Pacific Gas and Electric Company

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December 9, 2022

Mr. Aaron Yue
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Subject: *Third Quarter 2022 Quarterly Progress Report, PG&E Topock Compressor Station, Needles, California* (PGE20180115A)

Dear Mr. Yue:

Enclosed is the Third Quarter 2022 Quarterly Progress Report for the Pacific Gas and Electric Company (PG&E) Topock Compressor Station located in Needles, California (the Site). In December 2021, startup began for Phase 1 of the groundwater remedy system including start of National Trails Highway in-situ reactive zone (IRZ) system operation, maintenance, and monitoring to address hexavalent chromium in groundwater. Operation of the IRZ injection and extraction wells using Topock Compressor Station power continued at the start of Third Quarter 2022. After an extended period of unplanned downtime in July and August 2022, continuous operation of the IRZ system resumed using generators in late August 2022. Groundwater and surface water monitoring was performed to evaluate the performance of the groundwater remedy to attain the remedial action objectives and comply with Applicable or Relevant and Appropriate Requirements.

In accordance with the reporting requirements outlined in the Basis of Design Report/Final (100%) Design Submittal for the Final Groundwater Remedy, this quarterly progress report presents an overview of the groundwater remedy and remedial action objectives; a summary of Third Quarter 2022 communications, operations, and performance; and recommendations and planned activities for the next reporting period.

Please contact me at 415.314.8530 if you have any questions about the quarterly progress report.

Sincerely,

Iain Baker
Chromium Remediation Manager

Cc: Chris Guerre/DTSC
Veronica Dickerson/DOI
Ken Foster/CA-SLC
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Topock Project Executive Abstract

Document Title:	Third Quarter 2022 Quarterly Progress Report, PG&E Topock Compressor Station, Needles CA
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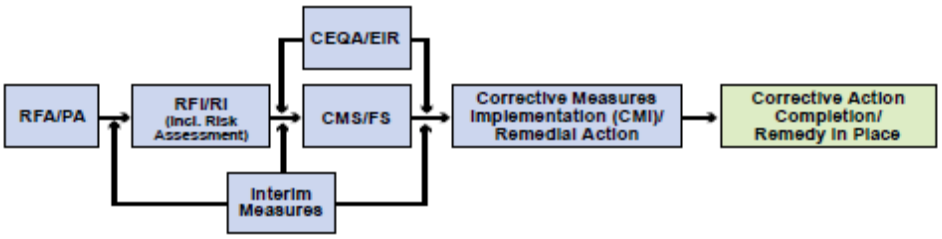
Action Required:	☒ Information Only ☐ Review & Comment Return to: _____ By Date: _____ ☐ Other / Explain:
What does this information pertain to?	☐ Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA)/Preliminary Assessment (PA) ☐ RCRA Facility Investigation (RFI)/Remedial Investigation (RI) (including Risk Assessment) ☐ Corrective Measures Study (CMS)/Feasibility Study (FS) ☒ Corrective Measures Implementation (CMI)/Remedial Action ☐ California Environmental Quality Act (CEQA)/Environmental Impact Report (EIR) ☐ Interim Measures ☐ Other / Explain:
Is this a regulatory requirement?	☒ Yes ☐ No If no, why is the document needed?
What is the consequence of NOT doing this item? What is the consequence of DOING this item?	Submittal of this report is a compliance requirement under DTSC and DOI requirements.
Other Justification/s:	☐ Permit ☐ Other / Explain:
Brief Summary of Attached Document:	In December 2021, startup began for Phase 1 of the groundwater remedy system including start of National Trails Highway in-situ reactive zone (IRZ) system operation, maintenance, and monitoring to address hexavalent chromium in groundwater. Operation of the IRZ injection and extraction wells using Topock Compressor Station power continued at the start of Third Quarter 2022. After an extended period of unplanned downtime in July and August 2022, continuous operation of the IRZ system resumed using generators in late August 2022. Groundwater and surface water monitoring was performed to evaluate the performance of the groundwater remedy to attain the remedial action objectives and comply with Applicable or Relevant and Appropriate Requirements. In accordance with the reporting requirements outlined in the Basis of Design Report/Final (100%) Design Submittal for the Final Groundwater Remedy, this quarterly progress report presents an overview of the groundwater remedy and remedial action objectives; a summary of Third Quarter 2022 communications, operations, and performance; and recommendations and planned activities for the next reporting period Written by: PG&E
Recommendations:	None.

How is this information related to the Final Remedy or Regulatory Requirements?:	This report is required by DTSC and DOI as part of the Basis of Design Report/Final (100%) Design Submittal for the Final Groundwater Remedy.
Other requirements of this information?:	None.
Related Reports and Documents:	Click any boxes in the Regulatory Road Map (below) to be linked to the Documents Library on the DTSC Topock Web Site (www.dtsc-topock.com).  **Legend** RFA/PA – RCRA Facility Assessment/Preliminary Assessment RFI/RI – RCRA Facility Investigation/CERCLA Remedial Investigation (including Risk Assessment) CMS/FS – RCRA Corrective Measure Study/CERCLA Feasibility Study CEQA/EIR – California Environmental Quality Act/Environmental Impact Report

Pacific Gas and Electric Company

Third Quarter 2022 Quarterly Progress Report

Topock Compressor Station

Needles, California

December 9, 2022

Third Quarter 2022 Quarterly Progress Report

Topock Compressor Station

Needles, California

December 9, 2022

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Acronyms and Abbreviations

Agencies	Department of the Interior and the California Department of Toxic Substances Control
ARAR	Applicable or Relevant and Appropriate Requirements
BOD SMP	Basis of Design Sampling and Monitoring Plan
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COPC	constituent of potential concern
Cr3	trivalent chromium
Cr6	hexavalent chromium
C/RAWP	Construction/Remedial Action Work Plan
DOI	U.S. Department of the Interior
DQO	Data Quality Objective
DTSC	California Department of Toxic Substances Control
Final BOD	Basis of Design Report/Final (100%) Design Submittal and Construction/ Remedial Action Work Plan for the Final Groundwater Remedy
ft/ft	foot per foot
GREM	Green Remediation Evaluation Matrix
IRZ	in-situ reactive zone
µg/L	microgram per liter
MCL	Maximum Contaminant Level
mg/L	milligram per liter
MS/MSD	matrix spike/matrix spike duplicate
NRWQC	National Recommended Water Quality Criteria
NTH	National Trails Highway
O&M	operation and maintenance
ORP	oxidation-reduction potential
PAP	Perimeter Assessment Plan
PARCC	precision, accuracy, representativeness, comparability, and completeness
PG&E	Pacific Gas and Electric Company
Phase 1 Monitoring Plan	Groundwater Remedy Phase 1 Interim Monitoring Plan
Phase 1 Monitoring Program	Groundwater Remedy Phase 1 Monitoring Program
QAPP	Quality Assurance Project Plan

RAO	remedial action objective
RCRA	Resource Conservation and Recovery Act
RPWC	remedy-produced water conditioning
Site	PG&E Topock Compressor Station, located in eastern San Bernardino County, 15 miles southeast of the City of Needles, California
SMP	Sampling and Monitoring Plan
SOP	Standard Operating Procedure
TCS	Topock Compressor Station
TDS	total dissolved solids
TOC	total organic carbon
USEPA	United States Environmental Protection Agency

Executive Summary

Startup of the Phase 1 groundwater remedy system at the Topock Compressor Station (TCS) in Needles, California (the Site) began in December 2021 including the start of National Trails Highway (NTH) in-situ reactive zone (IRZ) system operation, maintenance, and monitoring to address hexavalent chromium (Cr6) in groundwater. Operation of the IRZ injection and extraction wells using TCS power continued at the start of Third Quarter 2022. After an extended period of unplanned downtime in July and August 2022 due to TCS power loss, stormwater events, and re-energization troubleshooting, continuous operation of the IRZ system resumed using generators in late August 2022 through the end of the quarter. Ethanol injections into operational IRZ injection wells occurred once weekly, when operating. On September 26, 2022, ethanol dosing was increased to two injections per week.

Groundwater and surface water monitoring was performed in Third Quarter 2022 in accordance with the Basis of Design Report/Final (100%) Design Submittal for the Final Groundwater Remedy (Final BOD; CH2M Hill 2015a), Groundwater Remedy Phase 1 Interim Monitoring Plan (Phase 1 Monitoring Plan; Arcadis 2021), Standard Operating Procedures presented in Appendix B of the Phase 1 Monitoring Plan, and the PG&E Program Quality Assurance Project Plan (QAPP; CH2M Hill 2014; Critigen 2020) to evaluate the performance of the groundwater remedy to attain the Remedial Action Objectives (RAOs) and comply with Applicable or Relevant and Appropriate Requirements (ARARs). Key observations of Third Quarter 2022 remedy performance are highlighted below:

- The process control monitoring results indicated that initial or continued Cr6 treatment was observed at dose response monitoring wells MW-26, MW-31-060, MW-51, MW-78-070, MW-78-142, MW-79-058, MW-79-102, MW-80-057, and MW-80-082. These results indicate that increased flow to the southern IRZ injection wells (IRZ-27 [lower], IRZ-29, IRZ-31, IRZ-33, IRZ-35, and IRZ-37) in June 2022 had a positive impact on Cr6 treatment. To further enhance Cr6 treatment and generate reducing capacity, ethanol dosing at the IRZ injection wells was increased to two injections per week starting on September 26, 2022.
- Cr6 concentrations in the downgradient monitoring wells are evaluated to determine if concentrations are within expectations provided in the Final BOD (CH2M Hill 2015a). In Third Quarter 2022, Cr6 concentrations were below 32 micrograms per liter (µg/L), except at MW-39-100 and MW-77-187. Cr6 concentrations at MW-39-100 (ranging from 79 µg/L in August 2022, when the system was offline, to 240 µg/L in July 2022, when the system was operating) fluctuated in response to active system operation at IRZ-23, which pulled this portion of the downgradient plume from east to west when the system was actively operating. The sampling frequency at select monitoring wells downgradient of MW-39-100 was increased from quarterly in the Phase 1 Monitoring Plan to monthly to better evaluate changes in Cr6 concentrations over time in response to system operation. Cr6 concentrations at MW-77-187 (ranging from 8.80 µg/L in August 2022, when the system was offline, to 40 µg/L in July and September 2022, when the system was operating) fluctuated above and below 32 µg/L in conjunction with system operations. Cr6 concentrations at MW-39-100 and MW-77-187 and monitoring wells downgradient of those wells will be further evaluated in the monthly datasets.
- In-situ byproduct (dissolved arsenic, dissolved iron, and dissolved manganese) concentrations at the dose response and downgradient monitoring wells were below the action levels, except for the dissolved iron concentrations at MW-82-046 (7.3 milligrams per liter [mg/L]) and MW-53S (5.9 mg/L) collected on July 12 and August 24, 2022, respectively; see table below. Both monitoring wells are screened within the reducing rind with naturally occurring iron and elevated iron concentrations of 6.6 mg/L at MW-82-046 and 5.4 mg/L at MW-53S measured during the baseline period for this reporting program.

action level. Monitoring well MW-53S will be sampled in October 2022 to confirm whether dissolved iron concentrations are increasing above the action level. No operational changes were warranted in Third Quarter 2022.

- On the northern end of the NTH IRZ, the Cr6 plume was controlled. Westward gradients from the Colorado River to the floodplain were achieved during active operation of extraction wells, while easterly gradients were observed when IRZ-13S and IRZ-13D were not on during downtime due to electrical issues. However, during the period of easterly flow, the hydraulic gradient remained low (ranging from 0.0009 foot per foot [ft/ft] to 0.0018 ft/ft), Cr6 concentrations in the NTH IRZ extraction monitoring wells remained below 32 µg/L or within historical ranges near 32 µg/L (36 µg/L at MW-75-033), and Cr6 concentrations at the surface water monitoring locations remained non-detect, collectively demonstrating control of the Cr6 plume targeted by northern extraction.
- Remedy compliance monitoring data were collected in Third Quarter 2022 to evaluate progress towards achievement of RAOs 2, 3, and 4. RAO progress is anticipated to be evaluated throughout the duration of the remedy. Data collected each quarter will contribute to the overall evaluation.
- Constituents of Potential Concern (COPCs) Perimeter Assessment Plan (PAP) monitoring results in Third Quarter 2022 were below the trigger levels; therefore, no notifications or further actions were warranted in Third Quarter 2022.

The table below provides a summary of in-situ byproduct action level and COPC PAP trigger level exceedances from Third Quarter 2022 and associated response actions.

Program	Well	Constituent	Action Level or Trigger Level	Third Quarter 2022 Result	Response Actions
Process Control Monitoring	MW-82-046	Dissolved iron	Action Level: 6.6 mg/L	7.3 mg/L (July 12, 2022)	Re-sampled on August 10 (6 mg/L) and September 13, 2022 (5.5 mg/L). Results were below the action level. No further actions needed.
Process Control Monitoring	MW-56S	Dissolved iron	Action Level: 5.4 mg/L	5.9 mg/L (August 24, 2022)	Will re-sample in October 2022.

1 Introduction

Pacific Gas and Electric Company (PG&E) is implementing a final groundwater remedy to address hexavalent chromium (Cr6) in groundwater near the PG&E Topock Compressor Station (TCS) located in eastern San Bernardino County, 15 miles southeast of the City of Needles, California (the Site). PG&E is implementing the groundwater remedy at the TCS in conformance with the requirements of the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The U.S. Department of the Interior (DOI) and the California Department of Toxic Substances Control (DTSC), collectively known at the 'Agencies,' executed a Memorandum of Understanding on November 22, 2011 establishing coordination guidelines for overseeing implementation of a groundwater response action at the TCS (DTSC and DOI 2011). In a coordinated effort, the DOI and DTSC selected the final groundwater remedy to address chromium in groundwater, which is presented in the Record of Decision (DOI 2010).

In November 2015, PG&E submitted a Basis of Design Report/Final (100%) Design Submittal (Final BOD), which presents the final design basis, design criteria, drawings, specifications, and operation and maintenance (O&M) requirements for the groundwater remedy (CH2M Hill, Inc. [CH2M Hill] 2015a). The infrastructure for the groundwater remedy is being constructed following the plans and procedures documented within the Construction/Remedial Action Work Plan (C/RAWP; CH2M Hill 2015b). Construction and startup of the groundwater remedy is proceeding in phases.

Construction of Phase 1 was completed in December 2021 sufficient for initial system startup. The design was modified during construction to accommodate conditions encountered including a plume footprint smaller than documented in the Final BOD. Modifications included changes to the remediation and monitoring well networks and associated infrastructure including deferral of wells to Phase 2. Construction of the Phase 2a remedy was initiated in First Quarter 2022. Construction of Phase 2b is anticipated to begin in 2023 and be completed in 2026.

In December 2021, startup began for Phase 1 of the groundwater remedy system including the start of National Trails Highway (NTH) in-situ reactive zone (IRZ) system operation, maintenance, and monitoring. O&M are being performed in accordance with the O&M Plan (Appendix L, Volume 1; CH2M Hill 2015a). Monitoring is being performed in accordance with the Sampling and Monitoring Plan (BOD SMP), with modifications, provided in the Final BOD O&M Manual (Appendix L, Volume 2; CH2M Hill 2015a) to evaluate the performance of the groundwater remedy to attain the Remedial Action Objectives (RAOs) and comply with Applicable or Relevant and Appropriate Requirements (ARARs). Because the groundwater remedy is being constructed in phases, a modified SMP was needed to suit the as-built Phase 1 of the groundwater remedy. PG&E submitted the Groundwater Remedy Phase 1 Interim Monitoring Plan (Phase 1 Monitoring Plan; Arcadis 2021) to the Agencies on October 1, 2021.

In accordance with the BOD SMP reporting requirements (CH2M Hill 2015a), this quarterly progress report provides a summary of the following elements for Third Quarter 2022 (July through September 2022; the reporting period):

- Overview of the groundwater remedy and RAOs;
- Communications Summary. Summary of remedy-related communications with the DTSC, DOI, PG&E, Tribes, and other project stakeholders, which have been distributed as part of community outreach efforts;
- Operations Summary. Description of routine and non-routine downtime, operational data, and process monitoring data; utilities and consumables used and waste handling/disposal; issues encountered with

system operation; system optimizations and maintenance performed; and material deviations from design documents and the O&M Plan;

- Performance Summary. Description of the monitoring events performed during the current reporting period, the monitoring results and interpretation of results, evaluation of Cr6 plume control, interpretation of progress towards the RAOs, and material deviations from design documents and the O&M Plan;
- O&M Green Remediation Evaluation Matrix (GREM) Summary. PG&E develops a semiannual GREM summary report to document various sustainability metrics generated by PG&E including the TCS. The GREM summary reports data regarding greenhouse gas reductions, savings from use of renewable energy, reductions in liquid and solid waste, and local economy boost. The GREM summary is reported under separate cover and is not provided in this quarterly progress report.
- Recommendations and planned activities for the next reporting period.

1.1 Remedial Action Objectives

As stated in the Final BOD (CH2M Hill 2015a), the RAOs for the groundwater remedy are to:

1. Prevent ingestion of groundwater as a potable water source exhibiting Cr6 concentrations that exceed the regional background concentration of 32 micrograms per liter (µg/L).
2. Prevent or minimize migration of total dissolved chromium and Cr6 in groundwater to ensure that concentrations in surface water do not exceed water quality standards that support the designated beneficial uses of the Colorado River (11 µg/L Cr6; United States Environmental Protection Agency [USEPA] 2022).
3. Reduce the mass of total dissolved chromium and Cr6 in groundwater at the Site to achieve compliance with ARARs in groundwater. This RAO will be achieved by meeting the cleanup goal of the regional background concentration of 32 µg/L of Cr6.
4. Ensure that the geographic location of the target remediation area does not permanently expand following completion of the remedial action.

1.2 Phase 1 Remedy Overview

Per the C/RAWP, Phase 1 of the groundwater remedy comprises the creation of an IRZ along NTH using a line of injection and extraction wells to circulate groundwater and distribute an organic carbon source to promote reduction of soluble Cr6 to the insoluble form: trivalent chromium (Cr3). The groundwater remedy is being constructed in two phases in accordance with the C/RAWP (CH2M Hill 2015b).

The infrastructure for the Phase 1 remedial system consists of the following components (**Figure 1.1**):

- A line of remedial wells along the NTH that comprise the NTH IRZ (18 remediation wells);
- A treatment system compound, situated on the MW-20 bench, that includes infrastructure for organic carbon amendment and system maintenance;
- A remedy-produced water conditioning (RPWC) system situated on the compressor station;
- Conveyance lines among the NTH IRZ remedials wells, the MW-20 bench treatment compound, and the RPWC system;

- A monitoring well network composed of monitoring wells that existed before the groundwater remedy (174 monitoring locations) and monitoring wells constructed for Phase 1 of the groundwater remedy (69 newly constructed monitoring locations; a total of 243 monitoring locations; see Section 3);
- Riverbank Extraction Wells (four extraction wells). The riverbank extraction wells are not currently plumbed into the remedial system, and were, therefore, not operated in Third Quarter 2022.

The NTH IRZ system is operated by extracting groundwater from the NTH IRZ extraction wells, amending the water with carbon substrate (ethanol), then injecting the amended water into the NTH IRZ injection wells. **Figure 1.2** shows a process flow diagram of the treatment compound at the MW-20 bench including the carbon amendment infrastructure. The ethanol injections stimulate microbially mediated reduction of Cr6 to Cr3. The stimulated conditions may also reduce or release other constituents such as iron, manganese, sulfate, nitrate, and arsenic. These parameters are monitored in the Groundwater Remedy Phase 1 Monitoring Program (Phase 1 Monitoring Program) including the process control monitoring and remedy compliance monitoring programs (see Section 1.3). The groundwater and surface water monitoring data collected as part of the Phase 1 Monitoring Program are used to assess how biogeochemical conditions are changing in the subsurface in response to NTH IRZ system operations, inform system operational adjustments as needed, and evaluate overall remedy effectiveness.

During Phase 1, the NTH IRZ system is planned to operate for a period of time, nominally for 6 months, followed by a period of downtime, nominally 18 months, during which time residual reducing capacity generated during injections will continue to treat Cr6 in groundwater. Residual reducing capacity could potentially be stored during active injections as reduced iron from iron reduction, sulfide from sulfate reduction, or as biomass from microbial growth. Establishment and maintenance of an adequate reducing capacity within the treatment zone (i.e., at the dose response wells along the NTH IRZ) is evaluated by dissolved iron and Cr6 concentrations and other redox indicators such as nitrate and sulfate. If these parameters indicate establishment of reducing conditions (i.e., dissolved iron concentrations increasing above baseline and Cr6 concentrations decreasing to less than 32 µg/L), then IRZ operations will be shut down, and monitoring of these parameters will continue. As the data indicate that reducing conditions are lost (e.g., through a decrease in dissolved iron concentrations, an increase in Cr6 concentrations, or an increase in other redox indicators such as nitrate), IRZ operations will resume.

Actual duration of the operational and rest periods will be determined based on the amount of active operation runtime each month and data collected in the process control monitoring program (see Section 1.3). Based on data collected in the first 6 months of operation in 2022, operations are planned to continue through the rest of 2022.

1.3 Phase 1 Monitoring Program Overview

The BOD SMP detailed monitoring programs for the groundwater remedy and developed Data Quality Objectives (DQOs) that guided the design of sampling locations, constituents, and frequencies and the methodology for evaluating the data to inform operations (Appendix L, Volume 2; CH2M Hill 2015a). The relevant programs from the BOD SMP, as described in the Phase 1 Monitoring Plan (Arcadis 2021), include:

- *Process control monitoring*. This program assesses the extent to which the NTH IRZ is functioning as designed according to the NTH IRZ DQOs presented in the BOD SMP (CH2M Hill 2015a) and listed below. The DQOs guide data collection and establish decision rules that outline how the data collected will be used to adjust system operations. The NTH IRZ decision rules and operational framework are provided on Figure 2.2-2 of the BOD SMP (Appendix L, Volume 2; CH2M Hill 2015a).

- The carbon substrate amendment system must be working to amend the organic carbon substrate into the recirculated groundwater (NTH IRZ DQO 1).
- The NTH IRZ must be complete and maintain Cr6 treatment over time (NTH IRZ DQO 2).
- In-situ byproduct (dissolved arsenic, dissolved manganese, dissolved iron, and dissolved barium) generation and migration from the NTH IRZ must be controlled (NTH IRZ DQO 3).
- Extraction on the north end of the NTH IRZ will be conducted to control Cr6 with the NTH and riverbank extraction systems (NTH IRZ DQO 4).
- Extraction will be conducted to minimize extraction of organic carbon and reduced metal byproducts (iron and manganese; NTH IRZ DQO 5).

The process control monitoring program consists of five components: dose response monitoring, downgradient well monitoring, northern NTH IRZ extraction monitoring, extraction well monitoring, and carbon amendment system monitoring. The process control monitoring network is shown on **Figure 1.3**. The carbon amendment monitoring locations are shown on **Figure 1.2;** these samples are collected from sampling ports located downstream of each in-line static mixer. Per the evaluation of the carbon amendment system data presented in the Second Quarter 2022 Quarterly Progress Report (Arcadis 2022c), the carbon amendment monitoring frequency was reduced to semi-annual; therefore, it is not discussed in this quarterly progress report. The next monitoring event is planned for Fourth Quarter 2022. Process control monitoring results are presented in Sections 2.2 and 3.2.1.

- *Remedy compliance monitoring*. This program consists of surface water and groundwater sampling to evaluate achievement of RAOs 2, 3, and 4, as defined in Section 1.1. Note that RAO 1, which involves prevention of the ingestion of water with elevated Cr6 concentrations, requires no action within the remedy compliance monitoring program because institutional controls are being implemented to achieve this RAO. The remedy compliance groundwater monitoring and surface water monitoring network is shown on **Figure 1.4**. Results are presented in Section 3.2.2.
- *Constituent of potential concern (COPC) monitoring.* The DTSC and DOI consider selenium, molybdenum, and nitrate as COPCs potentially related to site activities and have directed that these constituents be monitored throughout remediation. The RAOs defined in Section 1.1 are not applicable to the COPCs. The COPC monitoring program consists of surface water and groundwater sampling to monitor COPC concentrations during Phase 1 of remedy startup. The COPC monitoring network is shown on **Figure 1.5.** Results are presented in Section 3.2.3.
- *Water level monitoring*. The purpose of this program is to assess changes in hydraulic gradients in the floodplain affected by system operations. The pressure transducer monitoring network is shown on **Figure 1.6.** Results are presented in Sections 2.1 and 3.2.
- *RPWC system monitoring*. The purpose of this program is to monitor the quality of water at the RPWC system. The primary objective is to evaluate effluent water quality as it affects the reuse options. During Phase 1, the planned reuse is re-injection to the NTH IRZ wells. Results are presented in Section 2.2.
- *Former IM-3 injection area monitoring*. The purpose of this program is to evaluate the change in conditions in the IM-3 injection area following the end of injection associated with IM-3 operations. Former IM-3 injection area monitoring is performed annually; therefore, it is not discussed in this quarterly progress report. The next monitoring event is planned for Fourth Quarter 2022.

- *Domestic well sampling*. Per direction from the DTSC, domestic/private wells are sampled to evaluate the potential effects the remedy could impart to domestic wells chemically and hydraulically. Domestic wells are sampled biennially; therefore, it is not discussed in this quarterly progress report. The next sampling event is planned for Fourth Quarter 2022.

The Phase 1 Monitoring Program is intended to evaluate the first 2 years of remedy operation; the monitoring program will be re-evaluated and updated (as needed) after 2 years of operation of Phase 1.

1.4 Third Quarter 2022 Communications

This section summarizes key PG&E communications in Third Quarter 2022 associated with Phase 1 of the groundwater remedy:

- On July 6, 2022, PG&E notified the DTSC and DOI about an unplanned outage for the remedy July 5 through 6. The TCS shut down power to the remedy system on the morning of July 5. The down time was just more than 24 hours (PG&E 2022a).
- On July 13, 2022, PG&E notified the DTSC and DOI about an unplanned outage for the remedy. The TCS shut down power to the remedy system on the morning of July 12. During re-energization after the power shutdown, the switchgear experienced a fault, which required extensive troubleshooting to repair (PG&E 2022b).
- On September 2, 2022, PG&E submitted the Second Quarter 2022 Quarterly Progress Report (Arcadis 2022b) to the DTSC and DOI.
- On September 28, 2022, PG&E submitted the Second Quarter 2022 Well Performance Report (Arcadis 2022c) to the DTSC and DOI.

2 Third Quarter 2022 Operations Summary

This section provides a summary of the O&M tasks performed at the Site in Third Quarter 2022.

Operation using TCS power continued at the start of Third Quarter 2022. Following an unplanned system shutdown, operation resumed using generators for the remainder of Third Quarter 2022. System runtime, ethanol and recirculated groundwater injection volumes and flowrates, and average flowrates are summarized in **Tables 2.1** and **2.2**. An IRZ system operations and non-routine maintenance log is presented as **Table 2.3**.

In July, August, and September 2022, ethanol was injected into operational injection wells once weekly while the system was operating. On September 26, 2022, ethanol dosing was increased to twice weekly to increase Cr6 treatment throughout the IRZ (see Section 3.2.1.1.1). A total of 268 gallons of ethanol was injected in Third Quarter 2022. Volumes of ethanol injected per month and per individual well are provided in **Tables 2.1** and **2.2**.

The IRZ system was shut down on July 12 when power from the TCS was lost. The IRZ system could not be restarted following a switchgear fault and required extensive troubleshooting to repair. In the meantime, generators were brought on site to provide power to the IRZ system. Multiple storms flooded the IRZ vaults on August 24 and August 26, 2022, causing damage to electrical equipment. A subset of wells was brought back online on August 30, 2022 following the storms and generator arrival. The remaining wells planned for operation, except for IRZ-29 and IRZ-39, were brought online by September 13, 2022. Additional details on operational status throughout the quarter are provided in **Table 2.3**.

2.1 Water Level Monitoring Results

Water levels were monitored at a subset of monitoring wells to assess hydraulic gradients in the floodplain affected by system operations. Pressure transducer data were downloaded on August 30, 2022. Therefore, June, July, and August 2022 data are analyzed in this quarterly progress report, and September 2022 data will be analyzed in the Fourth Quarter 2022 quarterly progress report.

Figure 2.1 shows the average daily groundwater elevations for June, July, and August 2022 and the associated groundwater contours for Layers 1 and 2, Layer 3, and Layers 4 and 5. **Table 2.2** provides the active operation time for each IRZ extraction and injection well in June, July, and August 2022. The NTH IRZ extraction and injection wells were actively operating for the entire month of June 2022 and approximately half of July 2022 (12 days). The system was shut down for the second half of July 2022 and most of the month of August 2022.

The following observations were made based on the June, July, and August 2022 potentiometric surface maps:

- In June and early July 2022, the Colorado River stage was higher than groundwater elevations, resulting in the river generally losing to the aquifer within the floodplain area. During this period, flow gradients were generally inward from the river to the floodplain. In late July and August, the river stage dropped below groundwater elevations. During this period, flow gradients were generally outward from the floodplain to the river.
- During active extraction, cones of depression formed near IRZ extraction wells IRZ-13S (Layers 1 and 2), IRZ-13D (Layers 4 and 5), and IRZ-23 (Layer 3).
- In the area near injection wells, particularly near IRZ-17 through IRZ-20 in Layers 4 and 5, mounding was observed during periods of injection.

- During system shutdown in late July and August 2022, the cones of depression and mounding from active extraction and injection relaxed, and groundwater flowed eastward.

2.2 Well Fouling Monitoring and Prevention

The potential for extraction well fouling as the result of carbon injection is monitored during system operations (NTH IRZ DQO 5). This monitoring includes measuring total organic carbon (TOC) and metal byproducts at the extraction wells for conditions that may generate well fouling and specific capacity of the IRZ injection wells. The Third Quarter 2022 Well Performance Report (in progress), to be submitted under separate cover, provides an evaluation of overall well performance. However, the extraction well monitoring analytical results are provided herein.

Table 2.4 shows the baseline and monthly analytical results from extraction wells IRZ-9, IRZ-23, IRZ-13S, and IR Z-13D. The extraction wells are sampled monthly; however, the wells could not be sampled in July or August 2022 due to the system-wide power outage. TOC, total iron, dissolved iron, and dissolved manganese concentrations were generally lower than the reporting limits, with a few isolated exceptions. The isolated detections do not indicate a consistent trend that would be of concern for causing well fouling; therefore, no adjustments to operations were needed in Third Quarter 2022. Extraction well IRZ-9 was not operated in Third Quarter 2022.

The extraction wells will continue to be monitored monthly in Fourth Quarter 2022.

Table 2.4. Extraction Well Monitoring Results

Extraction Well	Sample Date	Active Time Operating (percent)	TOC (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Manganese (mg/L)
IRZ-9	Baseline: January 2022	9	Less than 1	Less than 0.02	Less than 0.02	0.0027
IRZ-9	September 2022	Not operating	Less than 1	Less than 0.02	Less than 0.02	0.0016
IRZ-23	Baseline: December 2021	8	Less than 10	0.69	0.091 J	Less than 0.0005
IRZ-23	September 2022	87	Less than 1	Less than 0.02	Less than 0.02	Less than 0.0005
IRZ-13S	Baseline: March 2022	53	Less than 1	0.06	Less than 0.02	Less than 0.0005
IRZ-13S	September 2022	51	Less than 1	0.021	Less than 0.02	Less than 0.0005
IRZ-13D	Baseline: March 2022	53	Less than 50	Less than 0.02	0.059	0.062
IRZ-13D	September 2022	86	Less than 1	Less than 0.02	Less than 0.02	Less than 0.0005

Notes:
mg/L = milligram per liter
J = estimated concentration

The IRZ injection wells were backwashed weekly when these wells were operating. The backwash water was stored in frac tanks at the MW-20 bench while the RPWC system was being finished. The RPWC system is planned to begin operation in Fourth Quarter 2022. Before re-injection into the IRZ injection wells, the backwash water was monitored for field parameters and analyzed for select constituents (Cr6, total chromium, dissolved iron, and dissolved manganese). A summary of field parameters and analytical results from the backwash water is provided in **Table 2.5**. The data demonstrate that the water met the conditions specified in the BOD SMP for re-injection into IRZ injection wells (pH between 6.5 and 8.5).

2.3 Waste Management

In Third Quarter 2022, IRZ backwash water, purge water from well sampling, and stormwater pumped from vaults was stored in frac tanks at the MW-20 bench. The water was filtered and used for re-injection into IRZ injection wells.

3 Third Quarter 2022 Performance Summary

This section describes the groundwater and surface water monitoring performed in Third Quarter 2022 and summarizes the Third Quarter 2022 monitoring results.

Table 3.1 provides a summary of the Phase 1 Monitoring Program including monitoring locations, monitoring frequencies, and constituents analyzed. Remediation well and monitoring well construction details are provided in **Tables 3.2** and **3.3**, respectively.

3.1 Summary of Third Quarter 2022 Monitoring Performed

Groundwater and surface water monitoring was performed in Third Quarter 2022 in accordance with the Phase 1 Monitoring Plan (Arcadis 2021), Standard Operating Procedures (SOPs) presented in Appendix B of the Phase 1 Monitoring Plan, and the QAPP (CH2M Hill 2014; Critigen 2020). The elements of the Phase 1 Monitoring Program performed in Third Quarter 2022 are listed below:

- Process control monitoring;
- Remedy compliance monitoring;
- COPC monitoring; and
- Water level monitoring.

Monitoring wells included in each monitoring program vary by quarter. **Table 3.1** and **Figure 3.1** show the monitoring wells and surface water monitoring locations monitored in Third Quarter 2022.

The following extraction wells were not sampled in Third Quarter 2022 for the reason noted below:

- Extraction wells IRZ-09, IRZ-13D, IRZ-13S, and IRZ-23: Unable to sample in July and August due to power outage

Field parameters (temperature, pH, specific conductivity, oxidation-reduction potential [ORP], turbidity, total dissolved solids [TDS], and salinity) were measured before groundwater and surface water sample collection. Samples were sent to Asset Laboratories in Las Vegas, Nevada for laboratory analysis. Samples collected from monitoring wells in Arizona were sent to EMAX Laboratories, Inc. in Torrance, California.

3.1.1 Modifications to the Phase 1 Monitoring Program

The following modifications were made to the Phase 1 Monitoring Program in Third Quarter 2022:

- Extraction wells IRZ-9, IRZ-13S, IRZ-13D, and IRZ-23 continued to be sampled monthly (see **Section 2.2**). Samples were analyzed for the constituents listed in **Table 3.1** as well as sulfate and nitrate to determine the concentrations that are extracted at each well.
- Inactive injection wells IRZ-15, IRZ-21, and IRZ-25 were incorporated into the dose response monitoring program in Second Quarter 2022 to further evaluate the influence of active IRZ operations adjacent to extraction wells. The wells were not sampled in Third Quarter 2022 because the equipment at the wells was removed after March 29, 2022 storm damage.

- Select downgradient monitoring wells (MW-30-050, MW-34-080, MW-36-090, MW-36-100, MW-39-040, MW-39-050, MW-39-060, MW-39-070, MW-39-080, MW-39-100, MW-44-115, MW-44-125, MW-45-095a, MW-77-046, MW-77-102, MW-77-158, MW-77-187, MW-81-043, MW-81-098, MW-82-046, MW-82-112, MW-82-168, and MW-82-198) continued to be sampled monthly to better evaluate changes in Cr6 concentrations over time in response to system operation. Samples collected from these wells were analyzed for the constituents listed in **Table 3.1** as well as sulfate.
- Monitoring wells MW-167-185 and MW-168-180, located in the vicinity of the TCS, continued to be sampled monthly to evaluate changes in Cr6 concentrations over time.
- COPC Perimeter Assessment Plan (PAP) monitoring is conducted quarterly for PAP monitoring wells that are part of the dose response monitoring program and annually for PAP monitoring wells that are part of the downgradient monitoring program per the Phase 1 Monitoring Plan (Arcadis 2021). Nitrate/nitrite by USEPA method 353.2 was added for COPC PAP monitoring in addition to nitrate by USEPA Method 300.0 until enough data are collected to establish baseline (i.e., trigger levels) for nitrate.

3.1.2 Data Validation and Completeness

Analytical results were validated in accordance with the QAPP (CH2M Hill 2014; Critigen 2020) using the criteria of precision, accuracy, representativeness, comparability, and completeness (PARCC) to demonstrate that a sufficient number of representative samples was collected. The resulting analytical data can be used to support the decision-making process as measured by the PARCC findings. The following summary highlights the PARCC findings:

- Precision of the data was verified through the review of the laboratory data quality indicators that include matrix spike/matrix spike duplicate (MS/MSD) and field duplicate relative percent differences. Precision for several analytes fell outside of performance indicators due to matrix interference; data validation qualifiers were applied for results that did not meet quality control criteria.
- Accuracy of the data was verified through the review of the calibration, laboratory control samples, MS/MSDs, as well as the evaluation of method/field blank data. Accuracy was acceptable for all analyses with some exceptions due to matrix interference; data validation qualifiers were applied for results that did not meet quality control criteria.
- Representativeness of the data was verified through the samples' collection, storage, and preservation procedures and the verification of holding-time compliance. The laboratory did not note any problems with the samples' collection, holding time, and storage. Chain-of-custody issues were minor and were resolved and documented in the data packages.
- Comparability of the data was ensured using standard analytical procedures and standard units for reporting. Results obtained are comparable to industry standards in that the collection and analytical techniques followed approved, documented procedures.
- Completeness is a measure of the number of valid measurements obtained in relation to the total number of measurements planned. Completeness is expressed as the percentage of valid or usable measurements compared to planned measurements. Valid data are defined as all data that are not rejected for project use and flagged "R" for rejected during validation. All data are considered valid for project decision-making.

  The completeness goal of 90 percent was met for all method/constituent combinations.

3.2 Summary of Third Quarter 2022 Monitoring Results

This section summarizes the Third Quarter 2022 process control monitoring, remedy compliance monitoring, and COPC monitoring results. Field parameter monitoring results are presented in **Appendix A**. Analytical results for all monitoring wells and surface water monitoring locations in the Phase 1 Monitoring Program from January 2020 to September 2022 are provided in **Appendix B**. Laboratory reports from Third Quarter 2022 are provided in **Appendix C**.

3.2.1 Process Control Monitoring Results

This section summarizes the Third Quarter 2022 process control monitoring results and describes how the results are used to assess the NTH IRZ DQOs 2, 3, and 4 (Section 1.3). The Third Quarter 2022 process control monitoring results are presented in **Table 3.4**.

3.2.1.1 Dose Response and Downgradient Well Monitoring Results

Cr6 and in-situ byproduct results from the dose response and downgradient monitoring wells are used to determine development of NTH IRZ treatment (NTH IRZ DQO 2) and if in-situ byproduct generation and migration from the NTH IRZ is controlled (NTH IRZ DQO 3). The decision rules and operational framework for evaluating IRZ effectiveness and in-situ byproduct generation and migration are provided on Figure 2.2-2 of the BOD SMP (Appendix L, Volume 2; CH2M Hill 2015a). The following sections provide a Third Quarter 2022 performance summary of the dose response and downgradient monitoring wells based on the decision rules outlined on Figure 2.2-2 of the BOD SMP.

3.2.1.1.1 NTH IRZ Treatment Results

For those dose response monitoring wells associated with actively operating injection wells, dose response monitoring results, including changes in TOC, Cr6, and/or dissolved iron concentrations, are used to determine establishment of the NTH IRZ and Cr6 treatment. **Table 3.5** provides a performance summary for these parameters for the dose response wells in Third Quarter 2022. The performance summary is based on the decision rules and operational framework provided on Figure 2.2-2 of the BOD SMP.

As indicated in **Table 3.5**, initial or continued Cr6 treatment, based on declining Cr6 concentrations and/or increasing dissolved iron concentrations, was observed at the following monitoring wells:

- MW-26;
- MW-31-060;
- MW-51;
- MW-78-070;
- MW-78-142;
- MW-79-058;
- MW-79-102;
- MW-80-057 and

- MW-80-082.

On June 15, 2022, flow to the southern IRZ injection wells (IRZ-27 [lower], IRZ-29, IRZ-31, IRZ-33, IRZ-35, and IRZ-37) was increased by approximately 50 percent to enhance hydraulic distribution from each injection well. The July 2022 analytical results indicate that the increased flow had a positive impact on Cr6 treatment, initiating Cr6 treatment at monitoring wells MW-78-142, MW-79-058, and MW-80-057 and generally enhancing Cr6 treatment at the other monitoring wells listed above.

TOC was sampled at the dose response wells, and concentrations were non-detect. The lack of TOC detections could reflect the periodic ethanol dosing or organic carbon consumption before reaching the dose response wells as reducing conditions were initially being established or could indicate that not enough ethanol is being injected to reach the monitoring well locations. In addition, dissolved iron concentrations at the dose response wells have been low compared to baseline values, and Cr6 concentrations at most dose response wells have not decreased below 32 µg/L (see **Table 3.5**), indicating that sustained Cr6 reducing conditions have not yet been established. Therefore, to further enhance Cr6 treatment and generate reducing capacity, ethanol dosing at the IRZ injection wells was increased to two injections per week starting on September 26, 2022. This dosing frequency is consistent with frequency implemented during initial system startup (December 2021 through March 7, 2022) but is still less than the nominal dosing amount planned in the Final BOD (33 percent of the planned dosing; CH2M Hill 2015a). The Fourth Quarter 2022 results will be evaluated to determine whether the increased dosing improved reducing capacity.

3.2.1.1.2 Downgradient Hexavalent Chromium Results

In the floodplain (i.e., downgradient of the NTH IRZ), Cr6 concentrations in downgradient monitoring wells are anticipated to decrease to below 32 µg/L within 2 to 10 years based on the results of solute transport modeling (refer to Table 2.2-1 of the BOD SMP; Appendix L, Volume 2; CH2M Hill 2015a). Within the first 6 months of system operation, Cr6 concentration trends are expected to vary: concentrations at some downgradient monitoring wells may increase, whereas concentrations at other wells may remain stable or decrease. Table 2.1-4 of the BOD SMP (Appendix L, Volume 2; CH2M Hill 2015a) describes the anticipated changes in Cr6 concentrations at specific monitoring wells during the first 6 months to 1 year of system operation.

Table 3.6 provides a performance summary of the downgradient monitoring wells in Third Quarter 2022 to evaluate Cr6 distribution and changes in Cr6 concentrations downgradient of the NTH IRZ. **Figure 3.2** shows the distribution of Cr6 in downgradient monitoring wells in Third Quarter 2022 for wells monitoring Layers 1 through 5**.** Cr6 concentrations were below 32 µg/L at all monitoring wells, except at the following two wells:

- *MW-39-100*. Table 2.1-4 of the BOD SMP (Appendix L, Volume 2; CH2M Hill 2015a) indicates that Cr6 concentrations at this monitoring well may increase during the initial remedy operation. In Third Quarter 2022, Cr6 concentrations increased to 240 µg/L in July 2022 during active system operation, decreased to 79 µg/L in August 2022 when the system was offline, and increased to 110 µg/L in September 2022 when the system was turned back on. This fluctuation in Cr6 concentrations likely represents pulling the plume from east to west when the system is actively operating, as supported by **Figure 2.1b,** which shows flow in this area towards extraction well IRZ-23 during operation. Although the Third Quarter 2022 Cr6 concentrations at MW-39-100 exceeded 32 µg/L, concentrations at monitoring wells further downgradient (MW-34-080, MW-34-100, MW-36-070, MW-36-090, MW-36-100, and MW-45-095a) remained below 32 µg/L (non-detect to 3.5 µg/L). Cr6 concentrations at MW-39-100 and downgradient wells will continue to be monitored monthly.

- *MW-77-187*. Cr6 concentrations at MW-77-187 have increased since startup of remedy operations in December 2021. In Third Quarter 2022, Cr6 concentrations increased to 40 µg/L in July 2022 during active system operation, decreased to 8.80 µg/L in August 2022 when the system was offline, and increased to 40 µg/L in September 2022 when the system was turned back on. These data indicate that Cr6 concentrations are fluctuating above and below 32 µg/L in conjunction with system operations. The Cr6 concentration at monitoring well MW-46-175 located further downgradient of MW-77-187 remained below 32 µg/L in August 2022 (4.3 µg/L). As the IRZ is established by injections at IRZ-18, it is expected that treated water will flow toward MW-77-187, and the Cr6 concentration will decline. To verify this expectation, MW-77-187, along with the rest of the wells in the MW-77, MW-81, and MW-82 monitoring well clusters, will continue to be sampled monthly to evaluate changes in Cr6 concentrations over time in response to system operation.

3.2.1.1.3 In-Situ Byproduct Results

In-situ byproduct (dissolved arsenic, dissolved manganese, dissolved iron, and dissolved barium) generation and migration from the NTH IRZ are evaluated using results from the dose response and downgradient monitoring wells. The BOD SMP (CH2M Hill 2015a) provides maximum concentrations (i.e., action levels) for dissolved arsenic, dissolved manganese, and dissolved iron, which are presented in **Tables 3.5 and 3.6**. Barium is also monitored as part of the process control monitoring program, but action levels for barium are not specified in the BOD SMP; dissolved barium monitoring results from Third Quarter 2022 are presented in **Table 3.4**. If an individual monitoring well exhibits a natural baseline concentration above the given maximum, then the baseline concentration is used as the action level. Baseline concentrations for dissolved arsenic, dissolved iron, and dissolved manganese, presented in **Tables 3.5** and **3.6**, were established as follows:

- For monitoring wells installed before 2019, the maximum historical result was selected.
- For monitoring wells installed after 2019, the maximum result between January 2020 and December 2021 was selected, which did not include initial samples collected after well installation and allowed for water quality stabilization after installation.

If in-situ byproduct concentrations at a dose response or downgradient monitoring well are above the action levels, then a new sample is collected from the monitoring well within 45 days. If the re-sample confirms the exceedance, then the DTSC is notified, and operation of the remedial system will be adjusted as needed.

Figures 3.3 through **3.5** show the distribution of Third Quarter 2022 dissolved arsenic, dissolved iron, and dissolved manganese concentrations for the dose response and downgradient monitoring wells monitoring Layers 1 through 5. In-situ byproduct concentrations at the dose response and downgradient monitoring wells were below the action levels, except for the dissolved iron concentrations at downgradient monitoring wells MW-82-046 (7.3 mg/L; above the action level of 6.6 mg/L) and MW-53S (5.9 mg/L; above the action level of 5.4 mg/L) collected on July 12 and August 24, 2022, respectively. Both monitoring wells are screened within the reducing rind with naturally occurring iron and elevated iron concentrations of 6.6 mg/L at MW-82-046 and 5.4 mg/L at MW-53S measured during the baseline period for this monitoring program. Monitoring well MW-82-046 was subsequently sampled on August 10 and September 13, 2022, and the dissolved iron concentrations decreased to 6 mg/L and 5.5 mg/L, respectively. Both results were below the action level of 6.6 mg/L; therefore, no operational changes were warranted in Third Quarter 2022. Monitoring well MW-53S will be sampled in Fourth Quarter 2022 to confirm whether dissolved iron concentrations are increasing above the action level.

3.2.1.2 Northern NTH IRZ Extraction Monitoring Results

On the northern end of the NTH IRZ, the system is designed to control potential migration of Cr6 via groundwater extraction rather than the establishment of an IRZ. **Figure 1.3** shows the area addressed by northern extraction, with the northern extraction monitoring wells identified in green. Multiple lines of evidence can be used to evaluate achievement of control of the Cr6 plume at the northern end of the NTH IRZ (NTH IRZ DQO 4) including interpreted water levels, concentration trends, and numerical modeling (CH2M Hill 2015a).

In Third Quarter 2022, Cr6 concentrations and groundwater elevation data demonstrate control of the Cr6 plume in this area. Cr6 concentrations in the northern NTH IRZ extraction monitoring wells (green symbols on **Figure 1.3**) were below 32 µg/L (except at MW-75-033, which yielded 36 µg/L, consistent with historical measurements since 2020), and Cr6 concentrations at the surface water monitoring locations were non-detect at the reporting limit (see **Tables 3.4** and **3.8** and **Figure 3.2)**, indicating Cr6 plume control in Third Quarter 2022**.** Nearby monitoring wells MW-76-039/-156/-181/-218 yielded maximum Cr6 concentrations of 140, 13, 1,700, and 36 µg/L, respectively, in Third Quarter 2022. This northern portion of the contiguous Cr6 plume at the MW-76 cluster will ultimately be treated by injection at IRZ-15, but injections have not been conducted to date. In the meantime, northern extraction at IRZ-13S and IRZ-13D is being evaluated to understand the influence of IRZ operations on this portion of the Cr6 plume, as described below.

Hydraulic influence of IRZ-13S and IRZ-13D was evaluated using potentiometric surface maps (see Section 2.1) and horizontal hydraulic gradient vectors. Gradient vectors were calculated using water level elevations in three wells located in a triangular fashion (“triplets”). These vectors provide a unique solution for each well triplet, and viewing multiple such vectors in an area can describe the approximate groundwater flow field in an area. This is performed for the area around IRZ-13S and IRZ-13D in Layers 1 and 2 and Layers 4 and 5, which is where Cr6 is or has been present at concentration above 32 µg/L in the MW-75 and MW-76 monitoring well clusters. The monitoring wells used in the triplets are shown on **Figure 3.6,** and flow vector azimuth directions calculated from average monthly water levels from pressure transducers are listed in **Table 3.7**. Note that June, July, and August 2022 data are analyzed in this quarterly progress report, and September 2022 data will be analyzed in the Fourth Quarter 2022 quarterly progress report.

IRZ-13S and IRZ-13D operated approximately 87 percent of the month in June 2022 and approximately 34 percent of the month in July 2022. The extraction wells were shut down from July 12 to August 30, 2022. IRZ-13S and IRZ-13D resumed operation in September 2022 and operated approximately 86 percent and 51 percent of the month, respectively. Because system operations significantly varied throughout the reporting period, observations based on the potentiometric surface maps and flow vectors are discussed below by month and system operational status.

In June and July 2022, the potentiometric surface maps for Layers 1 and 2 (**Figure 2.1a**) show an area of groundwater flow toward IRZ-13S achieved by extraction operations including the area by MW-75-033 and MW-76-039. Flow vectors described by triplets MW-75-033/MW-96-045/MW-97-042 and MW-76-039/MW-86-030/MW-97-042 (**Figure 3.6a**) also show flow towards IRZ-13S in June 2022. Because extraction well IRZ-13S was only partially operating in July 2022, and river stage began decreasing below groundwater elevations during this month, the flow vectors show groundwater flow direction starting to shift eastward in July.

Similarly, in Layers 4 and 5, the potentiometric surface map (**Figure 2.1c**) for June 2022 shows an area of groundwater flow towards IRZ-13D including the area by MW-76-156/-181. In July 2022, the potentiometric surface map shows groundwater flow direction starting to shift towards the east in response to partial operation of IRZ-13D and the decreasing river stage. Flow vectors described by triplets MW-35-135/MW-49-135/MW-76-181,

MW-76-181/MW-86-120/MW-77-158, and MW-76-181/MW-86-140/MW-77-187 show flow toward IRZ-13D in June and July 2022 (**Figure 3.6b**).

In August 2022, groundwater flow direction in Layers 1 and 2 and Layers 4 and 5 was predominantly eastward in response to system shutdown and decreasing river stage, as shown by the potentiometric surface maps (**Figures 2.1a and 2.1c**) and flow vectors (**Figures 3.6a and 3.6b**). During this period, the hydraulic gradient remained low (ranging from 0.0009 foot per foot [ft/ft] to 0.0018 ft/ft), and concentrations in the NTH IRZ extraction monitoring wells remained below 32 µg/L or within historical ranges near 32 µg/L (36 µg/L MW-75-033), collectively demonstrating control of the Cr6 plume targeted by northern extraction. Once the system resumes operation, groundwater flow in Layers 1 and 2 and Layers 4 and 5 is anticipated to reverse direction toward IRZ-13S and IRZ-13D.

3.2.2 Remedy Compliance Monitoring Results

This section summarizes the Third Quarter 2022 remedy compliance monitoring results and provides a brief overview of progress towards achievement of RAOs 2, 3, and 4, as defined in Section 1.1, during remedy startup. RAO progress is anticipated to be evaluated during the remedy; data collected each quarter will contribute to the overall evaluation.

The Third Quarter 2022 remedy compliance monitoring results are presented in **Table 3.8**. Progress towards achievement of RAOs 2, 3, and 4 is summarized below.

- *RAO 2*. RAO 2 is evaluated by monitoring Cr6 concentrations in the Colorado River to verify that concentrations do not exceed the surface water quality standard (11 µg/L). In Third Quarter 2022, Cr6 concentrations at the 16 surface water monitoring locations were below the water quality standard of 11 µg/L (USEPA 2022); all results were non-detect at the reporting limit.

  Although RAO 2 is specifically intended to address Cr6, IRZ in-situ byproducts dissolved arsenic and dissolved manganese are also monitored in the Colorado River to verify that concentrations do not exceed the surface water quality standards. In Third Quarter 2022, dissolved arsenic concentrations at the 16 surface water monitoring locations were below the National Recommended Water Quality Criteria (NRWQC) for aquatic life of 150 µg/L. There is no NRWQC for aquatic life for dissolved manganese (USEPA 2022). Dissolved arsenic and dissolved manganese concentrations were below the California primary and secondary maximum contaminant levels (MCLs) of 10 µg/L (primary MCL) and 0.05 mg/L (secondary MCL), respectively (State of California 2022), except for dissolved manganese concentrations at C-MAR-S (0.14 mg/L) and C-MAR-D (0.13 mg/L). Monitoring location C-MAR is on the Arizona side of the Colorado River, and results reflect naturally occurring conditions (**Figure 1.4**).

- *RAO 3*. RAO 3 is evaluated by monitoring changes in groundwater Cr6 concentrations inside the plume boundary (i.e., mass reduction) and assessing the lateral and vertical distributions of Cr6 concentrations across the plume. This RAO will be achieved by meeting the cleanup goal of 32 µg/L of Cr6.

  Changes in Cr6 concentrations inside the plume as a result of IRZ system operations are discussed in Section 3.2.1.1. In Third Quarter 2022, Cr6 treatment (i.e., decreasing Cr6 concentrations) was observed at nine dose response monitoring wells. **Figure 3.2** shows the distribution of Cr6 in groundwater across the Site in Third Quarter 2022 for wells monitoring Layers 1 through 5. As IRZ system operations continue, Cr6 data from monitoring wells located inside the plume will continue to be collected and assessed to evaluate progress towards this RAO.

- *RAO 4*. RAO 4 is evaluated by monitoring Cr6 and in-situ byproduct concentrations (dissolved arsenic and dissolved manganese) outside of the target remediation area (i.e., baseline Cr6 plume boundary) to verify that concentrations do not permanently increase following completion of the remedial action. Additional data collection over a longer period is needed to evaluate progress towards this RAO.

3.2.3 COPC Monitoring Results

This section summarizes the Third Quarter 2022 COPC monitoring results (dissolved selenium, dissolved molybdenum, and nitrate) and provides an evaluation of the results in accordance with the COPC PAP. The Third Quarter 2022 COPC monitoring results are presented in **Table 3.9**.

The COPC PAP was developed to notify the DTSC when COPC threshold concentrations (i.e., trigger levels) in select outer plume compliance groundwater monitoring wells (i.e., COPC PAP monitoring wells) are exceeded. Thirty-one monitoring wells are included in the COPC PAP; however, not all COPC PAP monitoring wells were scheduled for sampling in Third Quarter 2022 (see **Table 3.1**). The trigger levels are based on Shewhart control limits calculated from the most recent eight sample results for each monitoring well; the method for calculating the trigger levels is provided in Appendix D of the Fourth Quarter 2021 Quarterly Progress Report (Arcadis 2022a). The COPC PAP decision tree, also provided in Appendix D of the Fourth Quarter 2021 Quarterly Progress Report (Arcadis 2022a), outlines notifications and actions to be taken when COPC concentrations in a COPC PAP monitoring well exceed a trigger level.

In Third Quarter 2022, the COPC concentrations in the COPC PAP monitoring wells were below the trigger levels; therefore, no notifications or further actions were warranted in Third Quarter 2022.

4 Recommendations and Planned Activities for Next Reporting Period

Phase 1 remedy operations and the Phase 1 Monitoring Program will continue to be performed in Fourth Quarter 2022 (October to December 2022) in accordance with the O&M Plan (CH2M Hill 2015a) and Phase 1 Monitoring Plan (Arcadis 2021). Because the system operated intermittently in the First Half of 2022, reducing conditions are still being established; therefore, IRZ operations will continue (see Figure 2.2-2 of the BOD SMP [CH2M Hill 2015a]).

In addition to routine remedy operations and monitoring, the following activities are planned for Fourth Quarter 2022:

- Injection wells closest to an extraction well (IRZ-15, IRZ-21, and IRZ-25), along with extraction well IRZ-9, will remain offline.
- Initiate operation of the RPWC system and perform RPWC system monitoring in accordance with the BOD SMP (CH2M Hill 2015a).
- Continue to sample extraction wells IRZ-9, IRZ-13S, IRZ-13D, and IRZ-23 monthly (while operational) in Fourth Quarter 2022 to evaluate the potential for well fouling. In addition, sulfate and nitrate will be analyzed to determine the concentrations that are extracted at each well.
- Analyze samples collected from dose response monitoring wells MW-31-060, MW-26, and MW-51 for TOC using methods 5310C and 5310B and ethanol to compare results.
- Continue to sample select downgradient monitoring wells (MW-30-050, MW-34-080, MW-36-090, MW-36-100, MW-39-040, MW-39-050, MW-39-060, MW-39-070, MW-39-080, MW-39-100, MW-44-115, MW-44-125, MW-45-095a, MW-67-185, MW-68-180, MW-77-046, MW-77-102, MW-77-158, MW-77-187, MW-81-043, MW-81-098, MW-82-046, MW-82-112, MW-82-168, and MW-82-198) monthly to evaluate changes in Cr6 concentrations in response to system operation.
- Continue to analyze COPC PAP monitoring wells for nitrate by Method 300.0 and nitrate/nitrite by USEPA Method 353.2 quarterly to collect sufficient data to establish baseline (i.e., trigger levels) for nitrate.
- Continue construction of the Phase 2a remedy.

IRZ operations, monitoring, and monitoring results will be reported in a Fourth Quarter 2022 Quarterly Progress Report. A Fourth Quarter 2022 Well Performance Report will be submitted to document well performance tracking data from Fourth Quarter 2022 in accordance with the O&M Plan (CH2M Hill 2015a).

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Tables

Table 2.1
NTH IRZ Operational Overview
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Month	Recirculated Groundwater Extraction Volume (gal)	Recirculated Groundwater Injection Volume (gal)	Average Injection Flow Rate, During Operation (gpm)	Average Extraction Flow Rate, During Operation (gpm)	Ethanol Injection Volume (gal)	Run Time (hours)[a]	Run Time (percent)[b]
November 2021	--	--	--	--	--	--	--
December 2021	307,610	312,416	93.0	91.6	84.0	56	8
January 2022	790,773	807,489	62.9	61.6	195	214	29
February 2022	615,500	634,662	63.0	61.1	136	168	25
March 2022	4,154,763	4,226,217	113	112	186	621	83
April 2022	2,732,956	2,834,615	84	81	74	561	78
May 2022	3,528,183	3,670,117	122	117	153	501	67
June 2022	4,985,560	5,141,918	134	130	121	640	89
July 2022	2,151,883	2,195,991	146	143	47	250	34
August 2022	175,420	178,017	80	79	24	37	5
September 2022	4,345,920	4,512,708	119	115	198	631	88

Notes:

[a] The difference between extraction and injection volume is a reflection of flow totalizer accuracy.

[a] Run time in hours is calculated from extraction well operating hours over the course of the month

[b] Percent run time is calculated from extraction operating well hours divided by the total hours in the month x 100%.

Abbreviations:

-- = not applicable
gal = gallon
gpm = gallon(s) per minute
IRZ = In-Situ Reactive Zone
NTH = National Trails Highway

Table 2.2
Summary of NTH IRZ System Discharges to Groundwater
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Well ID	Aquifer Interval	Well Type	Operating Period	Recirculated Groundwater Volume (gal)	Ethanol Volume (gal)	Total Hours Operating (hours)	Active Time Operating (percent)	Average Flow Rate When Operating (gpm)
IRZ-15	Upper	Injection	Nov-21	--	--	--	--	--
IRZ-15	Upper	Injection	Dec-21	--	--	--	--	--
IRZ-15	Upper	Injection	Jan-22	--	--	--	--	--
IRZ-15	Upper	Injection	Feb-22	--	--	--	--	--
IRZ-15	Upper	Injection	Mar-22	--	--	--	--	--
IRZ-15	Upper	Injection	Apr-22	--	--	--	--	--
IRZ-15	Upper	Injection	May-22	--	--	--	--	--
IRZ-15	Upper	Injection	Jun-22	--	--	--	--	--
IRZ-15	Upper	Injection	Jul-22	--	--	--	--	--
IRZ-15	Upper	Injection	Aug-22	--	--	--	--	--
IRZ-15	Upper	Injection	Sep-22	--	--	--	--	--
IRZ-15	Lower	Injection	Nov-21	--	--	--	--	--
IRZ-15	Lower	Injection	Dec-21	--	--	--	--	--
IRZ-15	Lower	Injection	Jan-22	--	--	--	--	--
IRZ-15	Lower	Injection	Feb-22	--	--	--	--	--
IRZ-15	Lower	Injection	Mar-22	--	--	--	--	--
IRZ-15	Lower	Injection	Apr-22	--	--	--	--	--
IRZ-15	Lower	Injection	May-22	--	--	--	--	--
IRZ-15	Lower	Injection	Jun-22	--	--	--	--	--
IRZ-15	Lower	Injection	Jul-22	--	--	--	--	--
IRZ-15	Lower	Injection	Aug-22	--	--	--	--	--
IRZ-15	Lower	Injection	Sep-22	--	--	--	--	--
IRZ-16	Upper	Injection	Nov-21	--	--	--	--	--
IRZ-16	Upper	Injection	Dec-21	18,090	5.1	55	7	5.5
IRZ-16	Upper	Injection	Jan-22	47,945	11	150	20	5.3
IRZ-16	Upper	Injection	Feb-22	3,011	--	10	1	5.0
IRZ-16	Upper	Injection	Mar-22	188,133	8.8	610	82	5.1
IRZ-16	Upper	Injection	Apr-22	201,577	6.0	521	72	6.4
IRZ-16	Upper	Injection	May-22	159,085	6.5	495	67	5.4
IRZ-16	Upper	Injection	Jun-22	204,790	5.3	634	88	5.4
IRZ-16	Upper	Injection	Jul-22	75,254	1.8	250	34	5.0

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Well ID	Aquifer Interval	Well Type	Operating Period	Recirculated Groundwater Volume (gal)	Ethanol Volume (gal)	Total Hours Operating (hours)	Active Time Operating (percent)	Average Flow Rate When Operating (gpm)
IRZ-16	Upper	Injection	Aug-22	12,202	1.6	37	5	5.5
IRZ-16	Upper	Injection	Sep-22	192,188	7.9	628	87	5.1
IRZ-16	Lower	Injection	Nov-21	--	--	--	--	--
IRZ-16	Lower	Injection	Dec-21	37,913	10	56	8	11
IRZ-16	Lower	Injection	Jan-22	83,007	21	139	19	10
IRZ-16	Lower	Injection	Feb-22	5,621	--	10	1	9.4
IRZ-16	Lower	Injection	Mar-22	368,922	17	608	82	10
IRZ-16	Lower	Injection	Apr-22	344,997	11	521	72	11
IRZ-16	Lower	Injection	May-22	308,301	13	494	66	10
IRZ-16	Lower	Injection	Jun-22	415,866	10	633	88	11
IRZ-16	Lower	Injection	Jul-22	155,662	3.3	250	34	10
IRZ-16	Lower	Injection	Aug-22	22,502	3.0	37	5	10
IRZ-16	Lower	Injection	Sep-22	400,331	17	629	87	11
IRZ-17	Upper	Injection	Nov-21	--	--	--	--	--
IRZ-17	Upper	Injection	Dec-21	25,091	6.6	56	8	7.5
IRZ-17	Upper	Injection	Jan-22	61,929	15	153	21	6.7
IRZ-17	Upper	Injection	Feb-22	3,761	--	10	1	6.3
IRZ-17	Upper	Injection	Mar-22	253,824	12	636	85	6.7
IRZ-17	Upper	Injection	Apr-22	260,224	7.1	560	78	7.7
IRZ-17	Upper	Injection	May-22	206,311	8.7	484	65	7.1
IRZ-17	Upper	Injection	Jun-22	246,831	5.9	634	88	6.5
IRZ-17	Upper	Injection	Jul-22	95,763	2.0	250	34	6.4
IRZ-17	Upper	Injection	Aug-22	14,714	1.9	37	5	6.6
IRZ-17	Upper	Injection	Sep-22	248,873	10	630	88	6.6
IRZ-17	Lower	Injection	Nov-21	--	--	--	--	--
IRZ-17	Lower	Injection	Dec-21	48,210	13	56	8	14
IRZ-17	Lower	Injection	Jan-22	126,137	30	153	21	14
IRZ-17	Lower	Injection	Feb-22	7,626	--	10	1	13
IRZ-17	Lower	Injection	Mar-22	511,032	24	632	85	13
IRZ-17	Lower	Injection	Apr-22	450,449	12	558	78	13
IRZ-17	Lower	Injection	May-22	361,052	15	480	65	13

Table 2.2
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Well ID	Aquifer Interval	Well Type	Operating Period	Recirculated Groundwater Volume (gal)	Ethanol Volume (gal)	Total Hours Operating (hours)	Active Time Operating (percent)	Average Flow Rate When Operating (gpm)
IRZ-17	Lower	Injection	Jun-22	521,889	12	635	88	14
IRZ-17	Lower	Injection	Jul-22	202,016	4.5	250	34	13.5
IRZ-17	Lower	Injection	Aug-22	29,479	3.9	37	5	13.3
IRZ-17	Lower	Injection	Sep-22	519,697	22	629	87	13.8
IRZ-18	Upper	Injection	Nov-21	--	--	--	--	--
IRZ-18	Upper	Injection	Dec-21	23,330	6.5	56	8	6.9
IRZ-18	Upper	Injection	Jan-22	57,708	14	150	20	6.4
IRZ-18	Upper	Injection	Feb-22	3,581	--	10	1	6.0
IRZ-18	Upper	Injection	Mar-22	237,093	9.6	598	80	6.6
IRZ-18	Upper	Injection	Apr-22	134,493	2.9	221	31	10
IRZ-18	Upper	Injection	May-22	204,232	8.1	497	67	6.8
IRZ-18	Upper	Injection	Jun-22	222,597	5.6	635	88	5.8
IRZ-18	Upper	Injection	Jul-22	82,479	1.4	250	34	5.5
IRZ-18	Upper	Injection	Aug-22	--	--	--	--	--
IRZ-18	Upper	Injection	Sep-22	250,454	11	619	86	6.7
IRZ-18	Lower	Injection	Nov-21	--	--	--	--	--
IRZ-18	Lower	Injection	Dec-21	46,126	13	56	8	14
IRZ-18	Lower	Injection	Jan-22	124,878	30	152	20	14
IRZ-18	Lower	Injection	Feb-22	7,496	--	10	1	12
IRZ-18	Lower	Injection	Mar-22	441,208	17	598	80	12
IRZ-18	Lower	Injection	Apr-22	133,829	3.6	221	31	10
IRZ-18	Lower	Injection	May-22	355,640	14	497	67	12
IRZ-18	Lower	Injection	Jun-22	500,638	12	636	88	13
IRZ-18	Lower	Injection	Jul-22	188,924	3.9	250	34	12.6
IRZ-18	Lower	Injection	Aug-22	--	--	--	--	--
IRZ-18	Lower	Injection	Sep-22	510,878	21	620	86	13.7
IRZ-20	Upper	Injection	Nov-21	--	--	--	--	--
IRZ-20	Upper	Injection	Dec-21	18,890	5.2	56	8	5.6
IRZ-20	Upper	Injection	Jan-22	48,376	12	151	20	5.3
IRZ-20	Upper	Injection	Feb-22	2,701	--	9	1	5.0
IRZ-20	Upper	Injection	Mar-22	202,257	10	630	85	5.4

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Well ID	Aquifer Interval	Well Type	Operating Period	Recirculated Groundwater Volume (gal)	Ethanol Volume (gal)	Total Hours Operating (hours)	Active Time Operating (percent)	Average Flow Rate When Operating (gpm)
IRZ-20	Upper	Injection	Apr-22	253,197	6.9	560	78	7.5
IRZ-20	Upper	Injection	May-22	132,019	5.9	472	63	4.7
IRZ-20	Upper	Injection	Jun-22	197,493	5.0	632	88	5.2
IRZ-20	Upper	Injection	Jul-22	80,078	1.7	250	34	5.3
IRZ-20	Upper	Injection	Aug-22	12,232	1.6	37	5	5.5
IRZ-20	Upper	Injection	Sep-22	196,161	8.4	624	87	5.2
IRZ-20	Lower	Injection	Nov-21	--	--	--	--	--
IRZ-20	Lower	Injection	Dec-21	34,313	9.5	55	7	10
IRZ-20	Lower	Injection	Jan-22	93,639	22	152	20	10
IRZ-20	Lower	Injection	Feb-22	5,767	--	10	1	9.6
IRZ-20	Lower	Injection	Mar-22	388,733	19	631	85	10
IRZ-20	Lower	Injection	Apr-22	384,225	10	559	78	11
IRZ-20	Lower	Injection	May-22	288,041	12	477	64	10
IRZ-20	Lower	Injection	Jun-22	384,856	9.4	633	88	10
IRZ-20	Lower	Injection	Jul-22	160,316	3.4	250	34	10.7
IRZ-20	Lower	Injection	Aug-22	22,592	3.0	37	5	10.2
IRZ-20	Lower	Injection	Sep-22	388,169	16	625	87	10.4
IRZ-21	Upper	Injection	Nov-21	--	--	--	--	--
IRZ-21	Upper	Injection	Dec-21	--	--	--	--	--
IRZ-21	Upper	Injection	Jan-22	--	--	--	--	--
IRZ-21	Upper	Injection	Feb-22	--	--	--	--	--
IRZ-21	Upper	Injection	Mar-22	--	--	--	--	--
IRZ-21	Upper	Injection	Apr-22	--	--	--	--	--
IRZ-21	Upper	Injection	May-22	--	--	--	--	--
IRZ-21	Upper	Injection	Jun-22	--	--	--	--	--
IRZ-21	Upper	Injection	Jul-22	--	--	--	--	--
IRZ-21	Upper	Injection	Aug-22	--	--	--	--	--
IRZ-21	Upper	Injection	Sep-22	--	--	--	--	--
IRZ-21	Lower	Injection	Nov-21	--	--	--	--	--
IRZ-21	Lower	Injection	Dec-21	--	--	--	--	--
IRZ-21	Lower	Injection	Jan-22	--	--	--	--	--

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Well ID	Aquifer Interval	Well Type	Operating Period	Recirculated Groundwater Volume (gal)	Ethanol Volume (gal)	Total Hours Operating (hours)	Active Time Operating (percent)	Average Flow Rate When Operating (gpm)
IRZ-21	Lower	Injection	Feb-22	--	--	--	--	--
IRZ-21	Lower	Injection	Mar-22	--	--	--	--	--
IRZ-21	Lower	Injection	Apr-22	--	--	--	--	--
IRZ-21	Lower	Injection	May-22	--	--	--	--	--
IRZ-21	Lower	Injection	Jun-22	--	--	--	--	--
IRZ-21	Lower	Injection	Jul-22	--	--	--	--	--
IRZ-21	Lower	Injection	Aug-22	--	--	--	--	--
IRZ-21	Lower	Injection	Sep-22	--	--	--	--	--
IRZ-25	Upper / Upper Middle	Injection	Nov-21	--	--	--	--	--
IRZ-25	Upper / Upper Middle	Injection	Dec-21	--	--	--	--	--
IRZ-25	Upper / Upper Middle	Injection	Jan-22	--	--	--	--	--
IRZ-25	Upper / Upper Middle	Injection	Feb-22	--	--	--	--	--
IRZ-25	Upper / Upper Middle	Injection	Mar-22	--	--	--	--	--
IRZ-25	Upper / Upper Middle	Injection	Apr-22	--	--	--	--	--
IRZ-25	Upper / Upper Middle	Injection	May-22	--	--	--	--	--
IRZ-25	Upper / Upper Middle	Injection	Jun-22	--	--	--	--	--
IRZ-25	Upper / Upper Middle	Injection	Jul-22	--	--	--	--	--
IRZ-25	Upper / Upper Middle	Injection	Aug-22	--	--	--	--	--
IRZ-25	Upper / Upper Middle	Injection	Sep-22	--	--	--	--	--
IRZ-25	Lower	Injection	Nov-21	--	--	--	--	--
IRZ-25	Lower	Injection	Dec-21	--	--	--	--	--
IRZ-25	Lower	Injection	Jan-22	--	--	--	--	--
IRZ-25	Lower	Injection	Feb-22	--	--	--	--	--
IRZ-25	Lower	Injection	Mar-22	--	--	--	--	--
IRZ-25	Lower	Injection	Apr-22	--	--	--	--	--
IRZ-25	Lower	Injection	May-22	--	--	--	--	--
IRZ-25	Lower	Injection	Jun-22	--	--	--	--	--
IRZ-25	Lower	Injection	Jul-22	--	--	--	--	--
IRZ-25	Lower	Injection	Aug-22	--	--	--	--	--
IRZ-25	Lower	Injection	Sep-22	--	--	--	--	--
IRZ-27	Upper / Upper Middle	Injection	Nov-21	--	--	--	--	--
IRZ-27	Upper / Upper Middle	Injection	Dec-21	36,743	7.3	56	8	11

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Well ID	Aquifer Interval	Well Type	Operating Period	Recirculated Groundwater Volume (gal)	Ethanol Volume (gal)	Total Hours Operating (hours)	Active Time Operating (percent)	Average Flow Rate When Operating (gpm)
IRZ-27	Upper / Upper Middle	Injection	Jan-22	103,663	27	154	21	11
IRZ-27	Upper / Upper Middle	Injection	Feb-22	113,867	25	169	25	11
IRZ-27	Upper / Upper Middle	Injection	Mar-22	395,578	15	594	80	11
IRZ-27	Upper / Upper Middle	Injection	Apr-22	160,844	3.6	232	32	12
IRZ-27	Upper / Upper Middle	Injection	May-22	336,518	14	495	67	11
IRZ-27	Upper / Upper Middle	Injection	Jun-22	425,095	9.5	633	88	11
IRZ-27	Upper / Upper Middle	Injection	Jul-22	164,460	3.4	250	34	11
IRZ-27	Upper / Upper Middle	Injection	Aug-22	--	--	--	--	--
IRZ-27	Upper / Upper Middle	Injection	Sep-22	304,227	14	410	57	12.4
IRZ-27	Lower	Injection	Nov-21	--	--	--	--	--
IRZ-27	Lower	Injection	Dec-21	23,710	7.9	56	8	7.1
IRZ-27	Lower	Injection	Jan-22	47,797	12	154	21	5.2
IRZ-27	Lower	Injection	Feb-22	53,661	12	167	25	5.4
IRZ-27	Lower	Injection	Mar-22	190,998	7.1	594	80	5.4
IRZ-27	Lower	Injection	Apr-22	82,801	1.9	232	32	5.9
IRZ-27	Lower	Injection	May-22	152,496	6.2	495	67	5.1
IRZ-27	Lower	Injection	Jun-22	238,803	5.3	633	88	6.3
IRZ-27	Lower	Injection	Jul-22	109,216	2.3	250	34	7.3
IRZ-27	Lower	Injection	Aug-22	--	--	--	--	--
IRZ-27	Lower	Injection	Sep-22	183,269	8.9	409	57	7.5
IRZ-29	Upper	Injection	Nov-21	--	--	--	--	--
IRZ-29	Upper	Injection	Dec-21	--	--	--	--	--
IRZ-29	Upper	Injection	Jan-22	740	--	3	0.40	4.1
IRZ-29	Upper	Injection	Feb-22	50,817	12	157	23	5.4
IRZ-29	Upper	Injection	Mar-22	121,397	5.2	388	52	5.2
IRZ-29	Upper	Injection	Apr-22	71,497	1.6	241	33	4.9
IRZ-29	Upper	Injection	May-22	155,773	6.6	475	64	5.5
IRZ-29	Upper	Injection	Jun-22	236,587	5.4	632	88	6.2
IRZ-29	Upper	Injection	Jul-22	112,028	2.5	249	33	7.5
IRZ-29	Upper	Injection	Aug-22	--	--	--	--	--
IRZ-29	Upper	Injection	Sep-22	--	--	--	--	--

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Well ID	Aquifer Interval	Well Type	Operating Period	Recirculated Groundwater Volume (gal)	Ethanol Volume (gal)	Total Hours Operating (hours)	Active Time Operating (percent)	Average Flow Rate When Operating (gpm)
IRZ-29	Lower	Injection	Nov-21	--	--	--	--	--
IRZ-29	Lower	Injection	Dec-21	--	--	--	--	--
IRZ-29	Lower	Injection	Jan-22	3,450	--	5	1	12
IRZ-29	Lower	Injection	Feb-22	70,677	16	158	24	7.5
IRZ-29	Lower	Injection	Mar-22	167,369	7.4	389	52	7.2
IRZ-29	Lower	Injection	Apr-22	92,461	2.0	243	34	6.3
IRZ-29	Lower	Injection	May-22	200,840	7.9	497	67	6.7
IRZ-29	Lower	Injection	Jun-22	306,910	7.2	637	88	8.0
IRZ-29	Lower	Injection	Jul-22	145,421	3.1	250	34	9.7
IRZ-29	Lower	Injection	Aug-22	--	--	--	--	--
IRZ-29	Lower	Injection	Sep-22	--	--	--	--	--
IRZ-31	Upper	Injection	Nov-21	--	--	--	--	--
IRZ-31	Upper	Injection	Dec-21	--	--	--	--	--
IRZ-31	Upper	Injection	Jan-22	2,620	--	4	1	11
IRZ-31	Upper	Injection	Feb-22	60,855	15	160	24	6.3
IRZ-31	Upper	Injection	Mar-22	141,661	6.2	389	52	6.1
IRZ-31	Upper	Injection	Apr-22	91,150	1.9	247	34	6.2
IRZ-31	Upper	Injection	May-22	180,400	7.6	476	64	6.3
IRZ-31	Upper	Injection	Jun-22	286,700	6.3	633	88	7.5
IRZ-31	Upper	Injection	Jul-22	128,465	3.0	250	34	8.6
IRZ-31	Upper	Injection	Aug-22	19,769	2.6	37	5.0	8.9
IRZ-31	Upper	Injection	Sep-22	313,406	14	586	81	8.9
IRZ-31	Lower	Injection	Nov-21	--	--	--	--	--
IRZ-31	Lower	Injection	Dec-21	--	--	--	--	--
IRZ-31	Lower	Injection	Jan-22	3,380	--	5	0.67	11
IRZ-31	Lower	Injection	Feb-22	60,795	14	161	24	6.3
IRZ-31	Lower	Injection	Mar-22	144,199	6.4	389	52	6.2
IRZ-31	Lower	Injection	Apr-22	90,213	1.9	247	34	6.1
IRZ-31	Lower	Injection	May-22	172,157	7.4	474	64	6.1
IRZ-31	Lower	Injection	Jun-22	283,737	6.1	632	88	7.5
IRZ-31	Lower	Injection	Jul-22	137,303	2.9	250	34	9.2
IRZ-31	Lower	Injection	Aug-22	20,210	2.6	37	5.0	9.1

Table 2.2
Summary of NTH IRZ System Discharges to Groundwater
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Well ID	Aquifer Interval	Well Type	Operating Period	Recirculated Groundwater Volume (gal)	Ethanol Volume (gal)	Total Hours Operating (hours)	Active Time Operating (percent)	Average Flow Rate When Operating (gpm)
IRZ-31	Lower	Injection	Sep-22	316,969	14	586	81	9.0
IRZ-33	Upper	Injection	Nov-21	--	--	--	--	--
IRZ-33	Upper	Injection	Dec-21	--	--	--	--	--
IRZ-33	Upper	Injection	Jan-22	560	--	2	0.27	4.7
IRZ-33	Upper	Injection	Feb-22	42,259	10	158	24	4.5
IRZ-33	Upper	Injection	Mar-22	97,704	4.2	389	52	4.2
IRZ-33	Upper	Injection	Apr-22	--	--	--	--	--
IRZ-33	Upper	Injection	May-22	92,191	3.1	160	22	9.6
IRZ-33	Upper	Injection	Jun-22	199,182	4.2	634	88	5.2
IRZ-33	Upper	Injection	Jul-22	86,053	1.8	250	34	5.7
IRZ-33	Upper	Injection	Aug-22	12,923	1.7	37	5.0	5.8
IRZ-33	Upper	Injection	Sep-22	202,884	9.0	590	82	5.7
IRZ-33	Lower	Injection	Nov-21	--	--	--	--	--
IRZ-33	Lower	Injection	Dec-21	--	--	--	--	--
IRZ-33	Lower	Injection	Jan-22	480	--	2	0.27	4.0
IRZ-33	Lower	Injection	Feb-22	41,839	9.8	158	24	4.4
IRZ-33	Lower	Injection	Mar-22	97,074	4.2	389	52	4.2
IRZ-33	Lower	Injection	Apr-22	--	--	--	--	--
IRZ-33	Lower	Injection	May-22	119,857	6.1	395	53	5.1
IRZ-33	Lower	Injection	Jun-22	198,892	4.2	633	88	5.2
IRZ-33	Lower	Injection	Jul-22	95,088	1.9	250	34	6.3
IRZ-33	Lower	Injection	Aug-22	11,394	1.7	33	4.4	5.8
IRZ-33	Lower	Injection	Sep-22	218,254	9.5	590	82	6.2
IRZ-35	Upper	Injection	Nov-21	--	--	--	--	--
IRZ-35	Upper	Injection	Dec-21	--	--	--	--	--
IRZ-35	Upper	Injection	Jan-22	800	--	2	0.27	6.7
IRZ-35	Upper	Injection	Feb-22	51,887	12	158	24	5.5
IRZ-35	Upper	Injection	Mar-22	118,638	5.1	387	52	5.1
IRZ-35	Upper	Injection	Apr-22	76,787	1.7	190	26	6.7
IRZ-35	Upper	Injection	May-22	156,513	6.4	327	44	8.0
IRZ-35	Upper	Injection	Jun-22	170,729	5.5	427	59	6.7

Table 2.2
Summary of NTH IRZ System Discharges to Groundwater
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Well ID	Aquifer Interval	Well Type	Operating Period	Recirculated Groundwater Volume (gal)	Ethanol Volume (gal)	Total Hours Operating (hours)	Active Time Operating (percent)	Average Flow Rate When Operating (gpm)
IRZ-35	Upper	Injection	Jul-22	114,697	2.4	249	33	7.7
IRZ-35	Upper	Injection	Aug-22	--	--	--	--	--
IRZ-35	Upper	Injection	Sep-22	167,806	9.6	366	51	7.6
IRZ-37	Upper	Injection	Nov-21	--	--	--	--	--
IRZ-37	Upper	Injection	Dec-21	--	--	--	--	--
IRZ-37	Upper	Injection	Jan-22	380	--	2	0.27	3.2
IRZ-37	Upper	Injection	Feb-22	31,301	7.0	153	23	3.4
IRZ-37	Upper	Injection	Mar-22	76,904	3.4	383	51	3.3
IRZ-37	Upper	Injection	Apr-22	60	--	0.3	0.04	3.3
IRZ-37	Upper	Injection	May-22	88,691	4.4	405	54	3.6
IRZ-37	Upper	Injection	Jun-22	100,323	1.3	425	59	3.9
IRZ-37	Upper	Injection	Jul-22	62,768	1.3	249	33	4.2
IRZ-37	Upper	Injection	Aug-22	--	--	--	--	--
IRZ-37	Upper	Injection	Sep-22	99,142	5.6	366	51	4.5
IRZ-39	Upper	Injection	Nov-21	--	--	--	--	--
IRZ-39	Upper	Injection	Dec-21	--	--	--	--	--
IRZ-39	Upper	Injection	Jan-22	--	--	--	--	--
IRZ-39	Upper	Injection	Feb-22	17,140	2.9	72	11	4.0
IRZ-39	Upper	Injection	Mar-22	83,493	4.0	384	52	3.6
IRZ-39	Upper	Injection	Apr-22	5,811	0.15	37	5.1	2.6
IRZ-39	Upper	Injection	May-22	--	--	--	--	--
IRZ-39	Upper	Injection	Jun-22	--	--	--	--	--
IRZ-39	Upper	Injection	Jul-22	--	--	--	--	--
IRZ-39	Upper	Injection	Aug-22	--	--	--	--	--
IRZ-39	Upper	Injection	Sep-22	--	--	--	--	--
IRZ-9	Upper	Extraction	Nov-21	--	--	--	--	--
IRZ-9	Upper	Extraction	Dec-21	--	--	--	--	--
IRZ-9	Upper	Extraction	Jan-22	207,010	--	66	8.9	52
IRZ-9	Upper	Extraction	Feb-22	--	--	--	--	--
IRZ-9	Upper	Extraction	Mar-22	612	--	1	0.13	10
IRZ-9	Upper	Extraction	Apr-22	420	--	0.2	0.02	44

Table 2.2
Summary of NTH IRZ System Discharges to Groundwater
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Well ID	Aquifer Interval	Well Type	Operating Period	Recirculated Groundwater Volume (gal)	Ethanol Volume (gal)	Total Hours Operating (hours)	Active Time Operating (percent)	Average Flow Rate When Operating (gpm)
IRZ-9	Upper	Extraction	May-22	1,189	--	0.3	0.04	66
IRZ-9	Upper	Extraction	Jun-22	2,649	--	1.0	0.14	44
IRZ-9	Upper	Extraction	Jul-22	--	--	--	--	--
IRZ-9	Upper	Extraction	Aug-22	--	--	--	--	--
IRZ-9	Upper	Extraction	Sep-22	5,087	--	1.5	0.21	56.5
IRZ-13D	Lower	Extraction	Nov-21	--	--	--	--	--
IRZ-13D	Lower	Extraction	Dec-21	--	--	--	--	--
IRZ-13D	Lower	Extraction	Jan-22	--	--	--	--	--
IRZ-13D	Lower	Extraction	Feb-22	--	--	--	--	--
IRZ-13D	Lower	Extraction	Mar-22	937,033	--	391	53	40
IRZ-13D	Lower	Extraction	Apr-22	353,835	--	220	31	27
IRZ-13D	Lower	Extraction	May-22	728,432	--	472	63	26
IRZ-13D	Lower	Extraction	Jun-22	1,071,385	--	630	88	28
IRZ-13D	Lower	Extraction	Jul-22	469,048	--	250	34	31
IRZ-13D	Lower	Extraction	Aug-22	16,196	--	15	2.0	18
IRZ-13D	Lower	Extraction	Sep-22	1,107,871	--	616	86	30
IRZ-13S	Upper	Extraction	Nov-21	--	--	--	--	--
IRZ-13S	Upper	Extraction	Dec-21	--	--	--	--	--
IRZ-13S	Upper	Extraction	Jan-22	--	--	--	--	--
IRZ-13S	Upper	Extraction	Feb-22	--	--	--	--	--
IRZ-13S	Upper	Extraction	Mar-22	674,317	--	391	53	29
IRZ-13S	Upper	Extraction	Apr-22	491,289	--	241	33	34
IRZ-13S	Upper	Extraction	May-22	1,115,829	--	470	63	40
IRZ-13S	Upper	Extraction	Jun-22	1,594,436	--	629	87	42
IRZ-13S	Upper	Extraction	Jul-22	697,982	--	250	34	47
IRZ-13S	Upper	Extraction	Aug-22	220	--	0.2	0.027	18.3
IRZ-13S	Upper	Extraction	Sep-22	891,370	--	364	51	40.8
IRZ-23	Lower	Extraction	Nov-21	--	--	--	--	--
IRZ-23	Lower	Extraction	Dec-21	307,610	--	56	7.5	92
IRZ-23	Lower	Extraction	Jan-22	583,763	--	148	20	66
IRZ-23	Lower	Extraction	Feb-22	615,500	--	168	25	61
IRZ-23	Lower	Extraction	Mar-22	2,542,801	--	621	83	68

Table 2.2
Summary of NTH IRZ System Discharges to Groundwater
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Well ID	Aquifer Interval	Well Type	Operating Period	Recirculated Groundwater Volume (gal)	Ethanol Volume (gal)	Total Hours Operating (hours)	Active Time Operating (percent)	Average Flow Rate When Operating (gpm)
IRZ-23	Lower	Extraction	Apr-22	1,887,412	--	543	75	58
IRZ-23	Lower	Extraction	May-22	1,682,733	--	476	64	59
IRZ-23	Lower	Extraction	Jun-22	2,317,090	--	634	88	61
IRZ-23	Lower	Extraction	Jul-22	984,853	--	250	34	66
IRZ-23	Lower	Extraction	Aug-22	159,004	--	37	5.0	72
IRZ-23	Lower	Extraction	Sep-22	2,341,592	--	627	87	62

Abbreviations:
-- = not applicable
gal = gallon
gpm = gallons per minute
ID = identification
IRZ = In Situ Reactive Zone
NTH = National Trails Highway

Table 2.3
NTH IRZ System Operations and Non-Routine Maintenance Log
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Date	Approximate IRZ Systemwide Down Time (days)	Approximate IRZ Systemwide Down Time (hours)	Operations and Maintenance Log	Notes
6/30/2022	--	--	System re-energized. Wells operating: Extraction wells: IRZ-13S, IRZ-13D, IRZ-23. Injection wells: IRZ-16, IRZ-17, IRZ-18, IRZ-20, IRZ-27, IRZ-29, IRZ-31, IRZ-33, IRZ-35, IRZ-37, IRZ-39.	--
7/5/2022	--	--	Ethanol dosing occurred.	--
7/5/2022 through 7/6/2022	1.0	24.0	IRZ system offline.	TCS power loss.
7/7/2022	--	--	Processed backwash water into conditioned water storage tank.	--
7/8/2022	--	--	Backwashed injection wells IRZ-16, IRZ-17, IRZ-18, IRZ-20, IRZ-27, IRZ-29, IRZ-31, IRZ-33, IRZ-35, IRZ-37.	--
7/11/2022	--	--	Reinjected conditioned water into injection wells.	--
7/12/2022 through 8/30/2022	49	1177.3	IRZ system offline.	TCS power loss. Restart delayed due to switchgear fault and reenergization troubleshooting.
8/30/2022	--	--	IRZ system resumed operation using generators. Wells operating: Extraction wells: IRZ-13D, IRZ-23 Injection wells: IRZ-16, IRZ-17, IRZ-20, IRZ-31, IRZ-33.	Remaining wells and affiliated equipment inspected for damage from stormwater that entered vaults during 8/24 and 8/26 thunderstorms.
8/31/2022	--	--	Ethanol dosing occurred.	--
9/1/2022	--	--	Injection well IRZ-18 resumed operation.	--
9/2/2022	--	--	Backwashed injection wells IRZ-16, IRZ-17, IRZ-20, IRZ-31, and IRZ-33.	--
9/3/2022 through 9/6/2022	2.9	70.0	IRZ system offline.	Low diesel exhaust fuel in generators.
9/6/2022	--	--	IRZ system resumed operating using generators. Wells operating: Extraction wells: IRZ-13D, IRZ-23. Injection wells: IRZ-16, IRZ-17, IRZ-18, IRZ-20, IRZ-31, IRZ-33.	--
9/7/2022	--	--	Ethanol dosing occurred.	--
9/9/2022	--	--	Backwashed injection wells IRZ-16, IRZ-17, IRZ-20, and IRZ-33. Reinjected conditioned water into injection wells.	Injection wells IRZ-18 and IRZ-31 were not backwashed, as staff prepared wells for expected rainstorms over the weekend.
9/12/2022	0.3	6.0	IRZ system offline.	Thunderstorms caused rain to enter vaults. High level alarms in vaults caused system shutdown.
9/13/2022	--	--	Injection wells IRZ-27, IRZ-35 and IRZ-37 and extraction well IRZ-13S resumed operation.	--

Table 2.3
NTH IRZ System Operations and Non-Routine Maintenance Log
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Date	Approximate IRZ Systemwide Down Time (days)	Approximate IRZ Systemwide Down Time (hours)	Operations and Maintenance Log	Notes
9/13/2022	--	--	Ethanol dosing occurred.	--
9/14/2022	--	--	Samples collected from IRZ-9, IRZ-13, and IRZ-23.	--
9/16/2022	--	--	Backwashed injection wells IRZ-16, IRZ-17, IRZ-18, IRZ-20, IRZ-27, IRZ-31, IRZ-33, IRZ-35, and IRZ-37.	--
9/19/2022 through 9/20/2022	0.6	13.5	IRZ system offline.	Drip leak between the flange and block valve in IRZ-35/37 vault caused sump high level alarm.
9/20/2022	--	--	Ethanol dosing occurred.	--
9/20/2022 through 9/22/2022	--	--	Injection wells IRZ-31, IRZ-33, IRZ-35, and IRZ-37 and extraction well IRZ-13S offline for approximately 2 days to repair leak in IRZ-35/37 well vault.	--
9/23/2022	--	--	Backwashed injection wells IRZ-16, IRZ-17, IRZ-18, IRZ-20, IRZ-27, IRZ-31, IRZ-33, IRZ-35, and IRZ-37. Reinjected conditioned water into injection wells.	--
9/26/2022	--	--	Ethanol dosing occurred. Increased ethanol dosing to twice weekly to increase treatment throughout the IRZ.	--
9/27/2022	--	--	Processed backwash water into conditioned water storage tank. Backwash samples collected.	--
9/28/2022	--	--	Backwashed injection wells IRZ-16, IRZ-17, IRZ-18, IRZ-20, IRZ-27, IRZ-31, IRZ-33, IRZ-35, and IRZ-37. Increased backwash duration to 20 minutes per well.	--
9/28/2022 through 9/30/2022	--	--	Reinjected conditioned water into injection wells.	--
9/29/2022	--	--	Ethanol dosing occurred.	--

Abbreviations:
-- = not applicable
IRZ = in-situ reactive zone
NTH = National Trails Highway
TCS = Topock Compressor Station

Table 2.5
Backwash Water Field Parameters and Analytical Results
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Sample Description	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Chromium (µg/L)	Dissolved Iron (mg/L)	Dissolved Manganese (mg/L)	Temperature (deg C)	Dissolved Oxygen (mg/L)	Specific Conductance (µS/cm)	pH	ORP (mV)	Turbidity (NTU)
BACKWASH PRE-FILTER	7/7/2022	N	390	350	0.020	0.002	33.2	0	12,699	7.67	41.1	2.32
BACKWASH POST-FILTER	7/7/2022	N	390	360	0.023	0.0019	34.5	0	12,718	7.68	60.1	1.54
BACKWASH PRE-FILTER	9/8/2022	N	420	450	<0.02	0.0015	30.5	2.56	12,005	0.560[b]	72.2	2.30
BACKWASH POST-FILTER	9/8/2022	N	220	240	0.055	0.0036	32.9	2.19	12,485	7.61	55.8	1.52
BACKWASH PRE-FILTER	9/21/2022	N	460	440	<0.02	0.0022	29.2	4.17	11,603	7.73	40.0	2.40
BACKWASH POST-FILTER	9/21/2022	N	460	440	<0.02	0.0023	29.2	5.15	11,480	7.76	34.2	1.51
BACKWASH PRE-FILTER	9/27/2022	N	410	430	<0.02	<0.0005	27.1	3.61	11,790	8.00	48.4	1.20
BACKWASH POST-FILTER	9/27/2022	N	400	430	<0.02	0.0015	27.8	3.58	118[a]	7.87	39.0	1.00

Notes:
[a] This value was likely recorded incorrectly in the field.
[b] This value is likely a fault result due to instrument error.

Abbreviations:
-- = not available
< = not detected at the reporting limit, as shown
deg C = degrees Celsius
mg/L = milligram(s) per liter
mV = millivolts
N = primary sample
NTU = nephelometric turbidity units
ORP = oxidation-reduction potential
µg/L = microgram(s) per liter
µS/cm = microSiemens per centimeter

Table 3.1
Groundwater Remedy Phase 1 Monitoring Program Summary
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Location ID	Remedy Compliance Monitoring: Outside Plume	Remedy Compliance Monitoring: Inside Plume	Remedy Compliance Monitoring: Surface Water	Process Control Monitoring: Dose Response Wells	Process Control Monitoring: Downgradient Monitoring Wells	Process Control Monitoring: Northern NTH Extraction Wells	Process Control Monitoring: Northern NTH IRZ Extraction Monitoring Wells	Water Level Monitoring	Process Control Monitoring: Carbon Amendment System Monitoring	Former IM-3 Injection Area Monitoring	COPC Monitoring	Domestic Well Sampling	Hexavalent Chromium	Total Dissolved Chromium	Total Organic Carbon	Dissolved Arsenic	Dissolved Manganese	Dissolved Iron	Total Iron	Dissolved Barium	Nitrate	Nitrite and Ammonium [1]	Ammonia as N	Nitrate/ Nitrite as N	Sulfate	Dissolved Molybdenum	Dissolved Selenium	Other Dissolved Metals [2]	Total Dissolved Solids	Alkalinity	Cations/ Anions
C-BNS			X								X		Q	SA		Q	Q				A					A	A			
C-CON			X								X		Q	SA		Q	Q				A					A	A			
C-I-3			X					M(Q), Q			X		Q	SA		Q	Q				A					A	A			
C-MAR			X								X		Q	SA		Q	Q				A					A	A			
C-NR1			X								X		Q	SA		Q	Q				A					A	A			
C-NR3			X								X		Q	SA		Q	Q				A					A	A			
C-NR4			X								X		Q	SA		Q	Q				A					A	A			
C-R22A			X								X		Q	SA		Q	Q				A					A	A			
C-R27			X								X		Q	SA		Q	Q				A					A	A			
C-TAZ			X								X		Q	SA		Q	Q				A					A	A			
CW-01D										X			A	A		A	A			A				A	A	A	A	A	A	A [3]
CW-01M										X			A	A		A	A			A				A	A	A	A	A	A	A [3]
CW-02D										X			A	A		A	A			A				A	A	A	A	A	A	A [3]
CW-02M										X			A	A		A	A			A				A	A	A	A	A	A	A [3]
CW-03D										X			A	A		A	A			A				A	A	A	A	A	A	A [3]
CW-03M										X			A	A		A	A			A				A	A	A	A	A	A	A [3]
CW-04D										X			A	A		A	A			A				A	A	A	A	A	A	A [3]
CW-04M										X			A	A		A	A			A				A	A	A	A	A	A	A [3]
IRZ-13S						X							M(Q), Q		M(Q), Q		M(Q), Q	M(Q), Q	M(Q), Q												
IRZ-13D						X							M(Q), Q		M(Q), Q		M(Q), Q	M(Q), Q	M(Q), Q												
IRZ-23						X							M(Q), Q		M(Q), Q		M(Q), Q	M(Q), Q	M(Q), Q												
IRZ-09						X							M(Q), Q		M(Q), Q		M(Q), Q	M(Q), Q	M(Q), Q												
MW-09		X									X		SA	SA		A	A				SA					SA	SA				
MW-10		X									X		SA	SA		A	A				SA					SA	SA				
MW-10D		X									X		SA	SA		A	A				SA					SA	SA				
MW-11		X											SA	SA		A	A													
MW-11D		X											SA	SA		A	A													
MW-12		X									X		SA	SA		A	A				SA					SA	SA				
MW-13	X										X		SA	SA		A	A				A					A	A				
MW-14	X										X		SA	SA		A	A				A					A	A				
MW-15	X												SA	SA		A	A													
MW-19		X											SA	SA		A	A													
MW-20-070		X		X				M(Q), Q			X		M(yr), Q	Q (yr), SA	M(yr), Q	M(yr), Q	M(yr), Q	M(yr), Q		M(yr), Q	M(yr), Q	Q(yr)			M(yr), Q	Q	Q		As needed	As needed	As needed
MW-20-100		X		X				M(Q), Q			X		M(yr), Q	Q (yr), SA	M(yr), Q	M(yr), Q	M(yr), Q	M(yr), Q		M(yr), Q	M(yr), Q	Q(yr)			M(yr), Q	Q	Q		As needed	As needed	As needed
MW-20-130		X		X				M(Q), Q			X		M(yr), Q	Q (yr), SA	M(yr), Q	M(yr), Q	M(yr), Q	M(yr), Q		M(yr), Q	M(yr), Q	Q(yr)			M(yr), Q	Q	Q		As needed	As needed	As needed
MW-21	X			X							X		M(yr), Q	Q (yr), SA	M(yr), Q	M(yr), Q	M(yr), Q	M(yr), Q		M(yr), Q	M(yr), Q	Q(yr)			M(yr), Q	Q	Q		As needed	As needed	As needed
MW-22	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-23-060		X									X		SA	SA		A	A				A					A	A				
MW-23-080	X										X		SA	SA		A	A				A					A	A				
MW-24A		X									X		SA	SA		A	A				SA					SA	SA				
MW-24B		X									X		SA	SA		A	A				SA					SA	SA				
MW-24BR	X												SA	SA		A	A													
MW-25		X									X		SA	SA		A	A				A					A	A				
MW-26		X		X				M(Q), Q			X		M(yr), Q	Q (yr), SA	M(yr), Q	M(yr), Q	M(yr), Q	M(yr), Q		M(yr), Q	M(yr), Q	Q(yr)			M(yr), Q	Q	Q		As needed	As needed	As needed
MW-27-020	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-27-060	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-27-085	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-28-025	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-28-090	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-29	X						X						Q	SA																	
MW-30-030	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-30-050	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-31-060		X		X				M(Q), Q			X		M(yr), Q	Q (yr), SA	M(yr), Q	M(yr), Q	M(yr), Q	M(yr), Q		M(yr), Q	M(yr), Q	Q(yr)			M(yr), Q	Q	Q		As needed	As needed	As needed
MW-31-135	X			X				M(Q), Q			X		M(yr), Q	Q (yr), SA	M(yr), Q	M(yr), Q	M(yr), Q	M(yr), Q		M(yr), Q	M(yr), Q	Q(yr)			M(yr), Q	Q	Q		As needed	As needed	As needed
MW-32-020	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-32-035	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-33-040	X						X	M(Q), Q			X		Q	SA							A					A	A				
MW-33-090	X						X	M(Q), Q			X		Q	SA							A					A	A				
MW-33-150	X						X	M(Q), Q			X		Q	SA							A					A	A				
MW-33-210	X						X						Q	SA																	
MW-34-055	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-34-080	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-34-100	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-35-060	X						X	M(Q), Q			X		Q	SA							A					A	A				
MW-35-135	X						X	M(Q), Q			X		Q	SA							A					A	A				

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Location ID	Remedy Compliance Monitoring: Outside Plume	Remedy Compliance Monitoring: Inside Plume	Remedy Compliance Monitoring: Surface Water	Process Control Monitoring: Dose Response Wells	Process Control Monitoring: Downgradient Monitoring Wells	Process Control Monitoring: Northern NTH Extraction Wells	Process Control Monitoring: Northern NTH IRZ Extraction Monitoring Wells	Water Level Monitoring	Process Control Monitoring: Carbon Amendment System Monitoring	Former IM-3 Injection Area Monitoring	COPC Monitoring	Domestic Well Sampling	Hexavalent Chromium	Total Dissolved Chromium	Total Organic Carbon	Dissolved Arsenic	Dissolved Manganese	Dissolved Iron	Total Iron	Dissolved Barium	Nitrate	Nitrite and Ammonium [1]	Ammonia as N	Nitrate/ Nitrite as N	Sulfate	Dissolved Molybdenum	Dissolved Selenium	Other Dissolved Metals [2]	Total Dissolved Solids	Alkalinity	Cations/ Anions
MW-36-020	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-36-040	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-36-050	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-36-070	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-36-090	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-36-100	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-37D	X										X		SA	SA		A	A				A					A	A				
MW-37S	X										X		SA	SA		A	A				A					A	A				
MW-38D		X									X		Q	Q		A	A				Q					Q	Q				
MW-38S		X									X		Q	Q		A	A				Q					Q	Q				
MW-39-040	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-39-050	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-39-060	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-39-070	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-39-080	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-39-100		X			X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-40D		X									X		SA	SA		A	A				A					A	A				
MW-40S	X										X		SA	SA		A	A				A					A	A				
MW-41D	X										X		SA	SA		A	A				A					A	A				
MW-41M	X										X		SA	SA		A	A				A					A	A				
MW-41S	X										X		SA	SA		A	A				A					A	A				
MW-42-030	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-42-055	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-42-065	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-43-025	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-43-075	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-43-090	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-44-070	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-44-115	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-44-125	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-45-095a	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-46-175	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-46-205	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-47-055	X						X						Q	SA																	
MW-47-115	X						X	M(Q), Q					Q	SA																	
MW-48	X										X		SA	SA		A	A				SA					SA	SA				
MW-49-135	X						X	M(Q), Q					Q	SA																	
MW-49-275	X						X						Q	SA																	
MW-49-365	X						X						Q	SA																	
MW-50-095	X							M(Q), Q					SA	SA		A	A														
MW-50-200		X									X		SA	SA		A	A				A					A	A				
MW-51		X		X				M(Q), Q			X		M(yr), Q	Q (yr), SA	M(yr), Q	M(yr), Q	M(yr), Q	M(yr), Q		M(yr), Q	M(yr), Q	Q(yr)			M(yr), Q	Q	Q		As needed	As needed	As needed
MW-52D	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-52M	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-52S	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-53D	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-53M	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-53S	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-54-085	X							M(Q), Q			X		SA	SA		A	A				A					A	A				
MW-54-140	X							M(Q), Q			X		SA	SA		A	A				A					A	A				
MW-54-195	X							M(Q), Q			X		SA	SA		A	A				A					A	A				
MW-55-045	X												SA	SA		A	A														
MW-55-120	X												SA	SA		A	A														
MW-56D	X										X		SA	SA		A	A				A					A	A				
MW-56M	X										X		SA	SA		A	A				A					A	A				
MW-56S	X										X		SA	SA		A	A				A					A	A				
MW-57-050		X											SA	SA		A	A														
MW-57-070		X									X		SA	SA		A	A				A					A	A				
MW-57-185	X										X		SA	SA		A	A				A					A	A				
MW-58-065	X										X		SA	SA		A	A				A					A	A				
MW-58-115	X										X		SA	SA		A	A				A					A	A				
MW-58-205	X										X		SA	SA		A	A				A					A	A				
MW-58BR	X										X		SA	SA		A	A				A					A	A				
MW-59-100		X									X		SA	SA		A	A				A					A	A				
MW-60-125		X									X		SA	SA		A	A				A					A	A				
MW-60BR-245	X												SA	SA		A	A														

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MW-61-110		X									X		SA	SA		A	A				A					A	A				
MW-62-065		X									X		SA	SA		A	A				A					A	A				
MW-62-110		X									X		SA	SA		A	A				A					A	A				
MW-62-190	X										X		SA	SA		A	A				A					A	A				
MW-63-065	X										X		SA	SA		A	A				A					A	A				
MW-64-150	X												SA	SA		A	A														
MW-64-205	X												SA	SA		A	A														
MW-64-260	X												SA	SA		A	A														
MW-64BR	X										X		SA	SA		A	A				A					A	A				
MW-65-160		X									X		Q	Q		A	A				Q					Q	Q				
MW-65-225		X									X		Q	Q		A	A				Q					Q	Q				
MW-66-165		X									X		SA	SA		A	A				SA					SA	SA				
MW-66-230		X									X		SA	SA		A	A				SA					SA	SA				
MW-66BR-270	X												SA	SA		A	A														
MW-67-185		X									X		SA	SA		A	A				SA					SA	SA				
MW-67-225		X									X		SA	SA		A	A				SA					SA	SA				
MW-67-260		X									X		SA	SA		A	A				SA					SA	SA				
MW-68-180		X									X		Q	Q		A	A				Q					Q	Q				
MW-68-240		X									X		SA	SA		A	A				SA					SA	SA				
MW-68BR-280	X												SA	SA		A	A														
MW-69-195		X									X		Q	Q		A	A				Q					Q	Q				
MW-70-105		X									X		SA	SA		A	A				SA					SA	SA				
MW-70BR-225		X									X		SA	SA		A	A				SA					SA	SA				
MW-70BR-287		X											SA	SA		A	A														
MW-71-035	X			X							X		M(yr), Q	Q (yr), SA	M(yr), Q	M(yr), Q	M(yr), Q	M(yr), Q		M(yr), Q	M(yr), Q	Q(yr)			M(yr), Q	Q	Q		As needed	As needed	As needed
MW-72-080		X									X		SA	SA		A	A				A					A	A				
MW-72BR-200	X												SA	SA		A	A														
MW-73-080		X									X		SA	SA		A	A				A					A	A				
MW-74-240	X										X		SA	SA		A	A				A					A	A				
MW-75-033		X					X	M(Q), Q					Q	SA																	
MW-75-117	X						X	M(Q), Q					Q	SA																	
MW-75-202	X						X	M(Q), Q					Q	SA																	
MW-75-267	X						X	M(Q), Q					Q	SA																	
MW-75-337	X						X	M(Q), Q					Q	SA																	
MW-76-039		X		X				M(Q), Q			X		M(yr), Q	Q (yr), SA	M(yr), Q	M(yr), Q	M(yr), Q	M(yr), Q		M(yr), Q	M(yr), Q	Q(yr)			M(yr), Q	Q	Q		As needed	As needed	As needed
MW-76-156		X		X				M(Q), Q			X		M(yr), Q	Q (yr), SA	M(yr), Q	M(yr), Q	M(yr), Q	M(yr), Q		M(yr), Q	M(yr), Q	Q(yr)			M(yr), Q	Q	Q		As needed	As needed	As needed
MW-76-181		X		X				M(Q), Q			X		M(yr), Q	Q (yr), SA	M(yr), Q	M(yr), Q	M(yr), Q	M(yr), Q		M(yr), Q	M(yr), Q	Q(yr)			M(yr), Q	Q	Q		As needed	As needed	As needed
MW-76-218		X		X							X		M(yr), Q	Q (yr), SA	M(yr), Q	M(yr), Q	M(yr), Q	M(yr), Q		M(yr), Q	M(yr), Q	Q(yr)			M(yr), Q	Q	Q		As needed	As needed	As needed
MW-77-046	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-77-102	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-77-158	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-77-187	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-78-070		X		X							X		M(yr), Q	Q (yr), SA	M(yr), Q	M(yr), Q	M(yr), Q	M(yr), Q		M(yr), Q	M(yr), Q	Q(yr)			M(yr), Q	Q	Q		As needed	As needed	As needed
MW-78-142		X		X							X		M(yr), Q	Q (yr), SA	M(yr), Q	M(yr), Q	M(yr), Q	M(yr), Q		M(yr), Q	M(yr), Q	Q(yr)			M(yr), Q	Q	Q		As needed	As needed	As needed
MW-79-058		X		X							X		M(yr), Q	Q (yr), SA	M(yr), Q	M(yr), Q	M(yr), Q	M(yr), Q		M(yr), Q	M(yr), Q	Q(yr)			M(yr), Q	Q	Q		As needed	As needed	As needed
MW-79-102		X		X							X		M(yr), Q	Q (yr), SA	M(yr), Q	M(yr), Q	M(yr), Q	M(yr), Q		M(yr), Q	M(yr), Q	Q(yr)			M(yr), Q	Q	Q		As needed	As needed	As needed
MW-80-057		X		X				M(Q), Q			X		M(yr), Q	Q (yr), SA	M(yr), Q	M(yr), Q	M(yr), Q	M(yr), Q		M(yr), Q	M(yr), Q	Q(yr)			M(yr), Q	Q	Q		As needed	As needed	As needed
MW-80-082		X		X				M(Q), Q			X		M(yr), Q	Q (yr), SA	M(yr), Q	M(yr), Q	M(yr), Q	M(yr), Q		M(yr), Q	M(yr), Q	Q(yr)			M(yr), Q	Q	Q		As needed	As needed	As needed
MW-81-043	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-81-098	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-82-046	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-82-112	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-82-168	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-82-198	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-83-090		X									X		SA	SA		A	A				A					A	A				
MW-83-180	X										X		SA	SA		A	A				A					A	A				
MW-83-225		X									X		SA	SA		A	A				A					A	A				
MW-83-245		X									X		SA	SA		A	A				A					A	A				
MW-84-057		X									X		SA	SA		A	A				A					A	A				
MW-84-095	X										X		SA	SA		A	A				A					A	A				
MW-84-132	X										X		SA	SA		A	A				A					A	A				
MW-84-193		X									X		SA	SA		A	A				A					A	A				
MW-85-129		X									X		SA	SA		A	A				A					A	A				
MW-85-217		X									X		SA	SA		A	A				A					A	A				
MW-85-237		X									X		SA	SA		A	A				A					A	A				
MW-86-030	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				

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MW-86-066	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-86-120	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-86-140	X				X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-87-109	X										X		SA	SA		A	A				A					A	A				
MW-87-139	X										X		SA	SA		A	A				A					A	A				
MW-87-192	X										X		SA	SA		A	A				A					A	A				
MW-87-275	X										X		SA	SA		A	A				A					A	A				
MW-88-107		X											SA	SA		A	A														
MW-89-183	X										X		SA	SA		A	A				A					A	A				
MW-89-273	X										X		SA	SA		A	A				A					A	A				
MW-90-031	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
MW-91-045	X										X		SA	SA		A	A				A					A	A				
MW-91-120	X										X		SA	SA		A	A				A					A	A				
MW-91-170	X										X		SA	SA		A	A				A					A	A				
MW-91-320	X										X		SA	SA		A	A				A					A	A				
MW-92-037	X										X		SA	SA		A	A				A					A	A				
MW-92-072	X										X		SA	SA		A	A				A					A	A				
MW-92-102	X										X		SA	SA		A	A				A					A	A				
MW-92-122	X										X		SA	SA		A	A				A					A	A				
MW-93-050	X												SA	SA		A	A														
MW-93-213	X												SA	SA		A	A														
MW-95-113	X										X		SA	SA		A	A				A					A	A				
MW-95-157	X										X		SA	SA		A	A				A					A	A				
MW-96-045	X						X	M(Q), Q					Q	SA																		
MW-96-217	X						X	M(Q), Q					Q	SA																		
MW-97-042							X	M(Q), Q					Q	SA																		
MW-97-202							X	M(Q), Q					Q	SA																		
MW-98-055		X											SA	SA		A	A														
MW-98-077		X											SA	SA		A	A														
OW-01D										X			A	A		A	A			A				A	A	A	A	A	A	A	A [3]
OW-01M										X			A	A		A	A			A				A	A	A	A	A	A	A	A [3]
OW-01S								M(Q), Q		X			A	A		A	A			A				A	A	A	A	A	A	A	A [3]
OW-02D										X			A	A		A	A			A				A	A	A	A	A	A	A	A [3]
OW-02M										X			A	A		A	A			A				A	A	A	A	A	A	A	A [3]
OW-02S								M(Q), Q		X			A	A		A	A			A				A	A	A	A	A	A	A	A [3]
OW-05D								M(Q), Q		X			A	A		A	A			A				A	A	A	A	A	A	A	A [3]
OW-05M								M(Q), Q		X			A	A		A	A			A				A	A	A	A	A	A	A	A [3]
OW-05S								M(Q), Q		X			A	A		A	A			A				A	A	A	A	A	A	A	A [3]
PGE-07BR	X												SA	SA		A	A														
PGE-08	X												SA	SA		A	A														
PT5D		X			X			M(Q), Q			X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
PT5M	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
PT5S	X				X						X		Q	SA	Q	Q	Q	Q		Q	Q					A	A				
PT8D		X											SA	SA		A	A														
PT9D		X									X		SA	SA		A	A				A					A	A				
PT9M		X									X		SA	SA		A	A				A					A	A				
PT9S		X									X		SA	SA		A	A				A					A	A				
R-19			X								X		Q	SA		Q	Q				A					A	A				
R-28			X								X		Q	SA		Q	Q				A					A	A				
R-63			X								X		Q	SA		Q	Q				A					A	A				
RRB			X					M(Q), Q			X		Q	SA		Q	Q				A					A	A				
SW1			X								X		Q	SA		Q	Q				A					A	A				
SW2			X								X		Q	SA		Q	Q				A					A	A				
TW-01		X									X		SA	SA		A	A				SA					SA	SA				
TW-02D		X		X							X		M(yr), Q	Q (yr), SA	M(yr), Q	M(yr), Q	M(yr), Q	M(yr), Q		M(yr), Q	M(yr), Q	Q(yr)			M(yr), Q	Q	Q		As needed	As needed	As needed
TW-02S		X		X							X		M(yr), Q	Q (yr), SA	M(yr), Q	M(yr), Q	M(yr), Q	M(yr), Q		M(yr), Q	M(yr), Q	Q(yr)			M(yr), Q	Q	Q		As needed	As needed	As needed
TW-03D		X		X							X		M(yr), Q	Q (yr), SA	M(yr), Q	M(yr), Q	M(yr), Q	M(yr), Q		M(yr), Q	M(yr), Q	Q(yr)			M(yr), Q	Q	Q		As needed	As needed	As needed
TW-04	X						X						Q	SA																	
TW-05	X												SA	SA		A	A														
PM-03												X	B	B		B	B	B			B		B		B	B	B		B	B	B [4]
PM-04												X	B	B		B	B	B			B		B		B	B	B		B	B	B [4]
Marina-1												X	B	B		B	B	B			B		B		B	B	B		B	B	B [4]
MTS-1												X	B	B		B	B	B			B		B		B	B	B		B	B	B [4]
MTS-2												X	B	B		B	B	B			B		B		B	B	B		B	B	B [4]
Topock-2												X	B	B		B	B	B			B		B		B	B	B		B	B	B [4]
Topock-3												X	B	B		B	B	B			B		B		B	B	B		B	B	B [4]

Table 3.1
Groundwater Remedy Phase 1 Monitoring Program Summary
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Location ID	Remedy Compliance Monitoring: Outside Plume	Remedy Compliance Monitoring: Inside Plume	Remedy Compliance Monitoring: Surface Water	Process Control Monitoring: Dose Response Wells	Process Control Monitoring: Downgradient Monitoring Wells	Process Control Monitoring: Northern NTH Extraction Wells	Process Control Monitoring: Northern NTH IRZ Extraction Monitoring Wells	Water Level Monitoring	Process Control Monitoring: Carbon Amendment System Monitoring	Former IM-3 Injection Area Monitoring	COPC Monitoring	Domestic Well Sampling	Hexavalent Chromium	Total Dissolved Chromium	Total Organic Carbon	Dissolved Arsenic	Dissolved Manganese	Dissolved Iron	Total Iron	Dissolved Barium	Nitrate	Nitrite and Ammonium [1]	Ammonia as N	Nitrate/ Nitrite as N	Sulfate	Dissolved Molybdenum	Dissolved Selenium	Other Dissolved Metals [2]	Total Dissolved Solids	Alkalinity	Cations/ Anions
CAB_MIXER_606									X						M(Q), SA [5]															
CAB_MIXER_607									X						M(Q), SA [5]															

Notes:

1. The monitoring program will be re-evaluated after 2 years of operation.

2. MW-58-115, MW-58-205, MW-64-150, MW-64-205, MW-64-260: FLUTe™ equipment was removed from the wells and these depth intervals are no longer sampled. MW-54BR and MW_64 are currently sampled as part of the Phase 1 Monitoring Program.

[1] Ammonium and nitrite will be monitored for the first year. If not detected within the first year of monitoring, sampling for these analytes will be discontinued. If increases in ammonium or nitrite concentrations are detected in dose response wells, recommendations for continued sampling and potential expansion of the monitoring network for these analytes will be provided.

[2] Other dissolved metals: boron, calcium, magnesium, potassium, sodium, and vanadium

[3] Chloride and fluoride

[4] Dissolved calcium, dissolved magnesium, dissolved potassium, dissolved sodium, chloride, fluoride

[5] Samples are collected biweekly (1 time every 2 weeks) until the system operations are verified. The sampling frequency is reduced to semi-annual thereafter.

X(X): Frequency for the first year (yr) or quarter (Q); frequency reduction to be considered thereafter
A = Annually
B = biennially (every 2 years)
COPC = constituent of potential concern
ID = identification
IM-3 = Interim Measure 3
IRZ = In-site Reactive Zone
M = Monthly
NTH = National Trails Highway
Q = Quarterly
SA = Semi-annually

Table 3.2
Remedy Well Construction Details
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Well ID	Well Type	Easting (NAD83)	Northing (NAD83)	Drilling Method	Completion Date	Boring Depth (feet bgs)	Screen Type	Upper Screen Interval 1 (feet bgs) Start	Upper Screen Interval 1 (feet bgs) End	Upper Middle Screen Interval 2 (feet bgs) Start	Upper Middle Screen Interval 2 (feet bgs) End	Lower Screen Interval 4 (feet bgs) Start	Lower Screen Interval 4 (feet bgs) End	Sump Interval (feet bgs) Start	Sump Interval (feet bgs) End	Boring Diameter (inches; range if variable)
IRZ-09	Extraction	7615565.51	2103560.78	Dual Rotary	9/2/2020	107.6	Single	55.0	99.8	--	--	--	--	99.8	105.4	15.625 - 18
IRZ-13S	Extraction	7615711.28	2103302.8	Dual Rotary	7/24/2020	103.6	Single	53.0	95.8	--	--	--	--	95.8	101.6	18
IRZ-13D	Extraction	7615707.68	2103310.2	Dual Rotary	7/11/2020	227.7	Single	--	--	--	--	160.4	210.2	210.2	215.8	15.625 - 18
IRZ-23	Extraction	7615826.01	2102535.62	Dual Rotary	6/30/2019	150.4	Single	--	--	--	--	92.1	142.0	142.0	147.4	17.5 - 24
IRZ-15	Injection	7615772.94	2103152.1	Dual Rotary	1/16/2020	232.6	Dual	30.0	55.3	--	--	150.3	200.2	200.2	205.9	15.5 - 18
IRZ-16	Injection	7615823.34	2103042.34	Dual Rotary	12/11/2019	194.5	Dual	27.0	54.9	--	--	155.0	186.8	186.8	192.5	16 - 18
IRZ-17	Injection	7615870.94	2103001.18	Dual Rotary	11/19/2019	192.0	Dual	36.2	57.1	--	--	137.2	167.1	167.1	172.8	16 - 18
IRZ-18	Injection	7615808.45	2102885.15	Dual Rotary	8/11/2020	193.9	Dual	41.7	59.6	--	--	155.0	181.8	181.8	187.4	16 - 18
IRZ-20	Injection	7615813.89	2102761.96	Dual Rotary	4/23/2019	188.1	Dual	49	71	--	--	136.0	155	155.0	160.0	18 - 24
IRZ-21	Injection	7615817.31	2102689.08	Dual Rotary	6/15/2019	166.5	Dual	47.4	65.4	--	--	140.4	157.3	157.3	163.0	18 - 24
IRZ-25	Injection	7615824.68	2102414.88	Dual Rotary	5/29/2019	174.0	Triple[a]	50.1	67.1	77.1	100	135.0	166	166.0	171.6	15.5 - 18
IRZ-27	Injection	7615803.46	2102237.25	Dual Rotary	2/7/2020	144.3	Triple[a]	52	67	77	99.9	114.9	136.8	136.8	142.3	16 - 18
IRZ-29	Injection	7615788.78	2102085.65	Dual Rotary	2/22/2020	128.5	Dual	48.2	77	--	--	92.1	120.9	120.9	126.3	15.5 - 18
IRZ-31	Injection	7615789.12	2101940.52	Dual Rotary	3/7/2020	128.8	Dual	48.2	77.1	--	--	92.1	121	121.0	126.8	16 - 18
IRZ-33	Injection	7615828.03	2101792.54	Dual Rotary	3/22/2020	119.5	Dual[b]	51.4	77.3	--	--	87.2	111	111.0	116.6	16 - 18
IRZ-35	Injection	7615918.00	2101643.44	Dual Rotary	3/29/2020	97.0	Single	53.1	88.0	--	--	--	--	88.0	93.8	18
IRZ-37	Injection	7616004.52	2101556.06	Dual Rotary	2/4/2020	82.0	Single	49.0	74.0	--	--	--	--	74.0	79.8	12
IRZ-39	Injection	7616112.16	2101376.07	Dual Rotary	10/23/2019	47.0	Single	28.0	39.0	--	--	--	--	39.0	44.7	8 - 12

Notes:

a. At triple-screened wells IRZ-25 and IRZ-27, well intervals can only be packed off to operate as two discrete intervals (e.g., by combining the upper and middle screens, by combining the middle and lower screens).

b. At IRZ-33, the dual screens were separated by only filter pack and no bentonite.

Abbreviations:

-- = not applicable

bgs = below ground surface

NAD83 = North American Datum of 1983

NAVD88 = North American Vertical Datum of 1988

Table 3.2
Remedy Well Construction Details
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Well ID	Well Type	Easting (NAD83)	Northing (NAD83)	Well Casing Diameter (inches)	Well Casing Material	Screen Material	Upper Bentonite Seal Depth (range; feet bgs)	Upper Well Screen Slot Size (inches)	Upper Sand Pack Material	Upper Middle Bentonite Seal Depth (range; feet bgs)	Upper Middle Well Screen Slot Size (inches)	Upper Middle Sand Pack Material	Lower Bentonite Seal Depth (range; feet bgs)
IRZ-09	Extraction	7615565.51	2103560.78	10	SDR17 PVC	316L SS Wire	41.7 - 44	0.05	#6	--	--	--	--
IRZ-13S	Extraction	7615711.28	2103302.8	10	SDR17 PVC	316L SS Wire	40.4 - 42.1	0.05	#6	--	--	--	--
IRZ-13D	Extraction	7615707.68	2103310.2	10	SDR17 PVC	316L SS Wire	146.7 - 148.8	0.01	#0/30	--	--	--	--
IRZ-23	Extraction	7615826.01	2102535.62	10	SDR17 PVC	316L SS Wire	--	--	--	--	--	--	66.5 - 68.6
IRZ-15	Injection	7615772.94	2103152.1	10	SDR17 PVC	316L SS Wire	--	0.025	#2/16	--	--	--	59.8 - 140.9
IRZ-16	Injection	7615823.34	2103042.34	10	SDR17 PVC	316L SS Wire	--	0.02	#1	--	--	--	59.0 - 146.0
IRZ-17	Injection	7615870.94	2103001.18	10	SDR17 PVC	316L SS Wire	25.5 - 26.9	0.50	#8	--	--	--	61.3 - 128.2
IRZ-18	Injection	7615808.45	2102885.15	10	SDR17 PVC	316L SS Wire	--	0.01	#0/30	--	--	--	63.9 - 133.8
IRZ-20	Injection	7615813.89	2102761.96	10	SDR17 PVC	316L SS Wire	34.5 - 37.2	0.02	#1	--	--	--	75.4 - 125.6
IRZ-21	Injection	7615817.31	2102689.08	10	SDR17 PVC	316L SS Wire	35.2 - 36.7	0.025	#2/16	--	--	--	70.2 - 132.1
IRZ-25	Injection	7615824.68	2102414.88	10	SDR17 PVC	316L SS Wire	31.1 - 35.1	0.01	#0/30	69 - 74	0.03	#3	103.8 - 126
IRZ-27	Injection	7615803.46	2102237.25	10	SDR17 PVC	316L SS Wire	--	0.01	#0/30	69.1 - 72.9	0.02	#2/16	104 - 108.3
IRZ-29	Injection	7615788.78	2102085.65	10	SDR17 PVC	316L SS Wire	--	0.01	#0/30	--	--	--	80.4 - 85.9
IRZ-31	Injection	7615789.12	2101940.52	10	SDR17 PVC	316L SS Wire	--	0.01	#0/30	--	--	--	79.9 - 85.5
IRZ-33	Injection	7615828.03	2101792.54	10	SDR17 PVC	316L SS Wire	--	0.01	#0/30	--	--	--	--
IRZ-35	Injection	7615918.00	2101643.44	10	SDR17 PVC	316L SS Wire	--	0.01	#0/30	--	--	--	--
IRZ-37	Injection	7616004.52	2101556.06	8	SDR17 PVC	316L SS Wire	--	0.01	#0/60	--	--	--	--
IRZ-39	Injection	7616112.16	2101376.07	8	SDR17 PVC	316L SS Wire	--	0.008	#0/60	--	--	--	--

Notes:

a. At triple-screened wells IRZ-25 and IRZ-27, well intervals can only be packed off to operate as two discrete intervals (e.g., by combining the upper and middle screens, by combining the middle and lower screens).

b. At IRZ-33, the dual screens were separated by only filter pack and no bentonite.

Abbreviations:

-- = not applicable
bgs = below ground surface
NAD83 = North American Datum of 1983
NAVD88 = North American Vertical Datum of 1988

Table 3.2
Remedy Well Construction Details
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Well ID	Well Type	Easting (NAD83)	Northing (NAD83)	Lower Well Screen Slot Size (inches)	Lower Sand Pack Material
IRZ-09	Extraction	7615565.51	2103560.78	--	--
IRZ-13S	Extraction	7615711.28	2103302.8	--	--
IRZ-13D	Extraction	7615707.68	2103310.2	--	--
IRZ-23	Extraction	7615826.01	2102535.62	0.01	#0/30
IRZ-15	Injection	7615772.94	2103152.1	0.030	#2/12
IRZ-16	Injection	7615823.34	2103042.34	0.015	#1/20
IRZ-17	Injection	7615870.94	2103001.18	0.015	#1/20
IRZ-18	Injection	7615808.45	2102885.15	0.018	#1/20
IRZ-20	Injection	7615813.89	2102761.96	0.02	#1
IRZ-21	Injection	7615817.31	2102689.08	0.015	#1/20
IRZ-25	Injection	7615824.68	2102414.88	0.01	#0/30
IRZ-27	Injection	7615803.46	2102237.25	0.008	#0/60
IRZ-29	Injection	7615788.78	2102085.65	0.01	#0/30
IRZ-31	Injection	7615789.12	2101940.52	0.008	#0/60
IRZ-33	Injection	7615828.03	2101792.54	0.01	#0/30
IRZ-35	Injection	7615918.00	2101643.44	--	--
IRZ-37	Injection	7616004.52	2101556.06	--	--
IRZ-39	Injection	7616112.16	2101376.07	--	--

Notes:

a. At triple-screened wells IRZ-25 and IRZ-27, well intervals can only be packed off to operate as two discrete intervals (e.g., by combining the upper and middle screens, by combining the middle and lower screens).

b. At IRZ-33, the dual screens were separated by only filter pack and no bentonite.

Abbreviations:

-- = not applicable
bgs = below ground surface
NAD83 = North American Datum of 1983
NAVD88 = North American Vertical Datum of 1988

Table 3.3
Monitoring Well Construction Details
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Location ID	Location Type	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Other Layer	Top of Casing Elevation (ft)	Depth of Well (ft bgs)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Diameter of Well (inches)
C-BNS	SW	--	--	--	--	--	--	--	--	--	--	--
C-CON	SW	--	--	--	--	--	--	--	--	--	--	--
C-I-3	SW	--	--	--	--	--	--	--	--	--	--	--
C-MAR	SW	--	--	--	--	--	--	--	--	--	--	--
C-NR1	SW	--	--	--	--	--	--	--	--	--	--	--
C-NR3	SW	--	--	--	--	--	--	--	--	--	--	--
C-NR4	SW	--	--	--	--	--	--	--	--	--	--	--
C-R22A	SW	--	--	--	--	--	--	--	--	--	--	--
C-R27	SW	--	--	--	--	--	--	--	--	--	--	--
C-TAZ	SW	--	--	--	--	--	--	--	--	--	--	--
R-19	SW	--	--	--	--	--	--	--	--	--	--	--
R-28	SW	--	--	--	--	--	--	--	--	--	--	--
R63	SW	--	--	--	--	--	--	--	--	--	--	--
RRB	SW	--	--	--	--	--	--	--	--	--	--	--
SW1	SW	--	--	--	--	--	--	--	--	--	--	--
SW2	SW	--	--	--	--	--	--	--	--	--	--	--
TW-01	EW	X	X	X	--	--	--	620.55	271.0	169.0	269.0	5
TW-02D	EW	--	--	X	X	--	--	493.29	150.0	113.0	148.0	6
TW-02S	EW	X	X	--	--	--	--	499.05	97.5	42.5	92.5	6
TW-03D	EW	--	--	X	X	--	--	498.09	156.0	111.0	156.0	8
TW-04	EW	--	--	--	--	X	Layer 6	484.11	255.0	210.0	250.0	4
TW-05	EW	--	--	X	X	--	--	496.30	155.0	110.0	150.0	4
CW-01D	MW	--	--	--	X	X	--	566.46	300.2	250.0	300.0	2
CW-01M	MW	--	X	X	--	--	--	566.07	190.0	140.0	190.0	2
CW-02D	MW	--	--	--	--	X	Layer 6	549.43	355.0	285.0	335.0	2
CW-02M	MW	--	--	X	X	--	--	549.45	208.3	152.0	202.0	2
CW-03D	MW	--	--	--	--	X	Layer 6	534.14	340.0	270.0	320.0	2
CW-03M	MW	--	--	X	X	--	--	534.10	222.0	172.0	222.0	2
CW-04D	MW	--	--	--	--	X	Layer 6	518.55	303.0	233.0	283.0	2
CW-04M	MW	--	--	X	X	--	--	518.55	169.8	119.5	169.5	2
HNWR-1A	MW	--	X	X	X	--	--	467.69	400.0	63.0	133.0	--
MW-09	MW	X	--	--	--	--	--	536.56	89.4	77.0	87.0	4
MW-10	MW	X	--	--	--	--	--	530.65	96.9	74.0	94.0	4
MW-10D	MW	--	X	--	--	--	--	531.54	125.5	108.1	123.1	2
MW-11	MW	X	--	--	--	--	--	522.61	86.1	62.5	82.5	4
MW-11D	MW	--	X	X	--	--	--	522.59	132.4	110.0	130.0	2
MW-12	MW	X	--	--	--	--	--	484.01	50.4	27.5	47.5	4
MW-13	MW	X	--	--	--	--	--	486.67	52.0	28.5	48.5	4
MW-14	MW	X	--	--	--	--	--	570.99	133.8	111.0	131.0	4
MW-15	MW	X	--	--	--	--	--	641.52	203.0	180.5	200.5	4
MW-19	MW	X	--	--	--	--	--	499.92	65.8	46.0	66.0	4

Table 3.3
Monitoring Well Construction Details
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Location ID	Location Type	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Other Layer	Top of Casing Elevation (ft)	Depth of Well (ft bgs)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Diameter of Well (inches)
MW-20-070	MW	X	--	--	--	--	--	499.04	69.6	50.0	70.0	4
MW-20-100	MW	--	X	--	--	--	--	498.39	101.4	89.5	99.5	4
MW-20-130	MW	--	--	X	--	--	--	498.57	132.3	121.0	131.0	4
MW-21	MW	X	--	--	--	--	--	505.55	58.5	39.0	59.0	4
MW-22	MW	X	--	--	--	--	--	458.97	12.4	5.5	10.5	2
MW-23-060	MW	X	--	--	--	--	--	504.08	60.2	50.0	60.0	2
MW-23-080	MW	X	X	--	--	--	--	504.13	80.8	75.0	80.0	2
MW-24A	MW	X	--	--	--	--	--	567.16	127.5	104.0	124.0	4
MW-24B	MW	--	--	X	--	--	--	564.76	214.8	193.0	213.0	4
MW-24BR	MW	--	--	--	--	--	Layers 7, 8	563.95	441.0	378.0	437.0	4
MW-25	MW	X	--	--	--	--	--	542.90	106.5	84.5	104.5	4
MW-26	MW	X	--	--	--	--	--	502.22	70.1	51.5	71.5	2
MW-27-020	MW	X	--	--	--	--	--	460.56	14.4	7.0	17.0	2
MW-27-060	MW	--	X	--	--	--	--	461.38	59.0	47.3	57.3	2
MW-27-085	MW	--	--	X	--	--	--	460.99	92.0	77.5	87.5	2
MW-28-025	MW	X	--	--	--	--	--	466.77	21.1	13.0	23.0	2
MW-28-090	MW	--	--	X	--	--	--	467.53	98.4	70.0	90.0	2
MW-29	MW	X	--	--	--	--	--	485.21	41.5	29.5	39.5	2
MW-30-030	MW	X	--	--	--	--	--	468.12	26.9	12.0	32.0	2
MW-30-050	MW	X	X	--	--	--	--	468.81	52.6	40.0	50.0	4
MW-31-060	MW	X	--	--	--	--	--	496.81	64.0	41.5	61.5	4
MW-31-135	MW	--	--	X	--	--	--	495.33	135.5	113.0	133.0	2
MW-32-020	MW	X	--	--	--	--	--	461.51	19.6	10.0	20.0	2
MW-32-035	MW	X	--	--	--	--	--	461.63	37.2	27.5	35.0	4
MW-33-040	MW	X	--	--	--	--	--	487.38	41.8	29.0	39.0	2
MW-33-090	MW	--	X	X	--	--	--	487.55	88.3	69.0	89.0	4
MW-33-150	MW	--	--	X	X	--	--	487.77	155.4	132.0	152.0	2
MW-33-210	MW	--	--	--	--	X	--	487.25	223.0	190.0	210.0	2
MW-34-055	MW	--	X	--	--	--	--	460.95	56.6	45.0	55.0	4
MW-34-080	MW	--	--	X	--	--	--	461.20	84.3	73.0	83.0	4
MW-34-100	MW	--	--	X	--	--	--	460.97	117.0	89.5	99.5	2
MW-35-060	MW	X	X	--	--	--	--	482.06	56.8	41.0	61.0	2
MW-35-135	MW	--	--	X	X	--	--	481.72	158.7	116.0	136.0	2
MW-36-020	MW	X	--	--	--	--	--	469.33	20.3	10.0	20.0	1
MW-36-040	MW	X	--	--	--	--	--	469.59	40.3	30.0	40.0	1
MW-36-050	MW	--	X	--	--	--	--	469.62	108.0	46.0	51.0	1
MW-36-070	MW	--	X	X	--	--	--	469.27	70.3	60.0	70.0	1
MW-36-090	MW	--	--	X	--	--	--	469.64	90.3	80.0	90.0	1
MW-36-100	MW	--	--	X	--	--	--	469.65	108.0	88.0	98.0	2
MW-37D	MW	--	--	--	X	X	--	486.19	226.7	180.0	200.0	2
MW-37S	MW	--	X	--	--	--	--	485.97	85.0	64.0	84.0	2

Table 3.3
Monitoring Well Construction Details
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Location ID	Location Type	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Other Layer	Top of Casing Elevation (ft)	Depth of Well (ft bgs)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Diameter of Well (inches)
MW-38D	MW	--	--	X	X	--	--	525.31	190.9	163.0	183.0	2
MW-38S	MW	X	--	--	--	--	--	525.51	98.1	75.0	95.0	2
MW-39-040	MW	X	--	--	--	--	--	468.02	42.1	30.0	40.0	1
MW-39-050	MW	--	X	--	--	--	--	467.93	54.6	47.0	52.0	1
MW-39-060	MW	--	X	--	--	--	--	468.00	66.3	49.0	59.0	1
MW-39-070	MW	--	X	X	--	--	--	468.02	71.7	60.0	70.0	1
MW-39-080	MW	--	--	X	--	--	--	467.92	82.6	70.0	80.0	1
MW-39-100	MW	--	--	X	--	--	--	468.01	117.7	80.0	100.0	2
MW-40D	MW	--	--	--	X	--	--	566.08	266.0	240.0	260.0	2
MW-40S	MW	X	--	--	--	--	--	566.04	134.0	115.0	135.0	2
MW-41D	MW	--	--	--	--	--	Layer 6	479.42	311.5	271.0	291.0	2
MW-41M	MW	--	--	--	X	X	--	479.84	190.0	170.0	190.0	2
MW-41S	MW	X	X	--	--	--	--	480.07	60.0	40.0	60.0	2
MW-42-030	MW	X	--	--	--	--	--	463.74	30.1	9.8	29.8	2
MW-42-055	MW	--	X	--	--	--	--	463.85	52.8	42.5	52.5	2
MW-42-065	MW	--	X	X	--	--	--	463.37	80.0	56.2	66.2	2
MW-43-025	MW	X	--	--	--	--	--	462.54	25.0	15.0	25.0	2
MW-43-075	MW	--	--	X	--	--	--	462.71	75.0	65.0	75.0	2
MW-43-090	MW	--	--	X	--	--	--	462.76	97.0	80.0	90.0	2
MW-44-070	MW	--	X	--	--	--	--	471.90	70.0	61.0	71.0	2
MW-44-115	MW	--	--	X	--	--	--	472.01	113.5	105.0	115.0	2
MW-44-125	MW	--	--	X	X	--	--	472.04	128.8	116.0	125.0	2
MW-45-095a	MW	--	--	X	--	--	--	468.27	97.0	83.0	93.0	2
MW-46-175	MW	--	--	--	X	--	--	482.16	175.5	165.0	175.0	2
MW-46-205	MW	--	--	--	--	X	--	482.23	206.5	196.5	206.5	2
MW-47-055	MW	X	--	--	--	--	--	483.89	55.0	45.0	55.0	2
MW-47-115	MW	--	--	X	--	--	--	484.10	115.0	105.0	115.0	2
MW-48	MW	--	--	X	--	--	--	486.22	138.0	124.0	134.0	2
MW-49-135	MW	--	--	X	--	--	--	484.02	135.0	125.0	135.0	1.5
MW-49-275	MW	--	--	--	--	--	Layer 6	483.95	274.7	255.0	275.0	2
MW-49-365	MW	--	--	--	--	--	Layer 8	484.01	367.4	346.0	366.0	2
MW-50-095	MW	--	X	--	--	--	--	496.49	95.0	85.0	95.0	2
MW-50-200	MW	--	--	--	X	X	--	496.35	204.5	190.0	200.0	2
MW-51	MW	--	X	X	--	--	--	501.56	113.3	97.0	112.0	4
MW-52D	MW	--	--	X	--	--	--	462.16	89.5	85.0	87.0	0.75
MW-52M	MW	--	--	X	--	--	--	462.16	70.5	66.0	68.0	0.75
MW-52S	MW	--	X	--	--	--	--	462.16	51.5	47.0	49.0	0.75
MW-53D	MW	--	--	--	X	--	--	461.32	125.0	123.5	125.0	0.75
MW-53M	MW	--	--	X	--	--	--	461.32	125.0	98.5	100.0	0.75
MW-53S	MW	X	--	--	--	--	--	461.32	125.0	28.5	30.0	0.75
MW-54-085	MW	--	--	X	--	--	--	466.10	93.2	77.0	87.0	2

Table 3.3
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Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Location ID	Location Type	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Other Layer	Top of Casing Elevation (ft)	Depth of Well (ft bgs)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Diameter of Well (inches)
MW-54-140	MW	--	--	--	X	--	--	465.98	138.0	128.0	138.0	2
MW-54-195	MW	--	--	--	--	X	--	466.32	195.0	185.0	195.0	2
MW-55-045	MW	X	X	--	--	--	--	465.66	54.1	37.0	47.0	2
MW-55-120	MW	--	--	X	X	--	--	465.46	120.3	108.0	118.0	2
MW-56D	MW	--	--	X	--	--	--	461.36	105.5	103.5	105.5	0.75
MW-56M	MW	--	--	X	--	--	--	461.36	105.5	73.5	75.5	0.75
MW-56S	MW	X	--	--	--	--	--	461.36	105.5	33.5	35.5	0.75
MW-57-050	MW	X	--	--	--	--	--	508.76	50.0	40.0	50.0	2
MW-57-070	MW	X	--	--	--	--	--	509.37	70.0	55.0	70.0	2
MW-57-185	MW	X	X	X	X	--	--	508.97	184.7	70.0	184.0	4
MW-58-065	MW	X	--	--	--	--	--	523.26	66.0	54.0	64.0	2
MW-58-115	MW	X	X	--	--	--	--	524.44	115.0	95.0	115.0	0
MW-58-205	MW	--	--	X	X	--	--	524.42	206.0	160.0	206.0	0
MW-59-100	MW	X	--	--	--	--	--	541.61	101.0	86.0	101.0	2
MW-60-125	MW	X	--	--	--	--	--	555.47	122.5	103.0	123.0	2
MW-61-110	MW	X	--	--	--	--	--	544.03	112.5	92.0	112.0	2
MW-62-065	MW	X	--	--	--	--	--	503.56	67.4	44.5	64.5	2
MW-62-110	MW	--	X	X	--	--	--	504.05	110.0	85.0	110.0	0
MW-62-190	MW	--	--	--	X	--	--	504.05	190.0	155.0	192.0	0
MW-63-065	MW	X	--	--	--	--	--	504.42	65.6	46.0	66.0	2
MW-64-150	MW	X	--	--	--	--	--	575.90	150.0	120.0	150.0	0
MW-64-205	MW	--	--	X	--	--	--	575.92	205.0	175.0	205.0	0
MW-64-260	MW	--	--	--	X	--	--	575.90	260.0	230.0	260.0	0
MW-65-160	MW	X	--	--	--	--	--	596.59	160.1	150.0	160.0	2
MW-65-225	MW	--	--	X	--	--	--	596.58	225.1	215.0	225.0	2
MW-66-165	MW	X	X	--	--	--	--	586.16	162.1	142.0	162.0	2
MW-66-230	MW	--	--	X	--	--	--	586.22	228.1	218.0	228.0	2
MW-67-185	MW	X	--	--	--	--	--	625.91	186.7	177.0	187.0	2
MW-67-225	MW	--	X	--	--	--	--	625.83	225.0	210.0	225.0	2
MW-67-260	MW	--	--	X	--	--	--	625.81	260.0	250.0	260.0	2
MW-68-180	MW	X	--	--	--	--	--	621.17	180.1	165.0	180.0	2
MW-68-240	MW	--	X	X	--	--	--	621.17	240.1	220.0	240.0	2
MW-69-195	MW	X	--	--	--	--	--	631.36	195.5	176.0	196.0	2
MW-70-105	MW	X	--	--	--	--	--	541.47	107.8	85.0	105.0	2
MW-70BR-287	MW	--	--	--	--	X	--	538.28	287.0	240.0	287.0	5.5
MW-71-035	MW	X	--	--	--	--	--	483.69	36.2	26.0	36.0	2
MW-72-080	MW	X	--	--	--	--	--	513.32	80.1	60.0	80.0	2
MW-73-080	MW	X	--	--	--	--	--	505.84	79.9	60.2	80.2	2
MW-74-240	MW	X	--	--	--	--	--	672.34	239.7	220.0	240.0	2
MW-75-033	MW	X	--	--	--	--	--	473.31	35.4	18.0	33.0	2
MW-75-117	MW	--	--	X	--	--	--	473.37	119.3	97.0	117.0	2

Table 3.3
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Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Location ID	Location Type	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Other Layer	Top of Casing Elevation (ft)	Depth of Well (ft bgs)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Diameter of Well (inches)
MW-75-202	MW	--	--	--	--	X	--	473.01	204.0	182.0	202.0	2
MW-75-267	MW	--	--	--	--	--	Layer 6	472.88	269.3	247.0	267.0	2
MW-75-337	MW	--	--	--	--	--	Layers 7, 8	473.79	339.3	317.0	337.0	2
MW-76-039	MW	X	--	--	--	--	--	481.24	39.5	24.0	39.0	2
MW-76-156	MW	--	--	--	X	--	--	481.35	158.3	136.0	156.0	2
MW-76-181	MW	--	--	--	X	--	--	481.43	183.3	171.0	181.0	2
MW-76-218	MW	--	--	--	--	X	--	481.36	220.3	198.0	218.0	2
MW-77-046	MW	X	--	--	--	--	--	478.81	48.3	26.0	46.0	2
MW-77-102	MW	--	--	X	--	--	--	478.65	104.3	82.0	102.0	2
MW-77-158	MW	--	--	--	X	--	--	478.70	160.4	137.9	158.0	2
MW-77-187	MW	--	--	--	X	--	--	478.67	189.4	167.0	187.1	2
MW-78-070	MW	X	--	--	--	--	--	500.97	72.3	50.0	70.0	2
MW-78-142	MW	--	--	X	--	--	--	500.88	142.3	122.0	142.0	2
MW-79-058	MW	X	--	--	--	--	--	501.21	60.5	48.0	58.0	2
MW-79-102	MW	--	X	--	--	--	--	501.09	104.5	92.0	102.0	2
MW-80-057	MW	X	--	--	--	--	--	503.80	59.9	47.4	57.4	2
MW-80-082	MW	X	--	--	--	--	--	503.74	84.5	67.0	82.0	2
MW-81-043	MW	X	--	--	--	--	--	478.02	45.1	22.8	42.8	2
MW-81-098	MW	--	--	X	--	--	--	477.91	100.3	78.0	98.0	2
MW-82-046	MW	X	--	--	--	--	--	484.46	48.3	26.0	46.0	2
MW-82-112	MW	--	--	X	--	--	--	484.36	114.3	92.0	112.0	2
MW-82-168	MW	--	--	--	X	--	--	483.75	170.3	148.0	168.0	2
MW-82-198	MW	--	--	--	X	X	--	483.66	200.3	178.0	198.0	2
MW-83-090	MW	X	--	--	--	--	--	529.24	92.3	70.0	90.0	2
MW-83-180	MW	--	--	X	X	--	--	529.13	182.0	160.0	180.0	2
MW-83-225	MW	--	--	--	X	--	--	529.80	227.4	205.0	225.0	2
MW-83-245	MW	--	--	--	--	X	--	529.65	257.4	235.0	245.0	2
MW-84-057	MW	X	--	--	--	--	--	500.70	59.4	42.0	57.0	2
MW-84-095	MW	X	X	--	--	--	--	500.64	97.4	75.0	95.0	2
MW-84-132	MW	--	--	X	--	--	--	501.26	134.4	112.0	132.0	2
MW-84-193	MW	--	--	--	X	--	--	501.18	195.5	173.2	193.2	2
MW-85-129	MW	X	--	--	--	--	--	569.93	131.3	113.8	129.0	2
MW-85-217	MW	--	--	X	--	--	--	569.36	219.0	196.7	216.7	2
MW-85-237	MW	--	--	--	X	--	--	569.50	239.0	226.7	236.7	2
MW-86-030	MW	X	--	--	--	--	--	468.02	32.3	10.0	30.0	2
MW-86-066	MW	--	X	--	--	--	--	467.91	68.3	46.0	66.0	2
MW-86-120	MW	--	--	X	X	--	--	468.33	122.3	100.0	120.0	2
MW-86-140	MW	--	--	--	X	--	--	468.18	142.3	130.0	140.0	2
MW-87-109	MW	X	--	--	--	--	--	546.94	111.3	89.0	109.0	2
MW-87-139	MW	X	X	--	--	--	--	546.94	141.4	119.0	139.0	2
MW-87-192	MW	--	--	X	--	--	--	547.26	194.3	172.0	192.0	2

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Location ID	Location Type	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Other Layer	Top of Casing Elevation (ft)	Depth of Well (ft bgs)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Diameter of Well (inches)
MW-87-275	MW	--	--	--	--	X	--	547.11	277.3	255.0	275.0	2
MW-88-107	MW	X	--	--	--	--	--	546.53	109.3	87.0	107.0	2
MW-89-183	MW	--	X	--	--	--	--	587.52	185.6	163.2	183.2	2
MW-89-273	MW	--	--	--	X	--	--	587.66	275.6	253.2	273.2	2
MW-90-031	MW	X	--	--	--	--	--	459.27	33.8	21.5	31.5	2
MW-91-045	MW	X	X	--	--	--	--	465.48	46.5	24.2	44.2	2
MW-91-120	MW	--	--	X	X	--	--	465.37	122.1	99.8	119.8	2
MW-91-170	MW	--	--	--	X	X	--	465.37	173.2	150.8	170.8	2
MW-91-320	MW	--	--	--	--	--	Layers 7, 8	465.28	323.2	300.8	320.8	2
MW-92-037	MW	X	X	--	--	--	--	462.00	39.4	17.0	37.0	2
MW-92-072	MW	--	X	X	--	--	--	461.97	74.4	52.0	72.0	2
MW-92-102	MW	--	--	X	--	--	--	462.38	104.3	82.0	102.0	2
MW-92-122	MW	--	--	X	X	--	--	462.30	124.3	112.0	122.0	2
MW-93-050	MW	X	--	--	--	--	--	486.41	52.3	30.0	50.0	2
MW-93-213	MW	--	--	--	--	X	--	486.33	215.3	193.0	213.0	2
MW-94-030	MW	X	--	--	--	--	--	468.39	32.2	10.0	30.0	2
MW-94-100	MW	--	--	X	--	--	--	468.41	102.3	70.0	100.0	2
MW-95-113	MW	X	--	--	--	--	--	553.64	115.3	93.0	113.0	2
MW-95-157	MW	--	X	X	--	--	--	553.60	159.3	137.0	157.0	2
MW-96-045	MW	X	--	--	--	--	--	483.84	47.3	25.0	45.0	2
MW-96-217	MW	--	--	--	--	X	--	483.61	219.3	197.0	217.0	2
MW-97-042	MW	X	--	--	--	--	--	481.81	42.8	22.3	42.3	2
MW-97-202	MW	--	--	--	--	X	--	481.648	201.8	191.3	201.3	2
MW-98-055	MW	X	--	--	--	--	--	502.12	57.3	39.9	55.0	2
MW-98-077	MW	X	--	--	--	--	--	502.02	79.3	67.0	77.0	2
MW-99-060	MW	X	--	--	--	--	--	500.61	62.3	40.0	60.0	2
MW-99-140	MW	--	--	X	--	--	--	500.55	142.3	120.0	140.0	2
OW-01D	MW	--	--	--	--	X	--	550.37	277.3	257.0	277.0	2
OW-01M	MW	--	--	X	--	--	--	550.36	185.8	165.0	185.0	2
OW-01S	MW	X	--	--	--	--	--	550.21	113.5	83.5	113.5	2
OW-02D	MW	--	--	--	--	--	Layer 6	549.01	340.0	310.0	330.0	2
OW-02M	MW	--	--	X	X	--	--	548.52	210.3	190.0	210.0	2
OW-02S	MW	X	--	--	--	--	--	548.88	103.6	71.0	101.0	2
OW-05D	MW	--	--	--	--	--	Layer 6	552.41	350.0	300.0	320.0	2
OW-05M	MW	--	--	--	X	--	--	551.81	250.3	210.0	250.0	2
OW-05S	MW	X	--	--	--	--	--	551.83	110.3	70.0	110.0	2
PGE-07BR	MW	--	--	--	--	--	Layer 9	--	300.0	249.0	300.0	7
PGE-08	MW	--	--	--	--	--	Layers 7, 8, 9	596.01	564.0	405.0	554.0	6.75
PT5D	MW	--	--	X	--	--	--	473.49	105.0	95.0	105.0	2
PT5M	MW	--	X	--	--	--	--	473.49	70.0	60.0	70.0	2
PT5S	MW	X	--	--	--	--	--	473.47	45.0	35.0	45.0	2

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Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Location ID	Location Type	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Other Layer	Top of Casing Elevation (ft)	Depth of Well (ft bgs)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Diameter of Well (inches)
PT8D	MW	--	--	X	--	--	--	562.03	212.5	190.0	210.0	2
PT9D	MW	--	--	X	X	--	--	559.11	212.5	190.0	210.0	2
PT9M	MW	--	--	X	--	--	--	559.14	187.0	162.0	182.0	2
PT9S	MW	X	X	--	--	--	--	559.27	153.0	128.0	148.0	2
MW-58BR	MWBR	--	--	--	--	--	Layer 9	524.91	206.00	160.00	206.00	--
MW-60BR-245	MWBR	--	X	X	X	--	--	554.95	244.1	136.0	245.0	5
MW-64BR	MWBR	X	X	X	X	--	--	575.60	260.0	2.0	258.0	3
MW-66BR-270	MWBR	--	--	--	X	--	--	586.15	270.6	248.0	271.0	5
MW-68BR-280	MWBR	--	--	X	X	--	--	620.64	278.2	257.0	279.0	5
MW-70BR-225	MWBR	--	--	--	X	--	--	539.84	229.3	120.0	227.0	5
MW-72BR-200	MWBR	--	X	X	X	--	--	513.79	200.0	107.0	200.0	--

Abbreviations:
-- = not available or not applicable
bgs = below ground surface
EW = Extraction Well
ft = feet
ID = identification
MW = Monitoring Well
MWBR = Bedrock Monitoring Well
NAD83 = North American Datum of 1983
NGVD88 = Northern Geodetic Vertical Datum of 1988
SW = Surface Water
Layer 1 = greater than 425 feet NGVD88
Layer 2 = 400 – 425 feet NGVD88
Layer 3 = 350 – 400 feet NGVD88
Layer 4 = 300 – 350 feet NGVD88
Layer 5 = 250 – 300 feet NGVD88
Layer 6 = 200 – 250 feet NGVD88
Layer 7 = 150 – 200 ft NGVD88
Layer 8 = 100 – 150 ft NGVD88
Layer 9 = -200 – 100 ft NGVD88
Layer 10 = less than -200 ft NGVD88

Table 3.4
Process Control Monitoring Analytical Results
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company Topock Compressor Station, Needles, California

Monitoring Well ID	Well Group	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Manganese (mg/L)	Ammonia (as Nitrate) (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
MW-20-070	Dose Response	07/13/2022	N	1,200	--	0.6	41	--	0.035 J	0.0035	--	28	--	530	<1
MW-20-070	Dose Response	08/09/2022	N	700	720	<0.1	53 J	--	<0.02 J	<0.0005 J	<0.2	40	<5	690	<1
MW-20-070	Dose Response	08/09/2022	FD	690	680	<0.1	50 J	--	<0.02 J	<0.0005 J	<0.23	39	<5	690	<1
MW-20-070	Dose Response	09/14/2022	N	560	--	1.3	32	--	<0.02	<0.0005	--	25	--	420	<1
MW-20-100	Dose Response	07/13/2022	N	920	--	<0.1	74	--	0.021 J	<0.0005	--	5.3	--	880	<1
MW-20-100	Dose Response	07/13/2022	FD	930	--	<0.1	79	--	0.023 J	<0.0005	--	5.3	--	890	<1
MW-20-100	Dose Response	08/09/2022	N	1,600	1,700	<0.1	56 J	--	<0.02 J	<0.0005 J	<0.2	8.2	<5	650	<1
MW-20-100	Dose Response	09/14/2022	N	1,700	--	<0.1	77	--	<0.02	<0.0005	--	9.1	--	810	<1
MW-20-130	Dose Response	07/13/2022	N	1,800	--	<0.1	26	--	0.29 J	0.0027	--	5.4	--	1,100	<1
MW-20-130	Dose Response	08/09/2022	N	1,800	1,700	<0.1	24 J	--	<0.02 J	0.0023 J	<0.23	5.3	<5	1,100	<1
MW-20-130	Dose Response	09/14/2022	N	1,300	--	<0.1	33	--	<0.02	0.016	--	4.1	--	1,500	<1
MW-21	Dose Response	07/13/2022	N	<0.2	--	3.3	29	--	2.50 J	0.28	--	<0.5	--	1,800	<1
MW-21	Dose Response	08/12/2022	N	<1	5.8	5.7 J	25	--	1.20	0.28 J	<0.23	<0.5	<5	1,600	<1
MW-21	Dose Response	09/15/2022	N	<0.2	--	12	24	--	0.13	0.26	--	<0.5	--	1,500	<1
MW-26	Dose Response	07/13/2022	N	110	--	<0.1	79	--	0.076 J	0.11	--	<0.5	--	540	<1
MW-26	Dose Response	08/12/2022	N	100	94	<0.1 J	73	--	<0.02	0.0032 J	<0.23	<0.5	<5	520	<1
MW-26	Dose Response	09/15/2022	N	19	--	<0.1	73	--	0.038	0.77	--	<0.5	--	550	<1
MW-31-060	Dose Response	07/13/2022	N	190	--	<0.1 J	67 J	--	0.043 J	0.12 J	--	<0.5	--	560	<1
MW-31-060	Dose Response	08/10/2022	N	<1	<1	<0.1	76	--	0.26 J	0.85	0.6	<0.5	<5	540	<1
MW-31-060	Dose Response	09/14/2022	N	30	--	<0.1	99	--	0.17 J	0.98	--	<0.5	--	570	<1
MW-31-135	Dose Response	07/13/2022	N	23	--	<0.1 J	44 J	--	<0.02 J	0.013 J	--	1.1	--	670	<1
MW-31-135	Dose Response	08/10/2022	N	25	25	<0.1	40	--	<0.02 J	0.0021	<0.2	1.5	<5	690	<1
MW-31-135	Dose Response	09/14/2022	N	19	--	1.1	41	--	<0.02	0.0031	--	1.3	--	660	<1
MW-51	Dose Response	07/13/2022	N	490	--	<0.1	40	--	0.03 J	0.014	--	1.4	--	540	<1
MW-51	Dose Response	08/12/2022	N	390	450	<0.1 J	36	--	<0.02	<0.0005 J	<0.23	1	<5	530	<1
MW-51	Dose Response	09/15/2022	N	710	--	1.3	84	--	<0.02	0.017	--	2.6	--	530	<1
MW-71-035	Dose Response	07/13/2022	N	<1	--	<0.1	49	--	0.036 J	0.7	--	<0.5	--	1,300	<1
MW-71-035	Dose Response	08/12/2022	N	<1	<1	<0.1 J	52	--	0.38	2.20 J	<0.23	<0.5	<5	1,300	<1
MW-71-035	Dose Response	09/15/2022	N	5.6	--	<0.1	41	--	<0.02	0.44	--	0.8	--	1,500	<1
MW-76-039	Dose Response	07/11/2022	N	140	--	<0.1	74	--	0.11 J	0.012	--	2.5	--	280	<1
MW-76-039	Dose Response	08/08/2022	N	140	130	<0.1	53 J	--	<0.02 J	<0.0005 J	<0.2	2.8	<5	230	<1
MW-76-039	Dose Response	09/12/2022	N	93	--	<0.1	59	--	0.11	0.032	--	3	--	250	<1
MW-76-039	Dose Response	09/12/2022	FD	94	--	<0.1	60	--	0.078	0.029	--	3	--	250	<1
MW-76-156	Dose Response	07/11/2022	N	<1	--	<0.1	91	--	0.2 J	1.40	--	<0.5	--	720	<1
MW-76-156	Dose Response	08/08/2022	N	8.9	8.5	<0.1	44 J	--	0.027 J	0.13 J	<0.2	1.9	<5	710	<1
MW-76-156	Dose Response	09/12/2022	N	13	--	<0.1	45	--	0.025	0.085	--	2.2	--	760	<1
MW-76-181	Dose Response	07/11/2022	N	1,700	--	<0.1	68	--	0.032 J	0.00074	--	2.5	--	900	<1
MW-76-181	Dose Response	08/08/2022	N	1,300	1,200	<0.1	54 J	--	<0.02 J	0.0096 J	<0.2	1.6	<5	780	<1
MW-76-181	Dose Response	09/12/2022	N	1,100	--	<0.1	65	--	<0.02	0.039	--	<0.5	--	820	<1
MW-76-218	Dose Response	07/11/2022	N	36	--	<0.1	87	--	0.044 J	0.24	--	0.69	--	680	<1
MW-76-218	Dose Response	08/08/2022	N	2.3	2.3	<0.1	73 J	--	<0.02 J	0.35 J	<0.2	0.55	<5	640	<1
MW-76-218	Dose Response	09/12/2022	N	<1	--	<0.1	86	--	0.029	0.43	--	<0.5	--	680	<1
MW-78-070	Dose Response	07/14/2022	N	190	--	0.91	160	--	<0.02	0.17 J	--	<0.5	--	500	<1
MW-78-070	Dose Response	08/11/2022	N	1,200	1,300	<0.1 J	140	--	<0.02	0.088 J	<0.2	2.1	<5	440	<1
MW-78-070	Dose Response	09/15/2022	N	110	--	<0.1	180	--	<0.02	0.12	--	0.54	--	540	<1
MW-78-070	Dose Response	09/15/2022	FD	110	--	<0.1	200	--	<0.02	0.12	--	<0.5	--	540	<1

Table 3.4
Process Control Monitoring Analytical Results
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company Topock Compressor Station, Needles, California

Monitoring Well ID	Well Group	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Manganese (mg/L)	Ammonia (as Nitrate) (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
MW-78-142	Dose Response	07/14/2022	N	4,900	--	4.5	26	--	<0.02	0.0017 J	--	8.2	--	850	<1
MW-78-142	Dose Response	07/14/2022	FD	4,800	--	4.4	26	--	<0.02	0.0027 J	--	8.1	--	830	<1
MW-78-142	Dose Response	08/11/2022	N	5,300	6,100	<0.1 J	28	--	<0.02	0.0032 J	<0.2	9	<5	840	<1
MW-78-142	Dose Response	09/15/2022	N	4,600	--	1.9	27	--	<0.02	0.0037	--	7.4	--	830	<1
MW-79-058	Dose Response	07/14/2022	N	2,200	--	<0.1	140	--	<0.02	<0.0005	--	7.1	--	440	<1
MW-79-058	Dose Response	08/11/2022	N	2,100	2,100	<0.1 J	110	--	<0.02	0.013 J	<0.23	6.9	<5	460	<1
MW-79-058	Dose Response	09/15/2022	N	1,200	--	<0.1	210	--	<0.02	0.0052	--	4.2	--	510	<1
MW-79-102	Dose Response	07/14/2022	N	1,000	--	4.1	40	--	<0.02	0.0019	--	2.2	--	610	<1
MW-79-102	Dose Response	08/11/2022	N	2,000	2,200	<0.1 J	46	--	0.022	<0.0005 J	<0.22	3.6	<5	660	<1
MW-79-102	Dose Response	09/15/2022	N	880	--	1.1	41	--	<0.02	0.0072	--	1.5	--	620	<20
MW-80-057	Dose Response	07/14/2022	N	750	--	1.9	65	--	<0.02	0.007	--	8.2	--	490	<1
MW-80-057	Dose Response	08/11/2022	N	650	690	<0.1 J	55	--	<0.02	0.018 J	<0.2	12	<5	440	<1
MW-80-057	Dose Response	09/15/2022	N	880	--	0.61	65	--	<0.02	0.0099	--	11	--	510	<1
MW-80-082	Dose Response	07/14/2022	N	120	--	5.5	39	--	<0.02	0.009	--	0.59	--	550	<1
MW-80-082	Dose Response	08/11/2022	N	200	240	<0.1 J	48	--	0.033	0.0095 J	<0.22	1.2	<5	530	<1
MW-80-082	Dose Response	09/15/2022	N	160	--	1.8	42	--	<0.02	0.0034 J	--	0.81	--	610	<1
MW-80-082	Dose Response	09/15/2022	FD	160	--	1.8	44	--	<0.02	0.0051 J	--	0.87	--	600	<1
TW-02D	Dose Response	07/13/2022	N	490	--	<0.1	26	--	0.02 J	0.054	--	0.89	--	720	<1
TW-02D	Dose Response	08/09/2022	N	200	210	<0.1	24 J	--	<0.02 J	0.039 J	<0.2	1.5	<5	650	<1
TW-02D	Dose Response	09/14/2022	N	560	--	3.1	23	--	<0.02	0.0077	--	0.97	--	740	<1
TW-02S	Dose Response	07/13/2022	N	100	--	0.52	66	--	<0.02	<0.0005	--	2.8	--	180	<1
TW-02S	Dose Response	08/09/2022	N	130	130	<0.1	77 J	--	<0.02 J	0.0015 J	<0.2	3	<5	170	<1
TW-02S	Dose Response	09/14/2022	N	130	--	0.81	110	--	<0.02	<0.0005	--	2.6	--	230	<1
TW-03D	Dose Response	07/13/2022	N	520	--	<0.1	32	--	<0.02	0.048	--	0.95	--	750	<1
TW-03D	Dose Response	08/09/2022	N	160	150	<0.1	45 J	--	<0.02 J	0.055 J	<0.2	1.6	<5	660	<1
TW-03D	Dose Response	09/14/2022	N	550	--	1.8	29	--	0.095 J	0.019	--	1	--	790	<1
MW-22	Downgradient	08/19/2022	N	<1	--	14	150	--	16	5.30 J	--	<0.5	--	--	1.3
MW-27-020	Downgradient	08/23/2022	N	<0.2	--	0.67	57 J	--	<0.02 J	0.036 J	--	<0.25	--	--	1.1
MW-27-060	Downgradient	08/23/2022	N	<0.2	--	8.7	62 J	--	0.33 J	0.26 J	--	<0.25	--	--	1.4
MW-27-085	Downgradient	08/23/2022	N	<1	--	<0.1	50 J	--	0.27 J	0.26 J	--	<0.25	--	--	<1
MW-28-025	Downgradient	08/23/2022	N	<0.2	--	0.38 J	58 J	--	<0.02	0.051 J	--	<0.25	--	--	<1
MW-28-090	Downgradient	08/23/2022	N	<0.2	--	<0.1	32 J	--	1.10 J	0.41 J	--	<0.5	--	--	<1
MW-30-030	Downgradient	08/22/2022	N	<1	--	<0.1	240 J	--	0.37 J	0.11 J	--	<0.5	--	--	12
MW-30-050	Downgradient	07/12/2022	N	<0.2	--	2.2	22	--	0.034 J	0.5	--	<0.5	--	200	<5
MW-30-050	Downgradient	08/10/2022	N	<0.2	--	2.5	18	--	0.052 J	0.36	--	<0.5	--	200	<1
MW-30-050	Downgradient	08/10/2022	FD	<0.2	--	2.4	18	--	0.047 J	0.37	--	<0.5	--	190	<1
MW-30-050	Downgradient	09/13/2022	N	3.4	--	2.9	20	--	<0.02	0.0018	--	0.51	--	230	<1
MW-32-020	Downgradient	08/19/2022	N	<1	--	2.6	120	--	3.60	0.28 J	--	<0.5	--	--	8.2
MW-32-035	Downgradient	08/19/2022	N	<0.2	--	17	260	--	10	0.77 J	--	<0.5	--	--	1.8
MW-34-055	Downgradient	08/23/2022	N	<0.2	--	3.4	30 J	--	0.094 J	0.11 J	--	<0.25	--	--	1.1
MW-34-080	Downgradient	07/14/2022	N	<0.2	--	1.7	35	--	0.99	0.13 J	--	<0.5	--	490	<1
MW-34-080	Downgradient	08/11/2022	N	<0.2	--	<0.1 J	39	--	0.48	0.13 J	--	<0.5	--	540	<1
MW-34-080	Downgradient	09/15/2022	N	<0.2	--	<0.1	36	--	0.41	0.14	--	<0.5	--	620	<1
MW-34-100	Downgradient	08/23/2022	N	<1	--	<0.1	21 J	--	0.055 J	0.12 J	--	<0.25	--	--	<1
MW-36-020	Downgradient	08/23/2022	N	<0.2	--	<0.1	340 J	--	3.70 J	0.72 J	--	<0.25	--	--	1.6
MW-36-040	Downgradient	08/23/2022	N	<0.2	--	6.7	55 J	--	0.47 J	0.17 J	--	<0.25	--	--	1.8

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Monitoring Well ID	Well Group	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Manganese (mg/L)	Ammonia (as Nitrate) (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
MW-36-050	Downgradient	08/23/2022	N	<0.2	--	5.6	28 J	--	0.2 J	0.32 J	--	<0.25	--	--	1.2
MW-36-070	Downgradient	08/10/2022	N	<0.2	--	1.9	36	--	0.033 J	0.28	--	<0.25	--	--	<1
MW-36-070	Downgradient	08/10/2022	FD	<0.2	--	2.2	36	--	0.029 J	0.29	--	<0.25	--	--	<1
MW-36-090	Downgradient	07/14/2022	N	<0.2	--	3.3	37	--	0.039	0.15 J	--	<0.5	--	280	<1
MW-36-090	Downgradient	08/10/2022	N	<0.2	--	1.2	33	--	0.037 J	0.16	--	<0.5	--	230	<1
MW-36-090	Downgradient	09/14/2022	N	<0.2	--	2	43	--	0.038 J	0.16	--	<0.5	--	290	<1
MW-36-100	Downgradient	07/14/2022	N	<0.2	--	4.1	59	--	0.43	0.48 J	--	<0.5	--	430	<1
MW-36-100	Downgradient	07/14/2022	FD	<0.2	--	3.5	54	--	0.38	0.46 J	--	<0.5	--	430	<1
MW-36-100	Downgradient	08/10/2022	N	3.5	--	13	33	--	<0.02 J	0.0098	--	<0.5	--	240	<1
MW-36-100	Downgradient	09/14/2022	N	<0.2	--	10	40	--	0.17 J	0.34	--	<0.5	--	350	<1
MW-39-040	Downgradient	07/12/2022	N	<0.2	--	14	69	--	0.29 J	0.11	--	<0.25	--	130	2.2
MW-39-040	Downgradient	08/09/2022	N	<0.2	--	13	59 J	--	0.24 J	0.093 J	--	<0.25	--	120	2.7
MW-39-040	Downgradient	09/13/2022	N	<0.2	--	15	66	--	0.26 J	0.099	--	<0.25	--	130	2.6
MW-39-040	Downgradient	09/13/2022	FD	<0.2	--	15	61	--	0.27 J	0.098	--	<0.25	--	130	2.7
MW-39-050	Downgradient	07/12/2022	N	<0.2	--	1.6	38	--	<0.02 J	0.21	--	<0.25	--	190	<1
MW-39-050	Downgradient	08/09/2022	N	<0.2	--	1.2	35 J	--	<0.02 J	0.19 J	--	<0.25	--	180	<1
MW-39-050	Downgradient	09/13/2022	N	<0.2	--	1.6	43	--	0.021 J	0.21	--	<0.25	--	200	<1
MW-39-060	Downgradient	07/12/2022	N	<0.2	--	2.1	24	--	0.036 J	0.13	--	<0.25	--	200	<1
MW-39-060	Downgradient	08/09/2022	N	<0.2	--	1.6	36 J	--	0.27 J	0.19 J	--	<0.25	--	200	<1
MW-39-060	Downgradient	09/13/2022	N	<0.2	--	2	32	--	0.042 J	0.18	--	<0.25	--	220	<5
MW-39-070	Downgradient	07/12/2022	N	<0.2	--	0.71	50	--	<0.02 J	0.015	--	<0.25	--	280	<1
MW-39-070	Downgradient	08/09/2022	N	<0.2	--	1.2	22 J	--	0.025 J	0.01 J	--	<0.25	--	240	<1
MW-39-070	Downgradient	08/09/2022	FD	<0.2	--	1.2	24 J	--	<0.02 J	0.012 J	--	<0.25	--	240	<1
MW-39-070	Downgradient	09/13/2022	N	<0.2	--	1.2	36	--	<0.02	0.012	--	<0.5	--	280	<1
MW-39-080	Downgradient	07/12/2022	N	13	--	<0.1	24	--	<0.02 J	0.0048	--	<0.5	--	510	<1
MW-39-080	Downgradient	08/09/2022	N	0.53	--	<0.1	20 J	--	<0.02 J	0.0065 J	--	<0.5	--	350	<1
MW-39-080	Downgradient	09/13/2022	N	17	--	<0.1	32	--	<0.02	0.0078	--	<0.5	--	580	<1
MW-39-100	Downgradient	07/12/2022	N	240	--	<0.1	29	--	0.025 J	0.0084	--	<0.5	--	960	<1
MW-39-100	Downgradient	08/09/2022	N	79	--	<0.1	26 J	--	<0.02 J	0.0085 J	--	<0.5	--	750	<1
MW-39-100	Downgradient	09/13/2022	N	110	--	<0.1	31	--	<0.02	0.0089	--	<0.5	--	880	<1
MW-42-030	Downgradient	08/18/2022	N	<0.2	--	1.6	150	--	0.83	0.2	--	<0.25	--	--	<5
MW-42-055	Downgradient	08/18/2022	N	<0.2	--	10	150	--	0.18	0.25	--	<0.25	--	--	<1
MW-42-065	Downgradient	08/18/2022	N	<0.2	--	1.6	110	--	0.41	2.30	--	<0.25	--	--	<1
MW-43-025	Downgradient	08/24/2022	N	<0.2	--	29 J	80 J	--	5.30 J	0.55 J	--	<0.25	--	--	1.9
MW-43-075	Downgradient	08/24/2022	N	<1	--	7 J	52 J	--	3	0.67 J	--	<0.5	--	--	<1
MW-43-090	Downgradient	08/24/2022	N	<1	--	<0.1 J	54 J	--	1	0.64 J	--	<0.5	--	--	<1
MW-44-070	Downgradient	08/23/2022	N	<0.2	--	2.8	33 J	--	0.65 J	0.32 J	--	<0.25	--	--	<1
MW-44-115	Downgradient	07/14/2022	N	<0.2	--	4.7 J	19	--	<0.02	0.054 J	--	<0.5	--	1,000	<1
MW-44-115	Downgradient	07/14/2022	FD	<0.2	--	<0.1 J	20	--	<0.02	0.058 J	--	<0.5	--	1,000	<1
MW-44-115	Downgradient	08/11/2022	N	<1	--	<0.1 J	19	--	<0.02	0.046 J	--	<0.5	--	1,000	<1
MW-44-115	Downgradient	08/11/2022	FD	<0.2	--	<0.1 J	21	--	<0.02	0.052 J	--	<0.5	--	940	<1
MW-44-115	Downgradient	09/13/2022	N	0.66	--	<0.1	21	--	0.041 J	0.018	--	<0.5	--	1,000	<1
MW-44-115	Downgradient	09/13/2022	FD	0.67	--	<0.1	20	--	0.037 J	0.018	--	<0.5	--	1,200	<1
MW-44-125	Downgradient	07/14/2022	N	<1	--	5.4	45	--	0.42	0.51 J	--	<0.5	--	1,100	<1
MW-44-125	Downgradient	08/11/2022	N	<1	--	<0.1 J	46	--	0.39	0.54 J	--	<0.5	--	1,100	<1
MW-44-125	Downgradient	09/13/2022	N	<1	--	<0.1	47	--	0.41 J	0.56	--	<0.5	--	1,300	<1

Table 3.4
Process Control Monitoring Analytical Results
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company Topock Compressor Station, Needles, California

Monitoring Well ID	Well Group	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Manganese (mg/L)	Ammonia (as Nitrate) (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
MW-45-095A	Downgradient	07/14/2022	N	<0.2	--	1.9	23	--	<0.02	0.12 J	--	<0.5	--	490	<1
MW-45-095A	Downgradient	08/11/2022	N	<0.2	--	<0.1 J	28	--	<0.02	0.23 J	--	<0.5	--	430	<1
MW-45-095A	Downgradient	09/15/2022	N	0.23	--	<0.1	27	--	<0.02	0.18	--	<0.5	--	470	<1
MW-46-175	Downgradient	08/24/2022	N	4.3	--	<0.1 J	28 J	--	0.1 J	0.0083 J	--	1	--	--	<50
MW-46-205	Downgradient	08/24/2022	N	<1	--	<0.1 J	34 J	--	<0.02 J	0.035 J	--	0.82	--	--	<1
MW-46-205	Downgradient	08/24/2022	FD	<1	--	<0.1 J	33 J	--	<0.02 J	0.035 J	--	0.83	--	--	<1
MW-52D	Downgradient	08/24/2022	N	<1	--	<0.1 J	36 J	--	0.74	0.38 J	--	<0.5	--	--	<1
MW-52D	Downgradient	08/24/2022	FD	<1	--	<0.1 J	35 J	--	0.7	0.33 J	--	<0.5	--	--	<1
MW-52M	Downgradient	08/24/2022	N	<1	--	<0.1 J	56 J	--	1.60	0.28 J	--	<0.5	--	--	<1
MW-52S	Downgradient	08/24/2022	N	<1	--	<0.1 J	850 J	--	20	1.30 J	--	<0.5	--	--	1.9
MW-53D	Downgradient	08/24/2022	N	<1	--	<0.1 J	53 J	--	0.25	1.20 J	--	<0.5	--	--	<1
MW-53M	Downgradient	08/24/2022	N	<1	--	<0.1 J	65 J	--	0.44	0.42 J	--	<0.5	--	--	<1
MW-53S	Downgradient	08/24/2022	N	<0.2	--	<0.1 J	190 J	--	5.90	1.50 J	--	<0.5	--	--	1.5
MW-77-046	Downgradient	07/11/2022	N	<0.2	--	1.2	55	--	0.13 J	0.48	--	<0.5	--	370	<1
MW-77-046	Downgradient	08/08/2022	N	<0.2	--	2.3	97 J	--	0.027 J	0.8 J	--	<0.5	--	920	<1
MW-77-046	Downgradient	09/12/2022	N	<0.2	--	3.7	59	--	0.076	0.47	--	<0.5	--	530	<1
MW-77-102	Downgradient	07/11/2022	N	<0.2	--	<0.1	59	--	0.26 J	0.11	--	0.93	--	710	<1
MW-77-102	Downgradient	08/08/2022	N	<0.2	--	<0.1	42 J	--	0.4 J	0.053 J	--	0.61	--	560	<1
MW-77-102	Downgradient	09/12/2022	N	0.31	--	<0.1	52	--	0.054	0.055	--	0.9	--	590	<1
MW-77-158	Downgradient	07/11/2022	N	<0.2	--	<0.1	30	--	0.36 J	0.019	--	<0.5	--	540	<1
MW-77-158	Downgradient	08/08/2022	N	<1	--	<0.1	46 J	--	<0.02 J	0.064 J	--	<0.5	--	660	<1
MW-77-158	Downgradient	09/12/2022	N	<0.2	--	2.4	31	--	0.029	0.039	--	<0.5	--	600	<1
MW-77-187	Downgradient	07/11/2022	N	40	--	<0.1	32	--	0.33 J	0.017	--	1.2	--	880	<1
MW-77-187	Downgradient	08/08/2022	N	8.8	--	<0.1	30 J	--	0.061 J	0.028 J	--	0.95	--	860	<50
MW-77-187	Downgradient	09/12/2022	N	40	--	2.1	31	--	<0.02	0.013	--	0.67	--	860	<1
MW-81-043	Downgradient	07/12/2022	N	6.4	--	3.1	77	--	0.16 J	0.14	--	1.2	--	350	<1
MW-81-043	Downgradient	08/10/2022	N	3	--	1.2 J	110	--	0.09 J	0.045	--	<0.5	--	460	<10
MW-81-043	Downgradient	09/13/2022	N	10	--	2.4	69	--	0.053 J	0.024	--	1.7	--	330	<1
MW-81-098	Downgradient	07/12/2022	N	1.3	--	<0.1	67	--	<0.02 J	0.22	--	0.82	--	680	<1
MW-81-098	Downgradient	08/10/2022	N	0.55	--	<0.1	59	--	<0.02 J	0.16	--	<0.5	--	580	<1
MW-81-098	Downgradient	09/13/2022	N	<1	--	<0.1	80	--	0.19 J	0.13	--	0.87	--	650	<20
MW-82-046	Downgradient	07/12/2022	N	<1	--	24	73	--	7.30 J	0.36	--	<0.5	--	1,600	7
MW-82-046	Downgradient	08/10/2022	N	<1	--	25	52	--	6 J	0.31	--	<0.5	--	1,600	2.2
MW-82-046	Downgradient	09/13/2022	N	<0.2	--	23	51	--	5.50 J	0.26	--	<0.5	--	1,400	1.6
MW-82-112	Downgradient	07/12/2022	N	<0.2	--	<0.1	57	--	<0.02 J	0.14	--	0.91	--	710	<1
MW-82-112	Downgradient	08/10/2022	N	<0.2	--	<0.1	36	--	<0.02 J	0.061	--	0.61	--	630	<1
MW-82-112	Downgradient	09/13/2022	N	0.29	--	<0.1	38	--	0.035 J	0.084	--	0.92	--	670	<1
MW-82-168	Downgradient	07/12/2022	N	0.28	--	<0.1	41	--	0.054 J	0.043	--	<0.5	--	550	<1
MW-82-168	Downgradient	07/12/2022	FD	<1	--	<0.1	41	--	0.033 J	0.045	--	<0.5	--	550	<1
MW-82-168	Downgradient	08/10/2022	N	<0.2	--	<0.1	38	--	0.024 J	0.041	--	<0.5	--	520	<1
MW-82-168	Downgradient	09/13/2022	N	<0.2	--	<0.1	38	--	0.035 J	0.042	--	<0.5	--	570	<1
MW-82-168	Downgradient	09/13/2022	FD	<0.2	--	<0.1	39	--	0.051 J	0.043	--	<0.5	--	570	<1
MW-82-198	Downgradient	07/12/2022	N	3.1	--	<0.1	46	--	<0.02 J	0.1	--	1.3	--	990	<1
MW-82-198	Downgradient	08/10/2022	N	<1	--	<0.1	39	--	0.025 J	0.15	--	0.76	--	1,000	<1
MW-82-198	Downgradient	09/13/2022	N	4.1	--	<0.1	42	--	<0.02	0.09	--	1.2	--	980	<1
MW-86-030	Downgradient	08/23/2022	N	<0.2	--	2.4 J	110 J	--	<0.02	0.088 J	--	<0.25	--	--	1.7

Table 3.4
Process Control Monitoring Analytical Results
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company Topock Compressor Station, Needles, California

Monitoring Well ID	Well Group	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Manganese (mg/L)	Ammonia (as Nitrate) (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
MW-86-066	Downgradient	08/23/2022	N	<0.2	--	<0.1 J	78 J	--	0.042	0.69 J	--	0.65	--	--	<1
MW-86-120	Downgradient	08/23/2022	N	<1	--	<0.1 J	38 J	--	<0.02	0.3 J	--	<0.5	--	--	<20
MW-86-140	Downgradient	08/23/2022	N	<1	--	<0.1 J	83 J	--	0.52	0.79 J	--	<0.5	--	--	<1
MW-90-031	Downgradient	08/19/2022	N	<1	--	<0.1	110	--	7.80	0.063 J	--	<0.5	--	--	2.2
PT5D	Downgradient	08/15/2022	N	10	--	<0.1	29 J	--	<0.02	0.013 J	--	<0.5	--	--	<1
PT5M	Downgradient	08/15/2022	N	<0.2	--	1.1	41 J	--	<0.02	1.10 J	--	<0.5	--	--	<1
PT5S	Downgradient	08/15/2022	N	<0.2	--	14	110 J	--	1.10	0.29 J	--	<0.25	--	--	1.9
IRZ-09-100	Extraction Wells	09/14/2022	N	16	--	--	--	<0.02	<0.02	0.0016	--	2.1	--	520	<1
IRZ-13D-210	Extraction Wells	09/14/2022	N	460	--	--	--	<0.02	<0.02	<0.0005	--	2.1	--	960	<1
IRZ-13S-095	Extraction Wells	09/14/2022	N	19	--	--	--	0.021	<0.02	<0.0005	--	2	--	400	<1
IRZ-23-143	Extraction Wells	09/14/2022	N	670	--	--	--	<0.02	<0.02	<0.0005	--	4.7	--	470	<1
MW-29	Northern Extraction	08/23/2022	N	<0.2	--	--	--	--	--	--	--	--	--	--	--
MW-33-040	Northern Extraction	08/24/2022	N	<1	--	--	--	--	--	--	--	--	--	--	--
MW-33-090	Northern Extraction	08/24/2022	N	2.8	--	--	--	--	--	--	--	--	--	--	--
MW-33-090	Northern Extraction	08/24/2022	FD	2.7	--	--	--	--	--	--	--	--	--	--	--
MW-33-150	Northern Extraction	08/24/2022	N	6.5	--	--	--	--	--	--	--	--	--	--	--
MW-33-210	Northern Extraction	08/24/2022	N	11	--	--	--	--	--	--	--	--	--	--	--
MW-35-060	Northern Extraction	08/22/2022	N	20	--	--	--	--	--	--	--	--	--	--	--
MW-35-060	Northern Extraction	08/22/2022	FD	20	--	--	--	--	--	--	--	--	--	--	--
MW-35-135	Northern Extraction	08/22/2022	N	27	--	--	--	--	--	--	--	--	--	--	--
MW-47-055	Northern Extraction	08/24/2022	N	17	--	--	--	--	--	--	--	--	--	--	--
MW-47-115	Northern Extraction	08/24/2022	N	24	--	--	--	--	--	--	--	--	--	--	--
MW-49-135	Northern Extraction	08/23/2022	N	7.7	--	--	--	--	--	--	--	--	--	--	--
MW-49-275	Northern Extraction	08/23/2022	N	<1	--	--	--	--	--	--	--	--	--	--	--
MW-49-365	Northern Extraction	08/23/2022	N	<1	--	--	--	--	--	--	--	--	--	--	--
MW-75-033	Northern Extraction	08/24/2022	N	36	--	--	--	--	--	--	--	--	--	--	--
MW-75-117	Northern Extraction	08/24/2022	N	14	--	--	--	--	--	--	--	--	--	--	--
MW-75-202	Northern Extraction	08/25/2022	N	<1	--	--	--	--	--	--	--	--	--	--	--
MW-75-202	Northern Extraction	08/25/2022	FD	<1	--	--	--	--	--	--	--	--	--	--	--
MW-75-267	Northern Extraction	08/25/2022	N	<1	--	--	--	--	--	--	--	--	--	--	--
MW-75-337	Northern Extraction	08/25/2022	N	<1	--	--	--	--	--	--	--	--	--	--	--
MW-96-045	Northern Extraction	08/11/2022	N	<1	--	--	--	--	--	--	--	--	--	--	--
MW-96-217	Northern Extraction	08/11/2022	N	<1	--	--	--	--	--	--	--	--	--	--	--
MW-97-042	Northern Extraction	08/22/2022	N	21	--	--	--	--	--	--	--	--	--	--	--
MW-97-202	Northern Extraction	08/22/2022	N	<1	--	--	--	--	--	--	--	--	--	--	--
TW-04	Northern Extraction	08/22/2022	N	12	--	--	--	--	--	--	--	--	--	--	--

Abbreviations:
-- = not applicable or not available
< = not detected at reporting limit, as shown
FD = field duplicate
ID = identification
J = estimated concentration
mg/L= milligram(s) per liter
N = primary sample
µg/L = microgram(s) per liter

Table 3.5
NTH IRZ Dose Response Monitoring Wells Performance Summary
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company Topock Compressor Station, Needles, California

Monitoring Well ID	IRZ Injection Well ID	Sample Date	TOC			Cr6						Dissolved Iron				Dissolved Arsenic			Dissolved Manganese			Evidence of Treated Groundwater at Well[g]	Are In-Situ Byproducts Controlled?	Operational Response and Reasoning[h]
			TOC Baseline[a] (mg/L)	TOC (mg/L)	Is TOC within the Target Range of 15 - 50 mg/L[a]?	Cr6 Baseline[c] (µg/L)	Cr6 (µg/L)	Change from Baseline Concentration (µg/L)	Percent Change from Baseline Concentration (%)[d]	Are Cr6 Concentrations Decreasing Compared to the Baseline Concentration?	Is Cr6 < 32 µg/L?	Dissolved Iron Baseline[f] (mg/L)	Dissolved Iron (mg/L)	Are Dissolved Iron Concentrations above Baseline?	Is Dissolved Iron < 5 mg/L[e]? If Dissolved Iron > 5 mg/L, Is It < Baseline?	Dissolved Arsenic Baseline[f] (µg/L)	Dissolved Arsenic (µg/L)	Is Dissolved Arsenic < 15 µg/L[e]? If Dissolved Arsenic > 15 µg/L, Is It < Baseline?	Dissolved Manganese Baseline[f] (mg/L)	Dissolved Manganese (mg/L)	Is Dissolved Manganese < 5 mg/L[e]? If Dissolved Manganese > 5 mg/L, Is It < Baseline?			
MW-20-070	IRZ-25	07/13/2022	<1	<1	N	2500	1,200	-1,300	-52%	Y	N	0.0624	0.035 J	N	Y	2.70	0.6	Y	0.0077	0.0035	Y	N	Y	IRZ injection well not operating
MW-20-070	IRZ-25	08/09/2022	<1	<1	N	2500	700	-1,800	-72%	Y	N	0.0624	<0.02 J	N	Y	2.70	<0.1	Y	0.0077	<0.0005 J	Y	N	Y	IRZ injection well not operating
MW-20-070	IRZ-25	09/14/2022	<1	<1	N	2500	560	-1,940	-78%	Y	N	0.0624	<0.02	N	Y	2.70	1.3	Y	0.0077	<0.0005	Y	N	Y	IRZ injection well not operating
MW-20-100	IRZ-25	07/13/2022	<1	<1	N	750	930	180	24%	N	N	0.390	0.023 J	N	Y	2.9	<0.1	Y	0.056	<0.0005	Y	N	Y	IRZ injection well not operating
MW-20-100	IRZ-25	08/09/2022	<1	<1	N	750	1,600	850	113%	N	N	0.390	<0.02 J	N	Y	2.9	<0.1	Y	0.056	<0.0005 J	Y	N	Y	IRZ injection well not operating
MW-20-100	IRZ-25	09/14/2022	<1	<1	N	750	1,700	950	127%	N	N	0.390	<0.02	N	Y	2.9	<0.1	Y	0.056	<0.0005	Y	N	Y	IRZ injection well not operating
MW-20-130	IRZ-25	07/13/2022	<1	<1	N	5900	1,800	-4,100	-69%	Y	N	0.092	0.29 J	Y	Y	7.42	<0.1	Y	0.0036	0.0027	Y	N	Y	IRZ injection well not operating
MW-20-130	IRZ-25	08/09/2022	<1	<1	N	5900	1,800	-4,100	-69%	Y	N	0.092	<0.02 J	N	Y	7.42	<0.1	Y	0.0036	0.0023 J	Y	N	Y	IRZ injection well not operating
MW-20-130	IRZ-25	09/14/2022	<1	<1	N	5900	1,300	-4,600	-78%	Y	N	0.092	<0.02	N	Y	7.42	<0.1	Y	0.0036	0.016	Y	N	Y	IRZ injection well not operating
MW-21	IRZ-37; IRZ-39	07/13/2022	<1	<1	N	4.6	<0.2	-4	-96%	Y	Y	0.170	2.5 J	Y	Y	4.47	3.3	Y	1.040	0.28	Y	N	Y	Baseline Cr6 less than 32 µg/L
MW-21	IRZ-37; IRZ-39	08/12/2022	<1	<1	N	4.6	<1	-4	-78%	Y	Y	0.170	1.2	Y	Y	4.47	5.7 J	Y	1.040	0.28 J	Y	N	Y	Baseline Cr6 less than 32 µg/L
MW-21	IRZ-37; IRZ-39	09/15/2022	<1	<1	N	4.6	<0.2	-4	-96%	Y	Y	0.170	0.13	N	Y	4.47	12	Y	1.040	0.26	Y	N	Y	Baseline Cr6 less than 32 µg/L
MW-26	IRZ-31	07/13/2022	<1	<1	N	2300	110	-2,190	-95%	Y	N	0.110	0.076 J	N	Y	2.2	<0.1	Y	0.120	0.11	Y	Y	Y	Power off 7/12/2022
MW-26	IRZ-31	08/12/2022	<1	<1	N	2300	100	-2,200	-96%	Y	N	0.110	<0.02	N	Y	2.2	<0.1 J	Y	0.120	0.0032 J	Y	Y	Y	Power off through 8/30/2022
MW-26	IRZ-31	09/15/2022	<1	<1	N	2300	19	-2,281	-99%	Y	Y	0.110	0.038	N	Y	2.2	<0.1	Y	0.120	0.77	Y	Y	Y	Increased dosing on 9/26/2022
MW-31-060	IRZ-18	07/13/2022	<1	<1	N	410	190	-220	-54%	Y	N	0.110	0.043 J	N	Y	1.96	<0.1 J	Y	0.0066	0.12 J	Y	Y	Y	Power off 7/12/2022
MW-31-060	IRZ-18	08/10/2022	<1	<1	N	410	<1	-409	-100%	Y	Y	0.110	0.26 J	Y	Y	1.96	<0.1	Y	0.0066	0.85	Y	Y	Y	Power off through 8/30/2022
MW-31-060	IRZ-18	09/14/2022	<1	<1	N	410	30	-380	-93%	Y	Y	0.110	0.17 J	Y	Y	1.96	<0.1	Y	0.0066	0.98	Y	Y	Y	Increased dosing on 9/26/2022
MW-31-135	IRZ-18	07/13/2022	<1	<1	N	15	23	8	53%	N	Y	0.0610	<0.02 J	N	Y	4.64	<0.1 J	Y	0.130	0.013 J	Y	N	Y	Baseline Cr6 less than 32 µg/L
MW-31-135	IRZ-18	08/10/2022	<1	<1	N	15	25	10	67%	N	Y	0.0610	<0.02 J	N	Y	4.64	<0.1	Y	0.130	0.0021	Y	N	Y	Baseline Cr6 less than 32 µg/L
MW-31-135	IRZ-18	09/14/2022	<1	<1	N	15	19	4	27%	N	Y	0.0610	<0.02	N	Y	4.64	1.1	Y	0.130	0.0031	Y	N	Y	Baseline Cr6 less than 32 µg/L
MW-51	IRZ-31	07/13/2022	<1	<1	N	3300	490	-2,810	-85%	Y	N	0.081	0.03 J	N	Y	4.9	<0.1	Y	0.0045	0.014	Y	Y	Y	Power off 7/12/2022
MW-51	IRZ-31	08/12/2022	<1	<1	N	3300	390	-2,910	-88%	Y	N	0.081	<0.02	N	Y	4.9	<0.1 J	Y	0.0045	<0.0005 J	Y	Y	Y	Power off through 8/30/2022
MW-51	IRZ-31	09/15/2022	<1	<1	N	3300	710	-2,590	-78%	Y	N	0.081	<0.02	N	Y	4.9	1.3	Y	0.0045	0.017	Y	Y	Y	Increased dosing on 9/26/2022
MW-71-035	IRZ-39	07/13/2022	<1	<1	N	<1.0	<1	0	0%	N	Y	13	0.036 J	N	Y	10	<0.1	Y	5.2	0.7	Y	N	Y	Baseline Cr6 less than 32 µg/L
MW-71-035	IRZ-39	08/12/2022	<1	<1	N	<1.0	<1	0	0%	N	Y	13	0.38	N	Y	10	<0.1 J	Y	5.2	2.2 J	Y	N	Y	Baseline Cr6 less than 32 µg/L
MW-71-035	IRZ-39	09/15/2022	<1	<1	N	<1.0	5.6	5	460%	N	Y	13	<0.02	N	Y	10	<0.1	Y	5.2	0.44	Y	N	Y	Baseline Cr6 less than 32 µg/L
MW-76-039	IRZ-15	07/11/2022	<1	<1	N	130	140	10	8%	N	N	2.0	0.11 J	N	Y	1.3	<0.1	Y	0.220	0.012	Y	N	Y	IRZ injection well not operating
MW-76-039	IRZ-15	08/08/2022	<1	<1	N	130	140	10	8%	N	N	2.0	<0.02 J	N	Y	1.3	<0.1	Y	0.220	<0.0005 J	Y	N	Y	IRZ injection well not operating
MW-76-039	IRZ-15	09/12/2022	<1	<1	N	130	94	-36	-28%	Y	N	2.0	0.11	N	Y	1.3	<0.1	Y	0.220	0.032	Y	N	Y	IRZ injection well not operating
MW-76-156	IRZ-15	07/11/2022	<1	<1	N	4.2	<1	-3	-76%	Y	Y	0.170	0.2 J	Y	Y	2.5	<0.1	Y	0.28	1.4	Y	N	Y	IRZ injection well not operating
MW-76-156	IRZ-15	08/08/2022	<1	<1	N	4.2	8.9	5	112%	N	Y	0.170	0.027 J	N	Y	2.5	<0.1	Y	0.28	0.13 J	Y	N	Y	IRZ injection well not operating
MW-76-156	IRZ-15	09/12/2022	<1	<1	N	4.2	13	9	210%	N	Y	0.170	0.025	N	Y	2.5	<0.1	Y	0.28	0.085	Y	N	Y	IRZ injection well not operating
MW-76-181	IRZ-15	07/11/2022	<1	<1	N	1500	1,700	200	13%	N	N	0.080	0.032 J	N	Y	1.7	<0.1	Y	0.93	0.00074	Y	N	Y	IRZ injection well not operating
MW-76-181	IRZ-15	08/08/2022	<1	<1	N	1500	1,300	-200	-13%	Y	N	0.080	<0.02 J	N	Y	1.7	<0.1	Y	0.93	0.0096 J	Y	N	Y	IRZ injection well not operating
MW-76-181	IRZ-15	09/12/2022	<1	<1	N	1500	1,100	-400	-27%	Y	N	0.080	<0.02	N	Y	1.7	<0.1	Y	0.93	0.039	Y	N	Y	IRZ injection well not operating
MW-76-218	IRZ-15	07/11/2022	<1	<1	N	320	36	-284	-89%	Y	N	0.180	0.044 J	N	Y	5.1	<0.1	Y	0.39	0.24	Y	N	Y	IRZ injection well not operating
MW-76-218	IRZ-15	08/08/2022	<1	<1	N	320	2.3	-318	-99%	Y	Y	0.180	<0.02 J	N	Y	5.1	<0.1	Y	0.39	0.35 J	Y	N	Y	IRZ injection well not operating

Table 3.5
NTH IRZ Dose Response Monitoring Wells Performance Summary
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company Topock Compressor Station, Needles, California

Monitoring Well ID	IRZ Injection Well ID	Sample Date	TOC			Cr6						Dissolved Iron				Dissolved Arsenic			Dissolved Manganese			Evidence of Treated Groundwater at Well[g]	Are In-Situ Byproducts Controlled?	Operational Response and Reasoning[h]
			TOC Baseline[a] (mg/L)	TOC (mg/L)	Is TOC within the Target Range of 15 - 50 mg/L[b]?	Cr6 Baseline[c] (µg/L)	Cr6 (µg/L)	Change from Baseline Concentration (µg/L)	Percent Change from Baseline Concentration (%)[d]	Are Cr6 Concentrations Decreasing Compared to the Baseline Concentration?	Is Cr6 < 32 µg/L?	Dissolved Iron Baseline[f] (mg/L)	Dissolved Iron (mg/L)	Are Dissolved Iron Concentrations above Baseline?	Is Dissolved Iron < 5 mg/L[e]? If Dissolved Iron > 5 mg/L, Is It < Baseline?	Dissolved Arsenic Baseline[f] (µg/L)	Dissolved Arsenic (µg/L)	Is Dissolved Arsenic < 15 µg/L[e]? If Dissolved Arsenic > 15 µg/L, Is It < Baseline?	Dissolved Manganese Baseline[f] (mg/L)	Dissolved Manganese (mg/L)	Is Dissolved Manganese < 5 mg/L[e]? If Dissolved Manganese > 5 mg/L, Is It < Baseline?			
MW-76-218	IRZ-15	09/12/2022	<1	<1	N	320	<1	-319	-100%	Y	Y	0.180	0.029	N	Y	5.1	<0.1	Y	0.39	0.43	Y	N	Y	IRZ injection well not operating
MW-78-070	IRZ-25; IRZ-27	07/14/2022	<1	<1	N	4400	190	-4,210	-96%	Y	N	0.100	<0.02	N	Y	1.40	0.91	Y	0.0054	0.17 J	Y	Y	Y	Power off 7/12/2022
MW-78-070	IRZ-25; IRZ-27	08/11/2022	<1	<1	N	4400	1,200	-3,200	-73%	Y	N	0.100	<0.02	N	Y	1.40	<0.1 J	Y	0.0054	0.088 J	Y	Y	Y	Power off
MW-78-070	IRZ-25; IRZ-27	09/15/2022	<1	<1	N	4400	110	-4,290	-98%	Y	N	0.100	<0.02	N	Y	1.40	<0.1	Y	0.0054	0.12	Y	Y	Y	Power off through 9/12/2022; Increased dosing on 9/26/2022
MW-78-142	IRZ-25; IRZ-27	07/14/2022	<1	<1	N	6800	4,900	-1,900	-28%	Y	N	0.130	<0.02	N	Y	4.3	4.5	Y	0.0250	0.0027 J	Y	Y	Y	Power off 7/12/2022
MW-78-142	IRZ-25; IRZ-27	08/11/2022	<1	<1	N	6800	5,300	-1,500	-22%	Y	N	0.130	<0.02	N	Y	4.3	<0.1 J	Y	0.0250	0.0032 J	Y	Y	Y	Power off
MW-78-142	IRZ-25; IRZ-27	09/15/2022	<1	<1	N	6800	4,600	-2,200	-32%	Y	N	0.130	<0.02	N	Y	4.3	1.9	Y	0.0250	0.0037	Y	Y	Y	Power off through 9/12/2022; Increased dosing on 9/26/2022
MW-79-058	IRZ-29; IRZ-31	07/14/2022	<1	<1	N	3200	2,200	-1,000	-31%	Y	N	2.6	<0.02	N	Y	2.5	<0.1	Y	0.470	<0.0005	Y	Y	Y	Power off 7/12/2022
MW-79-058	IRZ-29; IRZ-31	08/11/2022	<1	<1	N	3200	2,100	-1,100	-34%	Y	N	2.6	<0.02	N	Y	2.5	<0.1 J	Y	0.470	0.013 J	Y	Y	Y	Power off through 8/30/2022
MW-79-058	IRZ-29; IRZ-31	09/15/2022	<1	<1	N	3200	1,200	-2,000	-63%	Y	N	2.6	<0.02	N	Y	2.5	<0.1	Y	0.470	0.0052	Y	Y	Y	Increased dosing on 9/26/2022
MW-79-102	IRZ-29; IRZ-31	07/14/2022	<1	<1	N	3500 J	1,000	-2,500	-71%	Y	N	0.065	<0.02	N	Y	4.8	4.1	Y	0.054	0.0019	Y	Y	Y	Power off 7/12/2022
MW-79-102	IRZ-29; IRZ-31	08/11/2022	<1	<1	N	3500 J	2,000	-1,500	-43%	Y	N	0.065	0.022	N	Y	4.8	<0.1 J	Y	0.054	<0.0005 J	Y	Y	Y	Power off through 8/30/2022
MW-79-102	IRZ-29; IRZ-31	09/15/2022	<1	<20	N*	3500 J	880	-2,620	-75%	Y	N	0.065	<0.02	N	Y	4.8	1.1	Y	0.054	0.0072	Y	Y	Y	Increased dosing on 9/26/2022
MW-80-057	IRZ-35	07/14/2022	<1	<1	N	840 J	750	-90	-11%	Y	N	0.110	<0.02	N	Y	3.3	1.9	Y	0.080	0.007	Y	Y	Y	Power off 7/12/2022
MW-80-057	IRZ-35	08/11/2022	<1	<1	N	840 J	650	-190	-23%	Y	N	0.110	<0.02	N	Y	3.3	<0.1 J	Y	0.080	0.018 J	Y	Y	Y	Power off
MW-80-057	IRZ-35	09/15/2022	<1	<1	N	840 J	880	40	5%	N	N	0.110	<0.02	N	Y	3.3	0.61	Y	0.080	0.0099	Y	Y	Y	Power off through 9/12/2022; Increased dosing on 9/26/2022
MW-80-082	IRZ-35	07/14/2022	<1	<1	N	2100 J	120	-1,980	-94%	Y	N	0.059	<0.02	N	Y	4.2	5.5	Y	0.010	0.009	Y	Y	Y	Power off 7/12/2022
MW-80-082	IRZ-35	08/11/2022	<1	<1	N	2100 J	200	-1,900	-90%	Y	N	0.059	0.033	N	Y	4.2	<0.1 J	Y	0.010	0.0095 J	Y	Y	Y	Power off
MW-80-082	IRZ-35	09/15/2022	<1	<1	N	2100 J	160	-1,940	-92%	Y	N	0.059	<0.02	N	Y	4.2	1.8	Y	0.010	0.0051 J	Y	Y	Y	Power off through 9/12/2022; Increased dosing on 9/26/2022
TW-02D	IRZ-21	07/13/2022	<1	<1	N	740	490	-250	-34%	Y	N	0.770	0.02 J	N	Y	4.53	<0.1	Y	0.210	0.054	Y	N	Y	IRZ injection well not operating
TW-02D	IRZ-21	08/09/2022	<1	<1	N	740	200	-540	-73%	Y	N	0.770	<0.02 J	N	Y	4.53	<0.1	Y	0.210	0.039 J	Y	N	Y	IRZ injection well not operating
TW-02D	IRZ-21	09/14/2022	<1	<1	N	740	560	-180	-24%	Y	N	0.770	<0.02	N	Y	4.53	3.1	Y	0.210	0.0077	Y	N	Y	IRZ injection well not operating
TW-02S	IRZ-21	07/13/2022	<1	<1	N	81	100	19	23%	N	N	0.180	<0.02	N	Y	<10	0.52	Y	0.090	<0.0005	Y	N	Y	IRZ injection well not operating
TW-02S	IRZ-21	08/09/2022	<1	<1	N	81	130	49	60%	N	N	0.180	<0.02 J	N	Y	<10	<0.1	Y	0.090	0.0015 J	Y	N	Y	IRZ injection well not operating
TW-02S	IRZ-21	09/14/2022	<1	<1	N	81	130	49	60%	N	N	0.180	<0.02	N	Y	<10	0.81	Y	0.090	<0.0005	Y	N	Y	IRZ injection well not operating
TW-03D	IRZ-21	07/13/2022	<1	<1	N	470	520	50	11%	N	N	0.180	<0.02	N	Y	<5.0	<0.1	Y	0.034	0.048	Y	N	Y	IRZ injection well not operating
TW-03D	IRZ-21	08/09/2022	<1	<1	N	470	160	-310	-66%	Y	N	0.180	<0.02 J	N	Y	<5.0	<0.1	Y	0.034	0.055 J	Y	N	Y	IRZ injection well not operating
TW-03D	IRZ-21	09/14/2022	<1	<1	N	470	550	80	17%	N	N	0.180	0.095 J	N	Y	<5.0	1.8	Y	0.034	0.019	Y	N	Y	IRZ injection well not operating

Notes:

a. Baseline TOC concentrations are defined by the most recent sampling result prior to IRZ system startup. Note that if a result was non-detect at an elevated reporting limit, previous sampling events were considered to develop a more conservative baseline concentration.

b. Anticipated target ranges were set forth in the NTH IRZ Injection Decision Rules and Operational Framework (CH2M Hill 2015).

c. Baseline Cr6 concentrations represent the maximum concentration observed at each monitoring well between January 2020 and December 2021.

d. In comparison to the baseline concentration, a negative value indicates a decrease in concentration and a positive value indicates an increase in concentration.

e. Anticipated comparison values were set forth in the NTH IRZ Injection Decision Rules and Operational Framework (CH2M Hill 2015).

Table 3.5
NTH IRZ Dose Response Monitoring Wells Performance Summary
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company Topock Compressor Station, Needles, California

Monitoring Well ID	IRZ Injection Well ID	Sample Date	TOC			Cr6						Dissolved Iron				Dissolved Arsenic			Dissolved Manganese			Evidence of Treated Groundwater at Well[g]	Are In-Situ Byproducts Controlled?	Operational Response and Reasoning[h]
			TOC Baseline[a] (mg/L)	TOC (mg/L)	Is TOC within the Target Range of 15 - 50 mg/L[a]?	Cr6 Baseline[c] (µg/L)	Cr6 (µg/L)	Change from Baseline Concentration (µg/L)	Percent Change from Baseline Concentration (%)[d]	Are Cr6 Concentrations Decreasing Compared to the Baseline Concentration?	Is Cr6 < 32 µg/L?	Dissolved Iron Baseline[f] (mg/L)	Dissolved Iron (mg/L)	Are Dissolved Iron Concentrations above Baseline?	Is Dissolved Iron < 5 mg/L[e]? If Dissolved Iron > 5 mg/L, Is It < Baseline?	Dissolved Arsenic Baseline[f] (µg/L)	Dissolved Arsenic (µg/L)	Is Dissolved Arsenic < 15 µg/L[e]? If Dissolved Arsenic > 15 µg/L, Is It < Baseline?	Dissolved Manganese Baseline[f] (mg/L)	Dissolved Manganese (mg/L)	Is Dissolved Manganese < 5 mg/L[e]? If Dissolved Manganese > 5 mg/L, Is It < Baseline?			

f. Baseline dissolved iron, dissolved arsenic, and dissolved manganese concentrations represent the maximum historical concentration observed at each monitoring well. For wells installed after 2019, baseline concentrations represent the maximum concentration observed at each monitoring well between January 2020 and December 2021.

g. Evidence of treated groundwater at the monitoring well is determined by changes in TOC, Cr6, and/or in-situ byproduct (dissolved iron, dissolved arsenic and dissolved manganese) concentrations, as outlined in the NTH IRZ Injection Decision Rules and Operational Framework (CH2M Hill 2015). Additional information, including changes in nitrate and sulfate concentrations, is also used to support evidence of treated groundwater.

h. The need for an operational response is determined based on evidence of treated groundwater at the monitoring well and control of in-situ byproducts, as outlined in the NTH IRZ Injection Decision Rules and Operational Framework (CH2M Hill 2015).

Abbreviations:

<x = not detected at the reporting limit
< = less than
Cr6 = hexavalent chromium
ID = identification
IRZ = in-situ reactive zone
J = estimated concentration
mg/L= milligram(s) per liter
N = no
N* = No, the result is not detected at the reporting limit, and as such is not considered within the target range or above baseline.
NTH = National Trails Highway
TOC = total organic carbon
Y = yes
µg/L = microgram(s) per liter

Reference:

CH2M Hill. 2015. Basis of Design Report / Final (100%) Design Submittal for the Final Groundwater Remedy, PG&E Topock Compressor Station, Needles, California. November.

Table 3.6
NTH IRZ Downgradient Response Monitoring Wells Performance Summary
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Monitoring Well ID	Sample Date	Cr6						Dissolved Iron				Dissolved Arsenic			Dissolved Manganese			Are In-Situ Byproducts Controlled?	Operational Response and Reasoning[e]
		Cr6 Baseline[a] (µg/L)	Cr6 (µg/L)	Change from Baseline Concentration (µg/L)	Percent Change from Baseline Concentration[b]	Anticipated Change in Cr6 Concentrations[c]	Is Cr6 Concentration Within Expectations?	Dissolved Iron Baseline[a] (mg/L)	Dissolved Iron (mg/L)	Are Dissolved Iron Concentrations above Baseline?	Is Dissolved Iron < 5 mg/L[c] ? If Dissolved Iron > 5 mg/L, Is It < Baseline?	Dissolved Arsenic Baseline[a] (µg/L)	Dissolved Arsenic (µg/L)	Is Dissolved Arsenic < 15 µg/L[c]? If Dissolved Arsenic > 15 µg/L, Is It < Baseline?	Dissolved Manganese Baseline[a] (mg/L)	Dissolved Manganese (mg/L)	Is Dissolved Manganese < 5 mg/L[c]? If Dissolved Manganese > 5 mg/L, Is It < Baseline?		
MW-22	08/19/2022	<1.0	<1	0	0%	Remains below 32 µg/L	Y	21.0	16	N	Y	28	14	Y	7.2	5.3 J	Y	Y	No operational changes made
MW-27-020	08/23/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	2.9	<0.02 J	N	Y	4.8	0.67	Y	0.360	0.036 J	Y	Y	No operational changes made
MW-27-060	08/23/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	2.6	0.33 J	N	Y	13	8.7	Y	0.350	0.26 J	Y	Y	No operational changes made
MW-27-085	08/23/2022	<1.0	<1	0	0%	Remains below 32 µg/L	Y	1.9	0.27 J	N	Y	14	<0.1	Y	0.964	0.26 J	Y	Y	No operational changes made
MW-28-025	08/23/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	0.063	<0.02	N	Y	2.4	0.38 J	Y	0.410	0.051 J	Y	Y	No operational changes made
MW-28-090	08/23/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	1.0	1.1 J	Y	Y	7.7	<0.1	Y	0.664	0.41 J	Y	Y	No operational changes made
MW-30-030	08/22/2022	<1.0	<1	0	0%	Remains below 32 µg/L	Y	5.37	0.37 J	N	Y	19	<0.1	Y	1.3	0.11 J	Y	Y	No operational changes made
MW-30-050	07/12/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	0.12	0.034 J	N	Y	9.7	2.2	Y	0.260	0.5	Y	Y	No operational changes made
MW-30-050	08/10/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	0.12	0.052 J	N	Y	9.7	2.5	Y	0.260	0.37	Y	Y	No operational changes made
MW-30-050	09/13/2022	<0.2	3.4	3.2	1600%	Remains below 32 µg/L	Y	0.12	<0.02	N	Y	9.7	2.9	Y	0.260	0.0018	Y	Y	No operational changes made
MW-32-020	08/19/2022	<1.0	<1	0	0%	Remains below 32 µg/L	Y	21.0	3.6	N	Y	65	2.6	Y	2.850	0.28 J	Y	Y	No operational changes made
MW-32-035	08/19/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	24.1	10	N	Y	53	17	Y	4.300	0.77 J	Y	Y	No operational changes made
MW-34-055	08/23/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	0.505	0.094 J	N	Y	4.83	3.4	Y	0.290	0.11 J	Y	Y	No operational changes made
MW-34-080	07/14/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	0.35	0.99	Y	Y	7.3	1.7	Y	0.300	0.13 J	Y	Y	No operational changes made
MW-34-080	08/11/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	0.35	0.48	Y	Y	7.3	<0.1 J	Y	0.300	0.13 J	Y	Y	No operational changes made
MW-34-080	09/15/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	0.35	0.41	Y	Y	7.3	<0.1	Y	0.300	0.14	Y	Y	No operational changes made
MW-34-100	08/23/2022	<1.0	<1	0	0%	Steady	Y	0.47	0.055 J	N	Y	16	<0.1	Y	0.230	0.12 J	Y	Y	No operational changes made
MW-36-020	08/23/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	2.75	3.7 J	Y	Y	3.3	<0.1	Y	0.642	0.72 J	Y	Y	No operational changes made
MW-36-040	08/23/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	3.92	0.47 J	N	Y	7.7	6.7	Y	0.699	0.17 J	Y	Y	No operational changes made
MW-36-050	08/23/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	0.57	0.2 J	N	Y	5.6	5.6	Y	0.517	0.32 J	Y	Y	No operational changes made
MW-36-070	08/10/2022	0.2	<0.2	0	0%	Remains below 32 µg/L	Y	0.57	0.033 J	N	Y	10	2.2	Y	1.600	0.29	Y	Y	No operational changes made
MW-36-090	07/14/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	0.13	0.039	N	Y	25	3.3	Y	0.170	0.15 J	Y	Y	No operational changes made
MW-36-090	08/10/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	0.13	0.037 J	N	Y	25	1.2	Y	0.170	0.16	Y	Y	No operational changes made
MW-36-090	09/14/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	0.13	0.038 J	N	Y	25	2	Y	0.170	0.16	Y	Y	No operational changes made
MW-36-100	07/14/2022	36	<0.2	-36	-99%	Increasing	Y	0.26	0.43	Y	Y	14	4.1	Y	0.390	0.48 J	Y	Y	No operational changes made
MW-36-100	08/10/2022	36	3.5	-33	-90%	Increasing	Y	0.26	<0.02 J	N	Y	14	13	Y	0.390	0.0098	Y	Y	No operational changes made
MW-36-100	09/14/2022	36	<0.2	-36	-99%	Increasing	Y	0.26	0.17 J	N	Y	14	10	Y	0.390	0.34	Y	Y	No operational changes made
MW-39-040	07/12/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	12.4	0.29 J	N	Y	21	14	Y	1.590	0.11	Y	Y	No operational changes made
MW-39-040	08/09/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	12.4	0.24 J	N	Y	21	13	Y	1.590	0.093 J	Y	Y	No operational changes made
MW-39-040	09/13/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	12.4	0.27 J	N	Y	21	15	Y	1.590	0.099	Y	Y	No operational changes made
MW-39-050	07/12/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	0.15	<0.02 J	N	Y	16	1.6	Y	0.190	0.21	Y	Y	No operational changes made
MW-39-050	08/09/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	0.15	<0.02 J	N	Y	16	1.2	Y	0.190	0.19 J	Y	Y	No operational changes made
MW-39-050	09/13/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	0.15	0.021 J	N	Y	16	1.6	Y	0.190	0.21	Y	Y	No operational changes made
MW-39-060	07/12/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	0.12	0.036 J	N	Y	7.6	2.1	Y	0.110	0.13	Y	Y	No operational changes made
MW-39-060	08/09/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	0.12	0.27 J	Y	Y	7.6	1.6	Y	0.110	0.19 J	Y	Y	No operational changes made
MW-39-060	09/13/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	0.12	0.042 J	N	Y	7.6	2	Y	0.110	0.18	Y	Y	No operational changes made
MW-39-070	07/12/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	0.22	<0.02 J	N	Y	16	0.71	Y	0.12	0.015	Y	Y	No operational changes made

Table 3.6
NTH IRZ Downgradient Response Monitoring Wells Performance Summary
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Monitoring Well ID	Sample Date	Cr6						Dissolved Iron				Dissolved Arsenic			Dissolved Manganese			Are In-Situ Byproducts Controlled?	Operational Response and Reasoning[e]
		Cr6 Baseline[a] (µg/L)	Cr6 (µg/L)	Change from Baseline Concentration (µg/L)	Percent Change from Baseline Concentration[b]	Anticipated Change in Cr6 Concentrations[c]	Is Cr6 Concentration Within Expectations?	Dissolved Iron Baseline[a] (mg/L)	Dissolved Iron (mg/L)	Are Dissolved Iron Concentrations above Baseline?	Is Dissolved Iron < 5 mg/L[c] ? If Dissolved Iron > 5 mg/L, Is It < Baseline?	Dissolved Arsenic Baseline[a] (µg/L)	Dissolved Arsenic (µg/L)	Is Dissolved Arsenic < 15 µg/L[c]? If Dissolved Arsenic > 15 µg/L, Is It < Baseline?	Dissolved Manganese Baseline[a] (mg/L)	Dissolved Manganese (mg/L)	Is Dissolved Manganese < 5 mg/L[c]? If Dissolved Manganese > 5 mg/L, Is It < Baseline?		
MW-39-070	08/09/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	0.22	0.025 J	N	Y	16	1.2	Y	0.12	0.012 J	Y	Y	No operational changes made
MW-39-070	09/13/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	0.22	<0.02	N	Y	16	1.2	Y	0.12	0.012	Y	Y	No operational changes made
MW-39-080	07/12/2022	0.47	13	13	2666%	Remains below 32 µg/L	Y	0.12	<0.02 J	N	Y	16	<0.1	Y	0.12	0.0048	Y	Y	No operational changes made
MW-39-080	08/09/2022	0.47	0.53	0.06	13%	Remains below 32 µg/L	Y	0.12	<0.02 J	N	Y	16	<0.1	Y	0.12	0.0065 J	Y	Y	No operational changes made
MW-39-080	09/13/2022	0.47	17	17	3517%	Remains below 32 µg/L	Y	0.12	<0.02	N	Y	16	<0.1	Y	0.12	0.0078	Y	Y	No operational changes made
MW-39-100	07/12/2022	120	240	120	100%	Increasing	Y	0.056	0.025 J	N	Y	4.1	<0.1	Y	0.031	0.0084	Y	Y	No operational changes made; monitoring closely
MW-39-100	08/09/2022	120	79	-41	-34%	Increasing	Y	0.056	<0.02 J	N	Y	4.1	<0.1	Y	0.031	0.0085 J	Y	Y	No operational changes made; monitoring closely
MW-39-100	09/13/2022	120	110	-10	-8%	Increasing	Y	0.056	<0.02	N	Y	4.1	<0.1	Y	0.031	0.0089	Y	Y	No operational changes made; monitoring closely
MW-42-030	08/18/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	5.39	0.83	N	Y	6.5	1.6	Y	0.737	0.2	Y	Y	No operational changes made
MW-42-055	08/18/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	2.24	0.18	N	Y	29	10	Y	1.020	0.25	Y	Y	No operational changes made
MW-42-065	08/18/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	0.36	0.41	Y	Y	14	1.6	Y	2.370	2.3	Y	Y	No operational changes made
MW-43-025	08/24/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	5.4	5.3 J	N	Y	32	29 J	Y	0.360	0.55 J	Y	Y	No operational changes made
MW-43-075	08/24/2022	<0.2	<1	0	0%	Remains below 32 µg/L	Y	5.5	3	N	Y	17	7 J	Y	0.930	0.67 J	Y	Y	No operational changes made
MW-43-090	08/24/2022	<1.0	<1	0	0%	Remains below 32 µg/L	Y	9.260	1	N	Y	25	<0.1 J	Y	1.260	0.64 J	Y	Y	No operational changes made
MW-44-070	08/23/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	0.656	0.65 J	N	Y	6.6	2.8	Y	0.316	0.32 J	Y	Y	No operational changes made
MW-44-115	07/14/2022	4.8	<0.2	-4.6	-96%	Increasing	Y	0.25	<0.02	N	Y	6.93	4.7 J	Y	0.0917	0.058 J	Y	Y	No operational changes made
MW-44-115	08/11/2022	4.8	<1	-3.8	-79%	Increasing	Y	0.25	<0.02	N	Y	6.93	<0.1 J	Y	0.0917	0.052 J	Y	Y	No operational changes made
MW-44-115	09/13/2022	4.8	0.67	-4.1	-86%	Increasing	Y	0.25	0.041 J	N	Y	6.93	<0.1	Y	0.0917	0.018	Y	Y	No operational changes made
MW-44-125	07/14/2022	<1.0	<1	0	0%	Increasing	Y	0.7	0.42	N	Y	5.9	5.4	Y	0.777	0.51 J	Y	Y	No operational changes made
MW-44-125	08/11/2022	<1.0	<1	0	0%	Increasing	Y	0.7	0.39	N	Y	5.9	<0.1 J	Y	0.777	0.54 J	Y	Y	No operational changes made
MW-44-125	09/13/2022	<1.0	<1	0	0%	Increasing	Y	0.7	0.41 J	N	Y	5.9	<0.1	Y	0.777	0.56	Y	Y	No operational changes made
MW-45-095A	07/14/2022	<0.2	<0.2	0	0%	Increasing	Y	0.0129	<0.02	N*	Y	10	1.9	Y	0.260	0.12 J	Y	Y	No operational changes made
MW-45-095A	08/11/2022	<0.2	<0.2	0	0%	Increasing	Y	0.0129	<0.02	N*	Y	10	<0.1 J	Y	0.260	0.23 J	Y	Y	No operational changes made
MW-45-095A	09/15/2022	<0.2	0.23	0.030	15%	Increasing	Y	0.0129	<0.02	N*	Y	10	<0.1	Y	0.260	0.18	Y	Y	No operational changes made
MW-46-175	08/24/2022	6.6	4.3	-2.3	-35%	Remains below 32 µg/L	Y	0.20	0.1 J	N	Y	2.9	<0.1 J	Y	0.025	0.0083 J	Y	Y	No operational changes made
MW-46-205	08/24/2022	1.6	<1	-0.60	-38%	Remains below 32 µg/L	Y	0.068	<0.02 J	N	Y	<0.1	<0.1 J	Y	0.053	0.035 J	Y	Y	No operational changes made
MW-52D	08/24/2022	<1.0	<1	0	0%	Remains below 32 µg/L	Y	5.40	0.74	N	Y	27	<0.1 J	Y	0.319	0.38 J	Y	Y	No operational changes made
MW-52M	08/24/2022	<1.0	<1	0	0%	Remains below 32 µg/L	Y	2.00	1.6	N	Y	21	<0.1 J	Y	0.316	0.28 J	Y	Y	No operational changes made
MW-52S	08/24/2022	<0.2	<1	0	0%	Remains below 32 µg/L	Y	27	20	N	Y	12	<0.1 J	Y	2.100	1.3 J	Y	Y	No operational changes made
MW-53D	08/24/2022	<1.0	<1	0	0%	Remains below 32 µg/L	Y	0.54	0.25	N	Y	32	<0.1 J	Y	2.200	1.2 J	Y	Y	No operational changes made
MW-53M	08/24/2022	<1.0	<1	0	0%	Remains below 32 µg/L	Y	0.55	0.44	N	Y	25	<0.1 J	Y	0.630	0.42 J	Y	Y	No operational changes made
MW-53S	08/24/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	5.40	5.9	Y	N	<0.1	<0.1 J	Y	1.200	1.5 J	Y	Y	No operational changes made
MW-77-046	07/11/2022	1.1	<0.2	-0.90	-82%	Remains below 32 µg/L	Y	0.94	0.13 J	N	Y	3.6	1.2	Y	0.460	0.48	Y	Y	No operational changes made
MW-77-046	08/08/2022	1.1	<0.2	-0.90	-82%	Remains below 32 µg/L	Y	0.94	0.027 J	N	Y	3.6	2.3	Y	0.460	0.8 J	Y	Y	No operational changes made
MW-77-046	09/12/2022	1.1	<0.2	-0.90	-82%	Remains below 32 µg/L	Y	0.94	0.076	N	Y	3.6	3.7	Y	0.460	0.47	Y	Y	No operational changes made

Table 3.6
NTH IRZ Downgradient Response Monitoring Wells Performance Summary
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Monitoring Well ID	Sample Date	Cr6						Dissolved Iron				Dissolved Arsenic			Dissolved Manganese			Are In-Situ Byproducts Controlled?	Operational Response and Reasoning[e]
		Cr6 Baseline[a] (µg/L)	Cr6 (µg/L)	Change from Baseline Concentration (µg/L)	Percent Change from Baseline Concentration[b]	Anticipated Change in Cr6 Concentrations[c]	Is Cr6 Concentration Within Expectations?	Dissolved Iron Baseline[a] (mg/L)	Dissolved Iron (mg/L)	Are Dissolved Iron Concentrations above Baseline?	Is Dissolved Iron < 5 mg/L[c] ? If Dissolved Iron > 5 mg/L, Is It < Baseline?	Dissolved Arsenic Baseline[a] (µg/L)	Dissolved Arsenic (µg/L)	Is Dissolved Arsenic < 15 µg/L[c]? If Dissolved Arsenic > 15 µg/L, Is It < Baseline?	Dissolved Manganese Baseline[a] (mg/L)	Dissolved Manganese (mg/L)	Is Dissolved Manganese < 5 mg/L[c]? If Dissolved Manganese > 5 mg/L, Is It < Baseline?		
MW-77-102	07/11/2022	1.6	<0.2	-1.4	-88%	Remains below 32 µg/L	Y	0.082	0.26 J	Y	Y	1.3	<0.1	Y	0.064	0.11	Y	Y	No operational changes made
MW-77-102	08/08/2022	1.6	<0.2	-1.4	-88%	Remains below 32 µg/L	Y	0.082	0.4 J	Y	Y	1.3	<0.1	Y	0.064	0.053 J	Y	Y	No operational changes made
MW-77-102	09/12/2022	1.6	0.31	-1.3	-81%	Remains below 32 µg/L	Y	0.082	0.054	N	Y	1.3	<0.1	Y	0.064	0.055	Y	Y	No operational changes made
MW-77-158	07/11/2022	10 J	<0.2	-10	-98%	Remains below 32 µg/L	Y	0.048	0.36 J	Y	Y	3.2	<0.1	Y	0.087	0.019	Y	Y	No operational changes made
MW-77-158	08/08/2022	10 J	<1	-9.0	-90%	Remains below 32 µg/L	Y	0.048	<0.02 J	N	Y	3.2	<0.1	Y	0.087	0.064 J	Y	Y	No operational changes made
MW-77-158	09/12/2022	10 J	<0.2	-10	-98%	Remains below 32 µg/L	Y	0.048	0.029	N	Y	3.2	2.4	Y	0.087	0.039	Y	Y	No operational changes made
MW-77-187	07/11/2022	4.1	40	36	876%	Remains below 32 µg/L	N	0.050	0.33 J	Y	Y	4.4	<0.1	Y	0.110	0.017	Y	Y	No operational changes made; monitoring closely
MW-77-187	08/08/2022	4.1	8.8	4.7	115%	Remains below 32 µg/L	Y	0.050	0.061 J	Y	Y	4.4	<0.1	Y	0.110	0.028 J	Y	Y	No operational changes made; monitoring closely
MW-77-187	09/12/2022	4.1	40	36	876%	Remains below 32 µg/L	N	0.050	<0.02	N	Y	4.4	2.1	Y	0.110	0.013	Y	Y	No operational changes made; monitoring closely
MW-81-043	07/12/2022	13	6.4	-6.6	-51%	Remains below 32 µg/L	Y	0.38	0.16 J	N	Y	3.4	3.1	Y	0.360	0.14	Y	Y	No operational changes made
MW-81-043	08/10/2022	13	3	-10	-77%	Remains below 32 µg/L	Y	0.38	0.09 J	N	Y	3.4	1.2 J	Y	0.360	0.045	Y	Y	No operational changes made
MW-81-043	09/13/2022	13	10	-3.0	-23%	Remains below 32 µg/L	Y	0.38	0.053 J	N	Y	3.4	2.4	Y	0.360	0.024	Y	Y	No operational changes made
MW-81-098	07/12/2022	2.0 J	1.3	-0.70	-35%	Remains below 32 µg/L	Y	0.15	<0.02 J	N	Y	1.0	<0.1	Y	0.28	0.22	Y	Y	No operational changes made
MW-81-098	08/10/2022	2.0 J	0.55	-1.5	-73%	Remains below 32 µg/L	Y	0.15	<0.02 J	N	Y	1.0	<0.1	Y	0.28	0.16	Y	Y	No operational changes made
MW-81-098	09/13/2022	2.0 J	<1	-1.0	-50%	Remains below 32 µg/L	Y	0.15	0.19 J	Y	Y	1.0	<0.1	Y	0.28	0.13	Y	Y	No operational changes made
MW-82-046	07/12/2022	<0.2	<1	0	0%	Increasing before decreasing below 32 µg/L	Y	6.60	7.3 J	Y	N	32	24	Y	0.480	0.36	Y	Y	No operational changes made
MW-82-046	08/10/2022	<0.2	<1	0	0%	Increasing before decreasing below 32 µg/L	Y	6.60	6 J	N	Y	32	25	Y	0.480	0.31	Y	Y	No operational changes made
MW-82-046	09/13/2022	<0.2	<0.2	0	0%	Increasing before decreasing below 32 µg/L	Y	6.60	5.5 J	N	Y	32	23	Y	0.480	0.26	Y	Y	No operational changes made
MW-82-112	07/12/2022	0.88	<0.2	-0.68	-77%	Increasing before decreasing below 32 µg/L	Y	0.11	<0.02 J	N	Y	2.0	<0.1	Y	0.072	0.14	Y	Y	No operational changes made
MW-82-112	08/10/2022	0.88	<0.2	-0.68	-77%	Increasing before decreasing below 32 µg/L	Y	0.11	<0.02 J	N	Y	2.0	<0.1	Y	0.072	0.061	Y	Y	No operational changes made
MW-82-112	09/13/2022	0.88	0.29	-0.59	-67%	Increasing before decreasing below 32 µg/L	Y	0.11	0.035 J	N	Y	2.0	<0.1	Y	0.072	0.084	Y	Y	No operational changes made
MW-82-168	07/12/2022	7	0.28	-6.7	-96%	Increasing before decreasing below 32 µg/L	Y	0.094	0.054 J	N	Y	1.9	<0.1	Y	0.320	0.045	Y	Y	No operational changes made
MW-82-168	08/10/2022	7	<0.2	-6.8	-97%	Increasing before decreasing below 32 µg/L	Y	0.094	0.024 J	N	Y	1.9	<0.1	Y	0.320	0.041	Y	Y	No operational changes made
MW-82-168	09/13/2022	7	<0.2	-6.8	-97%	Increasing before decreasing below 32 µg/L	Y	0.094	0.051 J	N	Y	1.9	<0.1	Y	0.320	0.043	Y	Y	No operational changes made
MW-82-198	07/12/2022	<1.0	3.1	2.1	210%	Increasing before decreasing below 32 µg/L	Y	0.27	<0.02 J	N	Y	3.9	<0.1	Y	0.230	0.1	Y	Y	No operational changes made
MW-82-198	08/10/2022	<1.0	<1	0	0%	Increasing before decreasing below 32 µg/L	Y	0.27	0.025 J	N	Y	3.9	<0.1	Y	0.230	0.15	Y	Y	No operational changes made
MW-82-198	09/13/2022	<1.0	4.1	3.1	310%	Increasing before decreasing below 32 µg/L	Y	0.27	<0.02	N	Y	3.9	<0.1	Y	0.230	0.09	Y	Y	No operational changes made
MW-86-030	08/23/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	1.40	<0.02	N	Y	7.8	2.4 J	Y	0.44	0.088 J	Y	Y	No operational changes made
MW-86-066	08/23/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	0.42	0.042	N	Y	2.0	<0.1 J	Y	1.1	0.69 J	Y	Y	No operational changes made

Table 3.6
NTH IRZ Downgradient Response Monitoring Wells Performance Summary
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Monitoring Well ID	Sample Date	Cr6						Dissolved Iron				Dissolved Arsenic			Dissolved Manganese			Are In-Situ Byproducts Controlled?	Operational Response and Reasoning[e]
		Cr6 Baseline[a] (µg/L)	Cr6 (µg/L)	Change from Baseline Concentration (µg/L)	Percent Change from Baseline Concentration[b]	Anticipated Change in Cr6 Concentrations[c]	Is Cr6 Concentration Within Expectations?	Dissolved Iron Baseline[d] (mg/L)	Dissolved Iron (mg/L)	Are Dissolved Iron Concentrations above Baseline?	Is Dissolved Iron < 5 mg/L[c] ? If Dissolved Iron > 5 mg/L, Is It < Baseline?	Dissolved Arsenic Baseline[d] (µg/L)	Dissolved Arsenic (µg/L)	Is Dissolved Arsenic < 15 µg/L[c]? If Dissolved Arsenic > 15 µg/L, Is It < Baseline?	Dissolved Manganese Baseline[d] (mg/L)	Dissolved Manganese (mg/L)	Is Dissolved Manganese < 5 mg/L[c]? If Dissolved Manganese > 5 mg/L, Is It < Baseline?		
MW-86-120	08/23/2022	1.1 J	<1	-0.10	-9%	Remains below 32 µg/L	Y	0.69	<0.02	N	Y	3.1	<0.1 J	Y	0.980	0.3 J	Y	Y	No operational changes made
MW-86-140	08/23/2022	<1.0	<1	0	0%	Remains below 32 µg/L	Y	0.53	0.52	N	Y	1.4	<0.1 J	Y	1.5	0.79 J	Y	Y	No operational changes made
MW-90-031	08/19/2022	<1.0	<1	0	0%	Remains below 32 µg/L	Y	9.80	7.8	N	Y	3.7	<0.1	Y	0.350	0.063 J	Y	Y	No operational changes made
PT5D	08/15/2022	31	10	-21	-68%	May increase before decreasing	Y	2.2	<0.02	N	Y	11.5	<0.1	Y	1.7	0.013 J	Y	Y	No operational changes made
PT5M	08/15/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	1.82	<0.02	N	Y	11.1	1.1	Y	1.77	1.1 J	Y	Y	No operational changes made
PT5S	08/15/2022	<0.2	<0.2	0	0%	Remains below 32 µg/L	Y	1.03	1.1	Y	Y	13	14	Y	2.44	0.29 J	Y	Y	No operational changes made

Notes:

a. Baseline Cr6 concentrations represent the maximum concentration observed at each monitoring well between January 2020 and December 2021.

b. In comparison to the baseline concentration, a negative value indicates a decrease in concentration and a positive value indicates an increase in concentration.

c. Anticipated change in Cr6 concentrations and comparison values were determined from the NTH IRZ Injection Decision Rules and Operational Framework (CH2M Hill 2015).

d. Baseline dissolved iron, dissolved arsenic, and dissolved manganese concentrations represent the maximum historical concentration observed at each monitoring well. For wells installed after 2019, baseline concentrations represent the maximum concentration observed at each monitoring well between January 2020 and December 2021.

e. The need for an operational response is determined based on anticipated changes in Cr6 concentrations and control of in-situ byproducts, as outlined in the NTH IRZ Injection Decision Rules and Operational Framework (CH2M Hill 2015).

Abbreviations:

<x = not detected at the reporting limit
Cr6 = hexavalent chromium
ID = identification
IRZ = in-situ reactive zone
J = estimated value
mg/L= milligram(s) per liter
N = no
N* = No, the result is not detected at the reporting limit, and as such is not considered above baseline.
NTH = National Trails Highway
Y = yes
Y* = Yes, the result is not detected at an elevated reporting limit, and as such is not considered above the comparison criteria.
µg/L = microgram(s) per liter

Reference:

CH2M Hill. 2015. Basis of Design Report / Final (100%) Design Submittal for the Final Groundwater Remedy, PG&E Topock Compressor Station, Needles, California. November.

Table 3.7
Calculated Flow Vector Azimuth Directions
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Month	Layer	Location 1	Location 1 Elevation (ft NGVD88)	Location 2	Location 2 Elevation (ft NGVD88)	Location 3	Location 3 Elevation (ft NGVD88)	Gradient (ft/ft)	Azimuth (0 to 360)
June	Layers 1 and 2	MW-76-039	455.99	MW-86-030	456.25	MW-97-042	456.16	0.0006	200
July	Layers 1 and 2	MW-76-039	455.81	MW-86-030	455.74	MW-97-042	455.88	0.0003	125
August	Layers 1 and 2	MW-76-039	455.12	MW-86-030	454.74	MW-97-042	455.19	0.0009	78
June	Layers 1 and 2	MW-75-033	456.25	MW-96-045	456.09	MW-97-042	456.16	0.0005	113
July	Layers 1 and 2	MW-75-033	455.83	MW-96-045	455.74	MW-97-042	455.88	0.0006	60
August	Layers 1 and 2	MW-75-033	455.01	MW-96-045	454.82	MW-97-042	455.19	0.0018	54
June	Layers 4 and 5	MW-35-135	456.37	MW-49-135	456.27	MW-76-181	455.55	0.0009	208
July	Layers 4 and 5	MW-35-135	456.03	MW-49-135	455.97	MW-76-181	455.78	0.0004	203
August	Layers 4 and 5	MW-35-135	455.38	MW-49-135	455.19	MW-76-181	455.66	0.0010	48
June	Layers 4 and 5	MW-76-181	455.55	MW-86-120	456.36	MW-77-158	458.17	0.0071	327
July	Layers 4 and 5	MW-76-181	455.78	MW-86-120	455.91	MW-77-158	456.98	0.0034	338
August	Layers 4 and 5	MW-76-181	455.66	MW-86-120	455.00	MW-77-158	455.66	0.0017	54
June	Layers 4 and 5	MW-76-181	455.55	MW-86-140	456.47	MW-77-187	457.63	0.0057	319
July	Layers 4 and 5	MW-76-181	455.78	MW-86-140	456.02	MW-77-187	456.58	0.0022	327
August	Layers 4 and 5	MW-76-181	455.66	MW-86-140	455.14	MW-77-187	455.73	0.0013	47

Abbreviations:
ft = feet
ft/ft = foot per foot
NGVD88 = Northern Geodetic Vertical Datum of 1988
Layer 1 = greater than 425 feet NGVD88
Layer 2 = 400 – 425 feet NGVD88
Layer 4 = 300 – 350 feet NGVD88
Layer 5 = 250 – 300 feet NGVD88

Table 3.8
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Monitoring Well ID	Well Group	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Manganese (mg/L)
MW-20-070	Inside Plume	07/13/2022	N	1,200	--	0.6	0.0035
MW-20-070	Inside Plume	08/09/2022	N	700	720	<0.1	<0.0005 J
MW-20-070	Inside Plume	08/09/2022	FD	690	680	<0.1	<0.0005 J
MW-20-070	Inside Plume	09/14/2022	N	560	--	1.3	<0.0005
MW-20-100	Inside Plume	07/13/2022	N	920	--	<0.1	<0.0005
MW-20-100	Inside Plume	07/13/2022	FD	930	--	<0.1	<0.0005
MW-20-100	Inside Plume	08/09/2022	N	1,600	1,700	<0.1	<0.0005 J
MW-20-100	Inside Plume	09/14/2022	N	1,700	--	<0.1	<0.0005
MW-20-130	Inside Plume	07/13/2022	N	1,800	--	<0.1	0.0027
MW-20-130	Inside Plume	08/09/2022	N	1,800	1,700	<0.1	0.0023 J
MW-20-130	Inside Plume	09/14/2022	N	1,300	--	<0.1	0.016
MW-26	Inside Plume	07/13/2022	N	110	--	<0.1	0.11
MW-26	Inside Plume	08/12/2022	N	100	94	<0.1 J	0.0032 J
MW-26	Inside Plume	09/15/2022	N	19	--	<0.1	0.77
MW-31-060	Inside Plume	07/13/2022	N	190	--	<0.1 J	0.12 J
MW-31-060	Inside Plume	08/10/2022	N	<1	<1	<0.1	0.85
MW-31-060	Inside Plume	09/14/2022	N	30	--	<0.1	0.98
MW-38D	Inside Plume	08/25/2022	N	8.8	11	--	--
MW-38S	Inside Plume	08/25/2022	N	31	31	--	--
MW-39-100	Inside Plume	07/12/2022	N	240	--	<0.1	0.0084
MW-39-100	Inside Plume	08/09/2022	N	79	--	<0.1	0.0085 J
MW-39-100	Inside Plume	09/13/2022	N	110	--	<0.1	0.0089
MW-51	Inside Plume	07/13/2022	N	490	--	<0.1	0.014
MW-51	Inside Plume	08/12/2022	N	390	450	<0.1 J	<0.0005 J
MW-51	Inside Plume	09/15/2022	N	710	--	1.3	0.017
MW-65-160	Inside Plume	08/25/2022	N	280	300	--	--
MW-65-225	Inside Plume	08/25/2022	N	430	510	--	--
MW-67-185	Inside Plume	07/13/2022	N	<80	37	--	1.10 J
MW-67-185	Inside Plume	08/18/2022	N	<80	<5	--	0.8 J
MW-67-185	Inside Plume	09/14/2022	N	<80	<5	--	1.10
MW-68-180	Inside Plume	07/13/2022	N	5,000	4,900	--	--
MW-68-180	Inside Plume	08/18/2022	N	28,000	31,000	--	--
MW-68-180	Inside Plume	09/14/2022	N	36,000	40,000	--	--
MW-69-195	Inside Plume	08/25/2022	N	120	100	--	--
MW-75-033	Inside Plume	08/24/2022	N	36	--	--	--
MW-76-039	Inside Plume	07/11/2022	N	140	--	<0.1	0.012
MW-76-039	Inside Plume	08/08/2022	N	140	130	<0.1	<0.0005 J
MW-76-039	Inside Plume	09/12/2022	N	93	--	<0.1	0.032
MW-76-039	Inside Plume	09/12/2022	FD	94	--	<0.1	0.029
MW-76-156	Inside Plume	07/11/2022	N	<1	--	<0.1	1.40
MW-76-156	Inside Plume	08/08/2022	N	8.9	8.5	<0.1	0.13 J
MW-76-156	Inside Plume	09/12/2022	N	13	--	<0.1	0.085

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Monitoring Well ID	Well Group	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Manganese (mg/L)
MW-76-181	Inside Plume	07/11/2022	N	1,700	--	<0.1	0.00074
MW-76-181	Inside Plume	08/08/2022	N	1,300	1,200	<0.1	0.0096 J
MW-76-181	Inside Plume	09/12/2022	N	1,100	--	<0.1	0.039
MW-76-218	Inside Plume	07/11/2022	N	36	--	<0.1	0.24
MW-76-218	Inside Plume	08/08/2022	N	2.3	2.3	<0.1	0.35 J
MW-76-218	Inside Plume	09/12/2022	N	<1	--	<0.1	0.43
MW-78-070	Inside Plume	07/14/2022	N	190	--	0.91	0.17 J
MW-78-070	Inside Plume	08/11/2022	N	1,200	1,300	<0.1 J	0.088 J
MW-78-070	Inside Plume	09/15/2022	N	110	--	<0.1	0.12
MW-78-070	Inside Plume	09/15/2022	FD	110	--	<0.1	0.12
MW-78-142	Inside Plume	07/14/2022	N	4,900	--	4.5	0.0017 J
MW-78-142	Inside Plume	07/14/2022	FD	4,800	--	4.4	0.0027 J
MW-78-142	Inside Plume	08/11/2022	N	5,300	6,100	<0.1 J	0.0032 J
MW-78-142	Inside Plume	09/15/2022	N	4,600	--	1.9	0.0037
MW-79-058	Inside Plume	07/14/2022	N	2,200	--	<0.1	<0.0005
MW-79-058	Inside Plume	08/11/2022	N	2,100	2,100	<0.1 J	0.013 J
MW-79-058	Inside Plume	09/15/2022	N	1,200	--	<0.1	0.0052
MW-79-102	Inside Plume	07/14/2022	N	1,000	--	4.1	0.0019
MW-79-102	Inside Plume	08/11/2022	N	2,000	2,200	<0.1 J	<0.0005 J
MW-79-102	Inside Plume	09/15/2022	N	880	--	1.1	0.0072
MW-80-057	Inside Plume	07/14/2022	N	750	--	1.9	0.007
MW-80-057	Inside Plume	08/11/2022	N	650	690	<0.1 J	0.018 J
MW-80-057	Inside Plume	09/15/2022	N	880	--	0.61	0.0099
MW-80-082	Inside Plume	07/14/2022	N	120	--	5.5	0.009
MW-80-082	Inside Plume	08/11/2022	N	200	240	<0.1 J	0.0095 J
MW-80-082	Inside Plume	09/15/2022	N	160	--	1.8	0.0034 J
MW-80-082	Inside Plume	09/15/2022	FD	160	--	1.8	0.0051 J
PT5D	Inside Plume	08/15/2022	N	10	--	<0.1	0.013 J
TW-02D	Inside Plume	07/13/2022	N	490	--	<0.1	0.054
TW-02D	Inside Plume	08/09/2022	N	200	210	<0.1	0.039 J
TW-02D	Inside Plume	09/14/2022	N	560	--	3.1	0.0077
TW-02S	Inside Plume	07/13/2022	N	100	--	0.52	<0.0005
TW-02S	Inside Plume	08/09/2022	N	130	130	<0.1	0.0015 J
TW-02S	Inside Plume	09/14/2022	N	130	--	0.81	<0.0005
TW-03D	Inside Plume	07/13/2022	N	520	--	<0.1	0.048
TW-03D	Inside Plume	08/09/2022	N	160	150	<0.1	0.055 J
TW-03D	Inside Plume	09/14/2022	N	550	--	1.8	0.019
MW-21	Outside Plume	07/13/2022	N	<0.2	--	3.3	0.28
MW-21	Outside Plume	08/12/2022	N	<1	5.8	5.7 J	0.28 J
MW-21	Outside Plume	09/15/2022	N	<0.2	--	12	0.26
MW-22	Outside Plume	08/19/2022	N	<1	--	14	5.30 J
MW-27-020	Outside Plume	08/23/2022	N	<0.2	--	0.67	0.036 J

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Monitoring Well ID	Well Group	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Manganese (mg/L)
MW-27-060	Outside Plume	08/23/2022	N	<0.2	--	8.7	0.26 J
MW-27-085	Outside Plume	08/23/2022	N	<1	--	<0.1	0.26 J
MW-28-025	Outside Plume	08/23/2022	N	<0.2	--	0.38 J	0.051 J
MW-28-090	Outside Plume	08/23/2022	N	<0.2	--	<0.1	0.41 J
MW-29	Outside Plume	08/23/2022	N	<0.2	--	--	--
MW-30-030	Outside Plume	08/22/2022	N	<1	--	<0.1	0.11 J
MW-30-050	Outside Plume	07/12/2022	N	<0.2	--	2.2	0.5
MW-30-050	Outside Plume	08/10/2022	N	<0.2	--	2.5	0.36
MW-30-050	Outside Plume	08/10/2022	FD	<0.2	--	2.4	0.37
MW-30-050	Outside Plume	09/13/2022	N	3.4	--	2.9	0.0018
MW-31-135	Outside Plume	07/13/2022	N	23	--	<0.1 J	0.013 J
MW-31-135	Outside Plume	08/10/2022	N	25	25	<0.1	0.0021
MW-31-135	Outside Plume	09/14/2022	N	19	--	1.1	0.0031
MW-32-020	Outside Plume	08/19/2022	N	<1	--	2.6	0.28 J
MW-32-035	Outside Plume	08/19/2022	N	<0.2	--	17	0.77 J
MW-33-040	Outside Plume	08/24/2022	N	<1	--	--	--
MW-33-090	Outside Plume	08/24/2022	N	2.8	--	--	--
MW-33-090	Outside Plume	08/24/2022	FD	2.7	--	--	--
MW-33-150	Outside Plume	08/24/2022	N	6.5	--	--	--
MW-33-210	Outside Plume	08/24/2022	N	11	--	--	--
MW-34-055	Outside Plume	08/23/2022	N	<0.2	--	3.4	0.11 J
MW-34-080	Outside Plume	07/14/2022	N	<0.2	--	1.7	0.13 J
MW-34-080	Outside Plume	08/11/2022	N	<0.2	--	<0.1 J	0.13 J
MW-34-080	Outside Plume	09/15/2022	N	<0.2	--	<0.1	0.14
MW-34-100	Outside Plume	08/23/2022	N	<1	--	<0.1	0.12 J
MW-35-060	Outside Plume	08/22/2022	N	20	--	--	--
MW-35-060	Outside Plume	08/22/2022	FD	20	--	--	--
MW-35-135	Outside Plume	08/22/2022	N	27	--	--	--
MW-36-020	Outside Plume	08/23/2022	N	<0.2	--	<0.1	0.72 J
MW-36-040	Outside Plume	08/23/2022	N	<0.2	--	6.7	0.17 J
MW-36-050	Outside Plume	08/23/2022	N	<0.2	--	5.6	0.32 J
MW-36-070	Outside Plume	08/10/2022	N	<0.2	--	1.9	0.28
MW-36-070	Outside Plume	08/10/2022	FD	<0.2	--	2.2	0.29
MW-36-090	Outside Plume	07/14/2022	N	<0.2	--	3.3	0.15 J
MW-36-090	Outside Plume	08/10/2022	N	<0.2	--	1.2	0.16
MW-36-090	Outside Plume	09/14/2022	N	<0.2	--	2	0.16
MW-36-100	Outside Plume	07/14/2022	N	<0.2	--	4.1	0.48 J
MW-36-100	Outside Plume	07/14/2022	FD	<0.2	--	3.5	0.46 J
MW-36-100	Outside Plume	08/10/2022	N	3.5	--	13	0.0098
MW-36-100	Outside Plume	09/14/2022	N	<0.2	--	10	0.34
MW-39-040	Outside Plume	07/12/2022	N	<0.2	--	14	0.11
MW-39-040	Outside Plume	08/09/2022	N	<0.2	--	13	0.093 J

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Monitoring Well ID	Well Group	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Manganese (mg/L)
MW-39-040	Outside Plume	09/13/2022	N	<0.2	--	15	0.099
MW-39-040	Outside Plume	09/13/2022	FD	<0.2	--	15	0.098
MW-39-050	Outside Plume	07/12/2022	N	<0.2	--	1.6	0.21
MW-39-050	Outside Plume	08/09/2022	N	<0.2	--	1.2	0.19 J
MW-39-050	Outside Plume	09/13/2022	N	<0.2	--	1.6	0.21
MW-39-060	Outside Plume	07/12/2022	N	<0.2	--	2.1	0.13
MW-39-060	Outside Plume	08/09/2022	N	<0.2	--	1.6	0.19 J
MW-39-060	Outside Plume	09/13/2022	N	<0.2	--	2	0.18
MW-39-070	Outside Plume	07/12/2022	N	<0.2	--	0.71	0.015
MW-39-070	Outside Plume	08/09/2022	N	<0.2	--	1.2	0.01 J
MW-39-070	Outside Plume	08/09/2022	FD	<0.2	--	1.2	0.012 J
MW-39-070	Outside Plume	09/13/2022	N	<0.2	--	1.2	0.012
MW-39-080	Outside Plume	07/12/2022	N	13	--	<0.1	0.0048
MW-39-080	Outside Plume	08/09/2022	N	0.53	--	<0.1	0.0065 J
MW-39-080	Outside Plume	09/13/2022	N	17	--	<0.1	0.0078
MW-42-030	Outside Plume	08/18/2022	N	<0.2	--	1.6	0.2
MW-42-055	Outside Plume	08/18/2022	N	<0.2	--	10	0.25
MW-42-065	Outside Plume	08/18/2022	N	<0.2	--	1.6	2.30
MW-43-025	Outside Plume	08/24/2022	N	<0.2	--	29 J	0.55 J
MW-43-075	Outside Plume	08/24/2022	N	<1	--	7 J	0.67 J
MW-43-090	Outside Plume	08/24/2022	N	<1	--	<0.1 J	0.64 J
MW-44-070	Outside Plume	08/23/2022	N	<0.2	--	2.8	0.32 J
MW-44-115	Outside Plume	07/14/2022	N	<0.2	--	4.7 J	0.054 J
MW-44-115	Outside Plume	07/14/2022	FD	<0.2	--	<0.1 J	0.058 J
MW-44-115	Outside Plume	08/11/2022	N	<1	--	<0.1 J	0.046 J
MW-44-115	Outside Plume	08/11/2022	FD	<0.2	--	<0.1 J	0.052 J
MW-44-115	Outside Plume	09/13/2022	N	0.66	--	<0.1	0.018
MW-44-115	Outside Plume	09/13/2022	FD	0.67	--	<0.1	0.018
MW-44-125	Outside Plume	07/14/2022	N	<1	--	5.4	0.51 J
MW-44-125	Outside Plume	08/11/2022	N	<1	--	<0.1 J	0.54 J
MW-44-125	Outside Plume	09/13/2022	N	<1	--	<0.1	0.56
MW-45-095A	Outside Plume	07/14/2022	N	<0.2	--	1.9	0.12 J
MW-45-095A	Outside Plume	08/11/2022	N	<0.2	--	<0.1 J	0.23 J
MW-45-095A	Outside Plume	09/15/2022	N	0.23	--	<0.1	0.18
MW-46-175	Outside Plume	08/24/2022	N	4.3	--	<0.1 J	0.0083 J
MW-46-205	Outside Plume	08/24/2022	N	<1	--	<0.1 J	0.035 J
MW-46-205	Outside Plume	08/24/2022	FD	<1	--	<0.1 J	0.035 J
MW-47-055	Outside Plume	08/24/2022	N	17	--	--	--
MW-47-115	Outside Plume	08/24/2022	N	24	--	--	--
MW-49-135	Outside Plume	08/23/2022	N	7.7	--	--	--
MW-49-275	Outside Plume	08/23/2022	N	<1	--	--	--
MW-49-365	Outside Plume	08/23/2022	N	<1	--	--	--

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Monitoring Well ID	Well Group	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Manganese (mg/L)
MW-52D	Outside Plume	08/24/2022	N	<1	--	<0.1 J	0.38 J
MW-52D	Outside Plume	08/24/2022	FD	<1	--	<0.1 J	0.33 J
MW-52M	Outside Plume	08/24/2022	N	<1	--	<0.1 J	0.28 J
MW-52S	Outside Plume	08/24/2022	N	<1	--	<0.1 J	1.30 J
MW-53D	Outside Plume	08/24/2022	N	<1	--	<0.1 J	1.20 J
MW-53M	Outside Plume	08/24/2022	N	<1	--	<0.1 J	0.42 J
MW-53S	Outside Plume	08/24/2022	N	<0.2	--	<0.1 J	1.50 J
MW-71-035	Outside Plume	07/13/2022	N	<1	--	<0.1	0.7
MW-71-035	Outside Plume	08/12/2022	N	<1	<1	<0.1 J	2.20 J
MW-71-035	Outside Plume	09/15/2022	N	5.6	--	<0.1	0.44
MW-75-117	Outside Plume	08/24/2022	N	14	--	--	--
MW-75-202	Outside Plume	08/25/2022	N	<1	--	--	--
MW-75-202	Outside Plume	08/25/2022	FD	<1	--	--	--
MW-75-267	Outside Plume	08/25/2022	N	<1	--	--	--
MW-75-337	Outside Plume	08/25/2022	N	<1	--	--	--
MW-77-046	Outside Plume	07/11/2022	N	<0.2	--	1.2	0.48
MW-77-046	Outside Plume	08/08/2022	N	<0.2	--	2.3	0.8 J
MW-77-046	Outside Plume	09/12/2022	N	<0.2	--	3.7	0.47
MW-77-102	Outside Plume	07/11/2022	N	<0.2	--	<0.1	0.11
MW-77-102	Outside Plume	08/08/2022	N	<0.2	--	<0.1	0.053 J
MW-77-102	Outside Plume	09/12/2022	N	0.31	--	<0.1	0.055
MW-77-158	Outside Plume	07/11/2022	N	<0.2	--	<0.1	0.019
MW-77-158	Outside Plume	08/08/2022	N	<1	--	<0.1	0.064 J
MW-77-158	Outside Plume	09/12/2022	N	<0.2	--	2.4	0.039
MW-77-187	Outside Plume	07/11/2022	N	40	--	<0.1	0.017
MW-77-187	Outside Plume	08/08/2022	N	8.8	--	<0.1	0.028 J
MW-77-187	Outside Plume	09/12/2022	N	40	--	2.1	0.013
MW-81-043	Outside Plume	07/12/2022	N	6.4	--	3.1	0.14
MW-81-043	Outside Plume	08/10/2022	N	3	--	1.2 J	0.045
MW-81-043	Outside Plume	09/13/2022	N	10	--	2.4	0.024
MW-81-098	Outside Plume	07/12/2022	N	1.3	--	<0.1	0.22
MW-81-098	Outside Plume	08/10/2022	N	0.55	--	<0.1	0.16
MW-81-098	Outside Plume	09/13/2022	N	<1	--	<0.1	0.13
MW-82-046	Outside Plume	07/12/2022	N	<1	--	24	0.36
MW-82-046	Outside Plume	08/10/2022	N	<1	--	25	0.31
MW-82-046	Outside Plume	09/13/2022	N	<0.2	--	23	0.26
MW-82-112	Outside Plume	07/12/2022	N	<0.2	--	<0.1	0.14
MW-82-112	Outside Plume	08/10/2022	N	<0.2	--	<0.1	0.061
MW-82-112	Outside Plume	09/13/2022	N	0.29	--	<0.1	0.084
MW-82-168	Outside Plume	07/12/2022	N	0.28	--	<0.1	0.043
MW-82-168	Outside Plume	07/12/2022	FD	<1	--	<0.1	0.045
MW-82-168	Outside Plume	08/10/2022	N	<0.2	--	<0.1	0.041

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MW-82-168	Outside Plume	09/13/2022	N	<0.2	--	<0.1	0.042
MW-82-168	Outside Plume	09/13/2022	FD	<0.2	--	<0.1	0.043
MW-82-198	Outside Plume	07/12/2022	N	3.1	--	<0.1	0.1
MW-82-198	Outside Plume	08/10/2022	N	<1	--	<0.1	0.15
MW-82-198	Outside Plume	09/13/2022	N	4.1	--	<0.1	0.09
MW-86-030	Outside Plume	08/23/2022	N	<0.2	--	2.4 J	0.088 J
MW-86-066	Outside Plume	08/23/2022	N	<0.2	--	<0.1 J	0.69 J
MW-86-120	Outside Plume	08/23/2022	N	<1	--	<0.1 J	0.3 J
MW-86-140	Outside Plume	08/23/2022	N	<1	--	<0.1 J	0.79 J
MW-90-031	Outside Plume	08/19/2022	N	<1	--	<0.1	0.063 J
MW-96-045	Outside Plume	08/11/2022	N	<1	--	--	--
MW-96-217	Outside Plume	08/11/2022	N	<1	--	--	--
PT5M	Outside Plume	08/15/2022	N	<0.2	--	1.1	1.10 J
PT5S	Outside Plume	08/15/2022	N	<0.2	--	14	0.29 J
TW-04	Outside Plume	08/22/2022	N	12	--	--	--
C-BNS	Surface Water	08/17/2022	N	<0.2	--	2.3	0.0013 J
C-CON-D	Surface Water	08/18/2022	N	<0.2	--	2.4	0.00072 J
C-CON-D	Surface Water	08/18/2022	FD	<0.2	--	2.2	0.0041 J
C-CON-S	Surface Water	08/18/2022	N	<0.2	--	2.4	0.00092
C-I-3-D	Surface Water	08/17/2022	N	<0.2	--	2.4	0.0015 J
C-I-3-S	Surface Water	08/17/2022	N	<0.2	--	2.4	0.0022 J
C-I-3-S	Surface Water	08/17/2022	FD	<0.2	--	2.5	0.0017 J
C-MAR-D	Surface Water	08/18/2022	N	<0.2	--	3.5	0.13
C-MAR-S	Surface Water	08/18/2022	N	<0.2	--	4.2	0.14
C-NR1-D	Surface Water	08/18/2022	N	<0.2	--	2.5	<0.0005
C-NR1-D	Surface Water	08/18/2022	FD	<0.2	--	2.4	<0.0005
C-NR1-S	Surface Water	08/18/2022	N	<0.2	--	2.3	<0.0005
C-NR3-D	Surface Water	08/18/2022	N	<0.2	--	2.2	<0.0005
C-NR3-S	Surface Water	08/18/2022	N	<0.2	--	2.3	<0.0005
C-NR4-D	Surface Water	08/18/2022	N	<0.2	--	2.3	<0.0005
C-NR4-S	Surface Water	08/18/2022	N	<0.2	--	2.3	<0.0005
C-NR4-S	Surface Water	08/18/2022	FD	<0.2	--	2.3	<0.0005
C-R22A-D	Surface Water	08/17/2022	N	<0.2	--	2.4	0.0028 J
C-R22A-S	Surface Water	08/17/2022	N	<0.2	--	2.4	0.0025 J
C-R27-D	Surface Water	08/17/2022	N	<0.2	--	2.4	0.0013 J
C-R27-S	Surface Water	08/17/2022	N	<0.2	--	2.2	0.0013 J
C-TAZ-D	Surface Water	08/17/2022	N	<0.2	--	2.4	0.0031 J
C-TAZ-S	Surface Water	08/17/2022	N	<0.2	--	2.2	0.0026 J
C-TAZ-S	Surface Water	08/17/2022	FD	<0.2	--	2.2	0.0027 J
R-19	Surface Water	08/18/2022	N	<0.2	--	2.5	0.0012
R-28	Surface Water	08/17/2022	N	<0.2	--	2.2	0.0023 J
R-63	Surface Water	08/17/2022	N	<0.2	--	2	0.0087 J

Table 3.8
Remedy Compliance Monitoring Analytical Results
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Monitoring Well ID	Well Group	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Manganese (mg/L)
RRB	Surface Water	08/18/2022	N	<0.2	--	2.4	0.017
RRB	Surface Water	08/18/2022	FD	<0.2	--	2.1	0.015
SW1	Surface Water	08/17/2022	N	<0.2	--	2.4	0.0077 J
SW2	Surface Water	08/17/2022	N	<0.2	--	2.2	0.0091 J

Abbreviations:

-- = not applicable or not available

< = not detected at reporting limit, as shown

FD = field duplicate

ID = identification

J = estimated concentration

mg/L= milligram(s) per liter

N = primary sample

µg/L = microgram(s) per liter

Table 3.9
COPC Monitoring Analytical Results
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Monitoring Well ID	Perimeter Assessment Plan Monitoring Well	Sample Date	Sample Type	Dissolved Molybdenum (µg/L)	Dissolved Selenium (µg/L)	Nitrate as Nitrogen (mg/L)	Nitrate/Nitrite as Nitrogen (mg/L)
MW-20-070	--	08/09/22	N	19 J	43	40	--
MW-20-070	--	08/09/22	FD	18 J	41	39	--
MW-20-100	--	08/09/22	N	1.7 J	15	8.2	--
MW-20-130	--	08/09/22	N	6.9 J	18	5.3	--
MW-21	--	08/12/22	N	82 J	<0.5	<0.5	--
MW-22	X	08/19/22	N	--	--	<0.5	<0.1
MW-26	--	08/12/22	N	4.1 J	0.53	<0.5	--
MW-27-020	--	08/23/22	N	--	--	<0.25	--
MW-27-060	X	08/23/22	N	--	--	<0.25	<0.1
MW-27-085	X	08/23/22	N	--	--	<0.25	<0.1
MW-28-025	--	08/23/22	N	--	--	<0.25	--
MW-28-090	--	08/23/22	N	--	--	<0.5	--
MW-30-030	--	08/22/22	N	--	--	<0.5	--
MW-30-050	--	08/10/22	N	--	--	<0.5	--
MW-30-050	--	08/10/22	FD	--	--	<0.5	--
MW-31-060	--	08/10/22	N	7.6	<0.5 J	<0.5	--
MW-31-135	--	08/10/22	N	28	0.92 J	1.5	--
MW-32-020	--	08/19/22	N	--	--	<0.5	--
MW-32-035	X	08/19/22	N	--	--	<0.5	<0.1
MW-34-055	X	08/23/22	N	--	--	<0.25	<0.1
MW-34-080	--	08/11/22	N	--	--	<0.5	--
MW-34-100	X	08/23/22	N	--	--	<0.25	<0.1
MW-36-020	--	08/23/22	N	--	--	<0.25	--
MW-36-040	X	08/23/22	N	--	--	<0.25	<0.1
MW-36-050	--	08/23/22	N	--	--	<0.25	--
MW-36-070	--	08/10/22	N	--	--	<0.25	--
MW-36-070	--	08/10/22	FD	--	--	<0.25	--
MW-36-090	--	08/10/22	N	--	--	<0.5	--
MW-36-100	X	08/10/22	N	--	--	<0.5	0.25
MW-38D	--	08/25/22	N	32	<2.5	<1	--

Table 3.9
COPC Monitoring Analytical Results
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Monitoring Well ID	Perimeter Assessment Plan Monitoring Well	Sample Date	Sample Type	Dissolved Molybdenum (µg/L)	Dissolved Selenium (µg/L)	Nitrate as Nitrogen (mg/L)	Nitrate/Nitrite as Nitrogen (mg/L)
MW-38S	--	08/25/22	N	9	5	5.2	--
MW-39-040	--	08/09/22	N	--	--	<0.25	--
MW-39-050	--	08/09/22	N	--	--	<0.25	--
MW-39-060	--	08/09/22	N	--	--	<0.25	--
MW-39-070	--	08/09/22	N	--	--	<0.25	--
MW-39-070	--	08/09/22	FD	--	--	<0.25	--
MW-39-080	--	08/09/22	N	--	--	<0.5	--
MW-39-100	--	08/09/22	N	--	--	<0.5	--
MW-42-030	X	08/18/22	N	--	--	<0.25	<0.1
MW-42-055	--	08/18/22	N	--	--	<0.25	--
MW-42-065	--	08/18/22	N	--	--	<0.25	--
MW-43-025	--	08/24/22	N	--	--	<0.25	--
MW-43-075	--	08/24/22	N	--	--	<0.5	--
MW-43-090	--	08/24/22	N	--	--	<0.5	--
MW-44-070	X	08/23/22	N	--	--	<0.25	<0.1
MW-44-115	--	08/11/22	N	--	--	<0.5	--
MW-44-115	--	08/11/22	FD	--	--	<0.5	--
MW-44-125	X	08/11/22	N	--	--	<0.5	<0.1
MW-45-095A	--	08/11/22	N	--	--	<0.5	--
MW-46-175	X	08/24/22	N	--	--	1	1
MW-46-205	--	08/24/22	N	--	--	0.82	--
MW-46-205	--	08/24/22	FD	--	--	0.83	--
MW-51	--	08/12/22	N	57 J	2.9	1	--
MW-52D	--	08/24/22	N	--	--	<0.5	--
MW-52D	--	08/24/22	FD	--	--	<0.5	--
MW-52M	--	08/24/22	N	--	--	<0.5	--
MW-52S	--	08/24/22	N	--	--	<0.5	--
MW-53D	--	08/24/22	N	--	--	<0.5	--
MW-53M	--	08/24/22	N	--	--	<0.5	--
MW-53S	--	08/24/22	N	--	--	<0.5	--

Table 3.9
COPC Monitoring Analytical Results
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Monitoring Well ID	Perimeter Assessment Plan Monitoring Well	Sample Date	Sample Type	Dissolved Molybdenum (µg/L)	Dissolved Selenium (µg/L)	Nitrate as Nitrogen (mg/L)	Nitrate/Nitrite as Nitrogen (mg/L)
MW-65-160	--	08/25/22	N	24	11	14	--
MW-65-225	--	08/25/22	N	28	5.8	7.7	--
MW-67-185	--	08/18/22	N	39	87	23	--
MW-68-180	--	08/18/22	N	64	28	24	--
MW-69-195	--	08/25/22	N	61	6.1	8.4	--
MW-71-035	X	08/12/22	N	23 J	<0.5	<0.5	<0.1
MW-76-039	--	08/08/22	N	23 J	3.7	2.8	--
MW-76-156	--	08/08/22	N	27 J	0.93	1.9	--
MW-76-181	--	08/08/22	N	30 J	1.2	1.6	--
MW-76-218	--	08/08/22	N	33	0.74	0.55	--
MW-77-046	--	08/08/22	N	--	--	<0.5	--
MW-77-102	--	08/08/22	N	--	--	0.61	--
MW-77-158	--	08/08/22	N	--	--	<0.5	--
MW-77-187	--	08/08/22	N	--	--	0.95	--
MW-78-070	--	08/11/22	N	8.2 J	2.5	2.1	--
MW-78-142	--	08/11/22	N	20 J	35	9	--
MW-79-058	--	08/11/22	N	20 J	9.2	6.9	--
MW-79-102	--	08/11/22	N	27 J	11	3.6	--
MW-80-057	--	08/11/22	N	25 J	20	12	--
MW-80-082	--	08/11/22	N	52 J	1.3	1.2	--
MW-81-043	--	08/10/22	N	--	--	<0.5	--
MW-81-098	--	08/10/22	N	--	--	<0.5	--
MW-82-046	--	08/10/22	N	--	--	<0.5	--
MW-82-112	--	08/10/22	N	--	--	0.61	--
MW-82-168	--	08/10/22	N	--	--	<0.5	--
MW-82-198	--	08/10/22	N	--	--	0.76	--
MW-86-030	--	08/23/22	N	--	--	<0.25	--
MW-86-066	--	08/23/22	N	--	--	0.65	--
MW-86-120	--	08/23/22	N	--	--	<0.5	--
MW-86-140	--	08/23/22	N	--	--	<0.5	--

Table 3.9
COPC Monitoring Analytical Results
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Monitoring Well ID	Perimeter Assessment Plan Monitoring Well	Sample Date	Sample Type	Dissolved Molybdenum (µg/L)	Dissolved Selenium (µg/L)	Nitrate as Nitrogen (mg/L)	Nitrate/Nitrite as Nitrogen (mg/L)
MW-90-031	X	08/19/22	N	--	--	<0.5	<0.1
PT5D	--	08/15/22	N	--	--	<0.5	--
PT5M	--	08/15/22	N	--	--	<0.5	--
PT5S	--	08/15/22	N	--	--	<0.25	--
TW-02D	--	08/09/22	N	32 J	0.84	1.5	--
TW-02S	--	08/09/22	N	8 J	2.2	3	--
TW-03D	--	08/09/22	N	32 J	0.94	1.6	--

Abbreviations:

-- = not applicable or not available

< = not detected at reporting limit, as shown

COPC = constituent of potential concern

FD = field duplicate

ID = identification

J = estimated concentration

mg/L= milligram(s) per liter

N = primary sample

µg/L = microgram(s) per liter

Figures



LEGEND

- REMEDIATION WELL (EXTRACTION)
- REMEDIATION WELL (INJECTION)
- REMEDIATION WELL (NOT PLUMBED INTO SYSTEM CURRENTLY)
- BAT CAVE WASH
- PIPELINE
- REMEDY STRUCTURE

Notes:
1. NTH = National Trails Highway
2. IRZ = In Situ Reactive Zone

N

0 625 1,250

Feet

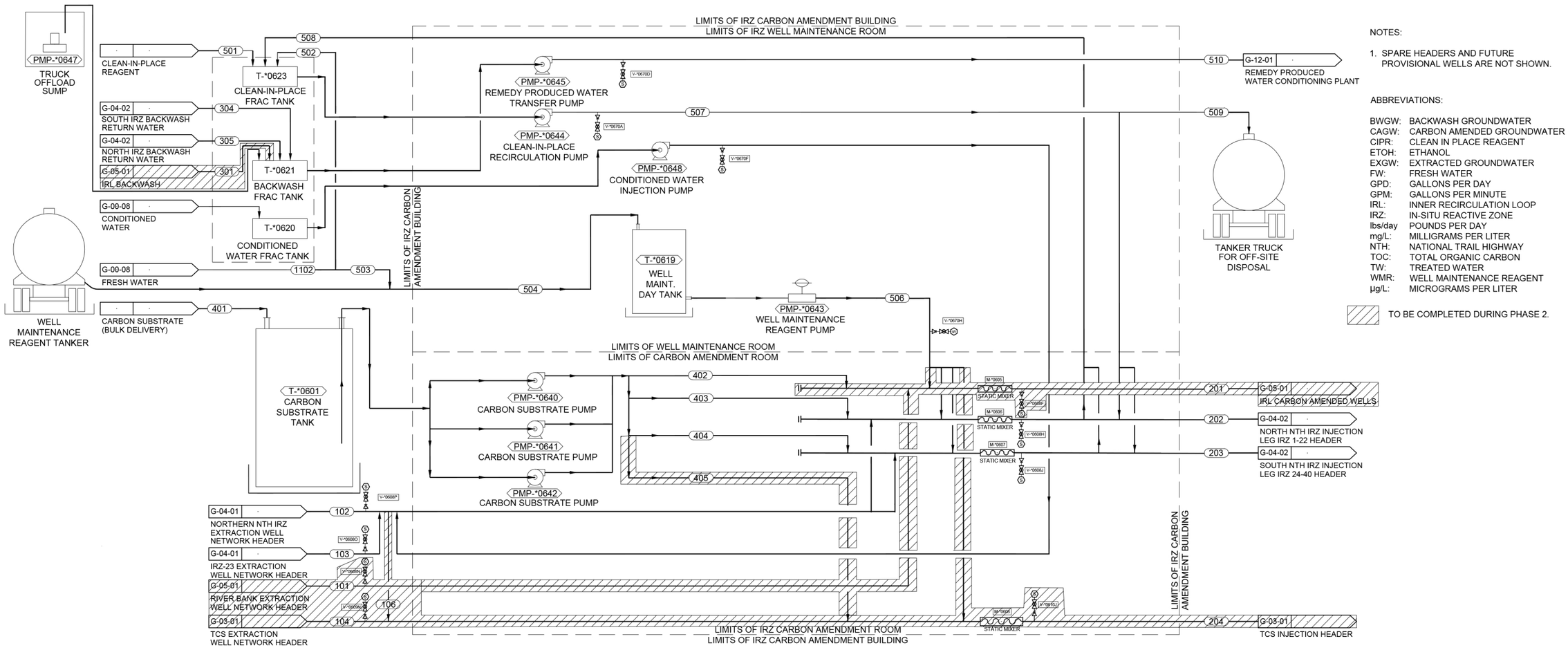
THIRD QUARTER 2022
QUARTERLY PROGRESS REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

PARTIAL REMEDY SYSTEM LAYOUT

ARCADIS

FIGURE
1.1

T:_ENV\PGE_TOPOCK\GEC\MXD\GMP\3Q22\FINAL\FIGURE1.1_PARTIAL REMEDY SYSTEM LAYOUT.MXD 9/27/2022 5:26:41 PM



NOTES:

1. SPARE HEADERS AND FUTURE PROVISIONAL WELLS ARE NOT SHOWN.

ABBREVIATIONS:

BWGW:	BACKWASH GROUNDWATER
CAGW:	CARBON AMENDED GROUNDWATER
CIPR:	CLEAN IN PLACE REAGENT
ETOH:	ETHANOL
EXGW:	EXTRACTED GROUNDWATER
FW:	FRESH WATER
GPD:	GALLONS PER DAY
GPM:	GALLONS PER MINUTE
IRL:	INNER RECIRCULATION LOOP
IRZ:	IN-SITU REACTIVE ZONE
lbs/day	POUNDS PER DAY
mg/L:	MILLIGRAMS PER LITER
NTH:	NATIONAL TRAIL HIGHWAY
TOC:	TOTAL ORGANIC CARBON
TW:	TREATED WATER
WMR:	WELL MAINTENANCE REAGENT
µg/L:	MICROGRAMS PER LITER

TO BE COMPLETED DURING PHASE 2.

ARCADIS

NO.	DATE	DESCRIPTION	GM/SPEC	DWN	CHKD	SUPV	APVD BY

REVISIONS

NO.	DATE	DESCRIPTION	GM/SPEC	DWN	CHKD	SUPV	APVD BY

REVISIONS

APPROVED BY	
SO	
SUPV	
DSGN	
DWN	
CHKD	
OK	
DATE	
SCALES	

TOPOCK GROUNDWATER REMEDIATION PROJECT

MW-20 BENCH PROCESS FLOW DIAGRAM

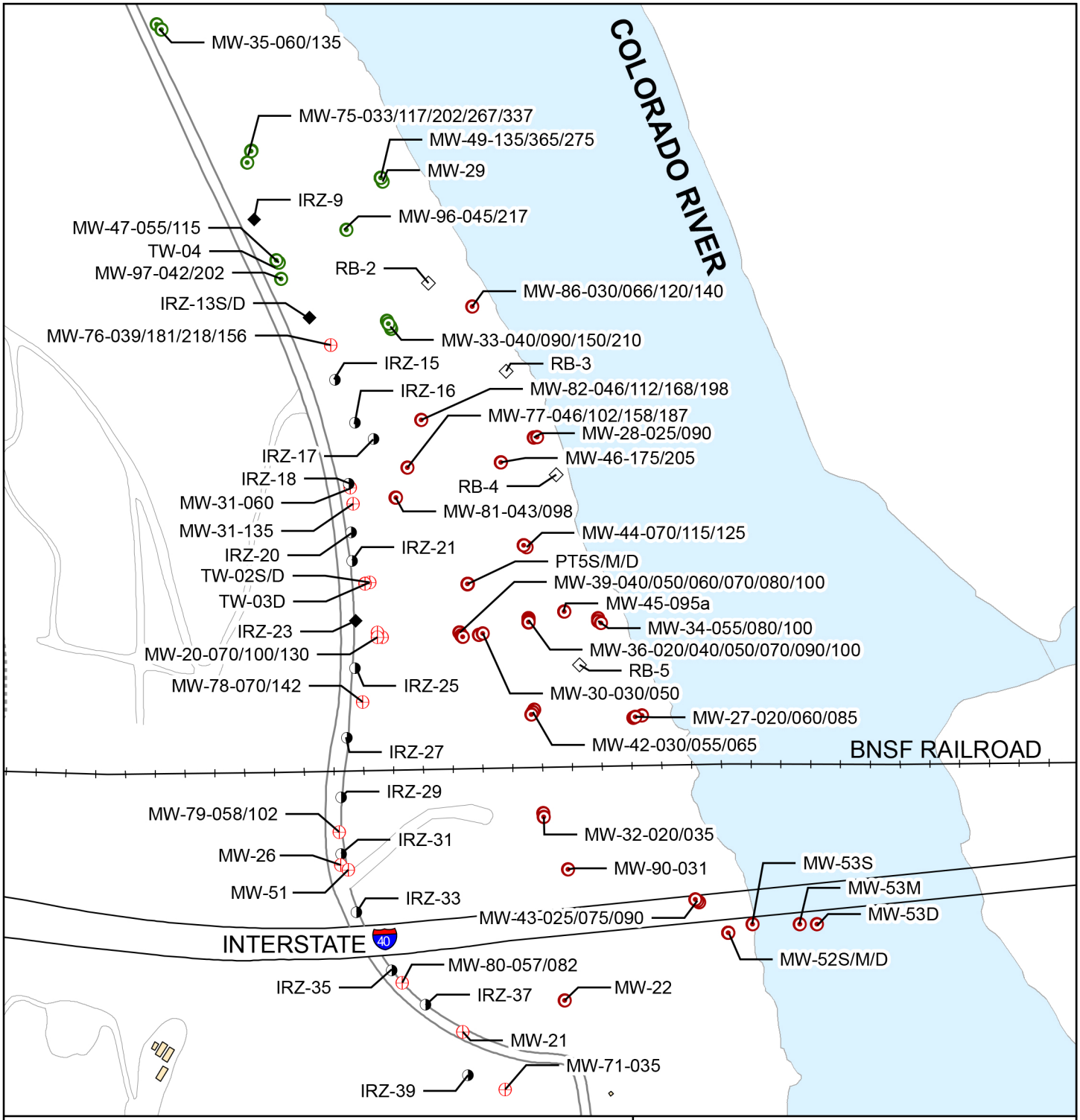
GAS TRANSMISSION & DISTRIBUTION
PACIFIC GAS AND ELECTRIC COMPANY
SAN FRANCISCO, CALIFORNIA

MICROFILM	
BILL OF MATL	
DWG LIST	
SUPSDS	
SUPSD BY	
SHEET NO.	of SHEETS

FIGURE 1.2 REV

N1808

05/24/2022, 21:37, C:\Users\vmorasko\ACCDocs\Arcadis\ANA - 30019125 – RC000753.0050 - Needles CA - Topock Construction & Closeout DOR Svcs\Project Files\0_WIP\G-General\G-06-01-Startup Figure.dwg, Tab: G-06-01 -Startup Figure



LEGEND

- NTH IRZ DOSE RESPONSE MONITORING WELL
- NORTHERN IRZ EXTRACTION MONITORING WELL
- NTH IRZ DOWNGRADIENT MONITORING WELL
- REMEDIATION WELL (INJECTION)
- REMEDIATION WELL (EXTRACTION)
- REMEDIATION WELL (NOT PLUMBED INTO SYSTEM CURRENTLY)

Notes:
1. NTH = National Trails Highway
2. IRZ = In Situ Reactive Zone

0 365 730
Feet

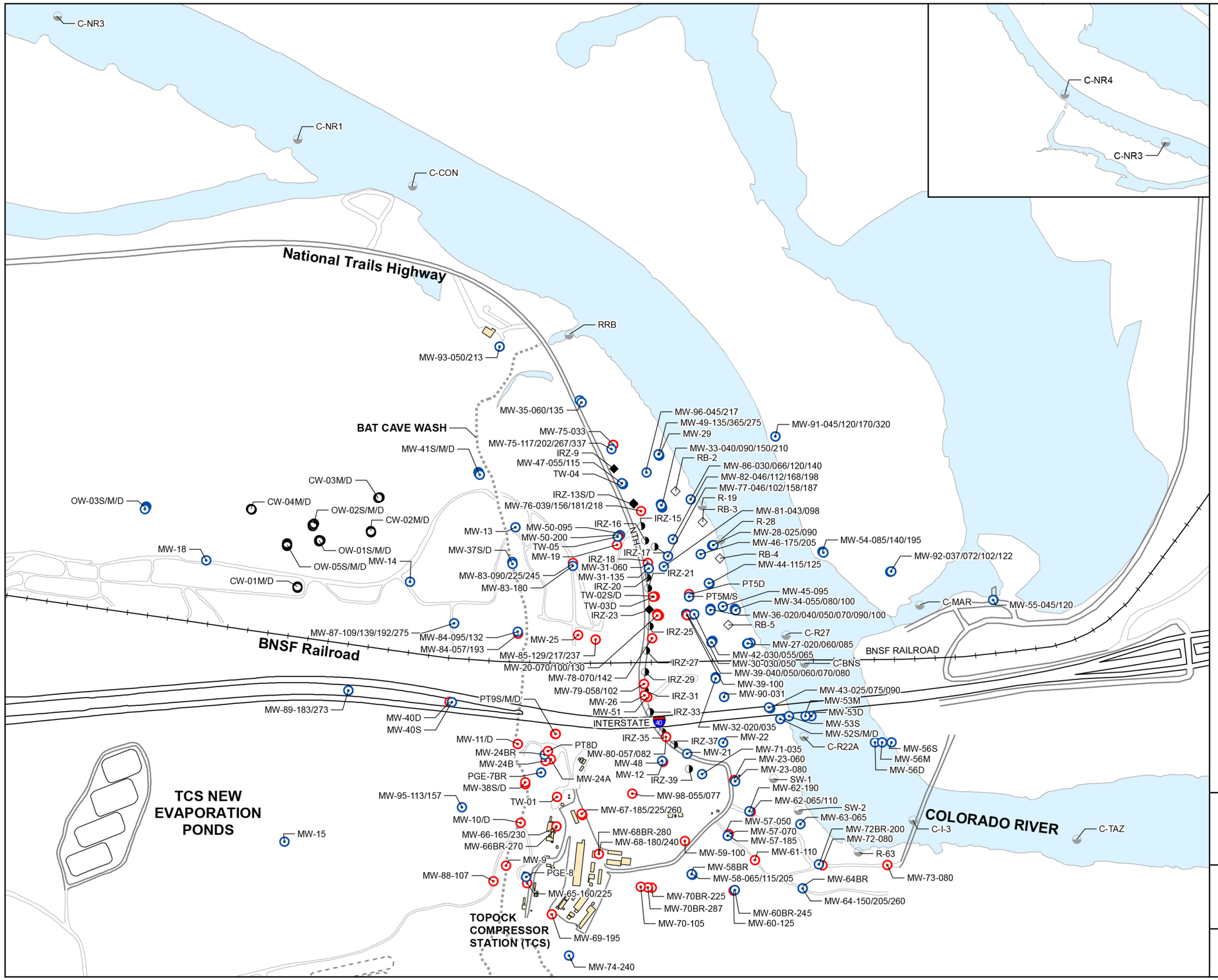
THIRD QUARTER 2022
QUARTERLY PROGRESS REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

PROCESS CONTROL MONITORING NETWORK

ARCADIS

FIGURE
1.3

T:_ENV\PGE_TOPOCK\GEC\MXD\GMP\3Q22\FINAL\FIGURE1.3_TOPOCK PROCESS CONTROL MONITORING WELLS.MXD 9/27/2022 5:15:32 PM



LEGEND

- REMEDIATION (INJECTION)
- REMEDIATION (EXTRACTION)
- REMEDIATION WELL (NOT PLUMBED INTO SYSTEM CURRENTLY)
- COMPLIANCE GROUNDWATER MONITORING WELL (INSIDE PLUME)
- COMPLIANCE GROUNDWATER MONITORING WELL (OUTSIDE PLUME)
- FORMER IM-3 MONITORING WELLS
- SURFACE WATER MONITORING LOCATION (INCLUDED IN REMEDY COMPLIANCE MONITORING PROGRAM)
- BAT CAVE WASH

Notes:
1. NTH = National Trail Highway
2. IRZ = In Situ Reactive Zone
3. IM-3 = Interim Measure 3

0 700 1,400
Feet

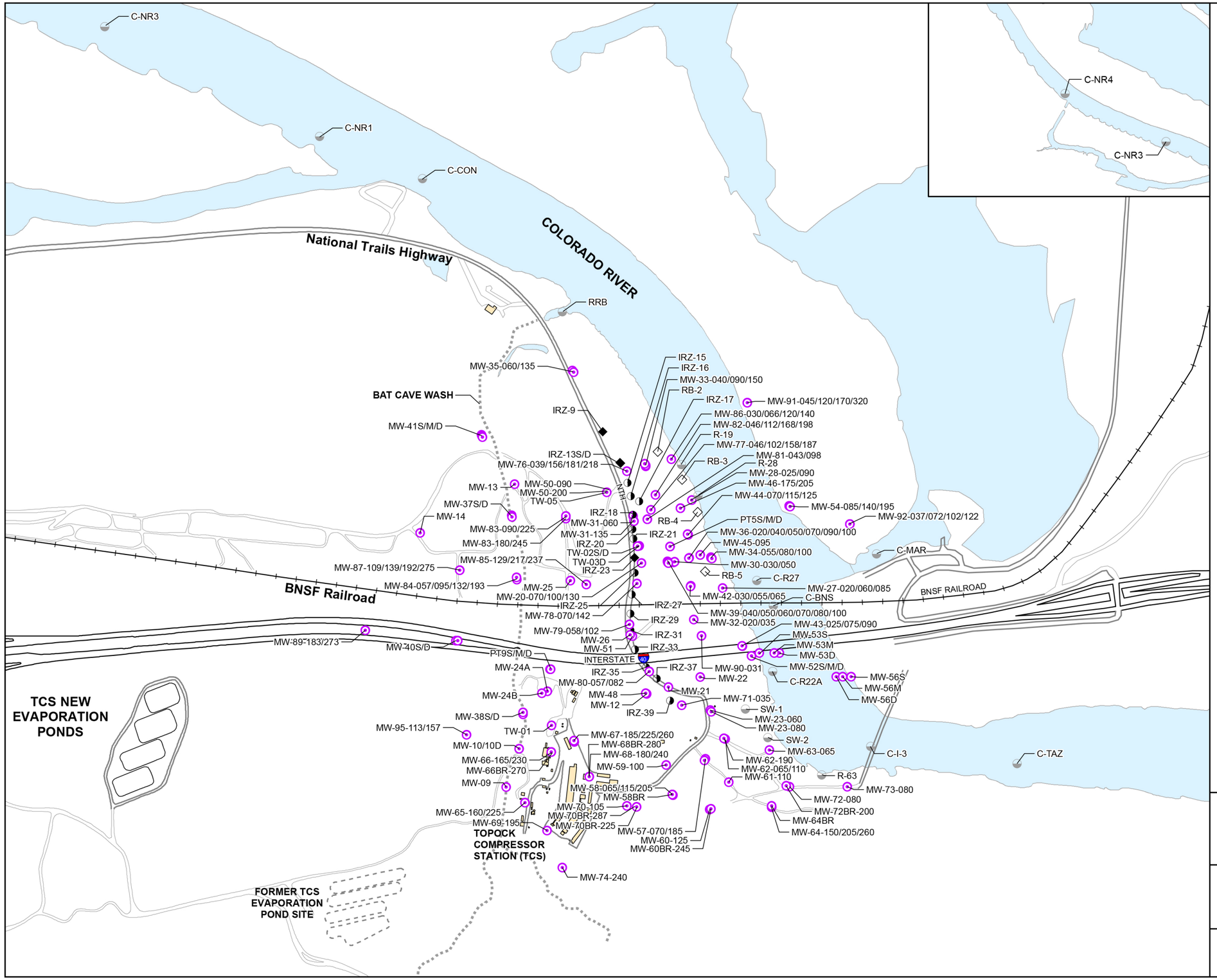
THIRD QUARTER 2022
QUARTERLY PROGRESS REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

REMEDY COMPLIANCE MONITORING NETWORK

ARCADIS

FIGURE
1.4

T:_ENV\PGE_TOPOCK\GEC\MXD\GMP\3Q22\FINAL\FIGURE1.4_REMEDY COMPLIANCE MONITORING NETWORK.MXD 9/27/2022 5:15:37 PM



LEGEND

- REMEDIATION WELL (EXTRACTION)
- REMEDIATION WELL (INJECTION)
- REMEDIATION WELL (NOT PLUMBED INTO SYSTEM CURRENTLY)
- SURFACE WATER MONITORING LOCATION (INCLUDED IN COPC MONITORING PROGRAM)
- COPC MONITORING WELL
- BAT CAVE WASH

Notes:
1. NTH = National Trails Highway
2. IRZ = In Situ Reactive Zone
3. COPC = Constituent of Potential Concern

0 500 1,000
Feet

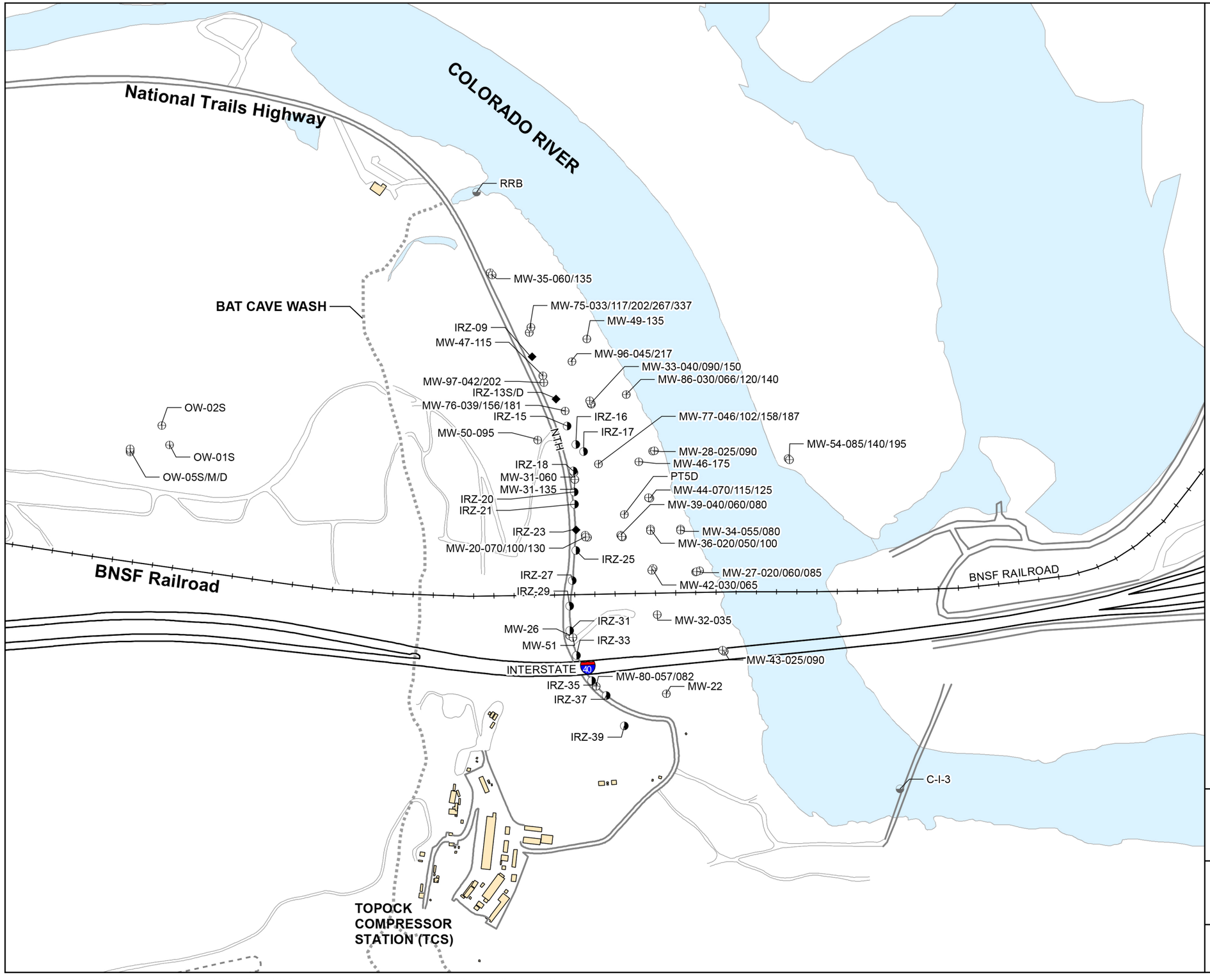
THIRD QUARTER 2022
QUARTERLY PROGRESS REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

COPC MONITORING NETWORK

ARCADIS

FIGURE
1.5

T:_ENV\PGE_TOPOCK\GEC\MXD\GMP\3Q22\FINAL\FIGURE1.5_COPC MONITORING NETWORK.MXD 9/27/2022 5:15:41 PM



LEGEND

- GROUNDWATER MONITORING WELL
- SURFACE WATER MONITORING LOCATION
- REMEDIATION WELL (INJECTION)
- REMEDIATION WELL (EXTRACTION)
- BAT CAVE WASH

0 500 1,000

Feet

THIRD QUARTER 2022
QUARTERLY PROGRESS REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

PRESSURE TRANSDUCER MONITORING NETWORK

ARCADIS

FIGURE
1.6

T:_ENV\PGE_TOPOCK\GEC\MXD\GMP\3Q22\FINAL\FIGURE1.6_PRESSURE TRANSDUCER MONITORING NETWORK.MXD 9/28/2022 7:41:45 PM

JUNE 2022

MW-35-060 456.42
MW-75-033 456.25
MW-96-045 456.09
IRZ-9
MW-97-042 456.16
MW-33-090 456.15
MW-33-040 456.13
IRZ-13S
MW-86-030 456.25
MW-76-039 455.99
IRZ-15
MW-86-066* 456.14
MW-50-095 456.23
IRZ-16
IRZ-17
MW-28-025 456.34
IRZ-18
MW-31-060 456.83
MW-44-070 456.26
MW-77-046 456.44
MW-39-040 456.37
IRZ-20
MW-39-060* 456.35
IRZ-21
MW-36-020* 456.62
MW-34-055 456.39
MW-20-100* 455.2
MW-20-070* 456.05
MW-36-050* 456.20
IRZ-25
MW-42-030 456.22
IRZ-27
MW-27-020 456.32
MW-42-065 456.33
IRZ-29
MW-27-060 456.28
IRZ-31
MW-32-035 456.29
MW-26 457.70
IRZ-33
MW-43-025 456.23
IRZ-35
MW-80-057 457.61
IRZ-37
MW-80-082* 455.08
IRZ-39

COLORADO RIVER
BNSF RAILROAD
INTERSTATE

June 2022 Average River Elevation: 456.52

JULY 2022

MW-35-060 455.95
MW-96-045 455.74
MW-75-033 455.83
IRZ-9
MW-33-040 455.84
MW-97-042 455.88
MW-33-090* 455.79
MW-86-030 455.74
IRZ-13S
MW-86-066 455.70
MW-76-039 455.81
IRZ-15
MW-28-025 455.82
MW-50-095 455.98
IRZ-16
IRZ-17
MW-44-070 455.76
IRZ-18
MW-77-046 455.93
MW-31-060 456.11
MW-39-040 455.89
IRZ-20
MW-39-060 455.90
IRZ-21
MW-36-020* 456.20
MW-34-055 455.90
IRZ-25
MW-20-070 456.04
MW-36-050 455.70
MW-20-100* 455.56
MW-42-030* 455.75
IRZ-27
MW-27-020 455.79
MW-42-065 455.85
IRZ-29
MW-27-060 455.74
IRZ-31
MW-32-035 455.79
MW-26 456.97
IRZ-33
MW-43-025 455.71
IRZ-35
MW-80-057 457.16
IRZ-37
MW-80-082* 453.32
IRZ-39

COLORADO RIVER
BNSF RAILROAD
INTERSTATE

July 2022 Average River Elevation: 455.99

AUGUST 2022

MW-35-060 455.08
MW-75-033 455.01
MW-96-045 454.82
MW-33-090 454.99
MW-33-040 455.05
IRZ-9
MW-97-042 455.19
MW-86-030 454.74
IRZ-13S
MW-86-066 454.63
MW-76-039 455.12
IRZ-15
IRZ-16
MW-50-095 455.36
IRZ-17
MW-28-025 454.69
MW-31-060 455.16
MW-77-046 455.10
MW-44-070 454.69
IRZ-18
MW-39-040 454.90
IRZ-20
MW-39-060 454.90
IRZ-21
MW-36-020* 455.19
MW-20-070 455.27
MW-34-055 454.79
MW-20-100* 455.26
MW-36-050 454.69
IRZ-25
MW-42-030* 454.78
IRZ-27
MW-27-020 454.72
MW-42-065 454.77
MW-27-060 454.68
IRZ-29
IRZ-31
MW-26 455.81
MW-32-035 454.80
IRZ-33
MW-43-025 454.57
IRZ-35
IRZ-37
MW-80-057 455.97
MW-80-082* 453.29
IRZ-39

COLORADO RIVER
BNSF RAILROAD
INTERSTATE

August 2022 Average River Elevation: 454.83

LEGEND

- NTH IRZ DOSE RESPONSE MONITORING WELL
- NORTHERN IRZ EXTRACTION MONITORING WELL
- NTH IRZ DOWNGRADIENT MONITORING WELL
- MONITORING WELL
- REMEDIATION WELL (INJECTION)
- REMEDIATION WELL (EXTRACTION)
- REMEDIATION WELL (INJECTION) OPERATING 59 - 90% UPTIME
- REMEDIATION WELL (INJECTION) OPERATING 30 - 35% UPTIME
- REMEDIATION WELL (EXTRACTION) OPERATING 59 - 90% UPTIME
- REMEDIATION WELL (EXTRACTION) OPERATING 30 - 35% UPTIME
- GROUNDWATER FLOW DIRECTION
- BAT CAVE WASH
- GROUNDWATER ELEVATION CONTOUR 0.2 FT (DASHED WHERE INFERRED)
- APPROXIMATE BEDROCK CONTACT (PER DEPTH INTERVAL)

Notes:
1. IRZ = In Situ Reactive Zone
2. NTH = National Trails Highway
3. Water elevation is in feet above mean sea level (ft amsl).
4. Asterisk* indicates well was not used for contouring.
5. Operating uptime was 0 - 5% at all remediation well locations in August 2022.

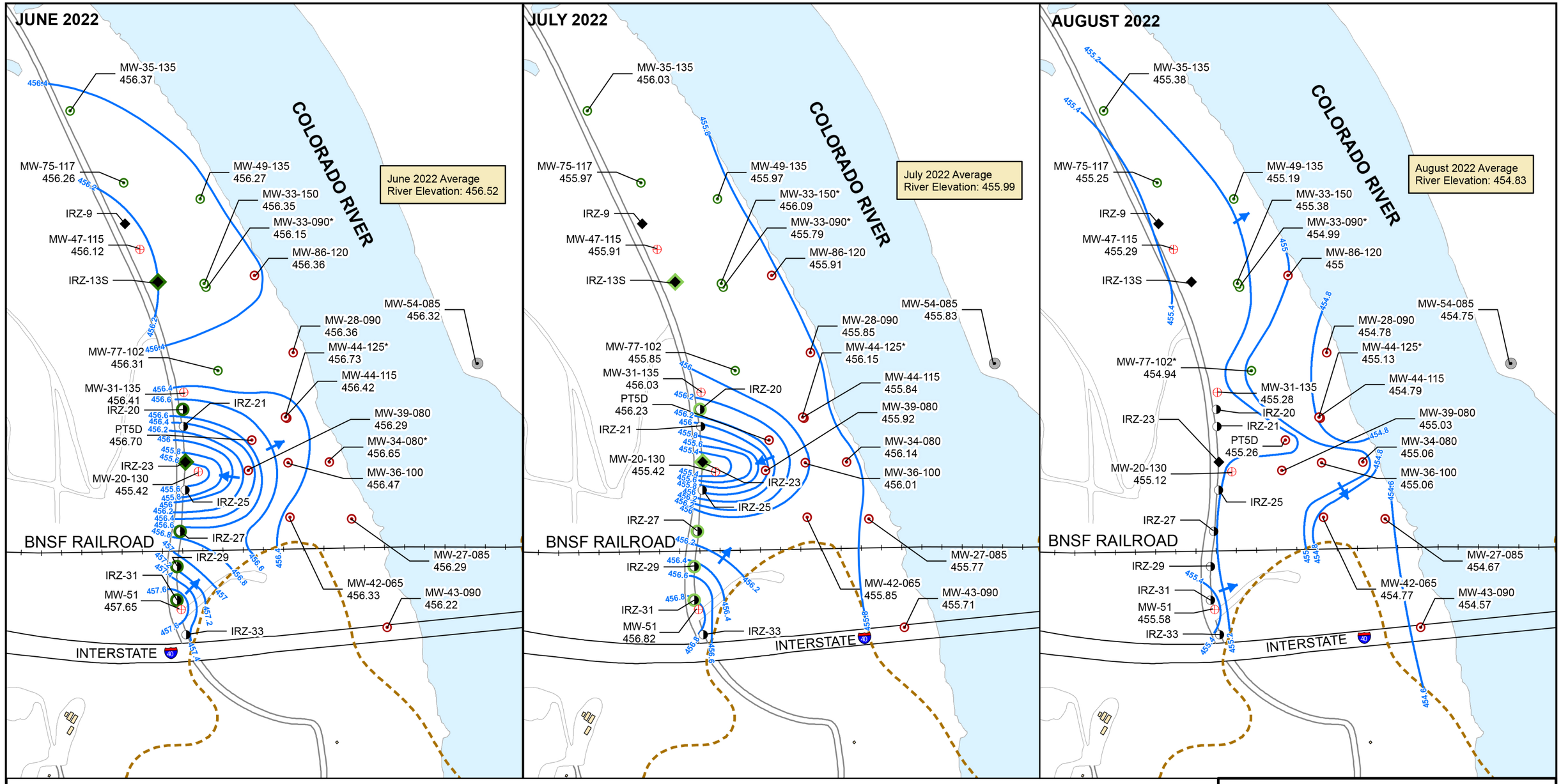
THIRD QUARTER 2022
QUARTERLY PROGRESS REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

LAYER 1 (425 – 455) & LAYER 2 (400 – 425) AVERAGE POTENTIOMETRIC SURFACE: JUNE, JULY, & AUGUST 2022

ARCADIS

FIGURE **2.1a**

City: Citrix Div/Group: IM Created By: K. SINSABAUGH Last Saved By: PSI01045
Topock (RC000753.802D.Q4182)
T:_ENVPGE_Topock\GEC\MXD\GMP\Plume Assessment Figures\3Q22\Figure2.1a_Average Potentiometric Surface_Layer1and2_June_July_August_2022.mxd 11/18/2022 4:00:31 PM



LEGEND

- NTH IRZ DOSE RESPONSE MONITORING WELL
- NORTHERN IRZ EXTRACTION MONITORING WELL
- NTH IRZ DOWNGRADIENT MONITORING WELL
- MONITORING WELL
- REMEDIATION WELL (INJECTION)
- REMEDIATION WELL (EXTRACTION)
- REMEDIATION WELL (INJECTION) OPERATING 59 - 90% UPTIME
- REMEDIATION WELL (INJECTION) OPERATING 30 - 35% UPTIME
- REMEDIATION WELL (EXTRACTION) OPERATING 59 - 90% UPTIME
- REMEDIATION WELL (EXTRACTION) OPERATING 30 - 35% UPTIME
- GROUNDWATER FLOW DIRECTION
- BAT CAVE WASH
- GROUNDWATER ELEVATION CONTOUR 0.2 FT (DASHED WHERE INFERRED)
- APPROXIMATE BEDROCK CONTACT (PER DEPTH INTERVAL)

Notes:
1. IRZ = In Situ Reactive Zone
2. NTH = National Trails Highway
3. Water elevation is in feet above mean sea level (ft amsl).
4. Asterisk* indicates well was not used for contouring.
5. Operating uptime was 0 - 5% at all remediation well locations in August 2022.

0 300 600
Feet

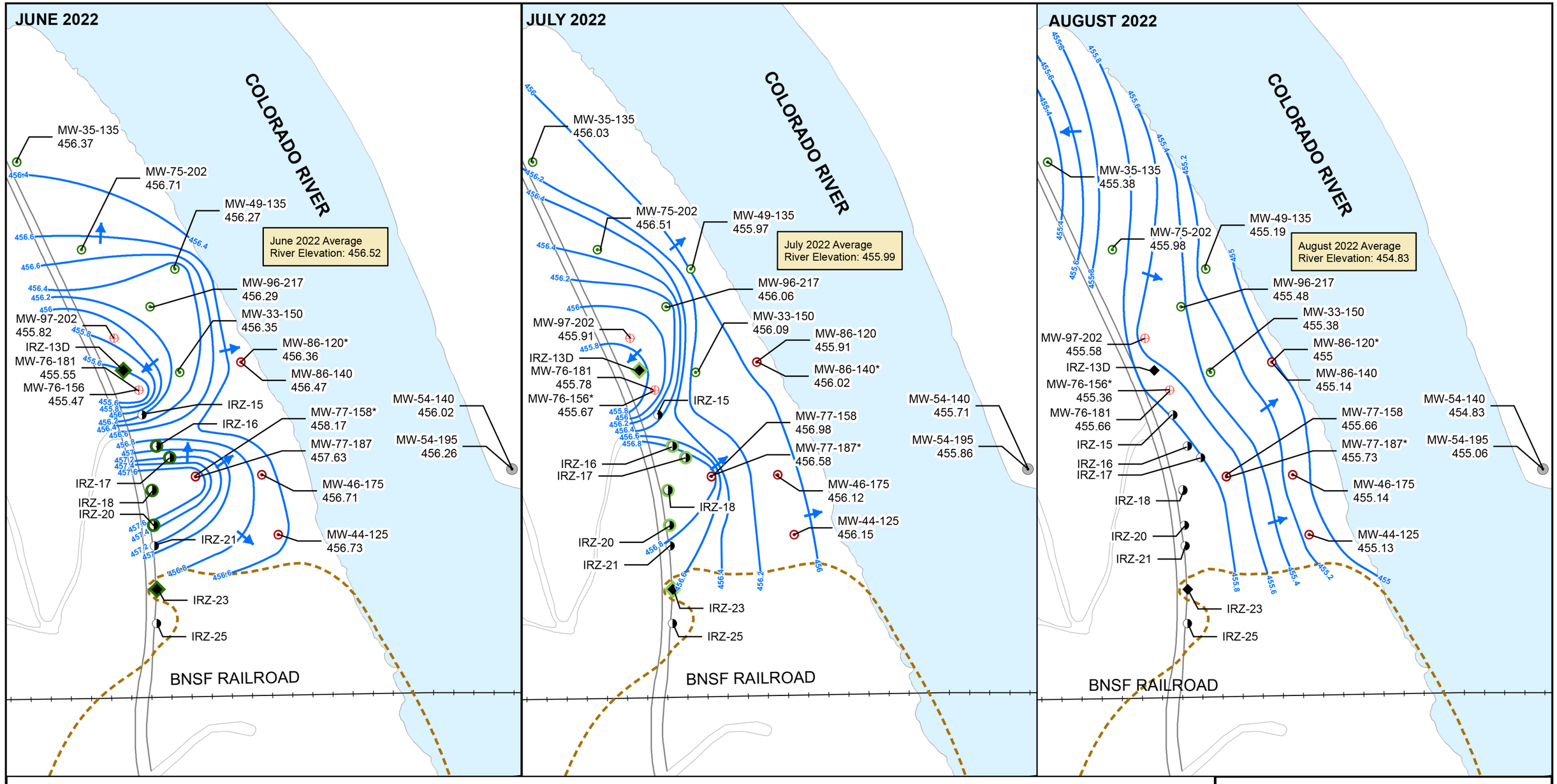
THIRD QUARTER 2022
QUARTERLY PROGRESS REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

LAYER 3 (350 - 400)
AVERAGE POTENTIOMETRIC SURFACE: JUNE, JULY, & AUGUST 2022

ARCADIS

FIGURE
2.1b

City: Citrix Div/Group: IM Created By: K. SINSABAUGH Last Saved By: PSI01045
Topock (RC000753.802D.Q4182)
T:_ENV\PGE_Topock\GEC\MXD\GMP\Plume Assessment Figures\3Q22\Figure2.1b_Average Potentiometric Surface_Layer3_June_July_August_2022.mxd 11/18/2022 4:14:25 PM



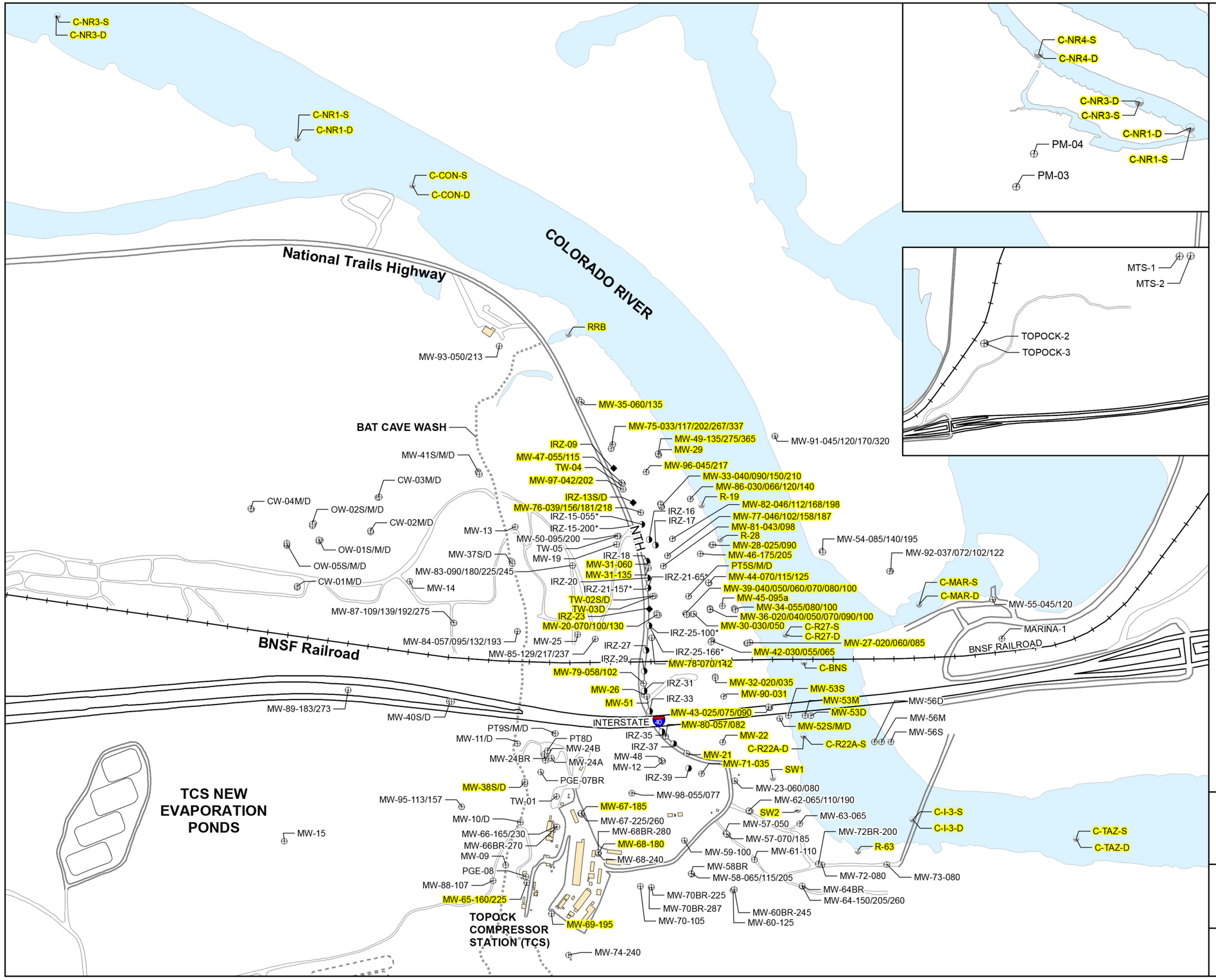
THIRD QUARTER 2022
QUARTERLY PROGRESS REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

LAYER 4 (300 – 350) & LAYER 5 (250 – 300) AVERAGE POTENTIOMETRIC SURFACE: JUNE, JULY, & AUGUST 2022

ARCADIS

FIGURE
2.1c

City: Citrix Div/Group: IM Created By: K. SINSABAUGH Last Saved By: PSI01045
Topock (RC000753.802D,G4182)
T:_ENV\PGE_Topock\GEC\MXD\GMP\Plume Assessment Figures\3Q22\Figure2.1c_Average Potentiometric Surface_Layer4and5_June_July_August_2022.mxd 11/18/2022 4:34:07 PM



LEGEND

- ⊕ GROUNDWATER MONITORING WELL
- ◒ SURFACE MONITORING WELL LOCATION
- ◑ REMEDIATION WELL (INJECTION)
- ◆ REMEDIATION WELL (EXTRACTION)
- ▪▪▪ BAT CAVE WASH

MW-69-195 = Location sampled in Third Quarter 2022
MW-74-240 = Location not sampled in Third Quarter 2022
* = Location was supposed to be sampled in Third Quarter 2022, but a sample could not be collected

0 500 1,000
Feet

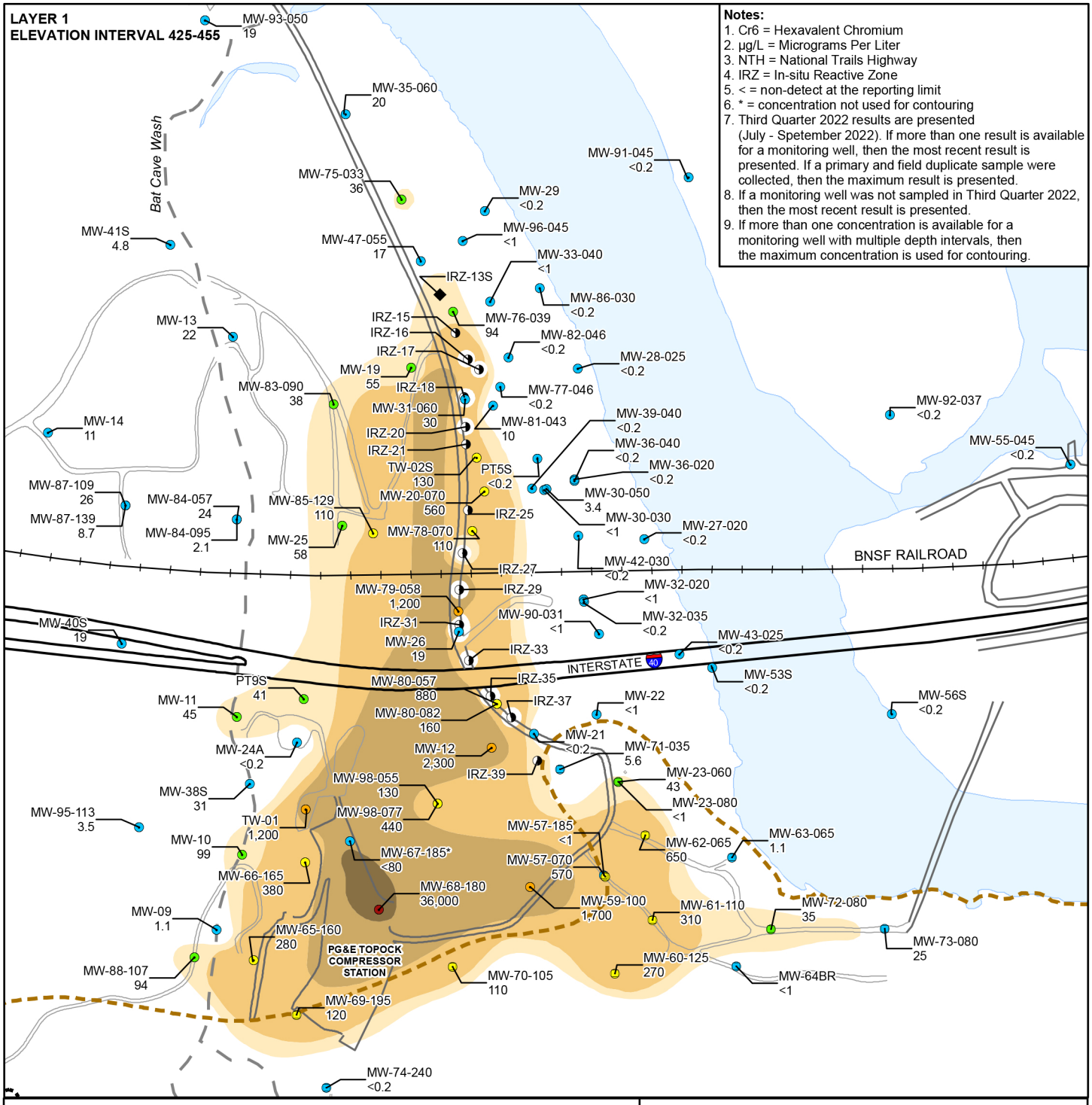
THIRD QUARTER 2022
QUARTERLY PROGRESS REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

PHASE 1 MONITORING PROGRAM: THIRD QUARTER 2022

ARCADIS

FIGURE
3.1

T:_ENV\PGE_TOPOCK\GEC\MXD\GMP\3Q22\FINAL\FIGURE3.1_PHASE1 MONITORING PROGRAM THIRD QUARTER 2022.MXD 11/11/2022 11:32:55 AM



THIRD QUARTER 2022 QUARTERLY PROGRESS REPORT

PG&E TOPOCK COMPRESSOR STATION NEEDLES, CALIFORNIA

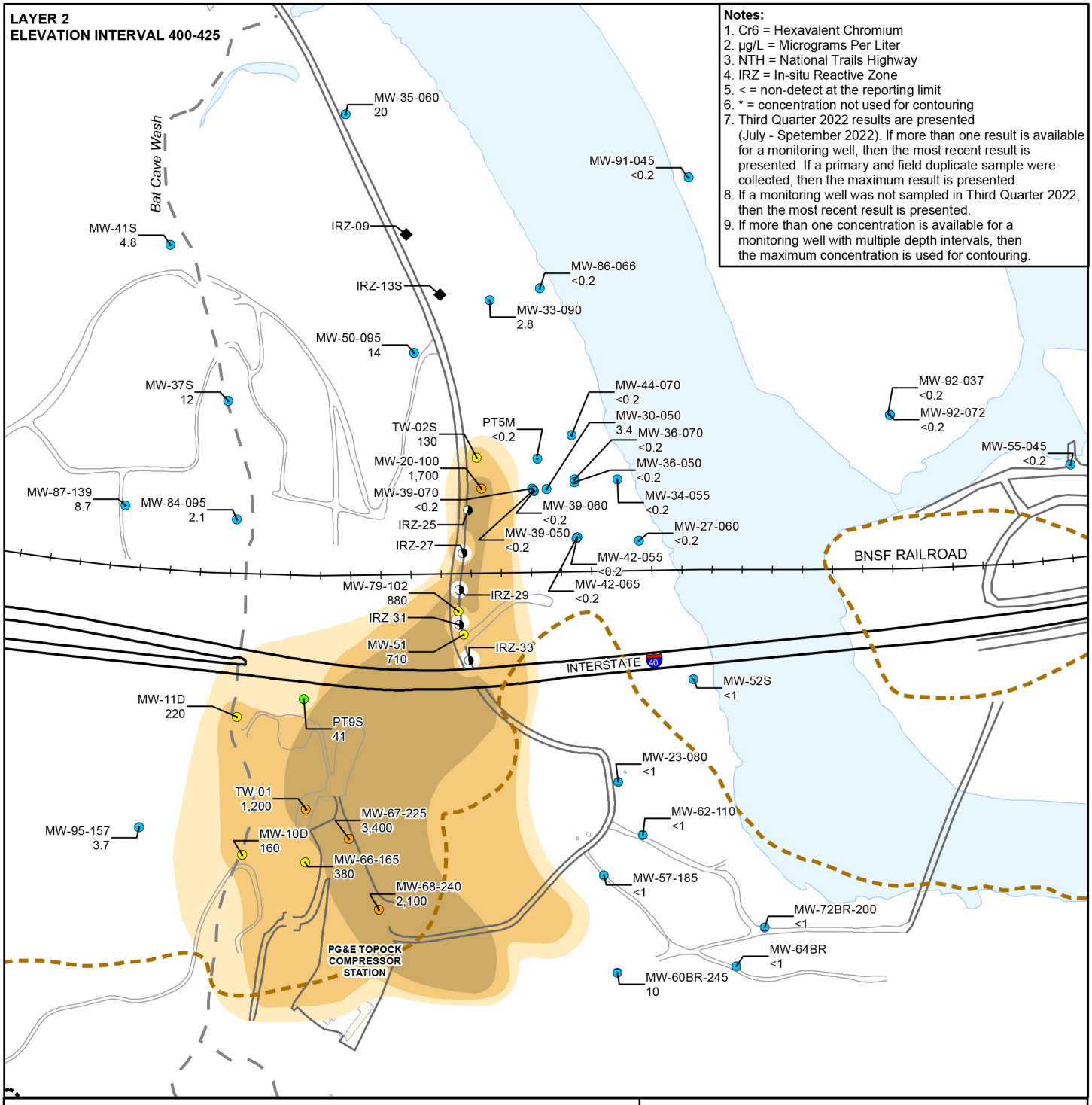
CR6 CONCENTRATIONS IN GROUNDWATER BY ELEVATION INTERVAL

ARCADIS

FIGURE

3.2a

T:_ENV\PGE_TOPOCK\GEC\MXD\GMP\3Q22\FINAL\FIGURE3.2A_CR6 CONCENTRATIONS_LAYER1_A4.MXD 11/10/2022 4:00:31 PM



THIRD QUARTER 2022 QUARTERLY PROGRESS REPORT

PG&E TOPOCK COMPRESSOR STATION NEEDLES, CALIFORNIA

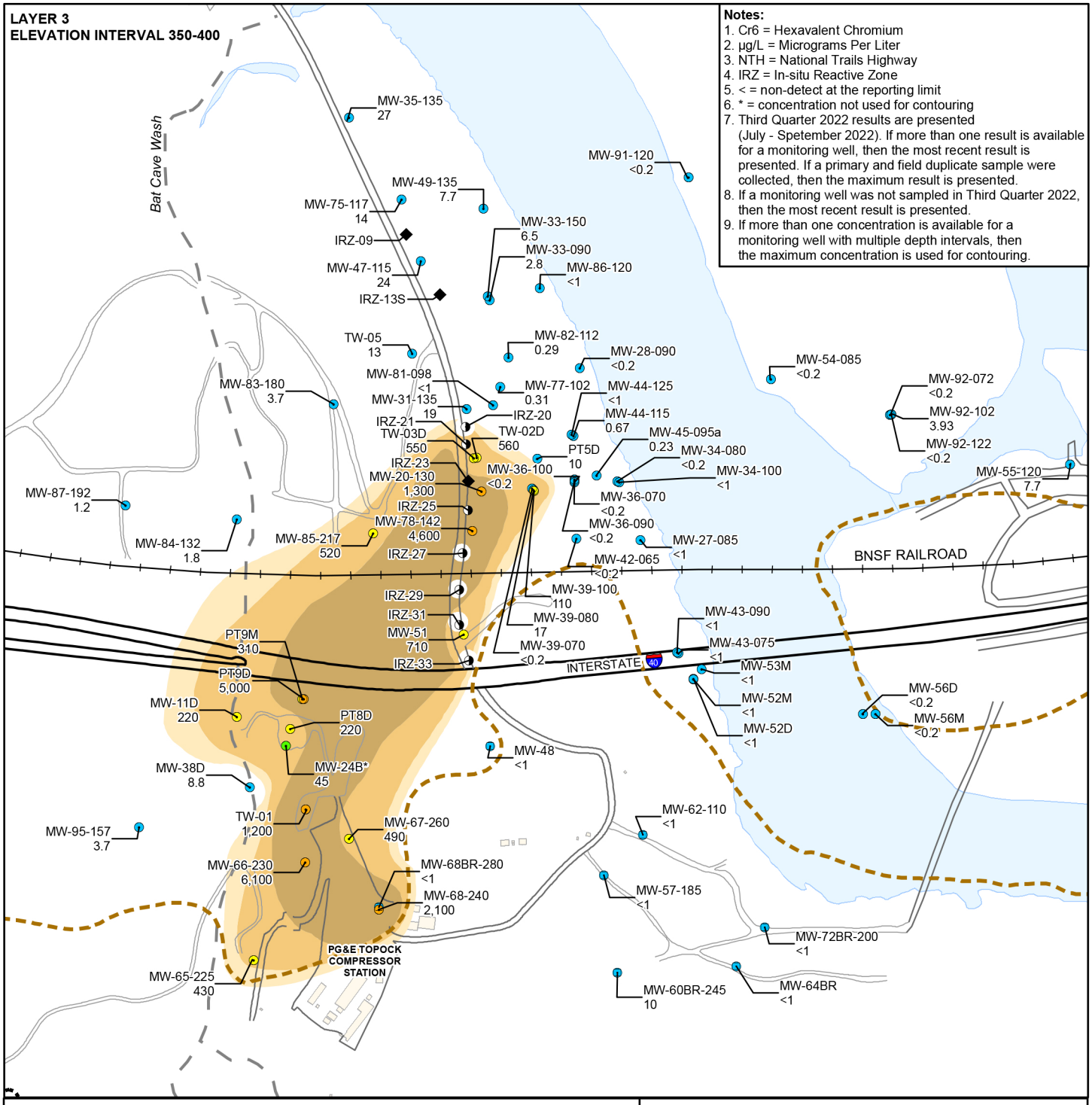
CR6 CONCENTRATIONS IN GROUNDWATER BY ELEVATION INTERVAL

ARCADIS

FIGURE

3.2b

T:_ENV\PGE_TOPOCK\GEC\MXD\GMP\3Q22\FINAL\FIGURE3.2B_CR6 CONCENTRATIONS_LAYER2_A4.MXD 11/10/2022 1:48:19 PM



THIRD QUARTER 2022
QUARTERLY PROGRESS REPORT

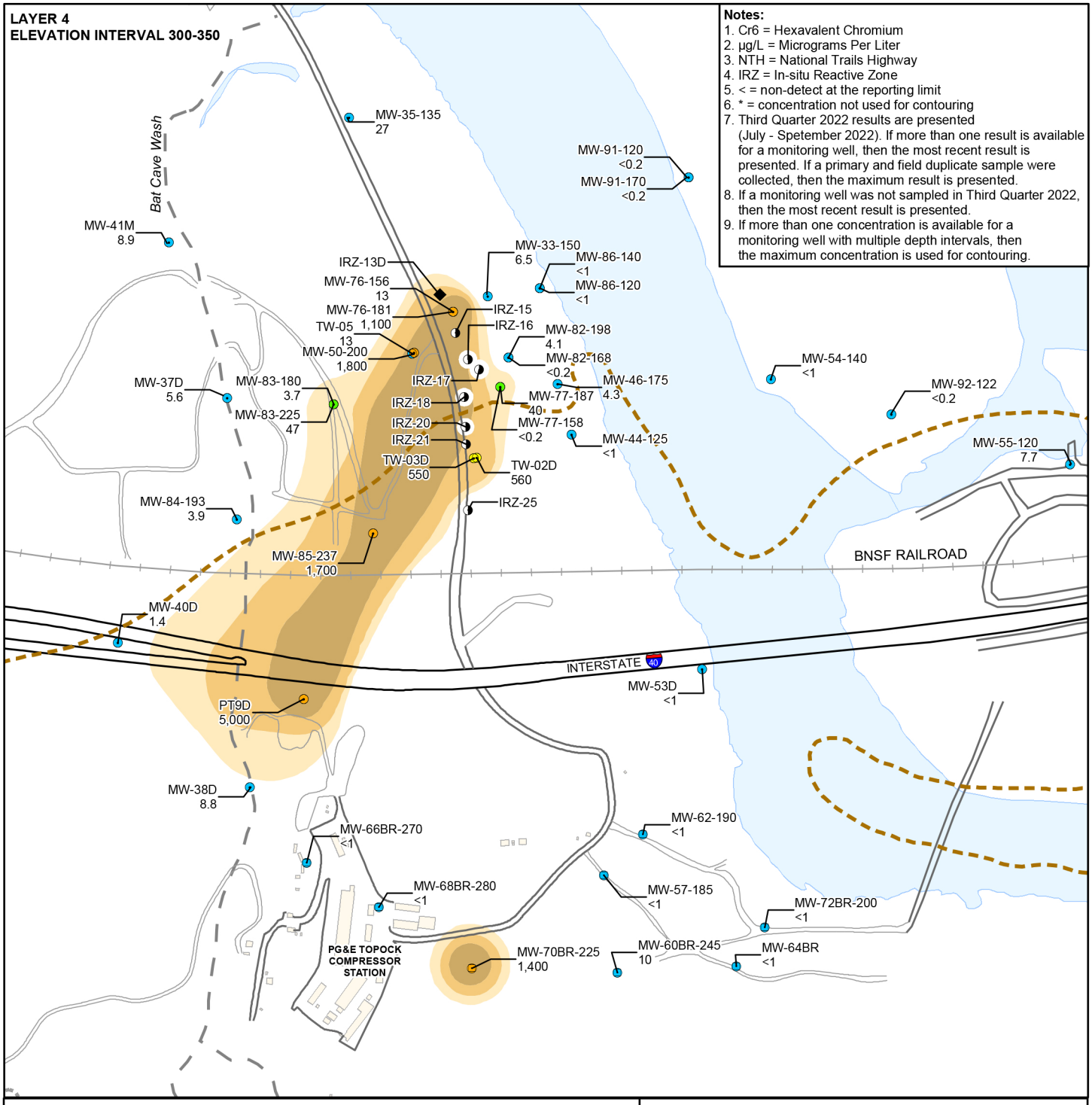
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CR6 CONCENTRATIONS IN GROUNDWATER BY ELEVATION INTERVAL

ARCADIS

FIGURE
3.2c

T:_ENV\PGE_TOPOCK\GEC\MXD\GMP\3Q22\FINAL\FIGURE3.2C_CR6 CONCENTRATIONS_LAYER3_A4.MXD 11/10/2022 2:09:12 PM



THIRD QUARTER 2022 QUARTERLY PROGRESS REPORT

PG&E TOPOCK COMPRESSOR STATION NEEDLES, CALIFORNIA

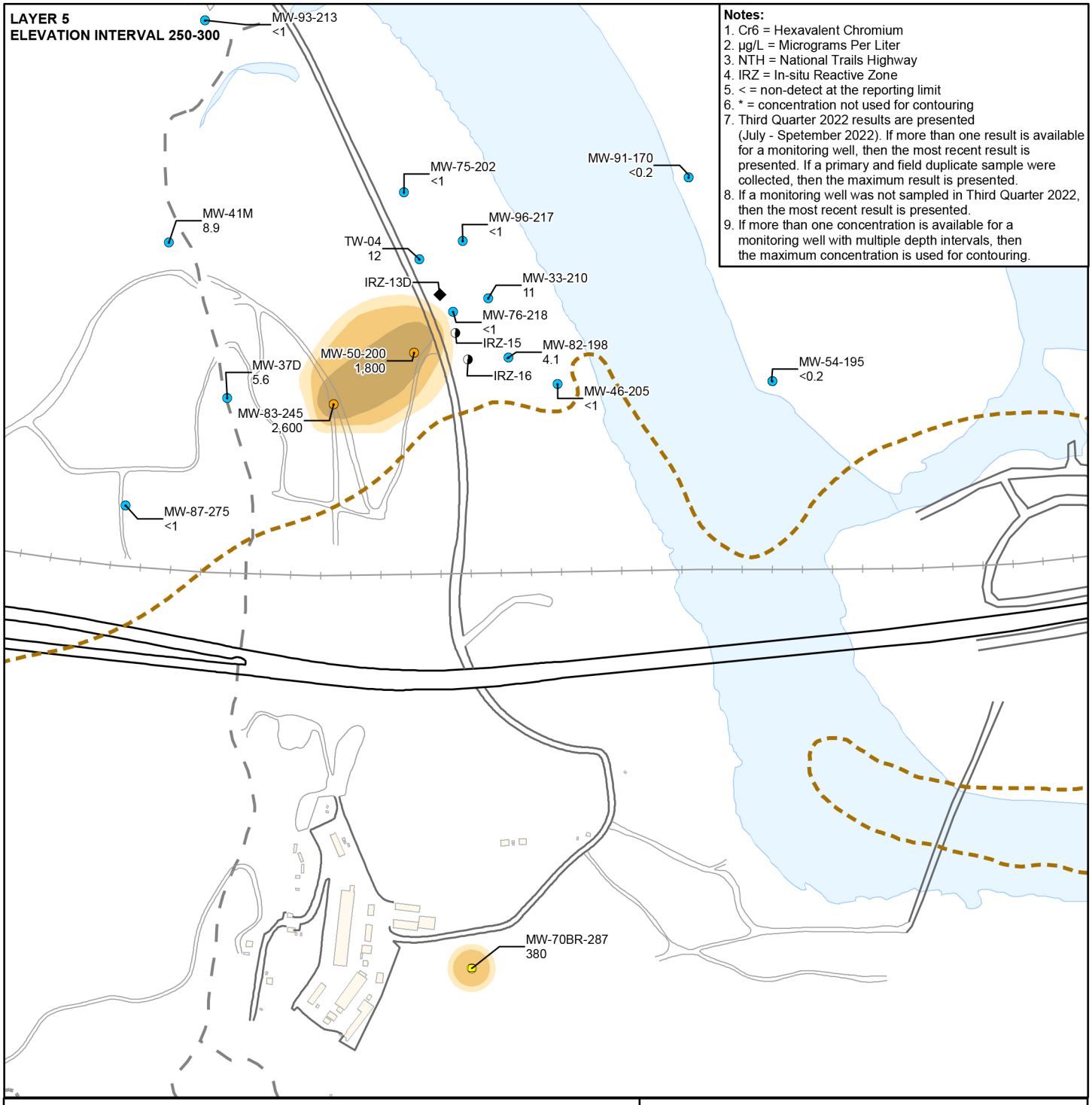
CR6 CONCENTRATIONS IN GROUNDWATER BY ELEVATION INTERVAL

ARCADIS

FIGURE

3.2d

T:_ENV\PGE_TOPOCK\GEC\MXD\GMP\3Q22\FINAL\FIGURE3.2D_CR6 CONCENTRATIONS_LAYER4.MXD 11/16/2022 5:01:19 PM



Notes:

1. Cr6 = Hexavalent Chromium
2. µg/L = Micrograms Per Liter
3. NTH = National Trails Highway
4. IRZ = In-situ Reactive Zone
5. < = non-detect at the reporting limit
6. * = concentration not used for contouring
7. Third Quarter 2022 results are presented (July - Spetember 2022). If more than one result is available for a monitoring well, then the most recent result is presented. If a primary and field duplicate sample were collected, then the maximum result is presented.
8. If a monitoring well was not sampled in Third Quarter 2022, then the most recent result is presented.
9. If more than one concentration is available for a monitoring well with multiple depth intervals, then the maximum concentration is used for contouring.

LEGEND

- Groundwater Monitoring Well
- Groundwater Well Completed in Bedrock
- NTH IRZ Injection Well
- NTH IRZ Extraction Well
- Bat Cave Wash
- Approximate bedrock contact (per depth interval)

0 300 600 Feet

N

MW-33-210 — Well ID
11 — Cr6 concentration in µg/L

Cr6 Concentrations

- ≤ 32 µg/L (or not detected)
- 32 - 100 µg/L
- 100 - 1,000 µg/L
- 1,000 - 10,000 µg/L
- > 10,000 µg/L

Cr6 contours

- 32 µg/L
- 100 µg/L
- 1,000 µg/L
- 10,000 µg/L

THIRD QUARTER 2022
QUARTERLY PROGRESS REPORT

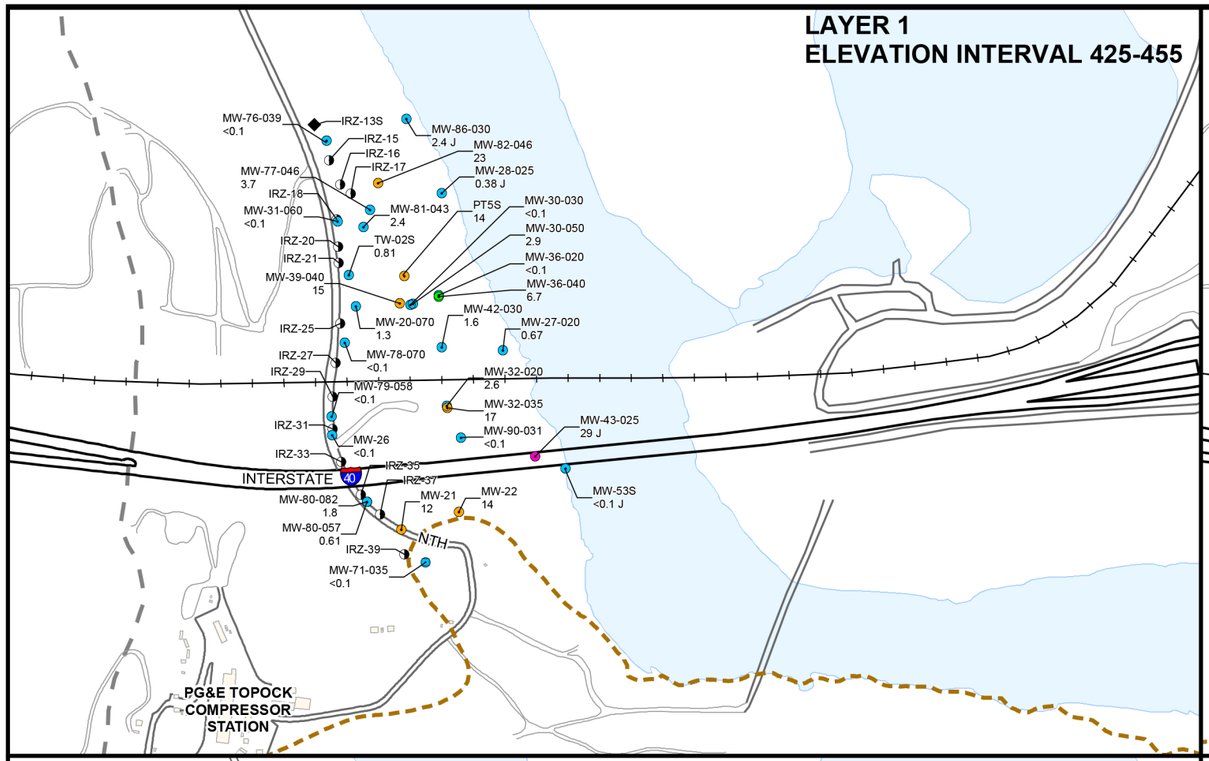
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CR6 CONCENTRATIONS IN GROUNDWATER BY ELEVATION INTERVAL

ARCADIS

FIGURE
3.2e

T:_ENV\PGE_TOPOCK\GEC\MXD\GMP\3Q22\FINAL\FIGURE3.2E_CR6 CONCENTRATIONS_LAYER5_A4.MXD 11/10/2022 4:33:29 PM



LEGEND

- Groundwater Monitoring Well
- Groundwater Well Completed in Bedrock
- NTH IRZ Injection Well
- NTH IRZ Extraction Well
- Bat Cave Wash
- Approximate bedrock contact (per depth interval)

Dissolved Arsenic Concentrations

- 5 µg/L
- 10 µg/L (ARAR)
- 24.3 µg/L (Background UTL)

MW-39-070 — Well ID
1.2 — Dissolved arsenic concentration in µg/L

N

0 400 800 Feet

Notes:

1. µg/L = micrograms per liter
2. NTH = National Trails Highway
3. IRZ = in-situ reactive zone
4. < = non-detect at the reporting limit
5. Arsenic Background Study Upper Tolerance Limit (UTL) = 24.3 µg/L
6. Arsenic applicable or relevant and appropriate requirement (ARAR) = 10.0 µg/L
7. J = concentration estimated by laboratory or data validation
8. Third Quarter 2022 results are presented (July to September 2022). If more than one result is available for a monitoring well, then the most recent result is presented. If a primary sample and field duplicate sample were collected, then the maximum result is presented.

THIRD QUARTER 2022
QUARTERLY PROGRESS REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

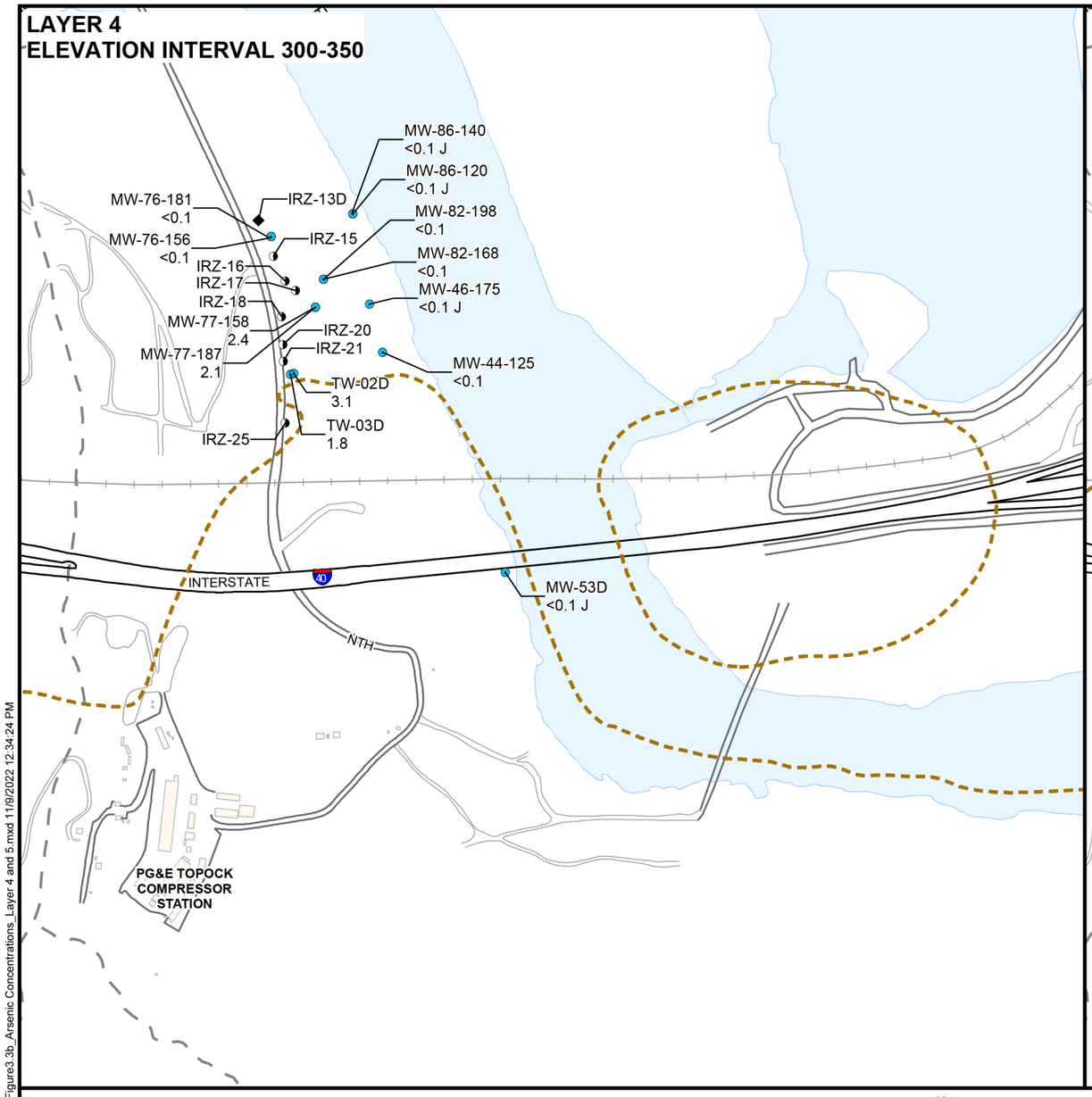
DISSOLVED ARSENIC CONCENTRATIONS IN GROUNDWATER BY ELEVATION INTERVAL

ARCADIS

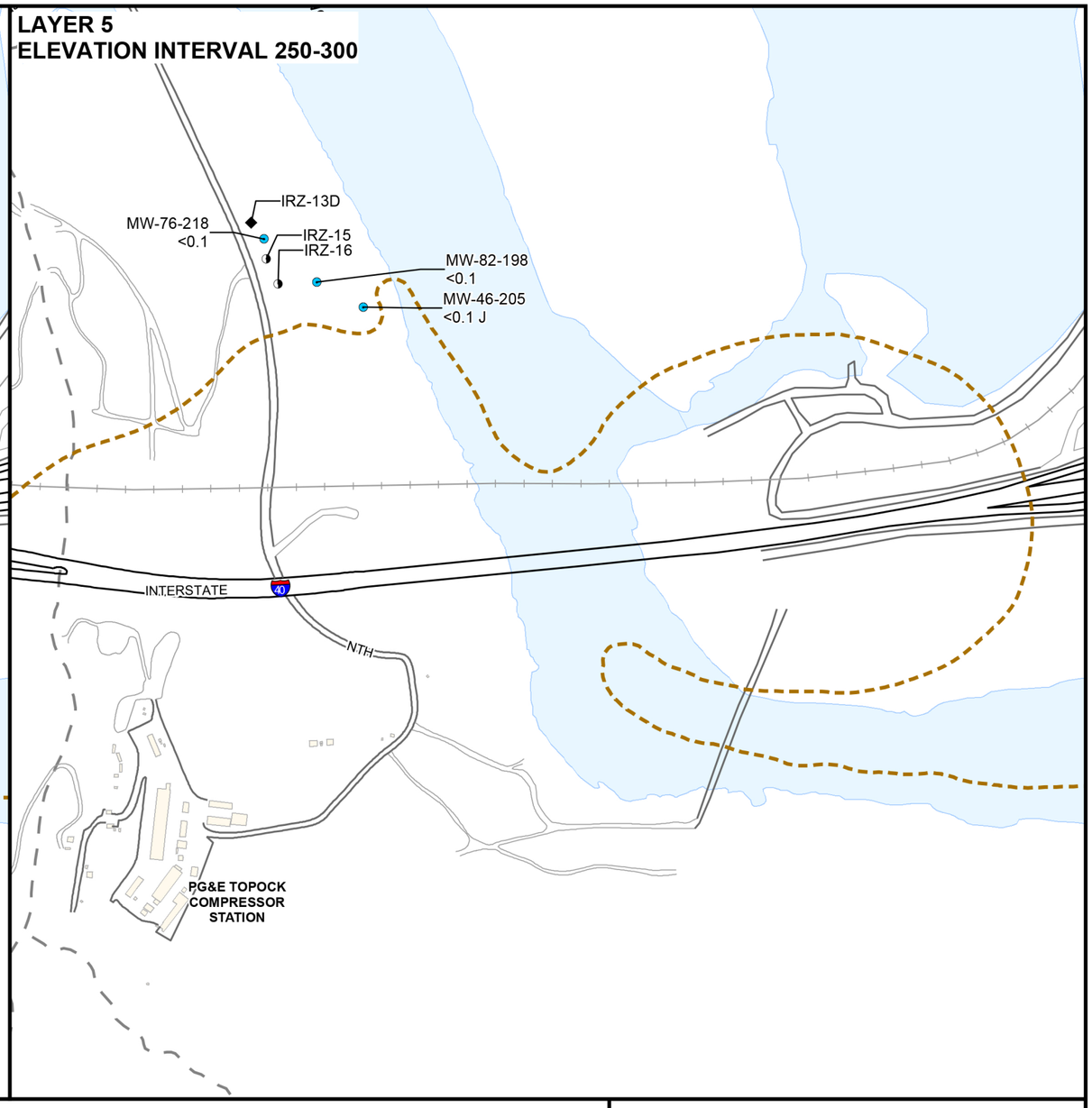
FIGURE 3.3a

City: Citrix Div/Group: IM Created By: K. SINSABAUGH Last Saved By: mayyar7350
Topock (RC000753.802D.Q4182)
T:_ENV\PGE_Topock\GEC\MXD\GMP\3Q22\Final\Figure3.3a_Arsenic Concentrations_Layer 1 to 3.mxd 11/11/2022 12:06:32 PM

LAYER 4
ELEVATION INTERVAL 300-350



LAYER 5
ELEVATION INTERVAL 250-300



LEGEND

- Groundwater Monitoring Well
- Groundwater Well Completed in Bedrock
- NTH IRZ Injection Well
- NTH IRZ Extraction Well
- Bat Cave Wash
- Approximate bedrock contact (per depth interval)

Dissolved Arsenic Concentrations

- 5 µg/L
- 10 µg/L (ARAR)
- 24.3 µg/L (Background UTL)

Notes:

1. µg/L = micrograms per liter
2. NTH = National Trails Highway
3. IRZ = in-situ reactive zone
4. < = non-detect at the reporting limit
5. Arsenic Background Study Upper Tolerance Limit (UTL) = 24.3 µg/L
6. Arsenic applicable or relevant and appropriate requirement (ARAR) = 10.0 µg/L
7. J = concentration estimated by laboratory or data validation
8. Third quarter 2022 results are presented (July to September 2022). If more than one result is available for a monitoring well, then the most recent result is presented. If a primary sample and field duplicate sample were collected, then the maximum result is presented.

MW-77-187 — Well ID
2.1 — Dissolved arsenic concentration in µg/L

N

0 400 800
Feet

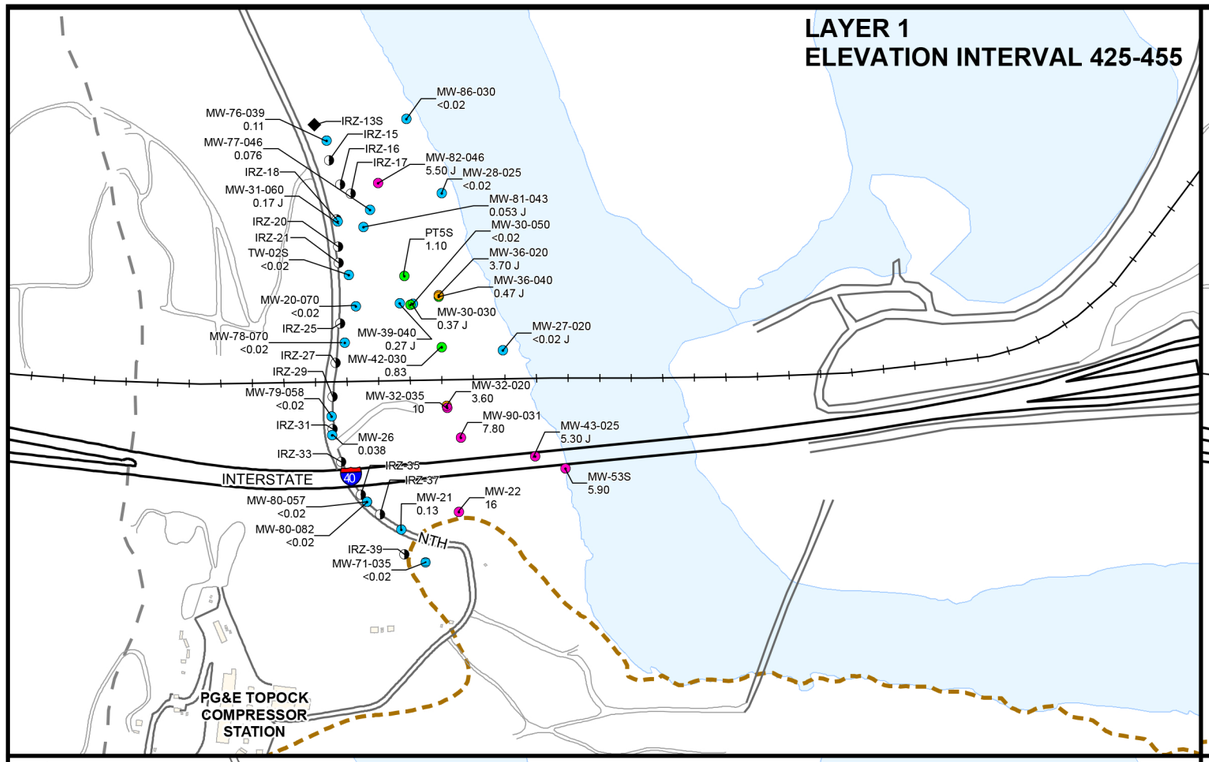
THIRD QUARTER 2022
QUARTERLY PROGRESS REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

DISSOLVED ARSENIC CONCENTRATIONS IN GROUNDWATER BY ELEVATION INTERVAL

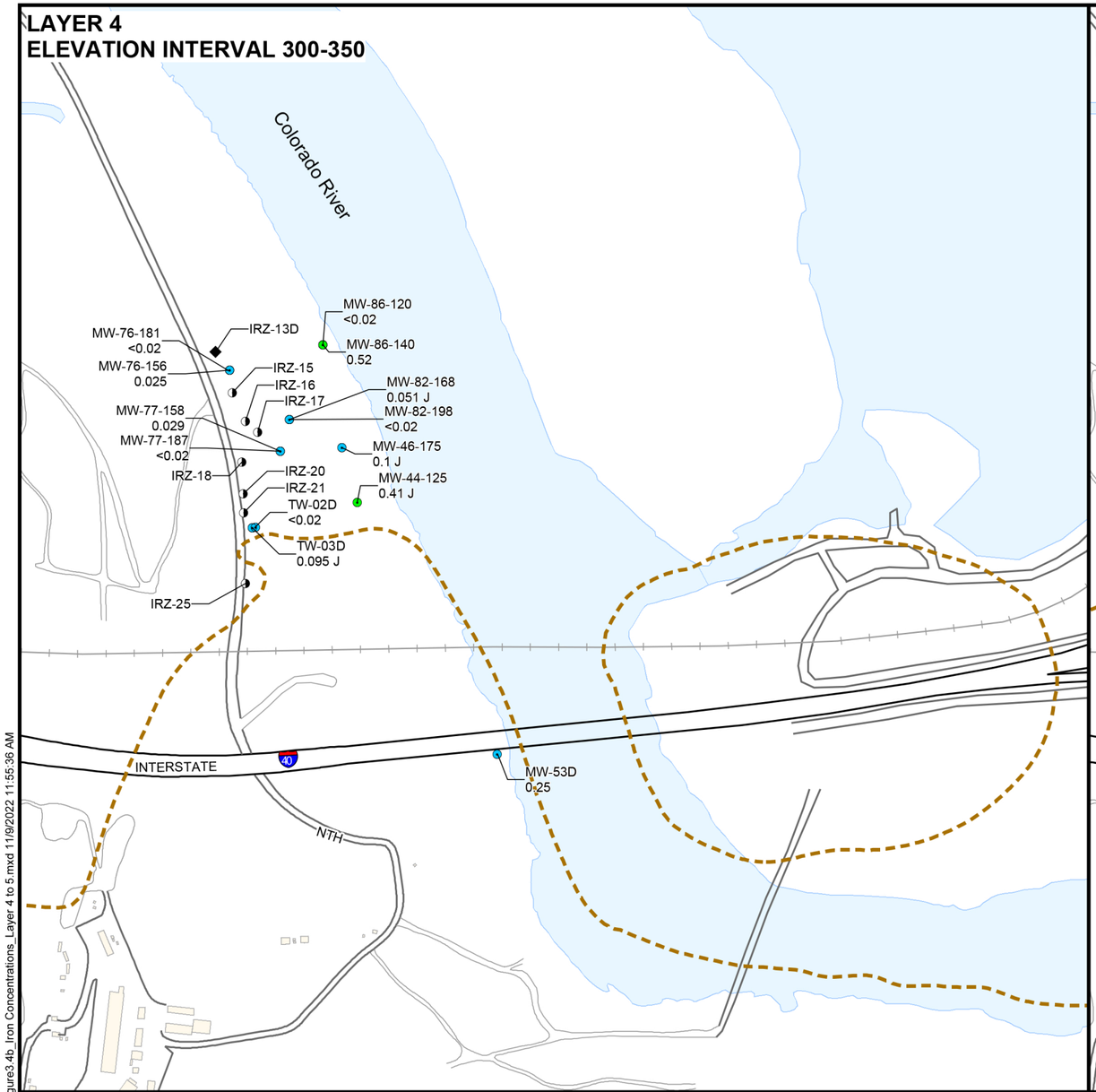
ARCADIS

FIGURE
3.3b

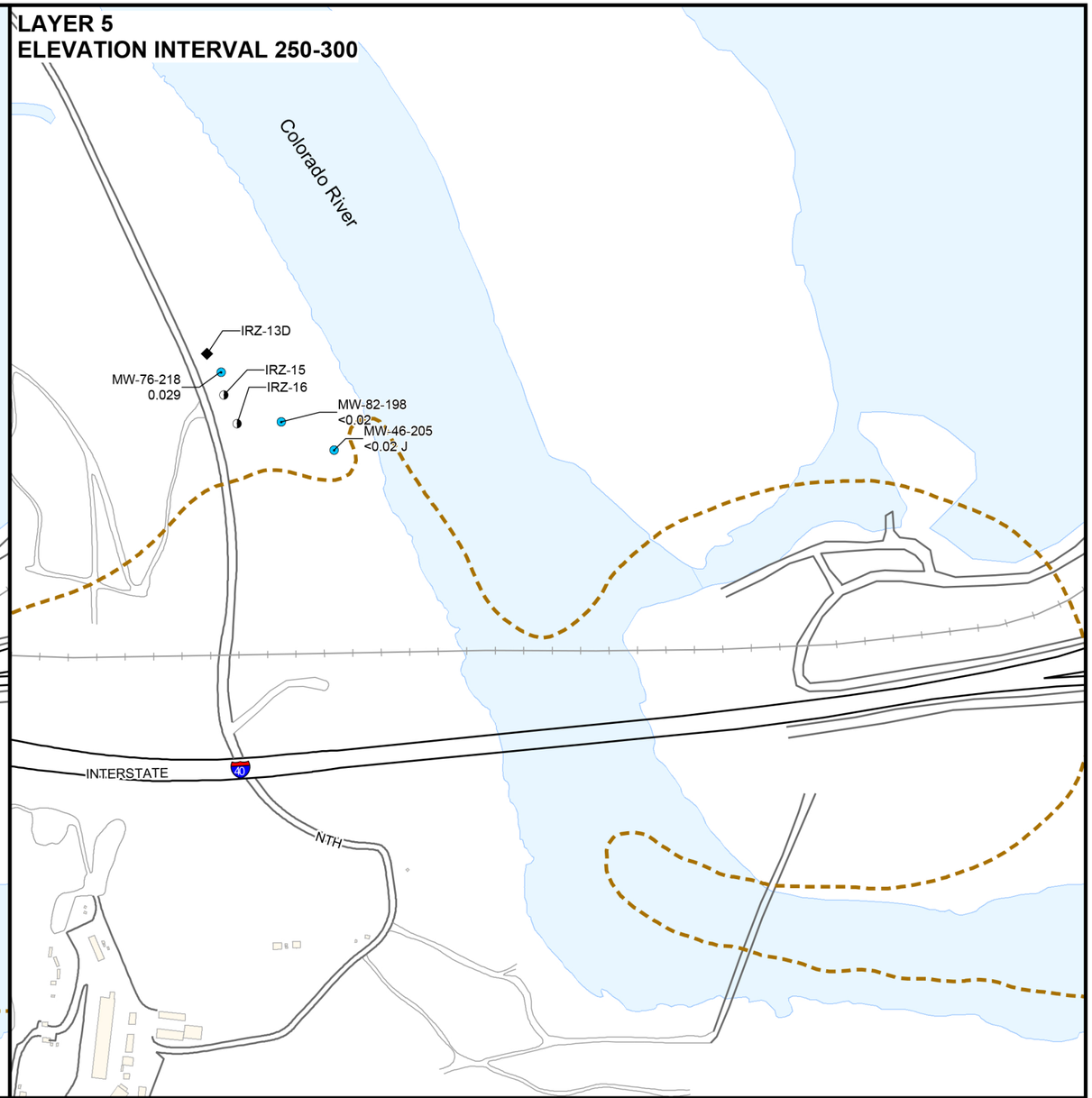
City: Citrix Div/Group: IM Created By: K. SINSABAUGH Last Saved By: mayyar7350
T:_ENV\PGE_Topock\GEC\MXD\GMP3Q22\FinalFigure3.3b_Arsenic Concentrations_Layer 4 and 5.mxd 11/9/2022 12:34:24 PM
Topock (RC000753.802D.C41182)


LAYER 1
ELEVATION INTERVAL 425-455
MW-76-039 0.11
IRZ-13S
MW-86-030 <0.02
IRZ-15
MW-77-046 0.076
IRZ-16
IRZ-17
MW-82-046 5.50 J
IRZ-18
MW-28-025 <0.02
MW-31-060 0.17 J
MW-81-043 0.053 J
IRZ-20
MW-30-050 <0.02
IRZ-21
PT5S 1.10
TW-02S <0.02
MW-36-020 3.70 J
MW-36-040 0.47 J
MW-20-070 <0.02
MW-30-030 0.37 J
IRZ-25
MW-78-070 <0.02
MW-39-040 0.27 J
MW-27-020 <0.02 J
IRZ-27
MW-42-030 0.83
IRZ-29
MW-79-058 <0.02
MW-32-035 10
MW-32-020 3.60
IRZ-31
MW-90-031 7.80
MW-26 0.038
MW-43-025 5.30 J
IRZ-33
IRZ-35
IRZ-37
MW-53S 5.90
INTERSTATE 40
MW-80-057 <0.02
MW-21 0.13
MW-22 16
MW-80-082 <0.02
NTH
IRZ-39
MW-71-035 <0.02
PG&E TOPOCK COMPRESSOR STATION
LAYER 2
ELEVATION INTERVAL 400-425
IRZ-09
Bat Cave Wash
MW-86-066 0.042
IRZ-13S
PT5M <0.02
MW-39-070 <0.02
MW-44-070 0.65 J
MW-39-050 0.021 J
TW-02S <0.02
MW-36-070 0.033 J
MW-20-100 <0.02
MW-36-050 0.2 J
MW-34-055 0.094 J
MW-30-050 <0.02
IRZ-25
MW-39-060 0.042 J
MW-27-060 0.33 J
MW-42-065 0.41
IRZ-27
IRZ-29
MW-42-055 0.18
IRZ-31
MW-79-102 <0.02
MW-51 <0.02
IRZ-33
INTERSTATE 40
MW-52S 20
NTH
PG&E TOPOCK COMPRESSOR STATION
LAYER 3
ELEVATION INTERVAL 350-400
IRZ-09
MW-86-120 <0.02
IRZ-13S
MW-28-090 1.10 J
MW-81-098 0.19 J
MW-82-112 0.035 J
MW-44-125 0.41 J
MW-44-115 0.041 J
MW-31-135 <0.02
MW-77-102 0.054
MW-36-070 0.033 J
TW-02D <0.02
IRZ-20
MW-36-090 0.038 J
TW-03D 0.095 J
IRZ-21
MW-36-100 0.17 J
IRZ-23
MW-34-100 0.055 J
MW-20-130 <0.02
PT5D <0.02
MW-34-080 0.41
IRZ-25
MW-45-095a <0.02
MW-78-142 <0.02
MW-27-085 0.27 J
IRZ-27
MW-42-065 0.41
IRZ-29
MW-43-090 1.0
MW-39-100 <0.02
IRZ-31
MW-43-075 3.0
MW-51 <0.02
MW-39-080 <0.02
IRZ-33
MW-39-070 <0.02
INTERSTATE 40
MW-53M 0.44
MW-52D 0.74
NTH
MW-52M 1.60
PG&E TOPOCK COMPRESSOR STATION
LEGEND
Groundwater Monitoring Well
Groundwater Well Completed in Bedrock
NTH IRZ Injection Well
NTH IRZ Extraction Well
Bat Cave Wash
Approximate bedrock contact (per depth interval)
Dissolved Iron Concentrations
0.3 mg/L (ARAR)
2 mg/L
3.93 mg/L (Background UTL)
MW-27-085 Well ID
0.27 Dissolved Iron concentration in mg/L
N
0
400
800
Feet
Notes:
1. mg/L = milligrams per liter
2. NTH = National Trails Highway
3. IRZ = in-situ reactive zone
4. < = non-detect at the reporting limit
5. Iron Background Study Upper Tolerance Limit (UTL) = 3.93 mg/L.
6. Iron applicable or relevant and appropriate requirement (ARAR) = 0.3 mg/L
7. J = concentration estimated by laboratory or data validation
8. Third Quarter 2022 results are presented (July to September 2022). If more than one result is available for a monitoring well, then the most recent result is presented. If a primary sample and field duplicate sample were collected, then the maximum result is presented.
THIRD QUARTER 2022
QUARTERLY PROGRESS REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA
DISSOLVED IRON CONCENTRATIONS IN GROUNDWATER BY ELEVATION INTERVAL
ARCADIS
FIGURE
3.4a
City: Citrix Div/Group: IM Created By: K. SINSABAUGH Last Saved By: mayyar7350
Topock (RC000753.802D.Q4182)
T:_ENV\PGE_Topock\GEC\MXD\GMP\3Q22\Final\Figure3.4a_Iron Concentrations_Layer 1 to 3.mxd 11/11/2022 12:09:16 PM

LAYER 4
ELEVATION INTERVAL 300-350



LAYER 5
ELEVATION INTERVAL 250-300



LEGEND

- Groundwater Monitoring Well
- Groundwater Well Completed in Bedrock
- NTH IRZ Injection Well
- NTH IRZ Extraction Well
- Bat Cave Wash
- Approximate bedrock contact (per depth interval)

Dissolved Iron Concentrations

- 0.3 mg/L (ARAR)
- 2 mg/L
- 3.93 mg/L (Background UTL)

Notes:

1. mg/L = milligrams per liter
2. NTH = National Trails Highway
3. IRZ = in-situ reactive zone
4. < = non-detect at the reporting limit
5. Iron Background Study Upper Tolerance Limit (UTL) = 3.93 mg/L.
6. Iron applicable or relevant and appropriate requirement (ARAR) = 0.3 mg/L
7. J = concentration estimated by laboratory or data validation
8. Third Quarter 2022 results are presented (July to September 2022). If more than one result is available for a monitoring well, then the most recent result is presented. If a primary sample and field duplicate sample were collected, then the maximum result is presented.

MW-53D — Well ID

0.25 — Dissolved Iron concentration in mg/L

N

0 400 800 Feet

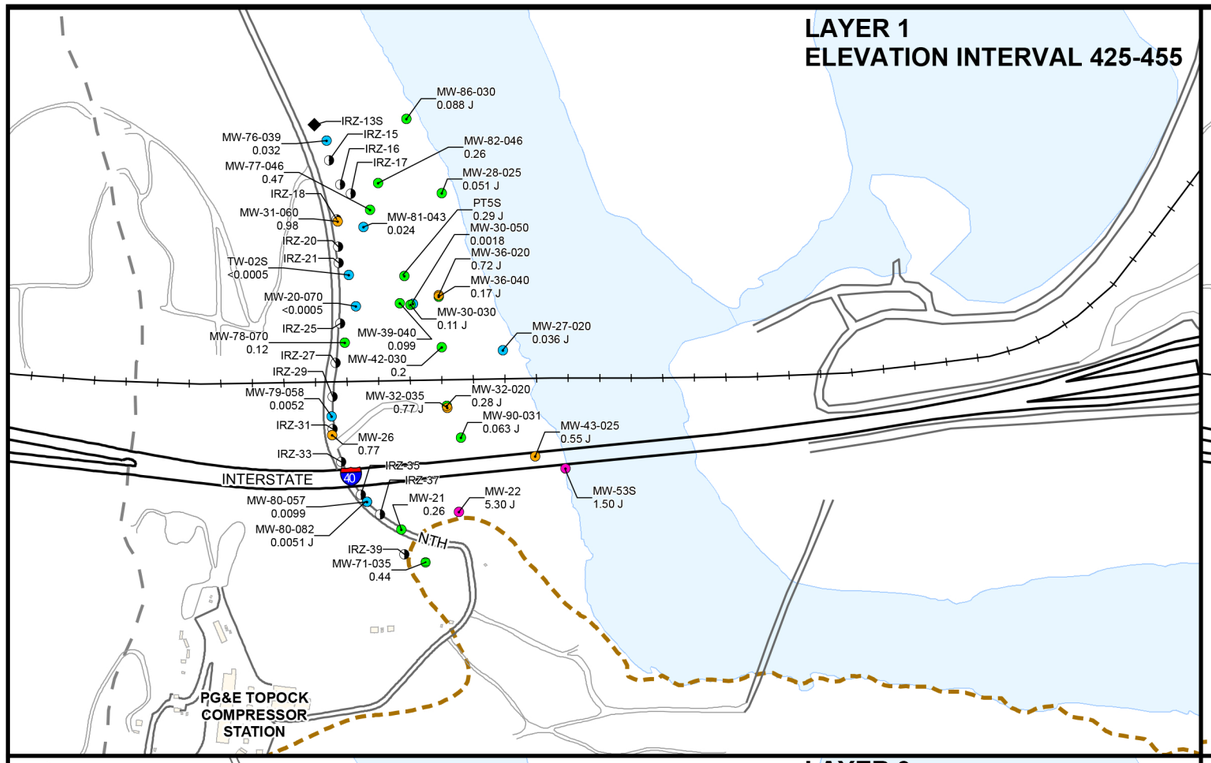
THIRD QUARTER 2022
QUARTERLY PROGRESS REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

DISSOLVED IRON CONCENTRATIONS IN GROUNDWATER BY ELEVATION INTERVAL

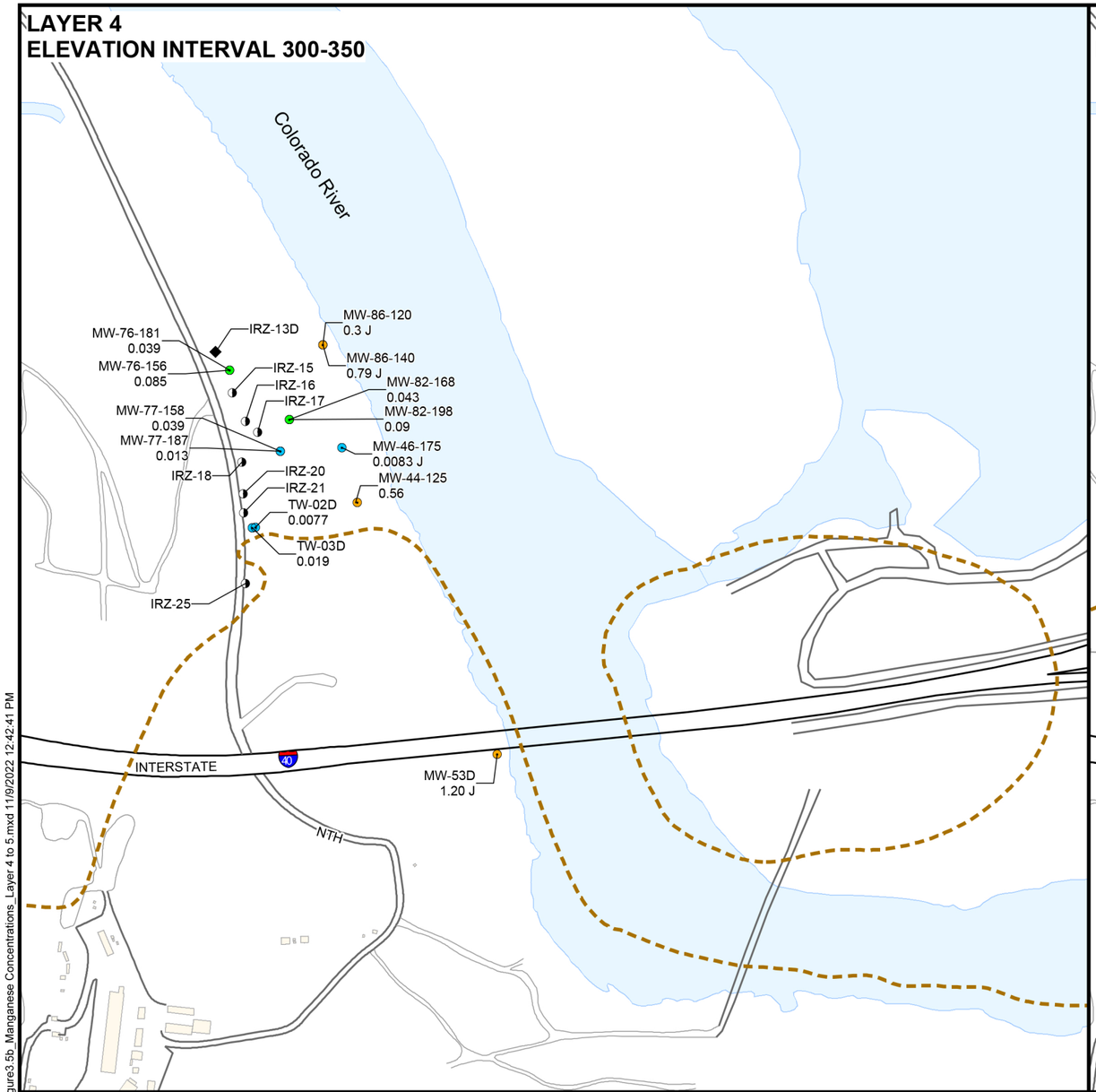
ARCADIS

FIGURE
3.4b

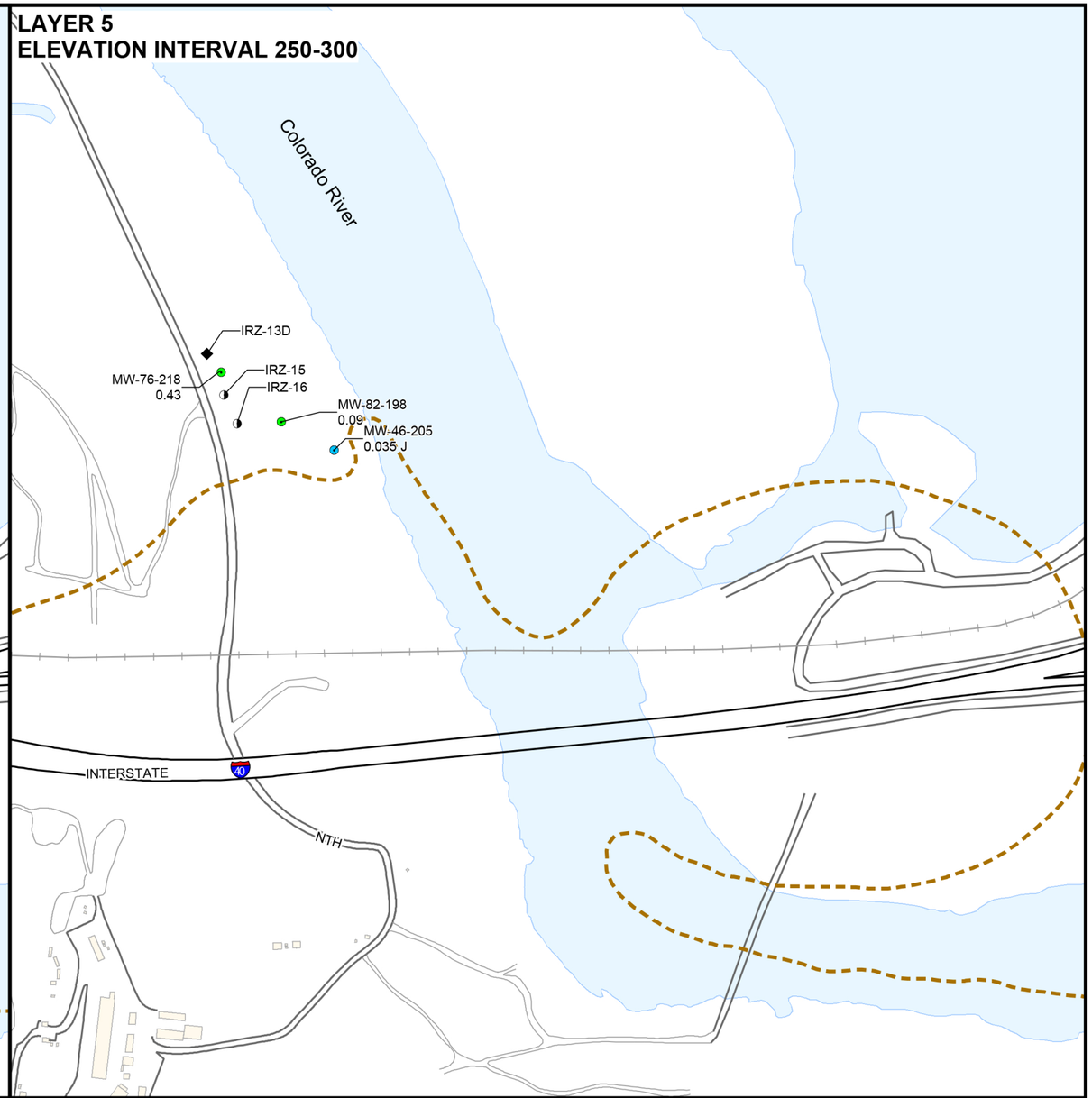
City: Citrix_Div/Group: IM Created By: K. SINSABAUGH Last Saved By: mayyar7350
Topock (RC000753.802D.C4182)
T:_ENV\PGE_Topock\GEC\MXD\GMP3Q22\FinalFigure3.4b_Iron Concentrations_Layer 4 to 5.mxd 11/9/2022 11:55:36 AM


LAYER 1
ELEVATION INTERVAL 425-455
MW-86-030 0.088 J
IRZ-13S
MW-76-039 0.032
IRZ-15
IRZ-16
IRZ-17
MW-82-046 0.26
MW-77-046 0.47
MW-28-025 0.051 J
IRZ-18
PT5S 0.29 J
MW-31-060 0.98
MW-81-043 0.024
MW-30-050 0.0018
IRZ-20
MW-36-020 0.72 J
IRZ-21
TW-02S <0.0005
MW-36-040 0.17 J
MW-20-070 <0.0005
MW-30-030 0.11 J
IRZ-25
MW-27-020 0.036 J
MW-78-070 0.12
MW-39-040 0.099
IRZ-27
MW-42-030 0.2
IRZ-29
MW-79-058 0.0052
MW-32-035 0.77 J
MW-32-020 0.28 J
MW-90-031 0.063 J
IRZ-31
MW-26 0.77
MW-43-025 0.55 J
IRZ-33
IRZ-35
INTERSTATE 40
IRZ-37
MW-53S 1.50 J
MW-22 5.30 J
MW-80-057 0.0099
MW-21 0.26
MW-80-082 0.0051 J
NTH
IRZ-39
MW-71-035 0.44
PG&E TOPOCK COMPRESSOR STATION
LAYER 2
ELEVATION INTERVAL 400-425
IRZ-09
Bat Cave Wash
MW-86-066 0.69 J
IRZ-13S
PT5M 1.10 J
MW-39-070 0.012
MW-44-070 0.32 J
MW-39-050 0.21
TW-02S <0.0005
MW-36-070 0.29
MW-20-100 <0.0005
MW-36-050 0.32 J
MW-34-055 0.11 J
IRZ-25
MW-30-050 0.0018
MW-39-060 0.18
MW-27-060 0.26 J
MW-42-065 2.30
IRZ-27
IRZ-29
MW-42-055 0.25
IRZ-31
MW-79-102 0.0072
MW-51 0.017
IRZ-33
INTERSTATE 40
MW-52S 1.30 J
NTH
PG&E TOPOCK COMPRESSOR STATION
LAYER 3
ELEVATION INTERVAL 350-400
IRZ-09
MW-86-120 0.3 J
IRZ-13S
MW-28-090 0.41 J
MW-82-112 0.084
MW-44-125 0.56
MW-81-098 0.13
MW-44-115 0.018
MW-31-135 0.0031
MW-77-102 0.055
MW-36-070 0.29
TW-02D 0.0077
IRZ-20
MW-36-100 0.34
TW-03D 0.019
IRZ-21
MW-36-090 0.16
IRZ-23
MW-34-100 0.12 J
MW-20-130 0.016
PT5D 0.013 J
MW-34-080 0.14
IRZ-25
MW-45-095a 0.18
MW-78-142 0.0037
MW-27-089 0.26 J
MW-42-065 2.30
IRZ-27
IRZ-29
MW-43-090 0.64 J
MW-39-100 0.0089
IRZ-31
MW-43-075 0.67 J
MW-51 0.017
MW-39-080 0.0078
IRZ-33
MW-39-070 0.012
INTERSTATE 40
MW-53M 0.42 J
MW-52D 0.38 J
NTH
MW-52M 0.28 J
PG&E TOPOCK COMPRESSOR STATION
LEGEND
Groundwater Monitoring Well
Groundwater Well Completed in Bedrock
NTH IRZ Injection Well
NTH IRZ Extraction Well
Bat Cave Wash
Approximate bedrock contact (per depth interval)
Dissolved Manganese Concentrations
0.05 mg/L (ARAR)
0.5 mg/L
1.320 mg/L (Background UTL)
MW-43-090
0.64
Well ID
Dissolved manganese concentration in mg/L
N
0
400
800
Feet
Notes:
1. mg/L = milligrams per liter
2. NTH = National Trails Highway
3. IRZ = in-situ reactive zone
4. < = non-detect at the reporting limit
5. Manganese Background Study Upper Tolerance Limit (UTL) = 1.320 mg/L
6. Manganese applicable or relevant and appropriate requirement (ARAR) = 0.05 mg/L
7. J = concentration estimated by laboratory or data validation
8. Third Quarter 2022 results are presented (July to September 2022). If more than one result is available for a monitoring well, then the most recent result is presented. If a primary sample and field duplicate sample were collected, then the maximum result is presented.
THIRD QUARTER 2022
QUARTERLY PROGRESS REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA
DISSOLVED MANGANESE CONCENTRATIONS IN GROUNDWATER BY ELEVATION INTERVAL
ARCADIS
FIGURE
3.5a
City: Citrix Div/Group: IM Created By: K. SINSABAUGH Last Saved By: mayyar7350
Topock (RC000753.802D.Q4182)
T:_ENV\PGE_Topock\GEC\MXD\GMP\3Q22\Final\Figure3.5a_Manganese Concentrations_Layer 1 to 3.mxd 11/9/2022 12:28:55 PM

LAYER 4
ELEVATION INTERVAL 300-350



LAYER 5
ELEVATION INTERVAL 250-300



LEGEND

- Groundwater Monitoring Well
- Groundwater Well Completed in Bedrock
- NTH IRZ Injection Well
- NTH IRZ Extraction Well
- Bat Cave Wash
- Approximate bedrock contact (per depth interval)

Dissolved Manganese Concentrations

- 0.05 mg/L (ARAR)
- 0.5 mg/L
- 1.320 mg/L (Background UTL)

Notes:

1. mg/L = milligrams per liter
2. NTH = National Trails Highway
3. IRZ = in-situ reactive zone
4. < = non-detect at the reporting limit
5. Manganese Background Study Upper Tolerance Limit (UTL) = 1.320 mg/L
6. Manganese applicable or relevant and appropriate requirement (ARAR) = 0.05 mg/L
7. J = concentration estimated by laboratory or data validation
8. Third Quarter 2022 results are presented (July to September 2022). If more than one result is available for a monitoring well, then the most recent result is presented. If a primary sample and field duplicate sample were collected, then the maximum result is presented.

MW-44-125
0.56
Well ID
Dissolved manganese concentration in mg/L

N

0 400 800
Feet

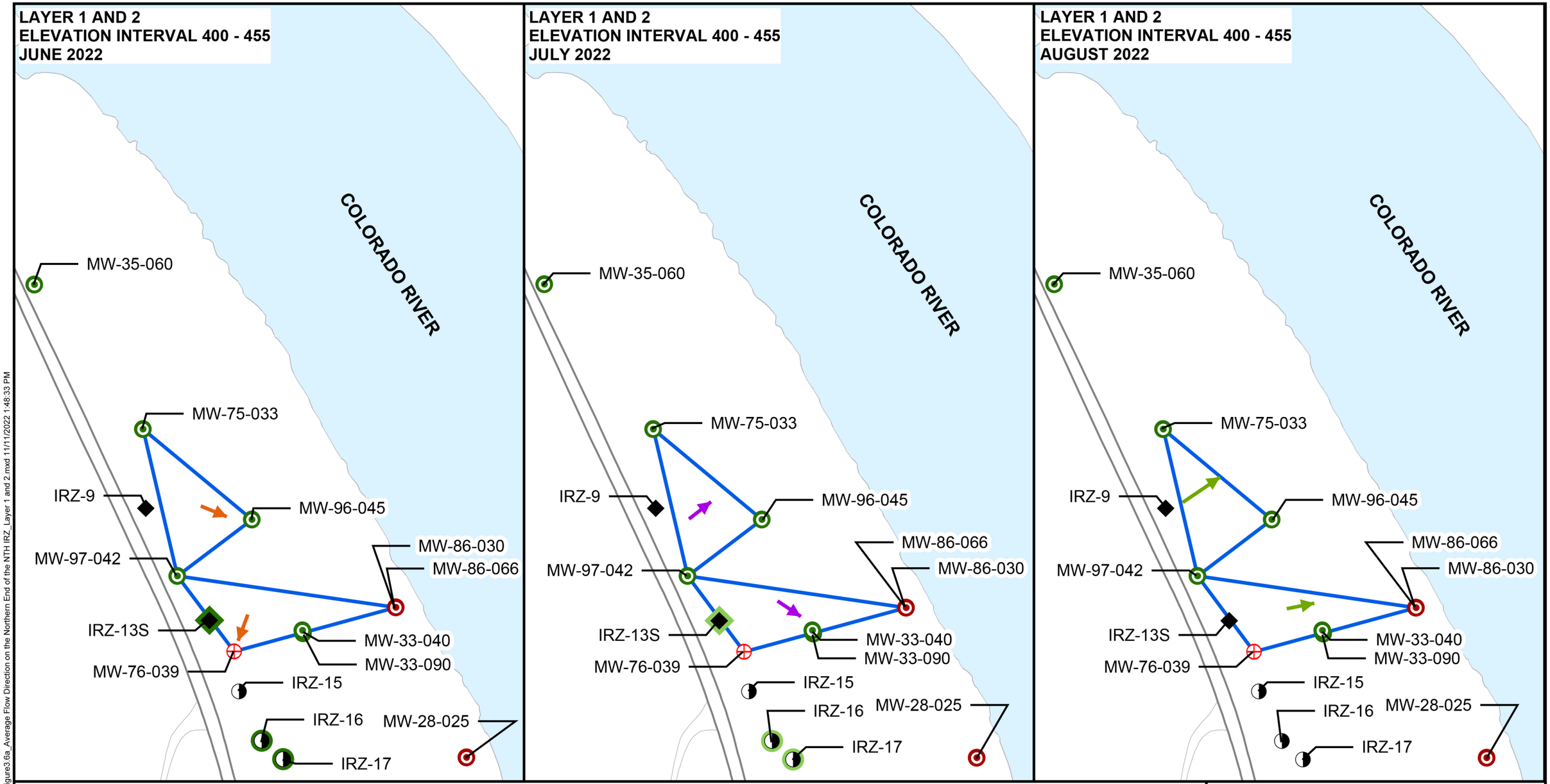
THIRD QUARTER 2022
QUARTERLY PROGRESS REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

DISSOLVED MANGANESE CONCENTRATIONS IN GROUNDWATER BY ELEVATION INTERVAL

ARCADIS

FIGURE
3.5b

City: Citrix_Div/Group: IM_Created By: K. SINSABAUGH_Last Saved By: mayyar7350
Topock (RC000753.802D.04182)
T:_ENV\PGE_Topock\GEC\MXD\GMP3Q22\FinalFigure3.5b_Manganese Concentrations_Layer 4 to 5.mxd 11/9/2022 12:42:41 PM



LEGEND

- NTH IRZ DOSE RESPONSE MONITORING WELL
- NORTHERN IRZ EXTRACTION MONITORING WELL
- NTH IRZ DOWNGRADIENT MONITORING WELL
- MONITORING WELL
- REMEDIATION WELL (INJECTION)
- REMEDIATION WELL (EXTRACTION)
- REMEDIATION WELL (INJECTION) OPERATING 85-90% UPTIME
- REMEDIATION WELL (INJECTION) OPERATING 30-35% UPTIME
- REMEDIATION WELL (EXTRACTION) OPERATING 85-90% UPTIME
- REMEDIATION WELL (EXTRACTION) OPERATING 30-35% UPTIME
- CALCULATED FLOW VECTOR IN JUNE 2022
- CALCULATED FLOW VECTOR IN JULY 2022
- CALCULATED FLOW VECTOR IN AUGUST 2022

Range of Hydraulic Gradients

- = 0.0001 to 0.001 ft/ft
- = 0.001 to 0.003 ft/ft
- = 0.003 to 0.009 ft/ft

Notes:
1. NTH = National Trails Highway
2. IRZ = in-situ reactive zone
3. The arrow length indicates the magnitude of the hydraulic gradient
4. ft/ft = feet per foot

0 200 400 Feet N

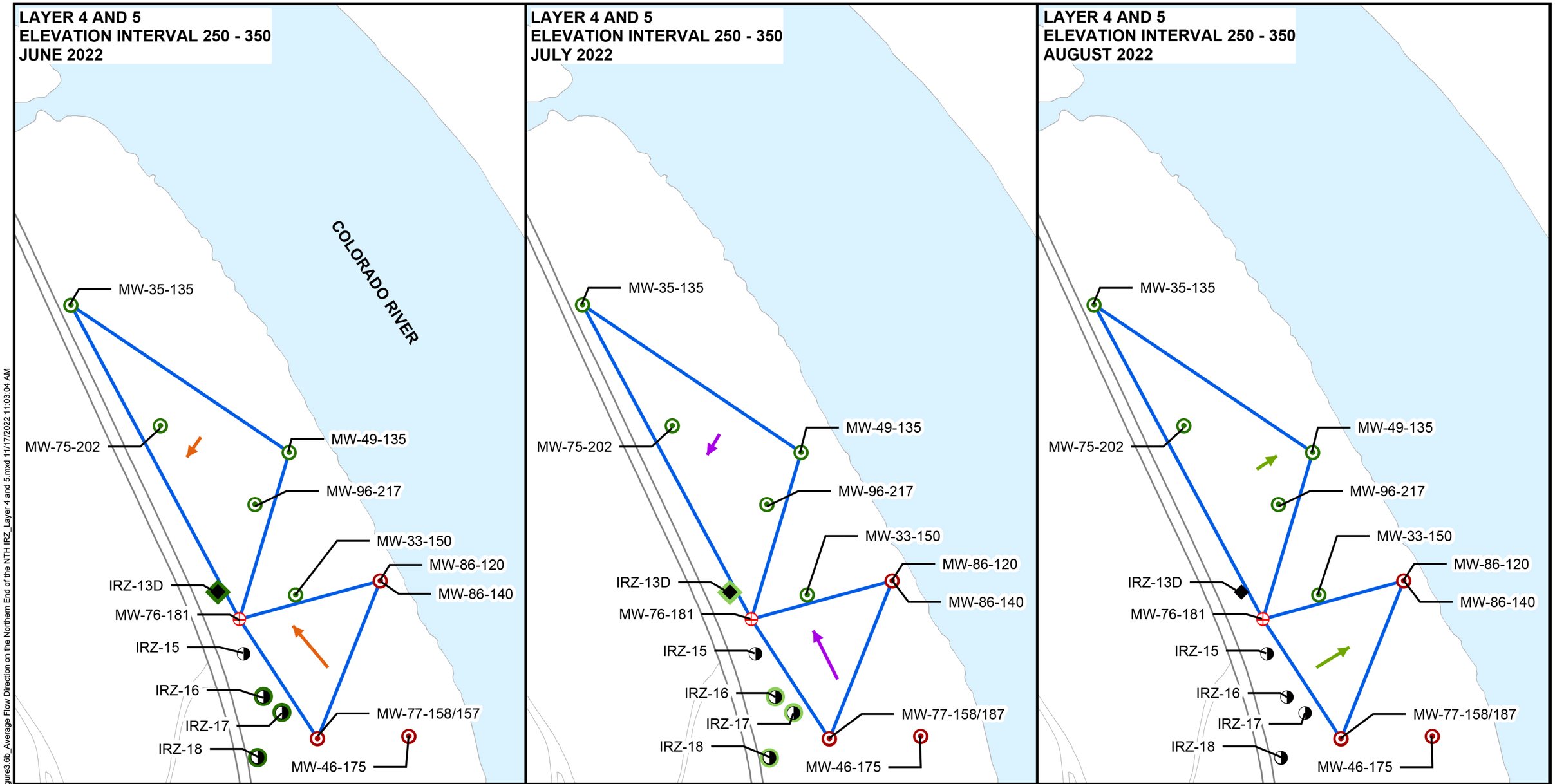
THIRD QUARTER 2022
QUARTERLY PROGRESS REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

AVERAGE FLOW DIRECTION ON THE NORTHERN END OF THE NTH IRZ

ARCADIS

FIGURE
3.6a

City: Citrix Div/Group: IM Created By: K. SINSABAUGH Last Saved By: mayyar7350
T:_ENV\PGE_Topock\GEC\MXD\GMP\3Q22\Final\Figure3.6a_Average Flow Direction on the Northern End of the NTH IRZ_Layer 1 and 2.mxd 11/11/2022 1:48:33 PM
Topock (RC000753.802D.Q4182)



LEGEND

- NTH IRZ DOSE RESPONSE MONITORING WELL
- NORTHERN IRZ EXTRACTION MONITORING WELL
- NTH IRZ DOWNGRADIENT MONITORING WELL
- MONITORING WELL
- REMEDIATION WELL (INJECTION)
- REMEDIATION WELL (EXTRACTION)
- REMEDIATION WELL (INJECTION) OPERATING 85-90% UPTIME
- REMEDIATION WELL (INJECTION) OPERATING 30-35% UPTIME
- REMEDIATION WELL (EXTRACTION) OPERATING 85-90% UPTIME
- REMEDIATION WELL (EXTRACTION) OPERATING 30-35% UPTIME
- CALCULATED FLOW VECTOR IN JUNE 2022
- CALCULATED FLOW VECTOR IN JULY 2022
- CALCULATED FLOW VECTOR IN AUGUST 2022

Range of Hydraulic Gradients

- = 0.0001 to 0.001 ft/ft
- = 0.001 to 0.003 ft/ft
- = 0.003 to 0.009 ft/ft

Notes:

1. NTH = National Trails Highway
2. IRZ = in-situ reactive zone
3. The July 2022 hyraulic gradient for triplet MW-76-181/MW-86-120/ MW-77-158 is represented on the figure
4. The arrow length indicates the magnitude of the hydraulic gradient
5. ft/ft = feet per foot

0 200 400 Feet

N

THIRD QUARTER 2022
QUARTERLY PROGRESS REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

AVERAGE FLOW DIRECTION ON THE NORTHERN END OF THE NTH IRZ

ARCADIS

FIGURE
3.6b

City: Citrix Div/Group: IM Created By: K. SINSABAUGH Last Saved By: mayyar7350
T:_ENV\PGE_Topock\GEC\MXD\GMP\3Q22FinalFigure3.6b_Average Flow Direction on the Northern End of the NTH IRZ_Layer 4 and 5.mxd 11/17/2022 11:03:04 AM
Topock (RC000753.802D.Q4182)

Appendix A

Third Quarter 2022 Field Parameters

Appendix A
Third Quarter 2022 Field Parameters
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Well ID	Sample Date	pH	Specific Conductance (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (deg C)	Salinity (ppt)	Total Dissolved Solids (mg/L)	ORP (mV)
C-BNS	08/17/2022	8.3	940	4.0	8.63	22.60	0.46	610	46.9
C-CON-D	08/18/2022	8.1	928	7.0	9.00	21.70	0.46	610	19.9
C-CON-S	08/18/2022	8.3	934	6.0	8.78	22.10	0.46	600	61.9
C-I-3-D	08/17/2022	8.2	937	9.0	5.62	22.90	0.46	610	16.8
C-I-3-S	08/17/2022	8.3	944	13.0	5.63	22.50	0.46	610	32.2
C-MAR-D	08/18/2022	8.3	884	18.0	4.81	23.30	0.44	570	20.0
C-MAR-S	08/18/2022	8.3	857	17.0	3.63	24.80	0.42	550	24.5
C-NR1-D	08/18/2022	8.2	931	8.0	8.97	21.70	0.46	600	20.8
C-NR1-S	08/18/2022	8.1	929	9.0	7.99	21.80	0.46	600	31.9
C-NR3-D	08/18/2022	8.1	928	11.0	7.65	21.70	0.46	600	22.1
C-NR3-S	08/18/2022	8.3	929	15.0	8.16	21.80	0.45	590	24.0
C-NR4-D	08/18/2022	8.3	916	16.0	5.36	21.30	0.46	590	23.7
C-NR4-S	08/18/2022	8.4	924	19.0	8.55	21.40	0.46	600	23.8
C-R22A-D	08/17/2022	8.1	971	17.0	4.85	23.30	0.45	590	89.4
C-R22A-S	08/17/2022	8.4	950	11.0	3.63	23.30	0.46	610	50.1
C-R27-D	08/17/2022	8.4	937	9.0	8.11	22.50	0.46	610	50.2
C-R27-S	08/17/2022	8.4	948	8.0	8.12	22.50	0.46	610	53.8
C-TAZ-D	08/17/2022	8.1	944	5.0	6.53	23.30	0.46	510	3.0
C-TAZ-S	08/17/2022	8.2	946	6.0	3.23	23.20	0.46	610	17.3
IRZ-09-100	09/14/2022	7.8	12,367	3.2	1.77	29.80	nm	nm	16.1
IRZ-13D-210	09/14/2022	7.6	20,565	2.0	3.55	28.40	nm	nm	39.3
IRZ-13S-095	09/14/2022	7.9	8,811	2.5	4.40	27.80	nm	nm	43.0
IRZ-23-143	09/14/2022	7.5	7,721	2.8	1.94	26.80	nm	nm	71.6
MW-20-070	07/13/2022	7.8	3,491	18.0	6.24	30.40	1.82	2,270	96.3
MW-20-070	08/09/2022	7.0	4,361	9.0	0.61	31.00	2.05	2,550	-12.3
MW-20-070	09/14/2022	7.6	2,967	7.0	6.42	30.30	0.91	nm	132.4
MW-20-100	07/13/2022	7.2	7,042	11.0	1.09	30.50	3.80	4,550	93.0
MW-20-100	08/09/2022	7.6	5,512	4.0	0.76	30.90	2.65	3,230	1.3

Appendix A
Third Quarter 2022 Field Parameters
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Well ID	Sample Date	pH	Specific Conductance (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (deg C)	Salinity (ppt)	Total Dissolved Solids (mg/L)	ORP (mV)
MW-20-100	09/14/2022	7.0	6,060	9.0	2.18	30.50	0.69	nm	143.9
MW-20-130	07/13/2022	7.2	12,004	13.0	0.62	31.20	6.76	7,780	93.2
MW-20-130	08/09/2022	7.3	12,763	6.0	0.44	30.90	6.50	7,480	-2.8
MW-20-130	09/14/2022	6.8	14,865	9.0	0.46	31.20	0.82	nm	133.6
MW-21	07/13/2022	7.2	13,125	6.0	0.40	38.10	5.82	6,820	-125.0
MW-21	08/12/2022	6.9	9,664	9.0	0.39	30.20	6.40	6,290	-44.7
MW-21	09/15/2022	7.7	10,268	14.0	1.29	28.40	5.76	6,650	26.5
MW-22	08/19/2022	7.3	20,386	31.0	0.39	32.20	0.12	13,260	-122.5
MW-26	07/13/2022	7.4	10,146	25.0	1.13	32.20	5.63	6,570	85.6
MW-26	08/12/2022	7.2	9,675	5.0	1.77	30.40	0.53	nm	224.1
MW-26	09/15/2022	7.1	9,976	9.0	0.85	30.50	0.60	nm	141.1
MW-27-020	08/23/2022	7.1	993	3.0	0.40	22.90	0.49	640	-56.8
MW-27-060	08/23/2022	7.3	1,003	5.0	0.41	20.60	0.50	650	-168.8
MW-27-085	08/23/2022	7.3	12,513	5.0	0.32	21.00	7.18	8,110	-65.8
MW-28-025	08/23/2022	7.4	1,234	8.0	2.18	22.70	0.62	820	64.5
MW-28-090	08/23/2022	7.5	7,933	5.0	2.44	20.40	4.41	5,150	47.2
MW-29	08/23/2022	7.5	2,185	8.0	0.18	24.60	1.12	1,410	-18.1
MW-30-030	08/22/2022	7.5	2,862	23.0	0.70	27.40	1.49	1,850	-166.8
MW-30-050	07/12/2022	7.5	1,345	7.0	3.13	24.10	0.67	880	92.3
MW-30-050	08/10/2022	7.7	1,105	4.0	4.51	24.80	0.62	nm	66.2
MW-30-050	09/13/2022	7.8	1,036	9.0	4.92	28.50	0.65	nm	74.8
MW-31-060	07/13/2022	7.6	10,502	9.0	0.19	32.20	5.89	6,840	88.1
MW-31-060	08/10/2022	7.7	10,186	6.0	0.30	31.10	0.88	nm	-133.5
MW-31-060	09/14/2022	7.6	10,506	6.0	0.19	29.80	0.90	nm	-107.2
MW-31-135	07/13/2022	8.0	15,180	41.0	0.32	32.00	8.70	9,810	88.8
MW-31-135	08/10/2022	7.9	14,657	19.0	0.33	31.80	0.85	nm	-11.7
MW-31-135	09/14/2022	7.8	14,853	7.0	0.42	29.50	0.72	nm	-8.3
MW-32-020	08/19/2022	7.7	23,341	25.0	0.15	29.20	0.14	15,210	-178.6

Appendix A
Third Quarter 2022 Field Parameters
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Well ID	Sample Date	pH	Specific Conductance (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (deg C)	Salinity (ppt)	Total Dissolved Solids (mg/L)	ORP (mV)
MW-32-035	08/19/2022	7.8	8,301	13.0	0.18	26.40	4.58	5,380	-142.7
MW-33-040	08/24/2022	7.7	24,682	7.0	2.39	25.50	0.15	15,980	86.4
MW-33-090	08/24/2022	7.6	11,378	9.0	3.39	24.90	6.44	7,370	84.1
MW-33-150	08/24/2022	7.6	17,868	3.0	5.29	26.50	0.11	11,690	87.8
MW-33-210	08/24/2022	7.5	20,483	4.0	2.45	25.70	0.12	13,340	96.3
MW-34-055	08/23/2022	7.4	923	2.0	0.57	20.90	0.46	590	-48.8
MW-34-080	07/14/2022	7.2	8,062	13.0	1.53	21.30	4.84	5,620	112.5
MW-34-080	08/11/2022	7.2	8,620	5.0	1.68	21.00	4.82	5,600	-32.4
MW-34-080	09/15/2022	7.6	9,636	8.0	0.34	19.90	5.44	6,260	62.9
MW-34-100	08/23/2022	7.4	12,899	6.0	0.25	21.30	7.34	8,280	-72.3
MW-35-060	08/22/2022	7.6	6,464	13.0	5.33	28.20	3.51	4,200	-123.5
MW-35-135	08/22/2022	7.3	11,014	17.0	1.33	30.00	6.21	7,716,000	-134.5
MW-36-020	08/23/2022	7.2	5,183	11.0	0.33	23.90	2.79	3,360	-141.3
MW-36-040	08/23/2022	7.6	1,066	9.0	0.36	22.80	0.53	690	-160.4
MW-36-050	08/23/2022	7.4	985	7.0	0.34	21.80	0.49	640	-184.1
MW-36-070	08/10/2022	7.9	1,020	5.0	0.41	22.40	0.70	nm	-81.8
MW-36-090	07/14/2022	7.1	3,584	6.0	0.55	24.50	1.91	2,380	-11.1
MW-36-090	08/10/2022	7.7	2,841	8.0	0.34	25.50	0.80	nm	-103.9
MW-36-090	09/14/2022	7.4	3,595	9.0	1.09	21.50	0.71	nm	-101.6
MW-36-100	07/14/2022	7.2	5,523	7.0	0.65	22.40	3.15	3,740	-95.1
MW-36-100	08/10/2022	7.9	2,930	5.0	0.38	30.90	0.88	nm	54.2
MW-36-100	09/14/2022	7.7	3,308	9.0	0.24	22.80	0.90	nm	-19.6
MW-38D	08/25/2022	7.8	20,493	8.0	1.19	28.40	0.12	13,300	115.1
MW-38S	08/25/2022	7.8	2,203	5.0	2.68	29.20	1.12	1,430	93.1
MW-39-040	07/12/2022	8.1	1,119	8.0	0.15	23.40	0.56	720	5.6
MW-39-040	08/09/2022	8.1	1,108	20.0	0.28	24.60	0.60	nm	-169.4
MW-39-040	09/13/2022	7.9	1,212	6.0	0.25	24.60	0.63	nm	-180.0
MW-39-050	07/12/2022	7.8	1,069	5.0	0.15	23.70	0.53	700	88.0

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Well ID	Sample Date	pH	Specific Conductance (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (deg C)	Salinity (ppt)	Total Dissolved Solids (mg/L)	ORP (mV)
MW-39-050	08/09/2022	7.7	1,038	9.0	0.19	25.60	0.30	nm	39.1
MW-39-050	09/13/2022	7.5	1,072	5.0	0.15	24.60	0.70	nm	16.2
MW-39-060	07/12/2022	7.8	1,220	36.0	0.15	25.60	0.61	790	92.8
MW-39-060	08/09/2022	7.7	1,339	335.0	0.20	27.40	0.84	nm	-50.1
MW-39-060	09/13/2022	7.5	1,388	9.0	0.18	24.20	0.70	nm	-91.9
MW-39-070	07/12/2022	7.7	4,396	8.0	0.21	23.20	2.37	2,880	86.3
MW-39-070	08/09/2022	7.6	2,140	5.0	0.23	25.50	0.40	nm	25.7
MW-39-070	09/13/2022	7.4	3,364	10.0	0.23	24.30	0.65	nm	33.8
MW-39-080	07/12/2022	7.7	7,827	5.0	0.19	24.00	3.28	3,910	84.0
MW-39-080	08/09/2022	7.6	5,150	9.0	0.16	25.20	0.36	nm	5.8
MW-39-080	09/13/2022	7.3	4,416	10.0	0.26	24.90	0.83	nm	-42.1
MW-39-100	07/12/2022	7.8	14,282	28.0	0.18	26.10	8.24	9,260	76.6
MW-39-100	08/09/2022	7.5	10,820	18.0	0.13	25.30	0.90	nm	56.3
MW-39-100	09/13/2022	7.2	12,460	9.0	0.14	25.00	0.93	nm	49.9
MW-42-030	08/18/2022	7.4	1,693	3.0	0.26	23.40	0.86	1,090	-114.3
MW-42-055	08/18/2022	7.4	1,079	4.0	0.41	23.00	0.53	700	-109.8
MW-42-065	08/18/2022	7.9	9,216	9.0	0.61	23.30	5.16	5,980	-60.9
MW-43-025	08/24/2022	7.0	1,971	24.0	0.69	23.10	1.00	1,280	-103.9
MW-43-075	08/24/2022	7.0	11,634	4.0	0.53	22.10	6.64	7,640	-160.4
MW-43-090	08/24/2022	7.1	16,633	8.0	0.41	23.00	9.57	10,930	-130.2
MW-44-070	08/23/2022	7.4	1,790	10.0	0.30	21.70	0.89	1,140	-179.9
MW-44-115	07/14/2022	7.4	10,104	36.0	0.30	24.40	5.56	6,430	-107.2
MW-44-115	08/11/2022	7.1	10,053	6.0	0.33	22.20	5.60	6,500	-80.9
MW-44-115	09/13/2022	8.0	11,688	5.0	0.25	20.90	6.68	7,580	52.1
MW-44-125	07/14/2022	7.4	10,788	5.0	0.38	23.00	6.31	7,350	-112.0
MW-44-125	08/11/2022	7.4	11,077	8.0	0.38	22.10	6.31	7,200	-75.8
MW-44-125	09/13/2022	8.1	13,034	4.0	0.28	20.60	7.53	8,490	18.5
MW-45-095A	07/14/2022	7.1	8,239	8.0	0.71	22.00	4.89	5,680	-66.0

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MW-45-095A	08/11/2022	7.3	8,158	4.0	0.70	21.80	4.54	5,300	-30.0
MW-45-095A	09/15/2022	7.5	9,468	7.0	0.54	20.60	5.33	6,150	83.2
MW-46-175	08/24/2022	8.3	20,238	4.0	3.98	22.00	0.12	13,140	79.9
MW-46-205	08/24/2022	8.2	23,244	5.0	3.37	21.70	0.14	15,120	75.9
MW-47-055	08/24/2022	7.7	6,128	7.0	2.67	27.10	3.38	4,050	72.1
MW-47-115	08/24/2022	7.6	14,020	6.0	3.47	27.90	8.09	9,120	78.8
MW-49-135	08/23/2022	7.6	15,441	5.0	0.82	28.60	8.85	10,020	-8.6
MW-49-275	08/23/2022	8.1	25,404	4.0	0.44	24.70	0.15	16,510	50.1
MW-49-365	08/23/2022	7.6	38,729	3.0	0.76	24.60	0.25	25,120	51.8
MW-51	07/13/2022	7.7	10,837	17.0	1.03	31.50	5.35	6,220	36.4
MW-51	08/12/2022	7.5	9,713	5.0	1.97	30.70	0.77	nm	186.0
MW-51	09/15/2022	7.3	8,460	8.0	0.54	30.20	0.70	nm	139.9
MW-52D	08/24/2022	7.6	20,412	3.0	0.26	23.30	0.12	13,280	-162.6
MW-52M	08/24/2022	7.6	15,925	6.0	0.44	24.10	0.22	10,270	-186.4
MW-52S	08/24/2022	7.6	12,522	11.0	0.28	24.00	7.16	8,130	-111.3
MW-53D	08/24/2022	8.0	25,072	5.0	0.33	23.20	0.15	16,230	-170.0
MW-53M	08/24/2022	7.9	14,190	7.0	0.64	22.80	8.40	9,420	-160.8
MW-53S	08/24/2022	7.0	1,389	6.0	0.51	22.80	0.70	900	-121.8
MW-65-160	08/25/2022	7.4	4,311	34.0	2.21	32.80	2.26	2,760	85.8
MW-65-225	08/25/2022	7.4	9,849	7.0	1.49	28.90	5.47	6,370	81.5
MW-67-185	07/13/2022	7.1	6,392	40.0	2.24	35.00	2.85	3,490	46.1
MW-67-185	08/18/2022	7.5	5,655	46.0	2.78	32.40	3.00	3,680	50.8
MW-67-185	09/14/2022	7.5	5,813	37.0	1.83	32.10	3.10	3,770	68.4
MW-68-180	07/13/2022	7.1	3,557	5.0	3.93	33.80	1.56	1,980	33.0
MW-68-180	08/18/2022	7.5	4,155	22.0	3.42	31.80	2.17	2,690	55.1
MW-68-180	09/14/2022	7.5	4,636	26.0	3.02	31.90	2.45	3,010	64.2
MW-69-195	08/25/2022	7.5	3,128	17.0	1.59	28.60	1.62	2,030	80.8
MW-71-035	07/13/2022	7.1	15,836	13.0	2.00	32.80	7.87	8,960	-9.5

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MW-71-035	08/12/2022	7.1	15,288	12.0	2.13	30.10	8.07	9,130	-43.3
MW-71-035	09/15/2022	7.0	15,301	7.0	3.72	28.60	8.87	9,930	85.5
MW-75-033	08/24/2022	7.6	4,285	32.0	0.32	29.10	2.26	2,780	-117.0
MW-75-117	08/24/2022	8.0	11,944	5.0	0.57	29.60	6.74	7,760	-139.5
MW-75-202	08/25/2022	8.0	17,091	7.0	0.95	27.80	0.10	11,110	-71.2
MW-75-267	08/25/2022	8.0	21,957	33.0	0.67	27.70	0.13	14,260	-246.0
MW-75-337	08/25/2022	8.0	28,744	14.0	0.42	28.10	0.18	18,220	-269.5
MW-76-039	07/11/2022	7.7	5,008	37.0	2.03	32.00	2.39	2,430	79.8
MW-76-039	08/08/2022	7.0	4,043	13.0	3.44	29.10	2.12	2,620	32.6
MW-76-039	09/12/2022	7.5	4,281	6.0	3.55	26.90	2.26	2,770	72.3
MW-76-156	07/11/2022	7.7	16,413	48.0	0.89	31.30	2.79	3,370	60.8
MW-76-156	08/08/2022	7.1	15,208	24.0	1.14	32.60	8.76	9,880	18.9
MW-76-156	09/12/2022	7.6	17,161	7.0	0.55	28.80	0.10	11,160	4.9
MW-76-181	07/11/2022	7.2	22,173	45.0	0.35	33.60	0.11	12,640	-41.4
MW-76-181	08/08/2022	7.1	17,155	28.0	0.89	30.70	8.93	10,020	-1.6
MW-76-181	09/12/2022	7.6	17,212	7.0	1.02	27.60	0.10	11,190	74.6
MW-76-218	07/11/2022	7.5	28,603	42.0	0.63	33.50	0.13	14,330	-54.6
MW-76-218	08/08/2022	7.3	18,266	4.0	0.70	32.30	9.18	10,320	-8.1
MW-76-218	09/12/2022	7.9	17,595	8.0	1.46	28.80	0.10	11,430	64.1
MW-77-046	07/11/2022	7.2	7,168	26.0	4.95	31.50	3.51	4,210	-49.8
MW-77-046	08/08/2022	7.6	10,020	39.0	5.45	32.90	0.60	nm	89.9
MW-77-046	09/12/2022	7.6	7,560	9.0	5.39	30.80	0.70	nm	41.0
MW-77-102	07/11/2022	7.8	11,287	180.0	0.15	29.80	6.35	7,330	73.4
MW-77-102	08/08/2022	7.6	8,841	119.0	0.25	28.70	0.45	nm	-49.9
MW-77-102	09/12/2022	7.3	8,563	11.0	0.27	28.80	0.65	nm	-72.8
MW-77-158	07/11/2022	8.2	10,431	8.0	3.26	29.40	5.97	6,920	66.0
MW-77-158	08/08/2022	8.0	11,332	41.0	4.66	30.30	0.45	nm	-61.1
MW-77-158	09/12/2022	7.9	11,415	5.0	4.48	29.30	0.70	nm	-109.9

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MW-77-187	07/11/2022	7.2	18,347	21.0	3.59	31.00	9.59	10,710	80.4
MW-77-187	08/08/2022	8.3	17,060	57.0	5.57	32.90	0.50	nm	93.2
MW-77-187	09/12/2022	8.0	17,739	10.0	6.00	29.90	0.75	nm	-69.6
MW-78-070	07/14/2022	7.7	10,133	40.0	4.41	31.30	5.00	5,790	23.5
MW-78-070	08/11/2022	7.3	7,825	60.0	3.29	32.10	0.85	nm	152.8
MW-78-070	09/15/2022	7.0	9,705	10.0	2.76	29.30	0.90	nm	159.9
MW-78-142	07/14/2022	7.7	11,984	27.0	0.48	32.20	6.62	7,730	96.9
MW-78-142	08/11/2022	7.6	11,519	22.0	0.47	32.10	0.84	nm	124.3
MW-78-142	09/15/2022	7.4	11,956	10.0	0.53	30.20	0.81	nm	145.9
MW-79-058	07/14/2022	7.8	4,154	39.0	3.98	30.50	2.03	2,520	97.8
MW-79-058	08/11/2022	7.5	3,377	202.0	1.63	31.70	0.75	nm	72.8
MW-79-058	09/15/2022	7.3	7,845	32.0	4.75	28.30	4.31	5,090	85.1
MW-79-102	07/14/2022	7.8	10,281	45.0	0.36	31.00	5.24	6,140	100.2
MW-79-102	08/11/2022	7.6	9,921	42.0	1.31	32.30	0.75	nm	126.6
MW-79-102	09/15/2022	7.6	10,558	13.0	2.62	28.80	5.94	6,860	87.9
MW-80-057	07/14/2022	7.7	7,861	18.0	3.70	30.40	4.31	5,100	111.6
MW-80-057	08/11/2022	7.6	6,570	49.0	2.80	31.00	0.70	nm	83.8
MW-80-057	09/15/2022	7.4	7,246	10.0	3.55	29.90	0.80	nm	131.9
MW-80-082	07/14/2022	7.9	10,271	29.0	0.25	30.50	5.77	6,690	100.6
MW-80-082	08/11/2022	7.7	9,850	32.0	0.47	32.40	0.60	nm	40.9
MW-80-082	09/15/2022	7.6	10,407	10.0	0.45	30.00	0.90	nm	83.7
MW-81-043	07/12/2022	7.2	7,130	39.0	1.18	31.10	3.46	4,160	-99.0
MW-81-043	08/10/2022	7.0	8,491	39.0	1.16	29.70	4.28	5,060	-50.6
MW-81-043	09/13/2022	7.7	6,282	18.0	0.36	28.10	3.41	4,090	50.5
MW-81-098	07/12/2022	7.0	16,483	20.0	0.25	35.30	8.61	9,610	-65.0
MW-81-098	08/10/2022	7.0	9,168	9.0	0.88	29.40	4.64	5,460	-42.0
MW-81-098	09/13/2022	7.3	11,228	7.0	1.86	26.80	6.33	7,260	55.1
MW-82-046	07/12/2022	7.8	14,314	42.0	0.26	28.70	7.96	9,040	-162.2

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MW-82-046	08/10/2022	7.7	13,777	48.0	0.40	26.50	7.64	8,650	-138.5
MW-82-046	09/13/2022	7.4	10,203	28.0	0.84	24.70	5.79	6,680	-73.5
MW-82-112	07/12/2022	7.6	11,406	15.0	0.30	31.30	5.69	6,640	-80.6
MW-82-112	08/10/2022	7.1	9,583	33.0	1.98	27.90	5.05	5,900	-34.3
MW-82-112	09/13/2022	7.7	9,619	5.0	4.51	24.40	5.40	6,250	71.5
MW-82-168	07/12/2022	7.2	10,384	13.0	0.38	31.10	5.24	6,100	-85.7
MW-82-168	08/10/2022	7.7	9,725	32.0	1.52	27.30	5.23	6,120	-40.0
MW-82-168	09/13/2022	7.9	10,688	7.0	3.19	24.70	6.04	6,930	71.1
MW-82-198	07/12/2022	7.7	18,824	46.0	0.20	33.10	9.45	10,590	-51.9
MW-82-198	08/10/2022	7.8	18,028	44.0	0.90	27.20	0.10	11,320	-23.2
MW-82-198	09/13/2022	7.9	15,789	7.0	3.89	24.90	9.46	10,610	64.1
MW-86-030	08/23/2022	7.4	1,438	8.0	0.31	21.80	0.73	930	58.9
MW-86-066	08/23/2022	7.5	8,059	3.0	2.75	20.80	4.49	5,240	45.9
MW-86-120	08/23/2022	7.8	12,930	3.0	5.21	22.50	7.43	8,390	65.7
MW-86-140	08/23/2022	7.5	11,812	4.0	6.91	23.80	6.74	7,680	68.9
MW-90-031	08/19/2022	7.7	13,235	22.0	0.26	26.10	7.64	9,640	-123.8
MW-96-045	08/11/2022	7.1	11,746	30.0	1.97	27.20	6.64	7,590	-41.5
MW-96-217	08/11/2022	7.0	18,454	3.0	0.63	27.90	0.11	11,970	-22.6
MW-97-042	08/22/2022	7.7	3,871	25.0	5.18	28.80	2.03	2,520	55.1
MW-97-202	08/22/2022	7.2	19,958	9.0	0.52	29.70	0.12	12,970	-28.1
PT5D	08/15/2022	7.4	10,015	7.0	0.32	23.40	5.65	6,610	-58.6
PT5M	08/15/2022	7.3	2,694	9.0	0.53	22.30	1.40	1,740	-17.0
PT5S	08/15/2022	7.6	1,233	5.0	2.18	22.80	0.61	790	-62.6
R-19	08/18/2022	8.3	935	5.0	8.23	22.30	0.46	600	18.3
R-28	08/17/2022	8.2	933	3.0	8.95	23.00	0.46	610	48.2
R-63	08/17/2022	8.4	941	14.0	4.71	23.50	0.46	610	46.1
RRB	08/18/2022	8.1	867	5.0	5.55	21.70	0.46	590	32.3
SW1	08/17/2022	8.1	972	12.0	7.72	22.80	0.48	640	10.6

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SW2	08/17/2022	8.2	933	13.0	7.53	22.90	0.46	620	52.8
TW-02D	07/13/2022	7.2	16,930	7.0	0.60	29.00	8.92	9,990	-89.4
TW-02D	08/09/2022	7.2	12,677	5.0	0.90	28.60	6.76	7,720	-11.2
TW-02D	09/14/2022	7.9	16,515	7.0	1.60	26.20	9.69	10,730	104.1
TW-02S	07/13/2022	7.4	3,884	5.0	4.84	29.80	1.86	2,310	-61.0
TW-02S	08/09/2022	7.3	4,100	22.0	1.17	28.90	2.01	2,480	7.1
TW-02S	09/14/2022	7.6	4,859	8.0	2.62	26.90	2.59	3,150	103.6
TW-03D	07/13/2022	7.1	17,047	4.0	0.33	29.90	9.03	10,120	-81.4
TW-03D	08/09/2022	7.1	12,705	7.0	0.51	28.50	6.75	7,720	-33.6
TW-03D	09/14/2022	7.6	18,889	5.0	1.73	26.90	0.11	12,230	96.8
TW-04	08/22/2022	7.6	22,918	4.0	6.45	27.90	0.14	14,880	65.8

Abbreviations:

-- = not available
deg C = degrees Celsius
mg/L = milligrams per liter
mV = millivolts
nm = not measured
NTU = nephelometric turbidity units
ORP = oxidation-reduction potential
ppt = parts per thousand
µS/cm = microsiemens per centimeter

Appendix B

January 2020 to September 2022 Analytical Results

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Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
C-BNS	01/29/20	N	<0.2	<1	2.2	120	--	--	0.093	<0.02	--	0.0016	4.7
C-BNS	02/19/20	N	<0.2	<1	2.2	120 J	--	--	0.13 J	0.08 J	--	0.0013	4.6
C-BNS	04/29/20	N	<0.2	<1	2.2	120	--	--	0.058 J	0.039 J	--	0.00071	4.6
C-BNS	08/19/20	N	<0.2	<1	2.6	120 J	--	--	0.051 J	0.023 J	--	0.00054	4.7
C-BNS	11/18/20	N	<0.2	<1	2.4	110	--	--	0.05	<0.02	--	0.00079	4.4
C-BNS	11/18/20	FD	<0.2	<1	2.4	110	--	--	0.036	<0.02	--	0.001	4.4
C-BNS	01/27/21	N	<0.2	<1	2.3	120	--	--	0.033	<0.02	--	0.0012	4.7
C-BNS	02/17/21	N	<0.2	<1	2.5	110	--	--	0.046 J	<0.02 J	--	0.0014	4.7
C-BNS	05/19/21	N	<0.2	<1	2.2	110	--	--	<0.02	<0.02 J	--	<0.0005	4.4
C-BNS	08/18/21	N	<0.2	<1	2.3	100	--	--	0.026 J	<0.02	--	<0.0005	4.1
C-BNS	11/17/21	N	<0.2	<1	3	--	--	--	--	--	--	<0.0005	4.4 J
C-BNS	02/16/22	N	<0.2	--	1.9	--	--	--	--	--	--	<0.0005 J	--
C-BNS	05/18/22	N	<0.2	<1	2.1 J	--	--	--	--	--	--	<0.0005	--
C-BNS	08/17/22	N	<0.2	--	2.3	--	--	--	--	--	--	0.0013 J	--
C-CON-D	01/30/20	N	<0.2	<1	2.2	120	--	--	0.084	0.027 J	--	0.002 J	4.6
C-CON-D	02/20/20	N	<0.2	<1	2.1	110	--	--	0.078	0.029	--	0.0014	4.5 J
C-CON-D	04/30/20	N	<0.2	<1	2.2	110	--	--	0.079	0.031 J	--	0.00082	4.6
C-CON-D	04/30/20	FD	<0.2	<1	2.1	100	--	--	0.099	0.029 J	--	0.00083	4.4
C-CON-D	08/20/20	N	<0.2	<1	2.6	110 J	--	--	0.032 J	<0.02 J	--	0.0021	4.8
C-CON-D	11/19/20	N	<0.2	<1	2.3	110	--	--	0.026	<0.02	--	0.00096	4.7
C-CON-D	01/28/21	N	<0.2	<1	2.3	120	--	--	0.035	0.024	--	0.00069	4.6
C-CON-D	02/18/21	N	<0.2	<1	2.2	110	--	--	0.15 J	<0.02 J	--	0.0012	4.6
C-CON-D	05/20/21	N	<0.2	<1	1.9	110	--	--	<0.02	<0.02	--	<0.0005	4.3
C-CON-D	08/19/21	N	<0.2	<1	2	98	--	--	0.025	<0.02 J	--	<0.0005	4.1
C-CON-D	11/18/21	N	<0.2	<1	2.5 J	--	--	--	--	--	--	<0.0005	4.5
C-CON-D	02/17/22	N	<0.2	--	2.2	--	--	--	--	--	--	0.00071	--
C-CON-D	05/19/22	N	<0.2	<1 J	1.9 J	--	--	--	--	--	--	<0.0005 J	--
C-CON-D	05/19/22	FD	<0.2	<1 J	2 J	--	--	--	--	--	--	0.0037 J	--
C-CON-D	08/18/22	N	<0.2	--	2.4	--	--	--	--	--	--	0.00072 J	--
C-CON-D	08/18/22	FD	<0.2	--	2.2	--	--	--	--	--	--	0.0041 J	--
C-CON-S	01/30/20	N	<0.2	<1	2.2	110	--	--	0.053	0.032 J	--	0.0022 J	4.6
C-CON-S	02/20/20	N	<0.2	<1	2.1	110	--	--	0.067 J	0.028	--	0.0012	4.6 J
C-CON-S	02/20/20	FD	<0.2	<1	2.3	120 J	--	--	0.088	0.038	--	0.00099	4.7
C-CON-S	04/30/20	N	<0.2	<1	2.2	110	--	--	0.073	<0.02	--	0.00052	4.5
C-CON-S	08/20/20	N	<0.2	<1	2.5	110 J	--	--	0.025 J	<0.02 J	--	0.00062	4.5
C-CON-S	11/19/20	N	<0.2	<1	2.2	110	--	--	0.034	<0.02	--	0.0011	4.5
C-CON-S	01/28/21	N	<0.2	<1	2.2	120	--	--	0.029	<0.02	--	0.00074	4.6
C-CON-S	02/18/21	N	<0.2	<1	2.3	120	--	--	0.1 J	<0.02 J	--	0.0011	4.8
C-CON-S	02/18/21	FD	<0.2	<1	2.5	120	--	--	0.035 J	<0.02 J	--	0.0011	4.8
C-CON-S	05/20/21	N	<0.2	<1	2.1	110	--	--	<0.02	<0.02	--	<0.0005	4.4

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
C-BNS	01/29/20	N	--	1.6	--	--	--	--	--	--	--	--	0.35
C-BNS	02/19/20	N	--	1.6	--	--	--	--	--	--	--	--	0.32
C-BNS	04/29/20	N	--	1.7	--	--	--	--	--	--	--	--	0.43
C-BNS	08/19/20	N	--	1.5	--	--	--	--	--	--	--	--	0.39
C-BNS	11/18/20	N	--	1.5	--	--	--	--	--	--	--	--	0.27
C-BNS	11/18/20	FD	--	1.5	--	--	--	--	--	--	--	--	0.28
C-BNS	01/27/21	N	--	1.7	--	--	--	--	--	--	--	--	0.27
C-BNS	02/17/21	N	--	1.6	--	--	--	--	--	--	--	--	0.42
C-BNS	05/19/21	N	--	1.4	--	--	--	--	--	--	--	--	0.36
C-BNS	08/18/21	N	--	1.4	--	--	--	--	--	--	--	--	0.36
C-BNS	11/17/21	N	--	1.9	--	--	--	--	--	--	--	--	0.29
C-BNS	02/16/22	N	--	--	--	--	--	--	--	--	--	--	--
C-BNS	05/18/22	N	--	--	--	--	--	--	--	--	--	--	--
C-BNS	08/17/22	N	--	--	--	--	--	--	--	--	--	--	--
C-CON-D	01/30/20	N	--	1.6	--	--	--	--	--	--	--	--	0.3
C-CON-D	02/20/20	N	--	1.4	--	--	--	--	--	--	--	--	0.28
C-CON-D	04/30/20	N	--	1.6	--	--	--	--	--	--	--	--	0.34
C-CON-D	04/30/20	FD	--	1.7	--	--	--	--	--	--	--	--	0.4
C-CON-D	08/20/20	N	--	1.6	--	--	--	--	--	--	--	--	0.43
C-CON-D	11/19/20	N	--	1.7	--	--	--	--	--	--	--	--	--
C-CON-D	01/28/21	N	--	1.6	--	--	--	--	--	--	--	--	0.44
C-CON-D	02/18/21	N	--	1.4	--	--	--	--	--	--	--	--	0.43
C-CON-D	05/20/21	N	--	1.3	--	--	--	--	--	--	--	--	0.46
C-CON-D	08/19/21	N	--	1.4	--	--	--	--	--	--	--	--	0.37
C-CON-D	11/18/21	N	--	1.5	--	--	--	--	--	--	--	--	0.28
C-CON-D	02/17/22	N	--	--	--	--	--	--	--	--	--	--	--
C-CON-D	05/19/22	N	--	--	--	--	--	--	--	--	--	--	--
C-CON-D	05/19/22	FD	--	--	--	--	--	--	--	--	--	--	--
C-CON-D	08/18/22	N	--	--	--	--	--	--	--	--	--	--	--
C-CON-D	08/18/22	FD	--	--	--	--	--	--	--	--	--	--	--
C-CON-S	01/30/20	N	--	1.6	--	--	--	--	--	--	--	--	0.36
C-CON-S	02/20/20	N	--	1.4	--	--	--	--	--	--	--	--	0.33
C-CON-S	02/20/20	FD	--	1.6	--	--	--	--	--	--	--	--	0.29
C-CON-S	04/30/20	N	--	1.5	--	--	--	--	--	--	--	--	0.43
C-CON-S	08/20/20	N	--	1.4	--	--	--	--	--	--	--	--	0.39
C-CON-S	11/19/20	N	--	1.6	--	--	--	--	--	--	--	--	--
C-CON-S	01/28/21	N	--	1.5	--	--	--	--	--	--	--	--	0.38
C-CON-S	02/18/21	N	--	1.6	--	--	--	--	--	--	--	--	0.4
C-CON-S	02/18/21	FD	--	1.7	--	--	--	--	--	--	--	--	0.39
C-CON-S	05/20/21	N	--	1.3	--	--	--	--	--	--	--	--	0.39

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
C-BNS	01/29/20	N	--	--	--
C-BNS	02/19/20	N	--	--	--
C-BNS	04/29/20	N	--	--	--
C-BNS	08/19/20	N	--	--	--
C-BNS	11/18/20	N	--	--	--
C-BNS	11/18/20	FD	--	--	--
C-BNS	01/27/21	N	--	--	--
C-BNS	02/17/21	N	--	--	--
C-BNS	05/19/21	N	--	--	--
C-BNS	08/18/21	N	--	--	--
C-BNS	11/17/21	N	--	--	--
C-BNS	02/16/22	N	--	--	--
C-BNS	05/18/22	N	--	--	--
C-BNS	08/17/22	N	--	--	--
C-CON-D	01/30/20	N	--	--	--
C-CON-D	02/20/20	N	--	--	--
C-CON-D	04/30/20	N	--	--	--
C-CON-D	04/30/20	FD	--	--	--
C-CON-D	08/20/20	N	--	--	--
C-CON-D	11/19/20	N	--	--	--
C-CON-D	01/28/21	N	--	--	--
C-CON-D	02/18/21	N	--	--	--
C-CON-D	05/20/21	N	--	--	--
C-CON-D	08/19/21	N	--	--	--
C-CON-D	11/18/21	N	--	--	--
C-CON-D	02/17/22	N	--	--	--
C-CON-D	05/19/22	N	--	--	--
C-CON-D	05/19/22	FD	--	--	--
C-CON-D	08/18/22	N	--	--	--
C-CON-D	08/18/22	FD	--	--	--
C-CON-S	01/30/20	N	--	--	--
C-CON-S	02/20/20	N	--	--	--
C-CON-S	02/20/20	FD	--	--	--
C-CON-S	04/30/20	N	--	--	--
C-CON-S	08/20/20	N	--	--	--
C-CON-S	11/19/20	N	--	--	--
C-CON-S	01/28/21	N	--	--	--
C-CON-S	02/18/21	N	--	--	--
C-CON-S	02/18/21	FD	--	--	--
C-CON-S	05/20/21	N	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
C-CON-S	08/19/21	N	<0.2	<1	2.2	100	--	--	0.021	<0.02 J	--	<0.0005	4.4
C-CON-S	11/18/21	N	<0.2	<1	3 J	--	--	--	--	--	--	<0.0005	4.4
C-CON-S	11/18/21	FD	<0.2	<1	3.2 J	--	--	--	--	--	--	<0.0005	4.5
C-CON-S	02/17/22	N	<0.2	--	2	--	--	--	--	--	--	<0.0005	--
C-CON-S	05/19/22	N	<0.2	<1 J	1.9 J	--	--	--	--	--	--	<0.0005	--
C-CON-S	08/18/22	N	<0.2	--	2.4	--	--	--	--	--	--	0.00092	--
C-I-3-D	01/29/20	N	<0.2	<1	2.1	110	--	--	0.075	<0.02	--	0.0012	4.4
C-I-3-D	02/19/20	N	<0.2	<1	2.1	120 J	--	--	0.091 J	0.086 J	--	0.00084	4.6
C-I-3-D	04/29/20	N	<0.2	<1	2.2	120	--	--	0.53 J	0.049 J	--	0.00068	4.5
C-I-3-D	08/19/20	N	<0.2	<1	2.6	120 J	--	--	0.056 J	0.051 J	--	0.00062	4.8
C-I-3-D	11/18/20	N	<0.2	<1	2.4	110	--	--	0.09	<0.02	--	0.0013	4.6
C-I-3-D	01/27/21	N	<0.2	<1	2.3	120	--	--	0.023	<0.02	--	<0.0005	4.6
C-I-3-D	02/17/21	N	<0.2	<1	2.5	120	--	--	0.07 J	<0.02 J	--	0.0014	4.8
C-I-3-D	05/19/21	N	<0.2	<1	2.3	110	--	--	<0.02	<0.02 J	--	<0.0005	4.5
C-I-3-D	08/18/21	N	<0.2	<1	2.1	100	--	--	<0.02	<0.02	--	<0.0005	4.3
C-I-3-D	11/17/21	N	<0.2	<1	2.5	--	--	--	--	--	--	<0.0005	4.5 J
C-I-3-D	02/16/22	N	<0.2	--	2.1	--	--	--	--	--	--	<0.0005 J	--
C-I-3-D	05/18/22	N	<0.2	<1	2 J	--	--	--	--	--	--	<0.0005	--
C-I-3-D	08/17/22	N	<0.2	--	2.4	--	--	--	--	--	--	0.0015 J	--
C-I-3-S	01/29/20	N	<0.2	<1	2.2	110	--	--	0.12	<0.02	--	0.0011	4.4
C-I-3-S	02/19/20	N	<0.2	<1	2.2	120 J	--	--	0.075	0.044 J	--	0.0011	4.6
C-I-3-S	04/29/20	N	<0.2	<1	2.2	120	--	--	0.075 J	0.029 J	--	<0.0005	4.5
C-I-3-S	08/19/20	N	<0.2 J	<1	2.5	120 J	--	--	0.04 J	0.038 J	--	<0.0005	4.7
C-I-3-S	11/18/20	N	<0.2	<1	2.5	110	--	--	0.044	<0.02	--	0.001	4.6
C-I-3-S	01/27/21	N	<0.2	<1	2.3	120	--	--	0.029	0.026 J	--	0.00051	4.9
C-I-3-S	02/17/21	N	<0.2	<1	2.3	110	--	--	0.069 J	<0.02 J	--	0.0017	4.6
C-I-3-S	05/19/21	N	<0.2	<1	2	110	--	--	<0.02	<0.02 J	--	<0.0005	4.4
C-I-3-S	08/18/21	N	<0.2	<1	2.1	100	--	--	0.025 J	<0.02	--	<0.0005	4.2
C-I-3-S	11/17/21	N	<0.2	<1	2.8	--	--	--	--	--	--	<0.0005	4.5 J
C-I-3-S	02/16/22	N	<0.2	--	1.9	--	--	--	--	--	--	<0.0005 J	--
C-I-3-S	05/18/22	N	<0.2	<1	1.9 J	--	--	--	--	--	--	<0.0005	--
C-I-3-S	08/17/22	N	<0.2	--	2.4	--	--	--	--	--	--	0.0022 J	--
C-I-3-S	08/17/22	FD	<0.2	--	2.5	--	--	--	--	--	--	0.0017 J	--
C-MAR-D	01/30/20	N	<0.2	<1	2.6	130	--	--	1.10	0.38 J	--	0.092 J	5.1
C-MAR-D	02/20/20	N	<0.2	<1	2.1	110	--	--	0.4 J	0.069	--	0.014	4.7 J
C-MAR-D	04/30/20	N	<0.2	<1	2.3	110	--	--	0.26	0.048 J	--	0.0021	4.6
C-MAR-D	08/20/20	N	<0.2	<1	2.5	110 J	--	--	0.15 J	<0.02 J	--	0.0038	4.7
C-MAR-D	08/20/20	FD	<0.2	<1	2.4	110 J	--	--	0.2 J	<0.02 J	--	0.0025	4.8
C-MAR-D	11/19/20	N	<0.2	<1	2.3	110	--	--	0.35	<0.02	--	0.0099	4.8
C-MAR-D	01/28/21	N	<0.2	<1	2.4	130	--	--	0.38	0.028	--	0.021	4.8

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C-CON-S	08/19/21	N	--	1.4	--	--	--	--	--	--	--	--	0.38
C-CON-S	11/18/21	N	--	1.5	--	--	--	--	--	--	--	--	0.3
C-CON-S	11/18/21	FD	--	2	--	--	--	--	--	--	--	--	0.28
C-CON-S	02/17/22	N	--	--	--	--	--	--	--	--	--	--	--
C-CON-S	05/19/22	N	--	--	--	--	--	--	--	--	--	--	--
C-CON-S	08/18/22	N	--	--	--	--	--	--	--	--	--	--	--
C-I-3-D	01/29/20	N	--	1.6	--	--	--	--	--	--	--	--	0.35
C-I-3-D	02/19/20	N	--	1.6	--	--	--	--	--	--	--	--	0.36
C-I-3-D	04/29/20	N	--	1.6	--	--	--	--	--	--	--	--	0.43
C-I-3-D	08/19/20	N	--	1.6	--	--	--	--	--	--	--	--	0.38
C-I-3-D	11/18/20	N	--	1.6	--	--	--	--	--	--	--	--	0.33
C-I-3-D	01/27/21	N	--	1.6	--	--	--	--	--	--	--	--	0.28
C-I-3-D	02/17/21	N	--	1.9	--	--	--	--	--	--	--	--	0.45
C-I-3-D	05/19/21	N	--	1.4	--	--	--	--	--	--	--	--	0.37
C-I-3-D	08/18/21	N	--	1.6	--	--	--	--	--	--	--	--	0.36
C-I-3-D	11/17/21	N	--	1.5	--	--	--	--	--	--	--	--	0.3
C-I-3-D	02/16/22	N	--	--	--	--	--	--	--	--	--	--	--
C-I-3-D	05/18/22	N	--	--	--	--	--	--	--	--	--	--	--
C-I-3-D	08/17/22	N	--	--	--	--	--	--	--	--	--	--	--
C-I-3-S	01/29/20	N	--	1.5	--	--	--	--	--	--	--	--	0.29
C-I-3-S	02/19/20	N	--	1.6	--	--	--	--	--	--	--	--	0.35
C-I-3-S	04/29/20	N	--	1.7	--	--	--	--	--	--	--	--	0.44
C-I-3-S	08/19/20	N	--	1.6	--	--	--	--	--	--	--	--	0.46
C-I-3-S	11/18/20	N	--	1.7	--	--	--	--	--	--	--	--	0.44
C-I-3-S	01/27/21	N	--	1.7	--	--	--	--	--	--	--	--	0.29
C-I-3-S	02/17/21	N	--	1.7	--	--	--	--	--	--	--	--	0.45
C-I-3-S	05/19/21	N	--	1.5	--	--	--	--	--	--	--	--	0.41
C-I-3-S	08/18/21	N	--	1.4	--	--	--	--	--	--	--	--	0.37
C-I-3-S	11/17/21	N	--	1.6	--	--	--	--	--	--	--	--	0.3
C-I-3-S	02/16/22	N	--	--	--	--	--	--	--	--	--	--	--
C-I-3-S	05/18/22	N	--	--	--	--	--	--	--	--	--	--	--
C-I-3-S	08/17/22	N	--	--	--	--	--	--	--	--	--	--	--
C-I-3-S	08/17/22	FD	--	--	--	--	--	--	--	--	--	--	--
C-MAR-D	01/30/20	N	--	1.6	--	--	--	--	--	--	--	--	0.31
C-MAR-D	02/20/20	N	--	1.5	--	--	--	--	--	--	--	--	0.35
C-MAR-D	04/30/20	N	--	1.7	--	--	--	--	--	--	--	--	0.41
C-MAR-D	08/20/20	N	--	1.5	--	--	--	--	--	--	--	--	0.35
C-MAR-D	08/20/20	FD	--	1.6	--	--	--	--	--	--	--	--	0.36
C-MAR-D	11/19/20	N	--	1.5	--	--	--	--	--	--	--	--	--
C-MAR-D	01/28/21	N	--	1.4	--	--	--	--	--	--	--	--	0.42

Appendix B
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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
C-CON-S	08/19/21	N	--	--	--
C-CON-S	11/18/21	N	--	--	--
C-CON-S	11/18/21	FD	--	--	--
C-CON-S	02/17/22	N	--	--	--
C-CON-S	05/19/22	N	--	--	--
C-CON-S	08/18/22	N	--	--	--
C-I-3-D	01/29/20	N	--	--	--
C-I-3-D	02/19/20	N	--	--	--
C-I-3-D	04/29/20	N	--	--	--
C-I-3-D	08/19/20	N	--	--	--
C-I-3-D	11/18/20	N	--	--	--
C-I-3-D	01/27/21	N	--	--	--
C-I-3-D	02/17/21	N	--	--	--
C-I-3-D	05/19/21	N	--	--	--
C-I-3-D	08/18/21	N	--	--	--
C-I-3-D	11/17/21	N	--	--	--
C-I-3-D	02/16/22	N	--	--	--
C-I-3-D	05/18/22	N	--	--	--
C-I-3-D	08/17/22	N	--	--	--
C-I-3-S	01/29/20	N	--	--	--
C-I-3-S	02/19/20	N	--	--	--
C-I-3-S	04/29/20	N	--	--	--
C-I-3-S	08/19/20	N	--	--	--
C-I-3-S	11/18/20	N	--	--	--
C-I-3-S	01/27/21	N	--	--	--
C-I-3-S	02/17/21	N	--	--	--
C-I-3-S	05/19/21	N	--	--	--
C-I-3-S	08/18/21	N	--	--	--
C-I-3-S	11/17/21	N	--	--	--
C-I-3-S	02/16/22	N	--	--	--
C-I-3-S	05/18/22	N	--	--	--
C-I-3-S	08/17/22	N	--	--	--
C-I-3-S	08/17/22	FD	--	--	--
C-MAR-D	01/30/20	N	--	--	--
C-MAR-D	02/20/20	N	--	--	--
C-MAR-D	04/30/20	N	--	--	--
C-MAR-D	08/20/20	N	--	--	--
C-MAR-D	08/20/20	FD	--	--	--
C-MAR-D	11/19/20	N	--	--	--
C-MAR-D	01/28/21	N	--	--	--

Appendix B
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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
C-MAR-D	02/18/21	N	<0.2	<1	2.4	110	--	--	0.24 J	<0.02 J	--	0.0036	4.8
C-MAR-D	05/20/21	N	<0.2	<1	1.9	100	--	--	0.042 J	<0.02	--	0.0014	4.4
C-MAR-D	08/19/21	N	<0.2	<1	2.1	100	--	--	0.19	<0.02 J	--	0.0032	4.3
C-MAR-D	11/18/21	N	<0.2	<1	3.2 J	--	--	--	--	--	--	0.0047	4.5
C-MAR-D	02/17/22	N	<0.2	--	1.8	--	--	--	--	--	--	0.0054	--
C-MAR-D	05/19/22	N	<0.2	<1 J	2.1 J	--	--	--	--	--	--	0.00096	--
C-MAR-D	08/18/22	N	<0.2	--	3.5	--	--	--	--	--	--	0.13	--
C-MAR-S	01/30/20	N	<0.2	<1	2.7	130	--	--	1.40	0.88 J	--	0.11 J	5
C-MAR-S	02/20/20	N	<0.2	<1	2.3	120	--	--	0.43 J	0.25	--	0.021	4.7 J
C-MAR-S	04/30/20	N	<0.2	<1	2.2	110	--	--	0.072	0.022 J	--	0.0019	4.5
C-MAR-S	08/20/20	N	<0.2	<1	2.6	110 J	--	--	0.2 J	<0.02 J	--	0.0055	4.9
C-MAR-S	11/19/20	N	<0.2	<1	2.3	110	--	--	0.11	0.021 J	--	0.0034	4.5
C-MAR-S	01/28/21	N	<0.2	<1	2.4	130	--	--	0.56	0.028	--	0.024	5.1
C-MAR-S	02/18/21	N	<0.2	<1	2.3	120	--	--	0.14 J	<0.02 J	--	0.003	4.8
C-MAR-S	02/18/21	FD	<0.2	<1	2.3	120	--	--	0.16 J	<0.02 J	--	0.003	4.8
C-MAR-S	05/20/21	N	<0.2	<1	1.9	100	--	--	0.029 J	<0.02	--	0.0034	4.4
C-MAR-S	08/19/21	N	<0.2	<1	2.6	100	--	--	0.15	<0.02 J	--	0.0048	4.3
C-MAR-S	11/18/21	N	<0.2	<1	3.2 J	--	--	--	--	--	--	0.005	4.6
C-MAR-S	02/17/22	N	<0.2	--	2	--	--	--	--	--	--	0.007	--
C-MAR-S	05/19/22	N	<0.2	<1 J	2 J	--	--	--	--	--	--	0.0026	--
C-MAR-S	08/18/22	N	<0.2	--	4.2	--	--	--	--	--	--	0.14	--
C-NR1-D	01/30/20	N	<0.2	<1	2.2	110	--	--	0.057	<0.02 J	--	0.002 J	4.5
C-NR1-D	02/20/20	N	<0.2	<1	2.1	120	--	--	0.08 J	0.038 J	--	0.00084	4.6 J
C-NR1-D	04/30/20	N	<0.2	<1	2.2	110	--	--	0.065	0.051 J	--	0.00082	4.6
C-NR1-D	08/20/20	N	<0.2	<1	2.4	110	--	--	0.15 J	0.2 J	--	0.00051	4.6
C-NR1-D	11/19/20	N	<0.2	<1	2.4	110	--	--	0.034	<0.02	--	0.00096	4.6
C-NR1-D	01/28/21	N	<0.2	<1	2.2	120	--	--	0.02	<0.02	--	0.00064	4.7
C-NR1-D	02/18/21	N	<0.2	<1	2.4	120	--	--	0.071 J	<0.02 J	--	0.0012	4.8
C-NR1-D	05/20/21	N	<0.2	<1	2	100	--	--	<0.02	<0.02	--	<0.0005	4.3
C-NR1-D	08/19/21	N	<0.2	<1	1.8	100	--	--	<0.02	<0.02 J	--	<0.0005	4.1
C-NR1-D	11/18/21	N	<0.2	<1	3.3 J	--	--	--	--	--	--	<0.0005	4.5
C-NR1-D	02/17/22	N	<0.2	--	2	--	--	--	--	--	--	<0.0005	--
C-NR1-D	02/17/22	FD	<0.2	--	1.9	--	--	--	--	--	--	0.0017	--
C-NR1-D	05/19/22	N	<0.2	<1 J	1.8 J	--	--	--	--	--	--	<0.0005	--
C-NR1-D	08/18/22	N	<0.2	--	2.5	--	--	--	--	--	--	<0.0005	--
C-NR1-D	08/18/22	FD	<0.2	--	2.4	--	--	--	--	--	--	<0.0005	--
C-NR1-S	01/30/20	N	<0.2	<1	2.1	110	--	--	0.026	0.028 J	--	0.0026 J	4.4
C-NR1-S	02/20/20	N	<0.2	<1	2.2	120	--	--	0.083 J	<0.02 J	--	0.0011	4.6 J
C-NR1-S	04/30/20	N	<0.2	<1	2.1	110	--	--	0.061 J	<0.02	--	<0.0005	4.4
C-NR1-S	04/30/20	FD	<0.2	<1	2.1	100	--	--	0.18 J	<0.02	--	<0.0005	4.6

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
C-MAR-D	02/18/21	N	--	1.6	--	--	--	--	--	--	--	--	0.4
C-MAR-D	05/20/21	N	--	1.3	--	--	--	--	--	--	--	--	0.42
C-MAR-D	08/19/21	N	--	1.5	--	--	--	--	--	--	--	--	0.36
C-MAR-D	11/18/21	N	--	1.8	--	--	--	--	--	--	--	--	0.28
C-MAR-D	02/17/22	N	--	--	--	--	--	--	--	--	--	--	--
C-MAR-D	05/19/22	N	--	--	--	--	--	--	--	--	--	--	--
C-MAR-D	08/18/22	N	--	--	--	--	--	--	--	--	--	--	--
C-MAR-S	01/30/20	N	--	1.4	--	--	--	--	--	--	--	--	0.27
C-MAR-S	02/20/20	N	--	1.5	--	--	--	--	--	--	--	--	0.28
C-MAR-S	04/30/20	N	--	1.6	--	--	--	--	--	--	--	--	0.4
C-MAR-S	08/20/20	N	--	1.5	--	--	--	--	--	--	--	--	0.39
C-MAR-S	11/19/20	N	--	1.4	--	--	--	--	--	--	--	--	--
C-MAR-S	01/28/21	N	--	1.5	--	--	--	--	--	--	--	--	0.41
C-MAR-S	02/18/21	N	--	1.9	--	--	--	--	--	--	--	--	0.37
C-MAR-S	02/18/21	FD	--	1.5	--	--	--	--	--	--	--	--	0.35
C-MAR-S	05/20/21	N	--	1.4	--	--	--	--	--	--	--	--	0.38
C-MAR-S	08/19/21	N	--	1.5	--	--	--	--	--	--	--	--	0.35
C-MAR-S	11/18/21	N	--	1.6	--	--	--	--	--	--	--	--	0.27
C-MAR-S	02/17/22	N	--	--	--	--	--	--	--	--	--	--	--
C-MAR-S	05/19/22	N	--	--	--	--	--	--	--	--	--	--	--
C-MAR-S	08/18/22	N	--	--	--	--	--	--	--	--	--	--	--
C-NR1-D	01/30/20	N	--	1.7	--	--	--	--	--	--	--	--	0.27
C-NR1-D	02/20/20	N	--	1.5	--	--	--	--	--	--	--	--	0.35
C-NR1-D	04/30/20	N	--	1.6	--	--	--	--	--	--	--	--	0.42
C-NR1-D	08/20/20	N	--	1.5	--	--	--	--	--	--	--	--	0.35
C-NR1-D	11/19/20	N	--	1.5	--	--	--	--	--	--	--	--	--
C-NR1-D	01/28/21	N	--	1.6	--	--	--	--	--	--	--	--	0.4
C-NR1-D	02/18/21	N	--	1.3	--	--	--	--	--	--	--	--	0.42
C-NR1-D	05/20/21	N	--	1.1	--	--	--	--	--	--	--	--	0.39
C-NR1-D	08/19/21	N	--	1.5	--	--	--	--	--	--	--	--	0.37
C-NR1-D	11/18/21	N	--	1.6	--	--	--	--	--	--	--	--	0.29
C-NR1-D	02/17/22	N	--	--	--	--	--	--	--	--	--	--	--
C-NR1-D	02/17/22	FD	--	--	--	--	--	--	--	--	--	--	--
C-NR1-D	05/19/22	N	--	--	--	--	--	--	--	--	--	--	--
C-NR1-D	08/18/22	N	--	--	--	--	--	--	--	--	--	--	--
C-NR1-D	08/18/22	FD	--	--	--	--	--	--	--	--	--	--	--
C-NR1-S	01/30/20	N	--	1.6	--	--	--	--	--	--	--	--	0.27
C-NR1-S	02/20/20	N	--	1.5	--	--	--	--	--	--	--	--	0.35
C-NR1-S	04/30/20	N	--	1.6	--	--	--	--	--	--	--	--	0.43
C-NR1-S	04/30/20	FD	--	1.7	--	--	--	--	--	--	--	--	0.43

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
C-MAR-D	02/18/21	N	--	--	--
C-MAR-D	05/20/21	N	--	--	--
C-MAR-D	08/19/21	N	--	--	--
C-MAR-D	11/18/21	N	--	--	--
C-MAR-D	02/17/22	N	--	--	--
C-MAR-D	05/19/22	N	--	--	--
C-MAR-D	08/18/22	N	--	--	--
C-MAR-S	01/30/20	N	--	--	--
C-MAR-S	02/20/20	N	--	--	--
C-MAR-S	04/30/20	N	--	--	--
C-MAR-S	08/20/20	N	--	--	--
C-MAR-S	11/19/20	N	--	--	--
C-MAR-S	01/28/21	N	--	--	--
C-MAR-S	02/18/21	N	--	--	--
C-MAR-S	02/18/21	FD	--	--	--
C-MAR-S	05/20/21	N	--	--	--
C-MAR-S	08/19/21	N	--	--	--
C-MAR-S	11/18/21	N	--	--	--
C-MAR-S	02/17/22	N	--	--	--
C-MAR-S	05/19/22	N	--	--	--
C-MAR-S	08/18/22	N	--	--	--
C-NR1-D	01/30/20	N	--	--	--
C-NR1-D	02/20/20	N	--	--	--
C-NR1-D	04/30/20	N	--	--	--
C-NR1-D	08/20/20	N	--	--	--
C-NR1-D	11/19/20	N	--	--	--
C-NR1-D	01/28/21	N	--	--	--
C-NR1-D	02/18/21	N	--	--	--
C-NR1-D	05/20/21	N	--	--	--
C-NR1-D	08/19/21	N	--	--	--
C-NR1-D	11/18/21	N	--	--	--
C-NR1-D	02/17/22	N	--	--	--
C-NR1-D	02/17/22	FD	--	--	--
C-NR1-D	05/19/22	N	--	--	--
C-NR1-D	08/18/22	N	--	--	--
C-NR1-D	08/18/22	FD	--	--	--
C-NR1-S	01/30/20	N	--	--	--
C-NR1-S	02/20/20	N	--	--	--
C-NR1-S	04/30/20	N	--	--	--
C-NR1-S	04/30/20	FD	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
C-NR1-S	08/20/20	N	<0.2	<1	2.4	110 J	--	--	0.022 J	<0.02 J	--	0.00059	4.5
C-NR1-S	11/19/20	N	<0.2	<1	2.3	110	--	--	<0.02	<0.02	--	0.00098	4.5
C-NR1-S	01/28/21	N	<0.2	<1	2.2	120	--	--	0.023	<0.02	--	0.00062	4.6
C-NR1-S	02/18/21	N	<0.2	<1	2.4	120	--	--	0.024 J	<0.02 J	--	0.0013	4.8
C-NR1-S	05/20/21	N	<0.2	<1	1.9	110	--	--	0.02 J	<0.02	--	<0.0005	4.4
C-NR1-S	08/19/21	N	<0.2	<1	1.7	99	--	--	<0.02	<0.02 J	--	<0.0005	4.2
C-NR1-S	11/18/21	N	<0.2	<1	3.1 J	--	--	--	--	--	--	<0.0005	4.4
C-NR1-S	02/17/22	N	<0.2	--	2	--	--	--	--	--	--	<0.0005	--
C-NR1-S	05/19/22	N	<0.2	<1 J	2 J	--	--	--	--	--	--	<0.0005	--
C-NR1-S	08/18/22	N	<0.2	--	2.3	--	--	--	--	--	--	<0.0005	--
C-NR3-D	01/30/20	N	<0.2	<1	2.1	110	--	--	0.054	0.044 J	--	0.0023 J	4.5
C-NR3-D	01/30/20	FD	<0.2	<1	2.1	110	--	--	0.037	0.031 J	--	0.0021 J	4.4
C-NR3-D	02/20/20	N	<0.2	<1	2.1	120	--	--	0.12 J	0.066 J	--	0.0017	4.6 J
C-NR3-D	04/30/20	N	<0.2	<1	2.2	110	--	--	0.049	<0.02	--	<0.0005	4.5
C-NR3-D	08/20/20	N	<0.2	<1	2.4	110 J	--	--	0.025 J	<0.02 J	--	0.0006	4.6
C-NR3-D	11/19/20	N	<0.2	<1	2.3	100	--	--	0.022	<0.02	--	0.0007	4.5
C-NR3-D	01/28/21	N	<0.2	<1	2.2	120	--	--	0.04	<0.02	--	0.0007	4.5
C-NR3-D	02/18/21	N	<0.2	<1	2.4	120	--	--	0.07 J	<0.02 J	--	0.0011	4.8
C-NR3-D	05/20/21	N	<0.2	<1	2.1	100	--	--	<0.02	<0.02	--	<0.0005	4.4
C-NR3-D	08/19/21	N	<0.2	<1	2	99	--	--	<0.02	<0.02 J	--	<0.0005	4.2
C-NR3-D	11/18/21	N	<0.2	<1	3.2 J	--	--	--	--	--	--	<0.0005	4.6
C-NR3-D	11/18/21	FD	<0.2	<1	3.1 J	--	--	--	--	--	--	<0.0005	4.4
C-NR3-D	02/17/22	N	<0.2	--	1.9	--	--	--	--	--	--	<0.0005	--
C-NR3-D	05/19/22	N	<0.2	<1 J	2 J	--	--	--	--	--	--	<0.0005	--
C-NR3-D	05/19/22	FD	<0.2	<1 J	2.1 J	--	--	--	--	--	--	<0.0005	--
C-NR3-D	08/18/22	N	<0.2	--	2.2	--	--	--	--	--	--	<0.0005	--
C-NR3-S	01/30/20	N	<0.2	<1	2	110	--	--	0.097	0.051 J	--	0.0017 J	4.3
C-NR3-S	02/20/20	N	<0.2	<1	2.2	120	--	--	0.091 J	0.02 J	--	0.0013	4.7 J
C-NR3-S	04/30/20	N	<0.2	<1	2	110	--	--	0.03	<0.02	--	<0.0005	4.4
C-NR3-S	08/20/20	N	<0.2	<1	2.4	110 J	--	--	0.022 J	<0.02 J	--	0.00057	4.6
C-NR3-S	11/19/20	N	<0.2	<1	2.3	110	--	--	<0.02	<0.02	--	0.00068	4.6
C-NR3-S	11/19/20	FD	<0.2	<1	2.2	100	--	--	0.022	<0.02	--	0.00067	4.5
C-NR3-S	01/28/21	N	<0.2	<1	2.4	120	--	--	0.084	0.025	--	0.00084	4.6
C-NR3-S	01/28/21	FD	<0.2	<1	2.3	120	--	--	0.026	<0.02	--	0.00061	4.4
C-NR3-S	02/18/21	N	<0.2	<1	2.5	120	--	--	0.032 J	<0.02 J	--	0.0013	4.8
C-NR3-S	05/20/21	N	<0.2	<1	2.1	110	--	--	<0.02	<0.02	--	<0.0005	4.5
C-NR3-S	08/19/21	N	<0.2	<1	2.4	100	--	--	<0.02	<0.02 J	--	<0.0005	4.2
C-NR3-S	11/18/21	N	<0.2	<1	3.2 J	--	--	--	--	--	--	<0.0005	4.5
C-NR3-S	02/17/22	N	<0.2	--	2	--	--	--	--	--	--	<0.0005	--
C-NR3-S	05/19/22	N	<0.2	<1 J	1.9 J	--	--	--	--	--	--	<0.0005	--

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
C-NR1-S	08/20/20	N	--	1.5	--	--	--	--	--	--	--	--	0.37
C-NR1-S	11/19/20	N	--	1.5	--	--	--	--	--	--	--	--	--
C-NR1-S	01/28/21	N	--	1.7	--	--	--	--	--	--	--	--	0.35
C-NR1-S	02/18/21	N	--	1.7	--	--	--	--	--	--	--	--	0.43
C-NR1-S	05/20/21	N	--	1.4	--	--	--	--	--	--	--	--	0.41
C-NR1-S	08/19/21	N	--	1.4	--	--	--	--	--	--	--	--	0.36
C-NR1-S	11/18/21	N	--	2	--	--	--	--	--	--	--	--	0.29
C-NR1-S	02/17/22	N	--	--	--	--	--	--	--	--	--	--	--
C-NR1-S	05/19/22	N	--	--	--	--	--	--	--	--	--	--	--
C-NR1-S	08/18/22	N	--	--	--	--	--	--	--	--	--	--	--
C-NR3-D	01/30/20	N	--	1.5	--	--	--	--	--	--	--	--	0.33
C-NR3-D	01/30/20	FD	--	1.6	--	--	--	--	--	--	--	--	0.39
C-NR3-D	02/20/20	N	--	1.6	--	--	--	--	--	--	--	--	0.27
C-NR3-D	04/30/20	N	--	1.6	--	--	--	--	--	--	--	--	0.43
C-NR3-D	08/20/20	N	--	1.4	--	--	--	--	--	--	--	--	0.39
C-NR3-D	11/19/20	N	--	1.4	--	--	--	--	--	--	--	--	--
C-NR3-D	01/28/21	N	--	1.6	--	--	--	--	--	--	--	--	0.4
C-NR3-D	02/18/21	N	--	1.3	--	--	--	--	--	--	--	--	0.41
C-NR3-D	05/20/21	N	--	1.4	--	--	--	--	--	--	--	--	0.57
C-NR3-D	08/19/21	N	--	1.4	--	--	--	--	--	--	--	--	0.38
C-NR3-D	11/18/21	N	--	1.7	--	--	--	--	--	--	--	--	0.29
C-NR3-D	11/18/21	FD	--	1.7	--	--	--	--	--	--	--	--	0.29
C-NR3-D	02/17/22	N	--	--	--	--	--	--	--	--	--	--	--
C-NR3-D	05/19/22	N	--	--	--	--	--	--	--	--	--	--	--
C-NR3-D	05/19/22	FD	--	--	--	--	--	--	--	--	--	--	--
C-NR3-D	08/18/22	N	--	--	--	--	--	--	--	--	--	--	--
C-NR3-S	01/30/20	N	--	1.6	--	--	--	--	--	--	--	--	0.33
C-NR3-S	02/20/20	N	--	1.5	--	--	--	--	--	--	--	--	0.29
C-NR3-S	04/30/20	N	--	1.6	--	--	--	--	--	--	--	--	0.37
C-NR3-S	08/20/20	N	--	1.5	--	--	--	--	--	--	--	--	0.38
C-NR3-S	11/19/20	N	--	1.5	--	--	--	--	--	--	--	--	--
C-NR3-S	11/19/20	FD	--	1.5	--	--	--	--	--	--	--	--	--
C-NR3-S	01/28/21	N	--	1.5	--	--	--	--	--	--	--	--	0.4
C-NR3-S	01/28/21	FD	--	1.6	--	--	--	--	--	--	--	--	0.4
C-NR3-S	02/18/21	N	--	1.5	--	--	--	--	--	--	--	--	0.41
C-NR3-S	05/20/21	N	--	1.3	--	--	--	--	--	--	--	--	0.42
C-NR3-S	08/19/21	N	--	1.5	--	--	--	--	--	--	--	--	0.38
C-NR3-S	11/18/21	N	--	1.8	--	--	--	--	--	--	--	--	0.28
C-NR3-S	02/17/22	N	--	--	--	--	--	--	--	--	--	--	--
C-NR3-S	05/19/22	N	--	--	--	--	--	--	--	--	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
C-NR1-S	08/20/20	N	--	--	--
C-NR1-S	11/19/20	N	--	--	--
C-NR1-S	01/28/21	N	--	--	--
C-NR1-S	02/18/21	N	--	--	--
C-NR1-S	05/20/21	N	--	--	--
C-NR1-S	08/19/21	N	--	--	--
C-NR1-S	11/18/21	N	--	--	--
C-NR1-S	02/17/22	N	--	--	--
C-NR1-S	05/19/22	N	--	--	--
C-NR1-S	08/18/22	N	--	--	--
C-NR3-D	01/30/20	N	--	--	--
C-NR3-D	01/30/20	FD	--	--	--
C-NR3-D	02/20/20	N	--	--	--
C-NR3-D	04/30/20	N	--	--	--
C-NR3-D	08/20/20	N	--	--	--
C-NR3-D	11/19/20	N	--	--	--
C-NR3-D	01/28/21	N	--	--	--
C-NR3-D	02/18/21	N	--	--	--
C-NR3-D	05/20/21	N	--	--	--
C-NR3-D	08/19/21	N	--	--	--
C-NR3-D	11/18/21	N	--	--	--
C-NR3-D	11/18/21	FD	--	--	--
C-NR3-D	02/17/22	N	--	--	--
C-NR3-D	05/19/22	N	--	--	--
C-NR3-D	05/19/22	FD	--	--	--
C-NR3-D	08/18/22	N	--	--	--
C-NR3-S	01/30/20	N	--	--	--
C-NR3-S	02/20/20	N	--	--	--
C-NR3-S	04/30/20	N	--	--	--
C-NR3-S	08/20/20	N	--	--	--
C-NR3-S	11/19/20	N	--	--	--
C-NR3-S	11/19/20	FD	--	--	--
C-NR3-S	01/28/21	N	--	--	--
C-NR3-S	01/28/21	FD	--	--	--
C-NR3-S	02/18/21	N	--	--	--
C-NR3-S	05/20/21	N	--	--	--
C-NR3-S	08/19/21	N	--	--	--
C-NR3-S	11/18/21	N	--	--	--
C-NR3-S	02/17/22	N	--	--	--
C-NR3-S	05/19/22	N	--	--	--

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C-NR3-S	08/18/22	N	<0.2	--	2.3	--	--	--	--	--	--	<0.0005	--
C-NR4-D	01/30/20	N	<0.2	<1	2.1	110	--	--	0.065	<0.02 J	--	0.0015 J	4.3
C-NR4-D	02/20/20	N	<0.2	<1	2.1	120	--	--	0.072 J	0.022 J	--	0.001	4.7 J
C-NR4-D	04/30/20	N	<0.2	<1	2.1	110	--	--	0.049	0.035 J	--	<0.0005	4.5
C-NR4-D	08/20/20	N	<0.2 J	<1	2.4	110 J	--	--	0.021 J	<0.02 J	--	0.00071	4.7
C-NR4-D	08/20/20	FD	<0.2	<1	2.4	110 J	--	--	0.027 J	<0.02 J	--	0.001	4.7
C-NR4-D	11/19/20	N	<0.2	<1	2.3	110	--	--	<0.02	<0.02	--	0.00057	4.7
C-NR4-D	01/28/21	N	<0.2	<1	2.3	120	--	--	0.058	<0.02	--	0.00073	4.7
C-NR4-D	01/28/21	FD	<0.2	<1	2.3	120	--	--	<0.02	<0.02	--	0.00085	4.6
C-NR4-D	02/18/21	N	<0.2	<1	2.4	110	--	--	0.031 J	<0.02 J	--	0.00099	4.7
C-NR4-D	05/20/21	N	<0.2	<1	1.9	100	--	--	0.027 J	<0.02	--	<0.0005	4.4
C-NR4-D	05/20/21	FD	<0.2	<1	2.1	100	--	--	<0.02	<0.02	--	<0.0005	4.3
C-NR4-D	08/19/21	N	<0.2	<1	2.4	100	--	--	0.024	<0.02 J	--	<0.0005	4.2
C-NR4-D	08/19/21	FD	<0.2	<1	2	110	--	--	<0.02	<0.02 J	--	<0.0005	4.2
C-NR4-D	11/18/21	N	<0.2	<1	3.2 J	--	--	--	--	--	--	<0.0005	4.7
C-NR4-D	02/17/22	N	<0.2	--	2	--	--	--	--	--	--	<0.0005	--
C-NR4-D	05/19/22	N	<0.2	<1 J	1.9 J	--	--	--	--	--	--	<0.0005	--
C-NR4-D	08/18/22	N	<0.2	--	2.3	--	--	--	--	--	--	<0.0005	--
C-NR4-S	01/30/20	N	<0.2	<1	2.1	110	--	--	0.038	0.022 J	--	0.0015 J	4.4
C-NR4-S	02/20/20	N	<0.2	<1	2.1	110	--	--	0.12 J	0.03	--	0.0011	4.5 J
C-NR4-S	04/30/20	N	<0.2	<1	2.2	110	--	--	0.042	<0.02	--	0.00053	4.5
C-NR4-S	08/20/20	N	<0.2	<1	2.5	110 J	--	--	0.031 J	<0.02 J	--	0.00065	4.7
C-NR4-S	11/19/20	N	<0.2	<1	2.4	120	--	--	<0.02	<0.02	--	0.00062	4.7
C-NR4-S	01/28/21	N	<0.2	<1	2.3	120	--	--	0.032	0.032	--	0.00073	4.7
C-NR4-S	02/18/21	N	<0.2	<1	2.2	120	--	--	0.071 J	<0.02 J	--	0.0011	4.9
C-NR4-S	05/20/21	N	<0.2	<1	2.1	110	--	--	<0.02	<0.02	--	<0.0005	4.5
C-NR4-S	08/19/21	N	<0.2	<1	1.9	99	--	--	<0.02	<0.02 J	--	<0.0005	4.2
C-NR4-S	11/18/21	N	<0.2	<1	3.1 J	--	--	--	--	--	--	<0.0005	4.4
C-NR4-S	02/17/22	N	<0.2	--	1.9	--	--	--	--	--	--	<0.0005	--
C-NR4-S	05/19/22	N	<0.2	<1 J	2 J	--	--	--	--	--	--	<0.0005	--
C-NR4-S	08/18/22	N	<0.2	--	2.3	--	--	--	--	--	--	<0.0005	--
C-NR4-S	08/18/22	FD	<0.2	--	2.3	--	--	--	--	--	--	<0.0005	--
C-R22A-D	01/29/20	N	<0.2	<1	2.2	120	--	--	0.13	<0.02	--	0.0026	4.8
C-R22A-D	02/19/20	N	<0.2	<1	2.2	120 J	--	--	0.13 J	0.11 J	--	0.0012	4.5
C-R22A-D	04/29/20	N	<0.2	<1	2.2	110	--	--	0.43 J	0.035 J	--	0.00088	4.4
C-R22A-D	08/19/20	N	<0.2	<1	2.4	110 J	--	--	0.047 J	0.037 J	--	0.00065	4.6
C-R22A-D	11/18/20	N	<0.2	<1	2.2	110	--	--	0.025	<0.02	--	0.0018	4.3
C-R22A-D	01/27/21	N	<0.2	<1	2.2	110	--	--	0.029	0.024 J	--	0.0023	4.7
C-R22A-D	02/17/21	N	<0.2	<1	2.3	110	--	--	0.048 J	0.034 J	--	0.0024	4.8
C-R22A-D	05/19/21	N	<0.2	<1	2	110	--	--	<0.02	<0.02 J	--	0.00088	4.7

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C-NR3-S	08/18/22	N	--	--	--	--	--	--	--	--	--	--	--
C-NR4-D	01/30/20	N	--	1.5	--	--	--	--	--	--	--	--	0.36
C-NR4-D	02/20/20	N	--	1.5	--	--	--	--	--	--	--	--	0.38
C-NR4-D	04/30/20	N	--	1.6	--	--	--	--	--	--	--	--	0.89
C-NR4-D	08/20/20	N	--	1.5	--	--	--	--	--	--	--	--	0.44
C-NR4-D	08/20/20	FD	--	1.6	--	--	--	--	--	--	--	--	0.54
C-NR4-D	11/19/20	N	--	1.5	--	--	--	--	--	--	--	--	--
C-NR4-D	01/28/21	N	--	1.6	--	--	--	--	--	--	--	--	0.39
C-NR4-D	01/28/21	FD	--	1.5	--	--	--	--	--	--	--	--	0.39
C-NR4-D	02/18/21	N	--	1.6	--	--	--	--	--	--	--	--	0.38
C-NR4-D	05/20/21	N	--	1.3	--	--	--	--	--	--	--	--	0.42
C-NR4-D	05/20/21	FD	--	1.2	--	--	--	--	--	--	--	--	0.38
C-NR4-D	08/19/21	N	--	1.3	--	--	--	--	--	--	--	--	0.39
C-NR4-D	08/19/21	FD	--	1.4	--	--	--	--	--	--	--	--	0.36
C-NR4-D	11/18/21	N	--	1.8	--	--	--	--	--	--	--	--	0.28
C-NR4-D	02/17/22	N	--	--	--	--	--	--	--	--	--	--	--
C-NR4-D	05/19/22	N	--	--	--	--	--	--	--	--	--	--	--
C-NR4-D	08/18/22	N	--	--	--	--	--	--	--	--	--	--	--
C-NR4-D	05/19/22	N	--	--	--	--	--	--	--	--	--	--	--
C-NR4-D	08/18/22	N	--	--	--	--	--	--	--	--	--	--	--
C-NR4-S	01/30/20	N	--	1.5	--	--	--	--	--	--	--	--	0.36
C-NR4-S	02/20/20	N	--	1.5	--	--	--	--	--	--	--	--	0.37
C-NR4-S	04/30/20	N	--	1.6	--	--	--	--	--	--	--	--	0.38
C-NR4-S	08/20/20	N	--	1.5	--	--	--	--	--	--	--	--	0.43
C-NR4-S	11/19/20	N	--	1.7	--	--	--	--	--	--	--	--	--
C-NR4-S	01/28/21	N	--	1.6	--	--	--	--	--	--	--	--	0.37
C-NR4-S	02/18/21	N	--	1.6	--	--	--	--	--	--	--	--	0.44
C-NR4-S	05/20/21	N	--	1.3	--	--	--	--	--	--	--	--	0.39
C-NR4-S	08/19/21	N	--	1.6	--	--	--	--	--	--	--	--	0.36
C-NR4-S	11/18/21	N	--	2	--	--	--	--	--	--	--	--	0.28
C-NR4-S	02/17/22	N	--	--	--	--	--	--	--	--	--	--	--
C-NR4-S	05/19/22	N	--	--	--	--	--	--	--	--	--	--	--
C-NR4-S	08/18/22	N	--	--	--	--	--	--	--	--	--	--	--
C-NR4-S	08/18/22	FD	--	--	--	--	--	--	--	--	--	--	--
C-R22A-D	01/29/20	N	--	1.6	--	--	--	--	--	--	--	--	0.36
C-R22A-D	02/19/20	N	--	1.6	--	--	--	--	--	--	--	--	0.33
C-R22A-D	04/29/20	N	--	1.6	--	--	--	--	--	--	--	--	0.43
C-R22A-D	08/19/20	N	--	1.4	--	--	--	--	--	--	--	--	0.32
C-R22A-D	11/18/20	N	--	1.6	--	--	--	--	--	--	--	--	0.25
C-R22A-D	01/27/21	N	--	1.6	--	--	--	--	--	--	--	--	0.3
C-R22A-D	02/17/21	N	--	1.9	--	--	--	--	--	--	--	--	0.46
C-R22A-D	05/19/21	N	--	1.5	--	--	--	--	--	--	--	--	0.39

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
C-NR3-S	08/18/22	N	--	--	--
C-NR4-D	01/30/20	N	--	--	--
C-NR4-D	02/20/20	N	--	--	--
C-NR4-D	04/30/20	N	--	--	--
C-NR4-D	08/20/20	N	--	--	--
C-NR4-D	08/20/20	FD	--	--	--
C-NR4-D	11/19/20	N	--	--	--
C-NR4-D	01/28/21	N	--	--	--
C-NR4-D	01/28/21	FD	--	--	--
C-NR4-D	02/18/21	N	--	--	--
C-NR4-D	05/20/21	N	--	--	--
C-NR4-D	05/20/21	FD	--	--	--
C-NR4-D	08/19/21	N	--	--	--
C-NR4-D	08/19/21	FD	--	--	--
C-NR4-D	11/18/21	N	--	--	--
C-NR4-D	02/17/22	N	--	--	--
C-NR4-D	05/19/22	N	--	--	--
C-NR4-D	08/18/22	N	--	--	--
C-NR4-S	01/30/20	N	--	--	--
C-NR4-S	02/20/20	N	--	--	--
C-NR4-S	04/30/20	N	--	--	--
C-NR4-S	08/20/20	N	--	--	--
C-NR4-S	11/19/20	N	--	--	--
C-NR4-S	01/28/21	N	--	--	--
C-NR4-S	02/18/21	N	--	--	--
C-NR4-S	05/20/21	N	--	--	--
C-NR4-S	08/19/21	N	--	--	--
C-NR4-S	11/18/21	N	--	--	--
C-NR4-S	02/17/22	N	--	--	--
C-NR4-S	05/19/22	N	--	--	--
C-NR4-S	08/18/22	N	--	--	--
C-NR4-S	08/18/22	FD	--	--	--
C-R22A-D	01/29/20	N	--	--	--
C-R22A-D	02/19/20	N	--	--	--
C-R22A-D	04/29/20	N	--	--	--
C-R22A-D	08/19/20	N	--	--	--
C-R22A-D	11/18/20	N	--	--	--
C-R22A-D	01/27/21	N	--	--	--
C-R22A-D	02/17/21	N	--	--	--
C-R22A-D	05/19/21	N	--	--	--

Appendix B
January 2020 to September 2022 Analytical Results
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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
C-R22A-D	08/18/21	N	<0.2	<1	2	100	--	--	0.021 J	<0.02	--	<0.0005	4.1
C-R22A-D	11/17/21	N	<0.2	<1	2.6	--	--	--	--	--	--	0.00058	4.5 J
C-R22A-D	02/16/22	N	<0.2	--	2	--	--	--	--	--	--	<0.0005 J	--
C-R22A-D	05/18/22	N	<0.2	<1	2 J	--	--	--	--	--	--	<0.0005	--
C-R22A-D	08/17/22	N	<0.2	--	2.4	--	--	--	--	--	--	0.0028 J	--
C-R22A-S	01/29/20	N	<0.2	<1	2.3	120	--	--	0.12	<0.02	--	0.0027	4.6
C-R22A-S	01/29/20	FD	<0.2	<1	2.3	130	--	--	0.16	0.027	--	0.0029	4.9
C-R22A-S	02/19/20	N	<0.2	<1	2.2	120 J	--	--	0.09	0.032 J	--	0.0014	4.7
C-R22A-S	04/29/20	N	<0.2	<1	2.2	110	--	--	0.088 J	<0.02 J	--	0.00058	4.5
C-R22A-S	08/19/20	N	<0.2	<1	2.6	110 J	--	--	0.058 J	<0.02 J	--	0.00074	4.8
C-R22A-S	11/18/20	N	<0.2	<1	2.3	110	--	--	0.06	0.027	--	0.0016	4.4
C-R22A-S	01/27/21	N	<0.2	<1	2.3	120	--	--	0.032	<0.02	--	0.0022	4.9
C-R22A-S	02/17/21	N	<0.2	<1	2.3	110	--	--	0.1 J	<0.02 J	--	0.0026	4.6
C-R22A-S	02/17/21	FD	<0.2	<1	2.2	110	--	--	0.043 J	<0.02 J	--	0.0025	4.5
C-R22A-S	05/19/21	N	<0.2	<1	2	100	--	--	<0.02	<0.02 J	--	0.0017	4.5
C-R22A-S	08/18/21	N	<0.2	<1	2.2	100	--	--	<0.02	<0.02	--	<0.0005	4.3
C-R22A-S	11/17/21	N	<0.2	<1	2.7	--	--	--	--	--	--	<0.0005	4.3 J
C-R22A-S	02/16/22	N	<0.2	--	2	--	--	--	--	--	--	<0.0005 J	--
C-R22A-S	02/16/22	FD	<0.2	--	2.1	--	--	--	--	--	--	<0.0005 J	--
C-R22A-S	05/18/22	N	<0.2	<1	2 J	--	--	--	--	--	--	<0.0005	--
C-R22A-S	08/17/22	N	<0.2	--	2.4	--	--	--	--	--	--	0.0025 J	--
C-R27-D	01/29/20	N	<0.2	<1	2.1	120	--	--	0.18	0.11	--	0.004	4.6
C-R27-D	02/19/20	N	<0.2	<1	2.1	120 J	--	--	0.26 J	0.039 J	--	0.0021	4.6
C-R27-D	02/19/20	FD	<0.2	<1	2.2	120 J	--	--	0.19 J	0.061 J	--	0.0011	4.6
C-R27-D	04/29/20	N	<0.2	<1	2.2	110	--	--	0.071 J	0.047 J	--	0.0011	4.5
C-R27-D	08/19/20	N	<0.2	<1	2.4	110 J	--	--	0.054 J	0.023 J	--	0.00067	4.6
C-R27-D	11/18/20	N	<0.2	<1	2.4	110	--	--	0.032	<0.02	--	0.001	4.4
C-R27-D	01/27/21	N	<0.2	<1	2.3	120	--	--	0.028	<0.02	--	0.0014	4.8
C-R27-D	02/17/21	N	<0.2	<1	2.2	110	--	--	0.11 J	<0.02 J	--	0.0016	4.7
C-R27-D	05/19/21	N	<0.2	<1	2.1	110	--	--	<0.02	<0.02 J	--	<0.0005	4.4
C-R27-D	08/18/21	N	<0.2	<1	1.9	100	--	--	0.023 J	0.021	--	<0.0005	4.3
C-R27-D	11/17/21	N	<0.2	<1	3	--	--	--	--	--	--	0.00059	4.4 J
C-R27-D	02/16/22	N	<0.2	--	2	--	--	--	--	--	--	<0.0005 J	--
C-R27-D	05/18/22	N	<0.2	<1	2 J	--	--	--	--	--	--	<0.0005	--
C-R27-D	08/17/22	N	<0.2	--	2.4	--	--	--	--	--	--	0.0013 J	--
C-R27-S	01/29/20	N	<0.2	<1	2.2	120	--	--	0.17	<0.02	--	0.002	4.6
C-R27-S	02/19/20	N	<0.2	<1	2.3	120 J	--	--	0.27 J	0.058 J	--	0.0011	4.7
C-R27-S	04/29/20	N	<0.2	<1	2.2	110	--	--	0.07 J	0.037 J	--	<0.0005 J	4.4
C-R27-S	04/29/20	FD	<0.2	<1	2.2	120	--	--	0.11 J	0.088 J	--	0.0014 J	4.4
C-R27-S	08/19/20	N	<0.2 J	<1	2.4	110 J	--	--	0.058 J	0.022 J	--	0.0006	4.6

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
C-R22A-D	08/18/21	N	--	1.2	--	--	--	--	--	--	--	--	0.35
C-R22A-D	11/17/21	N	--	1.5	--	--	--	--	--	--	--	--	0.35
C-R22A-D	02/16/22	N	--	--	--	--	--	--	--	--	--	--	--
C-R22A-D	05/18/22	N	--	--	--	--	--	--	--	--	--	--	--
C-R22A-D	08/17/22	N	--	--	--	--	--	--	--	--	--	--	--
C-R22A-S	01/29/20	N	--	1.6	--	--	--	--	--	--	--	--	0.35
C-R22A-S	01/29/20	FD	--	1.6	--	--	--	--	--	--	--	--	0.36
C-R22A-S	02/19/20	N	--	1.6	--	--	--	--	--	--	--	--	0.33
C-R22A-S	04/29/20	N	--	1.5	--	--	--	--	--	--	--	--	0.38
C-R22A-S	08/19/20	N	--	1.4	--	--	--	--	--	--	--	--	0.3
C-R22A-S	11/18/20	N	--	1.5	--	--	--	--	--	--	--	--	0.26
C-R22A-S	01/27/21	N	--	1.5	--	--	--	--	--	--	--	--	0.39
C-R22A-S	02/17/21	N	--	1.8	--	--	--	--	--	--	--	--	0.46
C-R22A-S	02/17/21	FD	--	1.7	--	--	--	--	--	--	--	--	0.51
C-R22A-S	05/19/21	N	--	1.5	--	--	--	--	--	--	--	--	0.4
C-R22A-S	08/18/21	N	--	1.3	--	--	--	--	--	--	--	--	0.37
C-R22A-S	11/17/21	N	--	1.5	--	--	--	--	--	--	--	--	0.3
C-R22A-S	02/16/22	N	--	--	--	--	--	--	--	--	--	--	--
C-R22A-S	02/16/22	FD	--	--	--	--	--	--	--	--	--	--	--
C-R22A-S	05/18/22	N	--	--	--	--	--	--	--	--	--	--	--
C-R22A-S	08/17/22	N	--	--	--	--	--	--	--	--	--	--	--
C-R27-D	01/29/20	N	--	1.6	--	--	--	--	--	--	--	--	0.25
C-R27-D	02/19/20	N	--	1.6	--	--	--	--	--	--	--	--	0.28
C-R27-D	02/19/20	FD	--	1.6	--	--	--	--	--	--	--	--	0.28
C-R27-D	04/29/20	N	--	1.6	--	--	--	--	--	--	--	--	0.42
C-R27-D	08/19/20	N	--	1.5	--	--	--	--	--	--	--	--	0.34
C-R27-D	11/18/20	N	--	1.5	--	--	--	--	--	--	--	--	0.24
C-R27-D	01/27/21	N	--	1.6	--	--	--	--	--	--	--	--	0.4
C-R27-D	02/17/21	N	--	1.7	--	--	--	--	--	--	--	--	0.46
C-R27-D	05/19/21	N	--	1.3	--	--	--	--	--	--	--	--	0.38
C-R27-D	08/18/21	N	--	1.5	--	--	--	--	--	--	--	--	0.37
C-R27-D	11/17/21	N	--	1.8	--	--	--	--	--	--	--	--	0.3
C-R27-D	02/16/22	N	--	--	--	--	--	--	--	--	--	--	--
C-R27-D	05/18/22	N	--	--	--	--	--	--	--	--	--	--	--
C-R27-D	08/17/22	N	--	--	--	--	--	--	--	--	--	--	--
C-R27-S	01/29/20	N	--	1.5	--	--	--	--	--	--	--	--	0.31
C-R27-S	02/19/20	N	--	1.7	--	--	--	--	--	--	--	--	0.28
C-R27-S	04/29/20	N	--	1.6	--	--	--	--	--	--	--	--	0.39
C-R27-S	04/29/20	FD	--	1.6	--	--	--	--	--	--	--	--	0.42
C-R27-S	08/19/20	N	--	1.4	--	--	--	--	--	--	--	--	0.34

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
C-R22A-D	08/18/21	N	--	--	--
C-R22A-D	11/17/21	N	--	--	--
C-R22A-D	02/16/22	N	--	--	--
C-R22A-D	05/18/22	N	--	--	--
C-R22A-D	08/17/22	N	--	--	--
C-R22A-S	01/29/20	N	--	--	--
C-R22A-S	01/29/20	FD	--	--	--
C-R22A-S	02/19/20	N	--	--	--
C-R22A-S	04/29/20	N	--	--	--
C-R22A-S	08/19/20	N	--	--	--
C-R22A-S	11/18/20	N	--	--	--
C-R22A-S	01/27/21	N	--	--	--
C-R22A-S	02/17/21	N	--	--	--
C-R22A-S	02/17/21	FD	--	--	--
C-R22A-S	05/19/21	N	--	--	--
C-R22A-S	08/18/21	N	--	--	--
C-R22A-S	11/17/21	N	--	--	--
C-R22A-S	02/16/22	N	--	--	--
C-R22A-S	02/16/22	FD	--	--	--
C-R22A-S	05/18/22	N	--	--	--
C-R22A-S	08/17/22	N	--	--	--
C-R27-D	01/29/20	N	--	--	--
C-R27-D	02/19/20	N	--	--	--
C-R27-D	02/19/20	FD	--	--	--
C-R27-D	04/29/20	N	--	--	--
C-R27-D	08/19/20	N	--	--	--
C-R27-D	11/18/20	N	--	--	--
C-R27-D	01/27/21	N	--	--	--
C-R27-D	02/17/21	N	--	--	--
C-R27-D	05/19/21	N	--	--	--
C-R27-D	08/18/21	N	--	--	--
C-R27-D	11/17/21	N	--	--	--
C-R27-D	02/16/22	N	--	--	--
C-R27-D	05/18/22	N	--	--	--
C-R27-D	08/17/22	N	--	--	--
C-R27-S	01/29/20	N	--	--	--
C-R27-S	02/19/20	N	--	--	--
C-R27-S	04/29/20	N	--	--	--
C-R27-S	04/29/20	FD	--	--	--
C-R27-S	08/19/20	N	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
C-R27-S	08/19/20	FD	<0.2 J	<1	2.6	120 J	--	--	0.19 J	0.026 J	--	0.00069	4.9
C-R27-S	11/18/20	N	<0.2	<1	2.5	110	--	--	0.038	<0.02	--	0.00093	4.4
C-R27-S	01/27/21	N	<0.2	<1	2.1	120	--	--	0.031	<0.02	--	0.0015	4.6
C-R27-S	02/17/21	N	<0.2	<1	2.4	120	--	--	0.098 J	<0.02 J	--	0.0022	4.7
C-R27-S	05/19/21	N	<0.2	<1	2.1	100	--	--	<0.02	<0.02 J	--	<0.0005	4.4
C-R27-S	08/18/21	N	<0.2	<1	2	100	--	--	0.043 J	<0.02	--	<0.0005	4.3
C-R27-S	11/17/21	N	<0.2	<1	2.9	--	--	--	--	--	--	<0.0005	4.4 J
C-R27-S	02/16/22	N	<0.2	--	1.9	--	--	--	--	--	--	<0.0005 J	--
C-R27-S	05/18/22	N	<0.2	<1	1.9 J	--	--	--	--	--	--	<0.0005	--
C-R27-S	08/17/22	N	<0.2	--	2.2	--	--	--	--	--	--	0.0013 J	--
C-TAZ-D	01/29/20	N	<0.2	<1	2.2	110	--	--	0.15	0.026	--	0.0022	4.5
C-TAZ-D	02/19/20	N	<0.2	<1	2.2	120 J	--	--	0.12 J	0.033 J	--	0.0014	4.5
C-TAZ-D	04/29/20	N	<0.2	<1	2.2	110	--	--	0.065 J	<0.02 J	--	<0.0005	4.4
C-TAZ-D	08/19/20	N	<0.2	<1	2.5	120 J	--	--	0.053 J	<0.02 J	--	<0.0005	4.6
C-TAZ-D	11/18/20	N	<0.2	<1	2.4	110	--	--	0.042	<0.02	--	0.0013	4.5
C-TAZ-D	01/27/21	N	<0.2	<1	2.2	120	--	--	0.034	0.025 J	--	0.00069	4.6
C-TAZ-D	02/17/21	N	<0.2	<1	2.3	110	--	--	0.15 J	<0.02 J	--	0.0014	4.6
C-TAZ-D	05/19/21	N	<0.2	<1	2	100	--	--	<0.02	<0.02 J	--	<0.0005	4.4
C-TAZ-D	08/18/21	N	<0.2	<1	2	100	--	--	0.036 J	<0.02	--	<0.0005	4.2
C-TAZ-D	08/18/21	FD	<0.2	<1	2.2	98	--	--	0.023 J	<0.02	--	<0.0005	4.2
C-TAZ-D	11/17/21	N	<0.2	<1	2.9	--	--	--	--	--	--	<0.0005	4.5 J
C-TAZ-D	02/16/22	N	<0.2	--	1.9	--	--	--	--	--	--	<0.0005 J	--
C-TAZ-D	02/16/22	FD	<0.2	--	2	--	--	--	--	--	--	<0.0005 J	--
C-TAZ-D	05/18/22	N	<0.2	<1	2.1 J	--	--	--	--	--	--	<0.0005	--
C-TAZ-D	08/17/22	N	<0.2	--	2.4	--	--	--	--	--	--	0.0031 J	--
C-TAZ-S	01/29/20	N	<0.2	<1	2.2	110	--	--	0.1	<0.02	--	0.0016	4.6
C-TAZ-S	02/19/20	N	<0.2	<1	2.2	120 J	--	--	0.084 J	0.03 J	--	0.001	4.4
C-TAZ-S	04/29/20	N	<0.2	<1	2.2	110	--	--	0.28 J	0.031 J	--	0.00055	4.5
C-TAZ-S	08/19/20	N	<0.2	<1	2.5	110 J	--	--	0.039 J	<0.02 J	--	0.00052	4.6
C-TAZ-S	11/18/20	N	<0.2	<1	2.4	110	--	--	0.037	<0.02	--	0.0013	4.5
C-TAZ-S	01/27/21	N	<0.2	<1	2.2	120	--	--	0.061	0.022 J	--	0.00079	4.8
C-TAZ-S	02/17/21	N	<0.2	<1	2.3	110	--	--	0.34 J	<0.02 J	--	0.0018	4.7
C-TAZ-S	05/19/21	N	<0.2	<1	2	110	--	--	<0.02	<0.02 J	--	<0.0005	4.3
C-TAZ-S	08/18/21	N	<0.2	<1	2.2	100	--	--	<0.02	<0.02	--	<0.0005	4.2
C-TAZ-S	11/17/21	N	<0.2	<1	3.3	--	--	--	--	--	--	<0.0005	4.6 J
C-TAZ-S	02/16/22	N	<0.2	--	1.9	--	--	--	--	--	--	<0.0005 J	--
C-TAZ-S	05/18/22	N	<0.2	<1	2 J	--	--	--	--	--	--	<0.0005	--
C-TAZ-S	08/17/22	N	<0.2	--	2.2	--	--	--	--	--	--	0.0026 J	--
C-TAZ-S	08/17/22	FD	<0.2	--	2.2	--	--	--	--	--	--	0.0027 J	--
CW-01D	10/08/20	N	0.59	2	1.4	22	1.1	100	0.93 J	0.19 J	21	0.0075	20

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
C-R27-S	08/19/20	FD	--	1.5	--	--	--	--	--	--	--	--	0.36
C-R27-S	11/18/20	N	--	1.6	--	--	--	--	--	--	--	--	0.3
C-R27-S	01/27/21	N	--	1.6	--	--	--	--	--	--	--	--	0.28
C-R27-S	02/17/21	N	--	1.6	--	--	--	--	--	--	--	--	0.43
C-R27-S	05/19/21	N	--	1.4	--	--	--	--	--	--	--	--	0.43
C-R27-S	08/18/21	N	--	1.2	--	--	--	--	--	--	--	--	0.36
C-R27-S	11/17/21	N	--	1.9	--	--	--	--	--	--	--	--	0.31
C-R27-S	02/16/22	N	--	--	--	--	--	--	--	--	--	--	--
C-R27-S	05/18/22	N	--	--	--	--	--	--	--	--	--	--	--
C-R27-S	08/17/22	N	--	--	--	--	--	--	--	--	--	--	--
C-TAZ-D	01/29/20	N	--	1.6	--	--	--	--	--	--	--	--	0.29
C-TAZ-D	02/19/20	N	--	1.5	--	--	--	--	--	--	--	--	0.27
C-TAZ-D	04/29/20	N	--	1.6	--	--	--	--	--	--	--	--	0.37
C-TAZ-D	08/19/20	N	--	1.5	--	--	--	--	--	--	--	--	0.35
C-TAZ-D	11/18/20	N	--	1.5	--	--	--	--	--	--	--	--	0.27
C-TAZ-D	01/27/21	N	--	1.5	--	--	--	--	--	--	--	--	0.29
C-TAZ-D	02/17/21	N	--	1.6	--	--	--	--	--	--	--	--	0.45
C-TAZ-D	05/19/21	N	--	1.4	--	--	--	--	--	--	--	--	0.54
C-TAZ-D	08/18/21	N	--	1.4	--	--	--	--	--	--	--	--	0.37
C-TAZ-D	08/18/21	FD	--	1.4	--	--	--	--	--	--	--	--	0.35
C-TAZ-D	11/17/21	N	--	1.8	--	--	--	--	--	--	--	--	0.3
C-TAZ-D	02/16/22	N	--	--	--	--	--	--	--	--	--	--	--
C-TAZ-D	02/16/22	FD	--	--	--	--	--	--	--	--	--	--	--
C-TAZ-D	05/18/22	N	--	--	--	--	--	--	--	--	--	--	--
C-TAZ-D	08/17/22	N	--	--	--	--	--	--	--	--	--	--	--
C-TAZ-S	01/29/20	N	--	1.7	--	--	--	--	--	--	--	--	0.35
C-TAZ-S	02/19/20	N	--	1.6	--	--	--	--	--	--	--	--	0.32
C-TAZ-S	04/29/20	N	--	1.6	--	--	--	--	--	--	--	--	2.5
C-TAZ-S	08/19/20	N	--	1.5	--	--	--	--	--	--	--	--	0.43
C-TAZ-S	11/18/20	N	--	1.5	--	--	--	--	--	--	--	--	0.28
C-TAZ-S	01/27/21	N	--	1.5	--	--	--	--	--	--	--	--	0.26
C-TAZ-S	02/17/21	N	--	1.8	--	--	--	--	--	--	--	--	0.42
C-TAZ-S	05/19/21	N	--	1.5	--	--	--	--	--	--	--	--	0.38
C-TAZ-S	08/18/21	N	--	1.3	--	--	--	--	--	--	--	--	0.37
C-TAZ-S	11/17/21	N	--	1.8	--	--	--	--	--	--	--	--	0.31
C-TAZ-S	02/16/22	N	--	--	--	--	--	--	--	--	--	--	--
C-TAZ-S	05/18/22	N	--	--	--	--	--	--	--	--	--	--	--
C-TAZ-S	08/17/22	N	--	--	--	--	--	--	--	--	--	--	--
C-TAZ-S	08/17/22	FD	--	--	--	--	--	--	--	--	--	--	--
CW-01D	10/08/20	N	10	4.8	1,400	2.4	90	<0.2	2,200	2.5	--	--	2.6

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
C-R27-S	08/19/20	FD	--	--	--
C-R27-S	11/18/20	N	--	--	--
C-R27-S	01/27/21	N	--	--	--
C-R27-S	02/17/21	N	--	--	--
C-R27-S	05/19/21	N	--	--	--
C-R27-S	08/18/21	N	--	--	--
C-R27-S	11/17/21	N	--	--	--
C-R27-S	02/16/22	N	--	--	--
C-R27-S	05/18/22	N	--	--	--
C-R27-S	08/17/22	N	--	--	--
C-TAZ-D	01/29/20	N	--	--	--
C-TAZ-D	02/19/20	N	--	--	--
C-TAZ-D	04/29/20	N	--	--	--
C-TAZ-D	08/19/20	N	--	--	--
C-TAZ-D	11/18/20	N	--	--	--
C-TAZ-D	01/27/21	N	--	--	--
C-TAZ-D	02/17/21	N	--	--	--
C-TAZ-D	05/19/21	N	--	--	--
C-TAZ-D	08/18/21	N	--	--	--
C-TAZ-D	05/19/21	N	--	--	--
C-TAZ-D	08/18/21	N	--	--	--
C-TAZ-D	08/18/21	FD	--	--	--
C-TAZ-D	11/17/21	N	--	--	--
C-TAZ-D	02/16/22	N	--	--	--
C-TAZ-D	02/16/22	FD	--	--	--
C-TAZ-D	05/18/22	N	--	--	--
C-TAZ-D	08/17/22	N	--	--	--
C-TAZ-S	01/29/20	N	--	--	--
C-TAZ-S	02/19/20	N	--	--	--
C-TAZ-S	04/29/20	N	--	--	--
C-TAZ-S	08/19/20	N	--	--	--
C-TAZ-S	11/18/20	N	--	--	--
C-TAZ-S	01/27/21	N	--	--	--
C-TAZ-S	02/17/21	N	--	--	--
C-TAZ-S	05/19/21	N	--	--	--
C-TAZ-S	08/18/21	N	--	--	--
C-TAZ-S	11/17/21	N	--	--	--
C-TAZ-S	02/16/22	N	--	--	--
C-TAZ-S	05/18/22	N	--	--	--
C-TAZ-S	08/17/22	N	--	--	--
C-TAZ-S	08/17/22	FD	--	--	--
CW-01D	10/08/20	N	500	4,600	--

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
CW-01D	12/01/21	N	0.51	1.6	<0.1 J	20	1.1	150	--	--	19	<0.0005	24
CW-01M	10/08/20	N	0.6	<1	1.3	82	1.2	110	0.17 J	0.099 J	14	<0.0005	17
CW-01M	10/08/20	FD	0.58	<1	1.3	81	1.2	120	0.19 J	0.12 J	14	<0.0005	17
CW-01M	12/01/21	N	1.2	2.4	<0.1 J	74	0.98	180	--	--	13	0.00092	17
CW-02D	10/07/20	N	0.47	1.3	2.2 J	21	3.7 J	150	<0.02	<0.1	12 J	0.00074	14 J
CW-02D	12/06/21	N	0.45	1.4 J	<0.1	17	1 J	100	--	--	5.2 J	0.00089 J	14
CW-02D	12/06/21	FD	0.45	1.5 J	<0.1	17	0.97 J	95	--	--	4.9 J	0.001 J	14
CW-02M	10/07/20	N	1.1	2.1	2.1 J	63	1.7 J	130	1	<0.1	12 J	0.0019	15 J
CW-02M	12/06/21	N	1.1	2.3 J	<0.1	66	1.1 J	140	--	--	9.8 J	0.00075 J	14
CW-03D	10/07/20	N	1	2.5	1.8 J	19	2.6 J	79	3.40	0.13 J	7.3 J	0.014	16 J
CW-03D	12/06/21	N	1.2	2.2 J	<0.1	19	0.89 J	73	--	--	4.6 J	0.0055 J	13
CW-03M	10/07/20	N	2.8	6.7	1.5 J	40	3.4 J	170	0.59 J	<0.1	17 J	0.0025 J	33 J
CW-03M	10/07/20	FD	2.8	6	1.5 J	38	2.9 J	150	0.44 J	<0.1	15 J	0.0014 J	34 J
CW-03M	12/06/21	N	2.2	3.6 J	<0.1	34	1.2 J	150	--	--	11 J	0.002 J	37
CW-04D	10/02/20	N	0.53	3.9	<0.1	23	1.2	100 J	0.099	0.058 J	11 J	0.0016	21
CW-04D	12/01/21	N	0.3	17	<0.1 J	30	0.99	160	--	--	11	0.095	24
CW-04M	10/02/20	N	1	4.8	<0.1	100	1.2	150 J	0.29	0.06 J	16 J	0.0022	12
CW-04M	12/01/21	N	1.2	2.1	<0.1 J	98	0.91	210	--	--	14	<0.0005	10
IRZ-09-100	09/14/20	N	19	20	--	--	--	--	--	--	--	--	--
IRZ-09-100	09/24/20	N	19	19	<0.1 J	79	1.2	240	<0.02 J	<0.02 J	32	0.011	14
IRZ-09-100	01/25/22	N	19	18	<0.1	75	1	330	<0.02	<0.02	27	0.0027	13
IRZ-09-100	03/10/22	N	6.7	--	--	--	--	--	0.081	0.022	--	0.0016	--
IRZ-09-100	04/12/22	N	11	--	--	--	--	--	0.34	<0.02	--	0.0018	--
IRZ-09-100	05/18/22	N	15	--	--	--	--	--	0.14 J	<0.02 J	--	<0.0005	--
IRZ-09-100	06/13/22	N	18	--	--	--	--	--	--	0.048 J	--	<0.0005	--
IRZ-09-100	09/14/22	N	16	--	--	--	--	--	<0.02	<0.02	--	0.0016	--
IRZ-13D-210	08/07/20	N	350	330	--	--	--	--	--	--	--	--	--
IRZ-13D-210	09/26/20	N	390	370	1.9 J	42	1.8 J	320 J	<0.1 J	<0.1 J	65 J	0.057	35
IRZ-13D-210	03/10/22	N	350	340	<0.1 J	44 J	1.4	450	<0.02	0.059 J	52 J	0.062	34
IRZ-13D-210	04/12/22	N	410	--	--	--	--	--	0.63	<0.02	--	0.028	--
IRZ-13D-210	05/17/22	N	500	--	--	--	--	--	<0.1 J	<0.02 J	--	0.0025	--
IRZ-13D-210	06/13/22	N	500	--	--	--	--	--	--	<0.02 J	--	<0.0005	--
IRZ-13D-210	09/14/22	N	460	--	--	--	--	--	<0.02	<0.02	--	<0.0005	--
IRZ-13S-095	08/18/20	N	24	22	--	--	--	--	--	--	--	--	--
IRZ-13S-095	09/28/20	N	20	21	<0.1	76	0.79 J	220 J	0.053 J	<0.02 J	30 J	0.0031	17
IRZ-13S-095	03/10/22	N	17	17	<0.1 J	76 J	1.1	430	0.06	<0.02 J	37 J	<0.0005	15
IRZ-13S-095	04/12/22	N	6.2	--	--	--	--	--	0.18	<0.02	--	0.0029	--
IRZ-13S-095	05/17/22	N	23	--	--	--	--	--	0.054 J	<0.02 J	--	<0.0005	--
IRZ-13S-095	06/13/22	N	23	--	--	--	--	--	--	<0.02	--	<0.0005	--
IRZ-13S-095	09/14/22	N	19	--	--	--	--	--	0.021	<0.02	--	<0.0005	--

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
CW-01D	12/01/21	N	13 J	7.6	1,400	2.4	73	--	1,900	2.7	--	--	8.3
CW-01M	10/08/20	N	9.7	4.6	1,500	2.5	89	<0.2	2,200	2.2	--	--	3 J
CW-01M	10/08/20	FD	8.9	4.7	1,700	2.5	90	<0.2	2,200	2.2	--	--	5.4 J
CW-01M	12/01/21	N	12 J	4.1	1,500	2.2	90	--	2,100	2.4	--	--	2.5
CW-02D	10/07/20	N	8.2 J	4.3	1,500	3.2	66	<0.2	2,300	2	--	--	2.8
CW-02D	12/06/21	N	14	4.1	1,500	3.7	64	--	2,200	2.1	--	--	2.8
CW-02D	12/06/21	FD	10	4.3	1,600	3.7	64	--	2,200	1.9	--	--	2.7
CW-02M	10/07/20	N	6.1 J	4.2	1,500	3.7	59	<0.2	2,200	3.1	--	--	2.6
CW-02M	12/06/21	N	15	3.4	1,500	3.5	63	--	2,200	3.2	--	--	2.8
CW-03D	10/07/20	N	8.7 J	4.4	1,600	2.7	68	<0.2	2,200	2.5	--	--	2.9
CW-03D	12/06/21	N	11	3.9	1,500	2.3	70	--	2,200	2.4	--	--	2.6
CW-03M	10/07/20	N	8 J	3.1	1,500	2.9	53	<0.2	2,300	3.7	--	--	2.6
CW-03M	10/07/20	FD	8.1 J	3.1	1,500	3	53	<0.2	2,300	3.8	--	--	2.6
CW-03M	12/06/21	N	13	2.5	1,500	2.6	52	--	2,200	4.2	--	--	2.6
CW-04D	10/02/20	N	11	3.6	1,500	3	59	0.21	2,100	4.2	--	--	2.9
CW-04D	12/01/21	N	13 J	3.5	1,500	5.3	72	--	2,100	2.9	--	--	2.7
CW-04M	10/02/20	N	13	5.9	1,400	3.6	60	<0.2	2,100	2.1	--	--	2.7
CW-04M	12/01/21	N	13 J	3.2	1,400	3.2	57	--	2,100	2.3	--	--	2.7
IRZ-09-100	09/14/20	N	--	--	--	--	--	--	--	--	--	--	--
IRZ-09-100	09/24/20	N	16	1	1,700	3.4	54	0.2	3,000	2.8	--	--	1.8
IRZ-09-100	01/25/22	N	19 J	0.83	1,900 J	3	52	<0.2	3,000	3.2	1.8	<5	--
IRZ-09-100	03/10/22	N	--	--	--	--	--	--	--	--	--	--	--
IRZ-09-100	04/12/22	N	--	--	--	--	--	--	--	--	--	--	--
IRZ-09-100	05/18/22	N	--	--	--	--	--	--	--	--	--	--	--
IRZ-09-100	06/13/22	N	--	--	--	--	--	--	--	--	--	--	--
IRZ-09-100	09/14/22	N	--	--	--	--	--	--	--	--	2.1	--	--
IRZ-13D-210	08/07/20	N	--	--	--	--	--	--	--	--	--	--	--
IRZ-13D-210	09/26/20	N	29 J	1.1	3,300 J	2.3	58	0.22	6,100	3	--	--	2.1
IRZ-13D-210	03/10/22	N	29 J	0.96	4,200	2.5	52	<0.2	6,200	3.7	1.5	<5	--
IRZ-13D-210	04/12/22	N	--	--	--	--	--	--	--	--	--	--	--
IRZ-13D-210	05/17/22	N	--	--	--	--	--	--	--	--	--	--	--
IRZ-13D-210	06/13/22	N	--	--	--	--	--	--	--	--	--	--	--
IRZ-13D-210	09/14/22	N	--	--	--	--	--	--	--	--	2.1	--	--
IRZ-13S-095	08/18/20	N	--	--	--	--	--	--	--	--	--	--	--
IRZ-13S-095	09/28/20	N	13 J	1.1	1,400 J	4.9	53	0.49	2,600	2.6	--	--	2.1
IRZ-13S-095	03/10/22	N	16 J	0.86	2,000	3.9	48	<0.22	2,800	3.8	1.6	<5	--
IRZ-13S-095	04/12/22	N	--	--	--	--	--	--	--	--	--	--	--
IRZ-13S-095	05/17/22	N	--	--	--	--	--	--	--	--	--	--	--
IRZ-13S-095	06/13/22	N	--	--	--	--	--	--	--	--	--	--	--
IRZ-13S-095	09/14/22	N	--	--	--	--	--	--	--	--	2	--	--

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
CW-01D	12/01/21	N	510	4,000	--
CW-01M	10/08/20	N	510	4,700	--
CW-01M	10/08/20	FD	510	4,600	--
CW-01M	12/01/21	N	490	4,300	--
CW-02D	10/07/20	N	510	4,300	--
CW-02D	12/06/21	N	510	4,000	--
CW-02D	12/06/21	FD	510	4,200	--
CW-02M	10/07/20	N	500	4,300	--
CW-02M	12/06/21	N	500	4,100	--
CW-03D	10/07/20	N	490	4,300	--
CW-03D	12/06/21	N	500	4,100	--
CW-03M	10/07/20	N	510	4,500	--
CW-03M	10/07/20	FD	510	4,400	--
CW-03M	12/06/21	N	520	4,100	--
CW-04D	10/02/20	N	470	4,400	--
CW-04D	12/01/21	N	480	4,300	--
CW-04M	10/02/20	N	480	4,500	--
CW-04M	12/01/21	N	490	4,200	--
IRZ-09-100	09/14/20	N	--	--	--
IRZ-09-100	09/24/20	N	500	6,500	<1
IRZ-09-100	01/25/22	N	480	6,800	<1
IRZ-09-100	03/10/22	N	--	--	<1
IRZ-09-100	04/12/22	N	--	--	<1
IRZ-09-100	05/18/22	N	--	--	<1
IRZ-09-100	06/13/22	N	--	--	<1
IRZ-09-100	09/14/22	N	520	--	<1
IRZ-13D-210	08/07/20	N	--	--	--
IRZ-13D-210	09/26/20	N	930	13,000	<1
IRZ-13D-210	03/10/22	N	950	12,000	<50
IRZ-13D-210	04/12/22	N	--	--	<1
IRZ-13D-210	05/17/22	N	--	--	<1
IRZ-13D-210	06/13/22	N	--	--	<1
IRZ-13D-210	09/14/22	N	960	--	<1
IRZ-13S-095	08/18/20	N	--	--	--
IRZ-13S-095	09/28/20	N	460	5,700	<1 J
IRZ-13S-095	03/10/22	N	460	5,600	<1
IRZ-13S-095	04/12/22	N	--	--	<1
IRZ-13S-095	05/17/22	N	--	--	<1
IRZ-13S-095	06/13/22	N	--	--	<1
IRZ-13S-095	09/14/22	N	400	--	<1

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
IRZ-15-055	06/30/20	N	36	--	--	--	--	--	--	--	--	--	--
IRZ-15-055	12/20/21	N	590	690	<0.1 J	45	1.7	460	0.14 J	0.023	23	0.014	45
IRZ-15-055	04/12/22	N	960	930	<0.1 J	31	--	--	--	<0.02	--	0.0059	--
IRZ-15-200	06/30/20	N	800	--	--	--	--	--	--	--	--	--	--
IRZ-15-200	12/20/21	N	65	77	<0.1 J	52	0.56	180	0.18 J	<0.02	26	0.00097	19
IRZ-15-200	04/12/22	N	320	260	<0.1 J	82	--	--	--	<0.02	--	0.0038	--
IRZ-21-065	12/20/21	N	270	180	1.3 J	40	0.34	76	4.80 J	<0.02	21	<0.0005	10
IRZ-21-065	04/12/22	N	370	350	<0.1 J	63	--	--	--	<0.02	--	0.053	--
IRZ-21-157	12/20/21	N	2,900	2,900	<0.1 J	230	1.7	640	3.50 J	<0.02	24	0.015	51
IRZ-21-157	04/12/22	N	410	460	<0.1 J	77	--	--	--	<0.02	--	0.16	--
IRZ-23-143	12/21/21	N	150	150	0.92 J	51	0.63 J	170	0.69	0.091 J	26 J	<0.0005	6.7
IRZ-23-143	01/25/22	N	780	--	--	--	--	--	0.13	<0.02	--	<0.0005	--
IRZ-23-143	02/21/22	N	880	--	--	--	--	--	<0.02	<0.02	--	<0.0005	--
IRZ-23-143	03/10/22	N	900	--	--	--	--	--	0.11	<0.02	--	<0.0005	--
IRZ-23-143	04/12/22	N	710	--	--	--	--	--	0.13	<0.02	--	<0.0005	--
IRZ-23-143	05/17/22	N	650	--	--	--	--	--	<0.02 J	<0.02 J	--	<0.0005	--
IRZ-23-143	06/13/22	N	660	--	--	--	--	--	--	<0.02 J	--	<0.0005	--
IRZ-23-143	09/14/22	N	670	--	--	--	--	--	<0.02	<0.02	--	<0.0005	--
IRZ-25-100	12/20/21	N	2,000	2,000	0.91 J	30	0.53	110	1.70 J	<0.02	19	0.00055	16
IRZ-25-100	04/12/22	N	2,600	2,500	0.85 J	25	--	--	--	<0.02	--	0.013	--
IRZ-25-166	12/20/21	N	3,700	810	<0.1 J	41	0.9	160	0.25 J	<0.02	17	0.018	17
IRZ-25-166	04/12/22	N	1,400	1,300	<0.1 J	39	--	--	--	<0.02	--	0.0062	--
IRZ-33-077	01/04/22	N	2,200	2,200	1.2	35	0.94 J	140	0.96	<0.02	26 J	<0.0005	91
MARINA-1	09/20/21	N	1.28	<10	<10	80.7	2.87	338	--	<1	10.4	<0.1	61.4
MARINA-1	03/10/22	N	2.08	<10	<10	74.1	2.64	313	--	<1	8.92	<0.1	66.7
MARINA-1	03/10/22	FD	1.99	<10	<10	73.9	2.59	316	--	<1	8.92	<0.1	67.5
MARINA-1	05/17/22	N	3.73	<10	<10	63.2	1.63	209	--	<1	10.6	<0.1	41.8
MTS-1	09/22/21	N	2.02	3.32	15.3	82.6	0.996	87.8	--	<0.1	2.84	<0.01	19.5
MTS-1	11/15/21	N	<0.2	<1	23.9	28.1	0.487	11.2	--	<0.1	0.358	<0.01	14.3
MTS-1	02/16/22	N	<1	<1	20.7	65.8	0.667	91	--	<0.1	2.84	<0.01	16.2
MTS-1	05/17/22	N	0.687	<10	13	88.8	0.728	92.8	--	<1	3.16	<0.1	<20
MTS-1	08/16/22	N	5.69	7.21	16.3	86.9	0.801	101	--	<0.1	3.28	<0.01	18.2
MTS-2	09/22/21	N	8.5	10.3	18.1	84.4	0.972	88	--	<0.1	2.82	<0.01	19.1
MTS-2	11/15/21	N	5.43	7.3	17.3	82.6	0.756	85.6	--	<0.1	3.07	<0.01	17.9
MTS-2	02/16/22	N	5.54	8.37	16.6	89.7	0.804	91.9	--	0.178	3.17	0.0218	19.6
MTS-2	05/17/22	N	9.87	11	17.1	88.9	0.744	94.3	--	<1	3.22	<0.1	<20
MTS-2	08/16/22	N	7.88	9.41	16.5	88.8	0.811	102	--	<0.1	3.34	<0.01	18.6
MW-09	04/24/20	N	130	130	1.1	--	--	--	--	--	--	0.0021	6.8
MW-09	12/01/20	N	120	120	1.8	--	1 J	100 J	--	<0.02	36 J	0.0017	4.4
MW-09	02/24/21	N	120	120	--	--	--	--	--	--	--	--	4.7

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IRZ-15-055	06/30/20	N	--	--	--	--	--	--	--	--	--	--	--
IRZ-15-055	12/20/21	N	38 J	1.5	4,900	3.7	38	--	7,100	4.2	1.4	<5	--
IRZ-15-055	04/12/22	N	--	--	--	--	--	--	--	--	1.6	--	--
IRZ-15-200	06/30/20	N	--	--	--	--	--	--	--	--	--	--	--
IRZ-15-200	12/20/21	N	10 J	2.1	600 J	3.2	81	--	1,200	2.8	2.3	<5	--
IRZ-15-200	04/12/22	N	--	--	--	--	--	--	--	--	1.5	--	--
IRZ-21-065	12/20/21	N	7.5 J	3.5	400	8.5	96	--	470	1.9	4.6	<5	--
IRZ-21-065	04/12/22	N	--	--	--	--	--	--	--	--	0.76	--	--
IRZ-21-157	12/20/21	N	32 J	2.4	4,300	6	39	--	7,300	4.6	2.2	<5	--
IRZ-21-157	04/12/22	N	--	--	--	--	--	--	--	--	0.5	--	--
IRZ-23-143	12/21/21	N	9.9 J	4.1	580	9.6	87	<0.2	990	2	5.5	<5	--
IRZ-23-143	01/25/22	N	--	--	--	--	--	--	--	--	--	--	--
IRZ-23-143	02/21/22	N	--	--	--	--	--	--	--	--	--	--	--
IRZ-23-143	03/10/22	N	--	--	--	--	--	--	--	--	--	--	--
IRZ-23-143	04/12/22	N	--	--	--	--	--	--	--	--	--	--	--
IRZ-23-143	05/17/22	N	--	--	--	--	--	--	--	--	--	--	--
IRZ-23-143	06/13/22	N	--	--	--	--	--	--	--	--	--	--	--
IRZ-23-143	09/14/22	N	--	--	--	--	--	--	--	--	4.7	--	--
IRZ-25-100	12/20/21	N	7.8 J	8.6	380	5.7	89	--	490	1.4	12	<5	--
IRZ-25-100	04/12/22	N	--	--	--	--	--	--	--	--	14	--	--
IRZ-25-166	12/20/21	N	15 J	7.2	420 J	5	47	--	5,600	4.2	2.8	<5	--
IRZ-25-166	04/12/22	N	--	--	--	--	--	--	--	--	7.2	--	--
IRZ-33-077	01/04/22	N	11 J	62	940	4.2	120	--	1,000	2.3	27	<5	--
MARINA-1	09/20/21	N	51.3	<10	5,360	<10	--	--	9,580	3.28	--	--	--
MARINA-1	03/10/22	N	49.6	<10	5,280	<10	--	--	12,400	3.5	--	--	--
MARINA-1	03/10/22	FD	50.3	<10	5,260	<10	--	--	11,700	3.26	--	--	--
MARINA-1	05/17/22	N	32	<10	3,120	<10	39.8	--	13,400	3.75	--	--	--
MTS-1	09/22/21	N	7.94	<1	404	9.65	--	--	565	5.25	--	--	--
MTS-1	11/15/21	N	6.38	<1	352	<1	40.7	0.261	1,160	4.74	--	--	--
MTS-1	02/16/22	N	8.49	<1	602	3.69	--	--	938	5.08	--	--	--
MTS-1	05/17/22	N	8.13	<10	434	<10	71.3	--	878	5.47	--	--	--
MTS-1	08/16/22	N	7.71	<1	439	10.8	73.3	--	809	5.64	1.57	--	--
MTS-2	09/22/21	N	7.87	<1	400	11.8	--	--	586	5.1	--	--	--
MTS-2	11/15/21	N	7.68	<1	370	11.2	69.8	<0.1	724	5	--	--	--
MTS-2	02/16/22	N	7.6	<1	393	12.3	--	--	612	5.48	--	--	--
MTS-2	05/17/22	N	7.77	<10	386	10.2	74	--	760	5.49	--	--	--
MTS-2	08/16/22	N	7.71	<1	413	12.1	74.2	--	683	5.32	1.73	--	--
MW-09	04/24/20	N	--	5.3	--	--	--	--	--	--	--	--	11
MW-09	12/01/20	N	--	5.3	450 J	--	120	--	740	--	--	--	--
MW-09	02/24/21	N	--	5.8	--	--	--	--	--	--	--	--	13

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
IRZ-15-055	06/30/20	N	--	--	--
IRZ-15-055	12/20/21	N	920	13,000	<50
IRZ-15-055	04/12/22	N	770	--	<1
IRZ-15-200	06/30/20	N	--	--	--
IRZ-15-200	12/20/21	N	230	2,400	<1
IRZ-15-200	04/12/22	N	500	--	<1
IRZ-21-065	12/20/21	N	180	1,200	<1
IRZ-21-065	04/12/22	N	540	--	<1
IRZ-21-157	12/20/21	N	840	13,000	<1
IRZ-21-157	04/12/22	N	600	--	<1
IRZ-23-143	12/21/21	N	220	2,200	<10
IRZ-23-143	01/25/22	N	--	--	<1
IRZ-23-143	02/21/22	N	--	--	<20
IRZ-23-143	03/10/22	N	--	--	<1
IRZ-23-143	04/12/22	N	--	--	<1
IRZ-23-143	05/17/22	N	--	--	<1
IRZ-23-143	06/13/22	N	--	--	<1
IRZ-23-143	09/14/22	N	470	--	<1
IRZ-25-100	12/20/21	N	270	1,500	<1
IRZ-25-100	04/12/22	N	300	--	<1
IRZ-25-166	12/20/21	N	790	13,000	<1
IRZ-25-166	04/12/22	N	380	--	<1
IRZ-33-077	01/04/22	N	620	2,900	<1
MARINA-1	09/20/21	N	653	19,400	--
MARINA-1	03/10/22	N	864	14,600	--
MARINA-1	03/10/22	FD	754	16,800	--
MARINA-1	05/17/22	N	902	15,400	--
MTS-1	09/22/21	N	129	1,090	--
MTS-1	11/15/21	N	128	2,090	--
MTS-1	02/16/22	N	126	1,810	--
MTS-1	05/17/22	N	137	1,350	--
MTS-1	08/16/22	N	142	1,430	<1
MTS-2	09/22/21	N	124	1,120	--
MTS-2	11/15/21	N	144	1,350	--
MTS-2	02/16/22	N	132	1,260	--
MTS-2	05/17/22	N	161	1,300	--
MTS-2	08/16/22	N	137	1,470	1.27
MW-09	04/24/20	N	--	--	--
MW-09	12/01/20	N	250	1,700	--
MW-09	02/24/21	N	--	--	--

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MW-09	05/19/21	N	120	110	0.86	--	--	--	--	--	--	<0.0005	3.9
MW-09	12/08/21	N	170	170	0.38	--	--	--	--	--	--	0.0016 J	6.2
MW-09	12/08/21	FD	170	180	0.52	--	--	--	--	--	--	0.002 J	6.7
MW-09	06/08/22	N	0.9	4	--	--	--	--	--	--	--	--	10
MW-09	06/08/22	FD	1.1	4.1	--	--	--	--	--	--	--	--	11
MW-10	04/23/20	N	150	150	--	--	--	--	--	--	--	--	19
MW-10	11/30/20	N	120	120	2.2	51	1 J	120 J	--	0.029 J	26 J	0.0071	21
MW-10	11/30/20	FD	120	120	2.2	50	1 J	120 J	--	0.026 J	26 J	0.0067	20
MW-10	02/24/21	N	110	120	--	--	--	--	--	--	--	--	16
MW-10	05/05/21	N	130	130 J	1.5	--	--	160	--	--	--	0.00057	17
MW-10	09/22/21	N	120	140 J	1.6 J	--	--	150 J	--	--	23 J	<0.0005	17 J
MW-10	12/08/21	N	69	71	0.93	--	--	--	--	--	--	0.0013 J	15
MW-10	12/08/21	FD	67	72	0.92	--	--	--	--	--	--	0.0011 J	15
MW-10	06/08/22	N	98	96	--	--	--	--	--	--	--	--	16
MW-10	06/08/22	FD	99	95	--	--	--	--	--	--	--	--	16
MW-10D	02/24/20	N	370	370	0.43	54	1.3	160	0.022 J	<0.02	31	<0.0005	1.8
MW-10D	05/28/20	N	380	390	0.52	53	1.3	150	0.24	0.022	37	0.0024	2.3
MW-10D	08/19/20	N	410	380	<0.1	40	1.3	130 J	0.089	0.065 J	35	0.018	1.9
MW-10D	12/10/20	N	420	390	0.21	46	1.1	140 J	0.18 J	0.046 J	39	<0.0005	1.4
MW-10D	02/24/21	N	380	380	<0.1	49 J	1.4	170	0.25 J	<0.02	41	<0.0005	1.4
MW-10D	05/05/21	N	400	370 J	<0.1	--	--	200	--	--	--	<0.0005	1.6
MW-10D	05/19/21	N	400	390	<0.1	45	1.1	160	<0.02 J	<0.02	32 J	<0.0005	1.4
MW-10D	08/24/21	N	240	270	<0.1	43	1.1	130	0.053 J	<0.02 J	28	<0.0005 J	1.4
MW-10D	09/22/21	N	94	120 J	<0.1 J	--	--	120 J	--	--	22 J	<0.0005	1.4 J
MW-10D	12/08/21	N	88	89	<0.1	--	--	--	--	--	--	<0.0005 J	1.8
MW-10D	06/08/22	N	160	150	--	--	--	--	--	--	--	--	1.5
MW-11	04/23/20	N	43	43	0.9	--	--	--	--	--	--	0.0013	5.8
MW-11	12/10/20	N	33	33	1.4	--	0.68	120	--	0.1 J	26	0.0006	5.1 J
MW-11	05/19/21	N	38	37	0.42	--	--	--	--	--	--	<0.0005	5.7
MW-11	12/09/21	N	170	180	0.48 J	--	--	--	--	--	--	0.00077	--
MW-11	06/08/22	N	45	44	--	--	--	--	--	--	--	--	--
MW-11D	01/29/20	N	390	380	<0.1	59	1.7	400	0.16	0.036	73 J	0.049	6.6
MW-11D	02/24/20	N	390	370	<0.1	54	1.5	320	0.15 J	0.11 J	52	0.012	6.2
MW-11D	05/28/20	N	340	340	<0.1	54	1.5	340	0.26	0.037	62	0.0058	7.2
MW-11D	08/26/20	N	480	460	<0.1	53	1.4 J	260	0.15 J	<0.02	64 J	0.0021	6.1
MW-11D	12/10/20	N	530	520	<0.1	49	1.3	300 J	0.23 J	<0.02 J	62	<0.0005	4.6
MW-11D	02/24/21	N	490	510	<0.1	55 J	1.6	400	0.055 J	<0.02	66	<0.0005	4.9
MW-11D	05/19/21	N	510	490	<0.1	50	1.3	330	0.042 J	0.024	53 J	<0.0005	5.9
MW-11D	08/24/21	N	300	330	<0.1	63	0.88	350	0.023 J	<0.02 J	64	<0.0005 J	4.1
MW-11D	12/09/21	N	150	150	<0.1 J	--	--	--	--	--	--	<0.0005	--

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MW-09	05/19/21	N	--	5.2	--	--	--	--	--	--	--	--	11
MW-09	12/08/21	N	--	6.2	--	--	--	--	--	--	--	--	14
MW-09	12/08/21	FD	--	6.4	--	--	--	--	--	--	--	--	14
MW-09	06/08/22	N	--	2.2	--	--	--	--	--	--	3.1	--	--
MW-09	06/08/22	FD	--	2.3	--	--	--	--	--	--	2.9	--	--
MW-10	04/23/20	N	--	6.1	--	--	--	--	--	--	--	--	12
MW-10	11/30/20	N	--	6	280 J	14	120	--	520	--	--	--	12
MW-10	11/30/20	FD	--	5.3	300 J	14	120	--	520	--	--	--	12
MW-10	02/24/21	N	--	6.5	--	--	--	--	--	--	--	--	9
MW-10	05/05/21	N	13 J	6.3	420	--	--	--	670	--	--	--	8.8
MW-10	09/22/21	N	11	7.3	500	--	--	--	710	--	--	--	11
MW-10	12/08/21	N	--	6.1	--	--	--	--	--	--	--	--	11
MW-10	12/08/21	FD	--	6.2	--	--	--	--	--	--	--	--	11
MW-10	06/08/22	N	--	5.8	--	--	--	--	--	--	9.6	--	--
MW-10	06/08/22	FD	--	6.1	--	--	--	--	--	--	9.6	--	--
MW-10D	02/24/20	N	14 J	7.6	620	9.1	120	0.05 J	980	1.1	--	--	11
MW-10D	05/28/20	N	14 J	7.9	710	10	120	<0.2	1,000	<1	--	--	13 J
MW-10D	08/19/20	N	14	8	640	11	120	<0.2	980	1.1	--	--	13 J
MW-10D	12/10/20	N	15	7.7	580	11	120	<0.2	1,000	1.2	--	--	13
MW-10D	02/24/21	N	16 J	7.1	800 J	11	120	<0.22	1,000	1.3	--	--	9.9
MW-10D	05/05/21	N	16 J	6.9	630	--	--	--	990	--	--	--	12
MW-10D	05/19/21	N	16 J	7.3	590	12	120	<0.2	980	1.1	--	--	12
MW-10D	08/24/21	N	18 J	6.6	630	14	120	<0.2	920	1.2	--	--	11
MW-10D	09/22/21	N	12	6.6	520	--	--	--	840	--	--	--	9.5
MW-10D	12/08/21	N	--	5.3	--	--	--	--	--	--	--	--	9.5
MW-10D	06/08/22	N	--	5.7	--	--	--	--	--	--	8.9	--	--
MW-11	04/23/20	N	--	4	--	--	--	--	--	--	--	--	5.2
MW-11	12/10/20	N	--	4	270	--	87	--	590	--	--	--	4.4
MW-11	05/19/21	N	--	4.1	--	--	--	--	--	--	--	--	5
MW-11	12/09/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-11	06/08/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-11D	01/29/20	N	18	5	800	3.8	84	<0.1	1,500	1.2	--	--	6.6
MW-11D	02/24/20	N	18 J	4.8	730	4.1	86	0.05 J	1,500	<2	--	--	6.4
MW-11D	05/28/20	N	19 J	4.6	750	3.8	86	<0.2	1,600	<2	--	--	8.1 J
MW-11D	08/26/20	N	19 J	5.2	830 J	4.9	86	<0.2	1,600	<2	--	--	7.8 J
MW-11D	12/10/20	N	20	5	680	5.8	85	<0.2	1,700	<2	--	--	7.8
MW-11D	02/24/21	N	21 J	4.7	770 J	6.3	83	<0.22	1,600	2.1	--	--	5.7
MW-11D	05/19/21	N	20 J	5.3	830	5.8	82	<0.2	1,800	<2	--	--	7.4
MW-11D	08/24/21	N	23 J	4.1	820	5.9	79	<0.2	1,600	<2	--	--	5.3 J
MW-11D	12/09/21	N	--	--	--	--	--	--	--	--	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-09	05/19/21	N	--	--	--
MW-09	12/08/21	N	--	--	--
MW-09	12/08/21	FD	--	--	--
MW-09	06/08/22	N	--	--	--
MW-09	06/08/22	FD	--	--	--
MW-10	04/23/20	N	--	--	--
MW-10	11/30/20	N	250	1,400	--
MW-10	11/30/20	FD	260	1,400	--
MW-10	02/24/21	N	--	--	--
MW-10	05/05/21	N	270	1,700	--
MW-10	09/22/21	N	280	1,800	--
MW-10	12/08/21	N	--	--	--
MW-10	12/08/21	FD	--	--	--
MW-10	06/08/22	N	--	--	--
MW-10	06/08/22	FD	--	--	--
MW-10D	02/24/20	N	370	2,500	<1
MW-10D	05/28/20	N	380	2,400	<1
MW-10D	08/19/20	N	370	2,500	<1
MW-10D	12/10/20	N	390	2,400	<1
MW-10D	02/24/21	N	380	2,300	<1
MW-10D	05/05/21	N	370	2,300	--
MW-10D	05/19/21	N	380	2,300	<1
MW-10D	08/24/21	N	370	2,200	<1
MW-10D	09/22/21	N	270	1,900	--
MW-10D	12/08/21	N	--	--	--
MW-10D	06/08/22	N	--	--	--
MW-11	04/23/20	N	--	--	--
MW-11	12/10/20	N	170	1,300	--
MW-11	05/19/21	N	--	--	--
MW-11	12/09/21	N	--	--	--
MW-11	06/08/22	N	--	--	--
MW-11D	01/29/20	N	460	3,500	<1
MW-11D	02/24/20	N	480	3,800	<1
MW-11D	05/28/20	N	520	4,400	<1
MW-11D	08/26/20	N	500	4,400	<1 J
MW-11D	12/10/20	N	490	3,500	<1
MW-11D	02/24/21	N	500	3,700	<1
MW-11D	05/19/21	N	550	4,000	<1
MW-11D	08/24/21	N	360	4,100	<1
MW-11D	12/09/21	N	--	--	--

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MW-11D	06/08/22	N	220	230	--	--	--	--	--	--	--	--	--
MW-12	04/28/20	N	2,700	2,800	45	--	--	--	--	--	--	0.0014	8.8
MW-12	12/14/20	N	1,600	1,900	45	41	1.2	22 J	--	0.068 J	5.8	0.0022	10
MW-12	12/14/20	FD	1,600	1,900	48	43	1.1	24 J	--	0.12 J	6.4	0.0023	10
MW-12	02/17/21	N	1,400	1,600	--	--	--	--	--	--	--	--	12
MW-12	05/26/21	N	1,300	1,200	--	--	--	--	--	--	--	--	11
MW-12	12/13/21	N	2,000	2,000	35	--	--	--	--	--	--	0.00064	9.7
MW-12	06/08/22	N	2,300	2,400	--	--	--	--	--	--	--	--	12
MW-12	06/08/22	FD	2,200	2,400	--	--	--	--	--	--	--	--	13
MW-13	12/14/20	N	23	24	1.9	--	0.68	120 J	--	0.043 J	21	0.0026	12
MW-13	12/07/21	N	19	20	0.8 J	--	--	--	--	--	--	0.0051 J	12
MW-13	12/07/21	FD	18	20	0.81 J	--	--	--	--	--	--	0.0047 J	11
MW-13	06/16/22	N	22	22	--	--	--	--	--	--	--	--	--
MW-14	06/24/20	N	12	12	0.12	--	--	--	--	--	--	0.00079	10
MW-14	06/24/20	FD	12	12	0.18 J	--	--	--	--	--	--	0.00072	10
MW-14	12/10/20	N	13	13	<0.1	190	0.25	160	--	0.067 J	30	0.00097	10
MW-14	05/28/21	N	17	16	0.82	--	--	--	--	--	--	0.0022	12
MW-14	12/07/21	N	12	12	<0.1 J	--	--	--	--	--	--	0.0026 J	13
MW-14	06/16/22	N	11	11	--	--	--	--	--	--	--	--	--
MW-15	12/10/20	N	15	14	--	--	0.2	130	--	0.069 J	36	<0.0005	3.1
MW-15	12/02/21	N	13	13	1.2 J	--	--	--	--	--	--	<0.0005	--
MW-15	06/14/22	N	12	11 J	--	--	--	--	--	--	--	--	--
MW-19	04/27/20	N	32	40	--	--	--	--	--	--	--	--	--
MW-19	12/07/20	N	94	92 J	--	--	0.62 J	100 J	--	0.022 J	19 J	<0.0005	6.6 J
MW-19	05/28/21	N	500	500	--	--	--	--	--	--	--	--	--
MW-19	12/13/21	N	43	48	0.3	--	--	--	--	--	--	0.0028	--
MW-19	06/17/22	N	55	54	--	--	--	--	--	--	--	--	--
MW-20-070	04/24/20	N	2,500	2,500	2.2	--	--	--	--	--	--	0.0022	29
MW-20-070	12/04/20	N	1,600 J	1,700	--	--	0.6 J	78	--	0.024 J	22 J	<0.0005	27
MW-20-070	05/28/21	N	1,700	1,700	--	--	--	--	--	--	--	--	22
MW-20-070	12/15/21	N	570	590	0.9	47	--	--	--	0.037 J	--	<0.0005	18
MW-20-070	02/03/22	N	520	--	2.1 J	32	--	--	--	<0.02 J	--	0.0046	--
MW-20-070	03/10/22	N	450	420	1.5	26	--	--	--	<0.02	--	<0.0005	20
MW-20-070	03/10/22	FD	450	450	1.6	26	--	--	--	<0.02	--	<0.0005	21
MW-20-070	04/14/22	N	320	--	1.4	24	--	--	--	<0.02	--	<0.0005	--
MW-20-070	05/20/22	N	330	--	1.1 J	29 J	--	--	--	<0.02	--	0.0016	--
MW-20-070	05/20/22	FD	330	--	0.95 J	26 J	--	--	--	<0.02	--	0.0013	--
MW-20-070	06/13/22	N	610	610 J	0.62 J	35	--	--	--	<0.02	--	<0.0005	19
MW-20-070	07/13/22	N	1,200	--	0.6	41	--	--	--	0.035 J	--	0.0035	--
MW-20-070	08/09/22	N	700	720	<0.1	53 J	--	--	--	<0.02 J	--	<0.0005 J	19 J

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MW-11D	06/08/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-12	04/28/20	N	--	13	--	--	--	--	--	--	--	--	15
MW-12	12/14/20	N	--	28	1,200	20	110	--	1,800	--	--	--	15
MW-12	12/14/20	FD	--	28	1,400	20	110	--	1,700	--	--	--	14
MW-12	02/17/21	N	--	29	--	--	--	--	--	--	--	--	15
MW-12	05/26/21	N	--	34	--	--	--	--	--	--	--	--	16
MW-12	12/13/21	N	--	19	--	--	--	--	--	--	--	--	17
MW-12	06/08/22	N	--	15	--	--	--	--	--	--	14	--	--
MW-12	06/08/22	FD	--	16	--	--	--	--	--	--	15	--	--
MW-13	12/14/20	N	--	3.3	340	--	71	--	680	--	--	--	--
MW-13	12/07/21	N	--	3	--	--	--	--	--	--	--	--	5.4
MW-13	12/07/21	FD	--	2.8	--	--	--	--	--	--	--	--	5.5
MW-13	06/16/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-14	06/24/20	N	--	1.8	--	--	--	--	--	--	--	--	3.2
MW-14	06/24/20	FD	--	2	--	--	--	--	--	--	--	--	2.8
MW-14	12/10/20	N	--	2	370	2.5	60	--	940	--	--	--	2.8
MW-14	05/28/21	N	--	2	--	--	--	--	--	--	--	--	3.7
MW-14	12/07/21	N	--	2.1	--	--	--	--	--	--	--	--	3.7
MW-14	06/16/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-15	12/10/20	N	--	3.5	220	--	67	--	590	--	--	--	--
MW-15	12/02/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-15	06/14/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-19	04/27/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-19	12/07/20	N	--	3.2 J	230 J	--	100	--	510	--	--	--	--
MW-19	05/28/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-19	12/13/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-19	06/17/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-20-070	04/24/20	N	--	7.7	--	--	--	--	--	--	--	--	13
MW-20-070	12/04/20	N	5.9	11	280	--	88	--	470	--	--	--	17
MW-20-070	05/28/21	N	--	21	--	--	--	--	--	--	--	--	25
MW-20-070	12/15/21	N	--	33 J	--	--	--	<0.2	--	--	--	<5	39
MW-20-070	02/03/22	N	--	--	--	--	--	--	--	--	21	--	--
MW-20-070	03/10/22	N	--	15	--	--	--	<0.2	--	--	17	--	--
MW-20-070	03/10/22	FD	--	16	--	--	--	<0.2	--	--	17	--	--
MW-20-070	04/14/22	N	--	--	--	--	--	--	--	--	14 J	--	--
MW-20-070	05/20/22	N	--	--	--	--	--	--	--	--	16	--	--
MW-20-070	05/20/22	FD	--	--	--	--	--	--	--	--	16	--	--
MW-20-070	06/13/22	N	--	22	--	--	--	<0.2	--	--	24	<5	--
MW-20-070	07/13/22	N	--	--	--	--	--	--	--	--	28	--	--
MW-20-070	08/09/22	N	--	43	--	--	--	<0.2	--	--	40	<5	--

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MW-11D	06/08/22	N	--	--	--
MW-12	04/28/20	N	--	--	--
MW-12	12/14/20	N	470	3,800	--
MW-12	12/14/20	FD	460	3,900	--
MW-12	02/17/21	N	--	--	--
MW-12	05/26/21	N	--	--	--
MW-12	12/13/21	N	--	--	--
MW-12	06/08/22	N	--	--	--
MW-12	06/08/22	FD	--	--	--
MW-13	12/14/20	N	150	1,600	--
MW-13	12/07/21	N	--	--	--
MW-13	12/07/21	FD	--	--	--
MW-13	06/16/22	N	--	--	--
MW-14	06/24/20	N	--	--	--
MW-14	06/24/20	FD	--	--	--
MW-14	12/10/20	N	150	1,900	--
MW-14	05/28/21	N	--	--	--
MW-14	12/07/21	N	--	--	--
MW-14	06/16/22	N	--	--	--
MW-15	12/10/20	N	170	1,400	--
MW-15	12/02/21	N	--	--	--
MW-15	06/14/22	N	--	--	--
MW-19	04/27/20	N	--	--	--
MW-19	12/07/20	N	160	1,200	--
MW-19	05/28/21	N	--	--	--
MW-19	12/13/21	N	--	--	--
MW-19	06/17/22	N	--	--	--
MW-20-070	04/24/20	N	--	--	--
MW-20-070	12/04/20	N	320	1,400	--
MW-20-070	05/28/21	N	--	--	--
MW-20-070	12/15/21	N	490	--	<1
MW-20-070	02/03/22	N	330	--	<1
MW-20-070	03/10/22	N	300	--	<5
MW-20-070	03/10/22	FD	300	--	<1
MW-20-070	04/14/22	N	250	--	<5
MW-20-070	05/20/22	N	280	--	<1
MW-20-070	05/20/22	FD	270	--	<1
MW-20-070	06/13/22	N	410	--	<1
MW-20-070	07/13/22	N	530	--	<1
MW-20-070	08/09/22	N	690	--	<1

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MW-20-070	08/09/22	FD	690	680	<0.1	50 J	--	--	--	<0.02 J	--	<0.0005 J	18 J
MW-20-070	09/14/22	N	560	--	1.3	32	--	--	--	<0.02	--	<0.0005	--
MW-20-100	04/24/20	N	750	760	1.3	--	--	--	--	--	--	0.0011	4.8
MW-20-100	12/04/20	N	610 J	660	--	--	1 J	95	--	<0.02 J	19 J	<0.0005	3.8
MW-20-100	05/28/21	N	680	690	--	--	--	--	--	--	--	--	3.8
MW-20-100	12/15/21	N	650	660	1.3	24	--	--	--	0.033 J	--	<0.0005	3.6
MW-20-100	02/03/22	N	1,300	--	1.6 J	31	--	--	--	0.022 J	--	0.0052	--
MW-20-100	03/10/22	N	2,100	2,000	0.65	44	--	--	--	0.1	--	<0.0005	3.1
MW-20-100	04/14/22	N	1,300	--	<0.1	83	--	--	--	<0.02	--	<0.0005	--
MW-20-100	04/14/22	FD	1,300	--	<0.1	83	--	--	--	<0.02	--	<0.0005	--
MW-20-100	05/20/22	N	880	--	<0.1 J	62 J	--	--	--	<0.02	--	<0.0005	--
MW-20-100	06/13/22	N	910	980 J	<0.1 J	66	--	--	--	<0.02 J	--	<0.0005	2.1
MW-20-100	07/13/22	N	920	--	<0.1	74	--	--	--	0.021 J	--	<0.0005	--
MW-20-100	07/13/22	FD	930	--	<0.1	79	--	--	--	0.023 J	--	<0.0005	--
MW-20-100	08/09/22	N	1,600	1,700	<0.1	56 J	--	--	--	<0.02 J	--	<0.0005 J	1.7 J
MW-20-100	09/14/22	N	1,700	--	<0.1	77	--	--	--	<0.02	--	<0.0005	--
MW-20-130	04/24/20	N	5,900	6,100	0.97	--	--	--	--	--	--	0.00084	42
MW-20-130	12/04/20	N	4,000 J	4,400	<0.1	--	2 J	140	--	0.092 J	20 J	0.0025	20
MW-20-130	12/04/20	FD	4,100 J	4,500	<0.1	--	2.2 J	150	--	0.023 J	21 J	0.0023	19
MW-20-130	05/28/21	N	4,100	4,000	3.1	--	--	--	--	--	--	0.0015	24
MW-20-130	12/15/21	N	3,300	3,400	0.22	24	--	--	--	<0.02 J	--	0.0016	22
MW-20-130	02/03/22	N	6,000	--	<0.1	29	--	--	--	<0.02 J	--	0.0053	--
MW-20-130	03/10/22	N	4,800	4,500	<0.1	26	--	--	--	0.041	--	0.0021	32
MW-20-130	04/14/22	N	3,300	--	<0.1	29	--	--	--	<0.1	--	0.00072	--
MW-20-130	05/20/22	N	2,000	--	<0.1 J	32 J	--	--	--	<0.02	--	0.0032	--
MW-20-130	06/13/22	N	1,700	1,600 J	<0.1 J	32	--	--	--	<0.02	--	0.0022	8.5
MW-20-130	06/13/22	FD	1,700	1,700 J	<0.1 J	34	--	--	--	0.04 J	--	0.0024	9
MW-20-130	07/13/22	N	1,800	--	<0.1	26	--	--	--	0.29 J	--	0.0027	--
MW-20-130	08/09/22	N	1,800	1,700	<0.1	24 J	--	--	--	<0.02 J	--	0.0023 J	6.9 J
MW-20-130	09/14/22	N	1,300	--	<0.1	33	--	--	--	<0.02	--	0.016	--
MW-21	04/30/20	N	4.6	5.4	--	--	--	--	--	--	--	--	46
MW-21	12/15/20	N	<1	<1	--	--	6.4	190 J	--	<0.1	97	0.038	64
MW-21	06/08/21	N	<1	1.7	--	--	--	--	--	--	--	--	43
MW-21	12/16/21	N	<1	<1	<0.1	41	--	--	--	0.076 J	--	0.2	65
MW-21	02/03/22	N	6.7	--	6.4 J	32	--	--	--	0.77 J	--	0.04	--
MW-21	03/14/22	N	2.3	5.6	14 J	35	--	--	--	0.13	--	0.028	28
MW-21	03/14/22	FD	2.4	5.7	9 J	36	--	--	--	0.16	--	0.029	28
MW-21	04/12/22	N	0.34	--	6 J	31	--	--	--	0.068	--	0.14	--
MW-21	05/18/22	N	<0.2	--	7.6	35	--	--	--	0.93 J	--	0.48	--
MW-21	06/14/22	N	<0.2	3.8	8.2	38 J	--	--	--	1.10	--	0.68	64

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-20-070	08/09/22	FD	--	41	--	--	--	<0.23	--	--	39	<5	--
MW-20-070	09/14/22	N	--	--	--	--	--	--	--	--	25	--	--
MW-20-100	04/24/20	N	--	5.4	--	--	--	--	--	--	--	--	7.5
MW-20-100	12/04/20	N	6.1 J	5.6	250	--	140	--	460	--	--	--	6.7
MW-20-100	05/28/21	N	--	5	--	--	--	--	--	--	--	--	6.6
MW-20-100	12/15/21	N	--	6 J	--	--	--	<0.2	--	--	--	<2.5	7.9
MW-20-100	02/03/22	N	--	--	--	--	--	--	--	--	6	--	--
MW-20-100	03/10/22	N	--	14	--	--	--	0.29	--	--	9.3	--	--
MW-20-100	04/14/22	N	--	--	--	--	--	--	--	--	6.3 J	--	--
MW-20-100	04/14/22	FD	--	--	--	--	--	--	--	--	6.5 J	--	--
MW-20-100	05/20/22	N	--	--	--	--	--	--	--	--	4.3	--	--
MW-20-100	06/13/22	N	--	11	--	--	--	<0.2	--	--	5.1	<5	--
MW-20-100	07/13/22	N	--	--	--	--	--	--	--	--	5.3	--	--
MW-20-100	07/13/22	FD	--	--	--	--	--	--	--	--	5.3	--	--
MW-20-100	08/09/22	N	--	15	--	--	--	<0.2	--	--	8.2	<5	--
MW-20-100	09/14/22	N	--	--	--	--	--	--	--	--	9.1	--	--
MW-20-130	04/24/20	N	--	22	--	--	--	--	--	--	--	--	11
MW-20-130	12/04/20	N	64	53	1,200	--	57 J	--	2,200	--	--	--	11
MW-20-130	12/04/20	FD	67 J	51	1,300	--	92 J	--	2,500	--	--	--	11
MW-20-130	05/28/21	N	--	39	--	--	--	--	--	--	--	--	12
MW-20-130	12/15/21	N	--	37 J	--	--	--	<0.2	--	--	--	<5	13
MW-20-130	02/03/22	N	--	--	--	--	--	--	--	--	9.3	--	--
MW-20-130	03/10/22	N	--	21	--	--	--	<0.2	--	--	9	--	--
MW-20-130	04/14/22	N	--	--	--	--	--	--	--	--	7 J	--	--
MW-20-130	05/20/22	N	--	--	--	--	--	--	--	--	4	--	--
MW-20-130	06/13/22	N	--	13	--	--	--	<0.2	--	--	4.3	<5	--
MW-20-130	06/13/22	FD	--	14	--	--	--	<0.2	--	--	4.3	<5	--
MW-20-130	07/13/22	N	--	--	--	--	--	--	--	--	5.4	--	--
MW-20-130	08/09/22	N	--	18	--	--	--	<0.23	--	--	5.3	<5	--
MW-20-130	09/14/22	N	--	--	--	--	--	--	--	--	4.1	--	--
MW-21	04/30/20	N	--	42	--	--	--	--	--	--	--	--	2.8
MW-21	12/15/20	N	--	4.7	2,900	--	750	--	3,400	--	--	--	0.21
MW-21	06/08/21	N	--	4.2	--	--	--	--	--	--	--	--	0.81
MW-21	12/16/21	N	--	4.5	--	--	--	<0.2	--	--	--	<5	0.27
MW-21	02/03/22	N	--	--	--	--	--	--	--	--	4.8	--	--
MW-21	03/14/22	N	--	76	--	--	--	<0.2	--	--	3.9	--	--
MW-21	03/14/22	FD	--	78	--	--	--	<0.2	--	--	3.7	--	--
MW-21	04/12/22	N	--	--	--	--	--	--	--	--	1	--	--
MW-21	05/18/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-21	06/14/22	N	--	1.4 J	--	--	--	<0.2	--	--	<0.5	<5	--

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-20-070	08/09/22	FD	690	--	<1
MW-20-070	09/14/22	N	420	--	<1
MW-20-100	04/24/20	N	--	--	--
MW-20-100	12/04/20	N	210	1,200	--
MW-20-100	05/28/21	N	--	--	--
MW-20-100	12/15/21	N	200	--	<1
MW-20-100	02/03/22	N	270	--	<1
MW-20-100	03/10/22	N	400	--	<1
MW-20-100	04/14/22	N	740	--	<1
MW-20-100	04/14/22	FD	740	--	<1
MW-20-100	05/20/22	N	650	--	<1
MW-20-100	06/13/22	N	700	--	<1
MW-20-100	07/13/22	N	880	--	<1
MW-20-100	07/13/22	FD	890	--	<1
MW-20-100	08/09/22	N	650	--	<1
MW-20-100	09/14/22	N	810	--	<1
MW-20-130	04/24/20	N	--	--	--
MW-20-130	12/04/20	N	1,000	5,200	--
MW-20-130	12/04/20	FD	940	5,800	--
MW-20-130	05/28/21	N	--	--	--
MW-20-130	12/15/21	N	960	--	<1
MW-20-130	02/03/22	N	870	--	<1
MW-20-130	03/10/22	N	950	--	<1
MW-20-130	04/14/22	N	1,100	--	<1
MW-20-130	05/20/22	N	1,400	--	<1
MW-20-130	06/13/22	N	1,400	--	<1
MW-20-130	06/13/22	FD	1,400	--	<1
MW-20-130	07/13/22	N	1,100	--	<1
MW-20-130	08/09/22	N	1,100	--	<1
MW-20-130	09/14/22	N	1,500	--	<1
MW-21	04/30/20	N	--	--	--
MW-21	12/15/20	N	1,600	9,700	--
MW-21	06/08/21	N	--	--	--
MW-21	12/16/21	N	1,600	--	<1
MW-21	02/03/22	N	1,100	--	<25
MW-21	03/14/22	N	1,400	--	<20
MW-21	03/14/22	FD	1,400	--	<1
MW-21	04/12/22	N	1,500	--	<1
MW-21	05/18/22	N	2,000	--	<1
MW-21	06/14/22	N	1,900	--	<1

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-21	07/13/22	N	<0.2	--	3.3	29	--	--	--	2.50 J	--	0.28	--
MW-21	08/12/22	N	<1	5.8	5.7 J	25	--	--	--	1.20	--	0.28 J	82 J
MW-21	09/15/22	N	<0.2	--	12	24	--	--	--	0.13	--	0.26	--
MW-22	06/16/20	N	<0.2	<1	3.2	--	--	--	--	--	--	1.60	--
MW-22	12/08/20	N	<1	<1	14	120	3.9 J	560 J	--	8.80 J	280 J	4	32
MW-22	12/08/20	FD	<1	<1	15	130	4.1 J	550 J	--	9.10 J	290 J	4.10	33
MW-22	04/27/21	N	<1	<1	8.2	--	--	--	--	--	--	1.80	--
MW-22	11/30/21	N	<1	<1	22 J	87	--	--	--	8.20	--	2.50	36
MW-22	11/30/21	FD	<1	<1	24 J	92	--	--	--	8	--	2.50	38
MW-22	03/04/22	N	<1	--	6.5	110	--	--	--	11	--	4.30	--
MW-22	05/05/22	N	<1	<1	3.7 J	110 J	--	--	--	4.30	--	2.10	--
MW-22	05/05/22	FD	<1	<1	5.1 J	150 J	--	--	--	4.80	--	2	--
MW-22	08/19/22	N	<1	--	14	150	--	--	--	16	--	5.30 J	--
MW-23-060	06/18/20	N	40	37	0.86 J	--	--	--	--	--	--	0.001	--
MW-23-060	12/08/20	N	42	40	4.5	--	1.6 J	810 J	--	<0.1 J	5.2 J	0.00095	21
MW-23-060	04/30/21	N	41	38	<0.1	--	--	--	--	--	--	0.00073	--
MW-23-060	12/09/21	N	36	35	<0.1 J	--	--	--	--	--	--	0.0016	24
MW-23-060	12/09/21	FD	36	34	<0.1 J	--	--	--	--	--	--	0.0015	23
MW-23-060	06/09/22	N	43	38 J	--	--	--	--	--	--	--	--	--
MW-23-080	06/18/20	N	<1	<1	4.9 J	--	--	--	--	--	--	0.0012	--
MW-23-080	12/08/20	N	<1	<1	5.9	--	1.9 J	770 J	--	<0.1 J	<500	0.001	45
MW-23-080	04/30/21	N	<1	1.3	<0.1	--	--	--	--	--	--	0.0015	--
MW-23-080	12/09/21	N	<1	<1	<0.1 J	--	--	--	--	--	--	0.00094	46
MW-23-080	06/09/22	N	<1	<1 J	--	--	--	--	--	--	--	--	--
MW-24A	05/01/20	N	<0.2	2.9	<0.1	--	--	--	--	--	--	0.017	100
MW-24A	10/05/20	N	<0.2	3.3	--	--	--	--	--	--	--	--	--
MW-24A	12/01/20	N	<0.2	<1	0.43	23	--	--	--	--	--	0.02	120
MW-24A	12/01/20	FD	<0.2	<1	0.35	23	--	--	--	--	--	0.02	110
MW-24A	05/05/21	N	<0.2	<1 J	<0.1	--	--	11	--	--	--	0.015	96
MW-24A	12/09/21	N	<0.2	1.9	<0.1 J	--	--	--	--	--	--	0.43	110
MW-24A	06/16/22	N	<0.2	<1	--	--	--	--	--	--	--	--	46
MW-24A	06/16/22	FD	<0.2	<1	--	--	--	--	--	--	--	--	42
MW-24B	05/01/20	N	120	140	<0.5	--	--	--	--	--	--	0.096	56
MW-24B	10/05/20	N	<1	57	--	--	--	--	--	--	--	--	--
MW-24B	12/01/20	N	64	65	3.8	74	--	--	--	--	--	0.12	63
MW-24B	05/05/21	N	48	45 J	<0.1	--	--	97	--	--	--	0.11	59
MW-24B	12/09/21	N	<1	1.3	<0.1 J	--	--	--	--	--	--	0.087	63
MW-24B	12/09/21	FD	<1	1.1	<0.1 J	--	--	--	--	--	--	0.087	64
MW-24B	06/16/22	N	45	160	--	--	--	--	--	--	--	--	36
MW-24BR	12/02/20	N	<1	<1	0.63	--	3	100	--	0.8	4.3	0.16	58

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-21	07/13/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-21	08/12/22	N	--	<0.5	--	--	--	<0.23	--	--	<0.5	<5	--
MW-21	09/15/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-22	06/16/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-22	12/08/20	N	--	<0.5	4,500 J	1.1	690	--	7,700	--	--	--	--
MW-22	12/08/20	FD	--	<0.5	4,600 J	1.1	690	--	8,000	--	--	--	--
MW-22	04/27/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-22	11/30/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-22	11/30/21	FD	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-22	03/04/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-22	05/05/22	N	--	--	--	--	--	--	--	--	<0.5	--	<0.1
MW-22	05/05/22	FD	--	--	--	--	--	--	--	--	<0.5	--	<0.1
MW-22	08/19/22	N	--	--	--	--	--	--	--	--	<0.5	--	<0.1
MW-23-060	06/18/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-23-060	12/08/20	N	--	4.8	3,000 J	--	16	--	5,800	--	--	--	--
MW-23-060	04/30/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-23-060	12/09/21	N	--	5.3	--	--	--	--	--	--	--	--	5.7
MW-23-060	12/09/21	FD	--	5	--	--	--	--	--	--	--	--	5.8
MW-23-060	06/09/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-23-080	06/18/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-23-080	12/08/20	N	--	5	3,500 J	--	50	--	5,700	--	--	--	--
MW-23-080	04/30/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-23-080	12/09/21	N	--	4.5	--	--	--	--	--	--	--	--	4.7
MW-23-080	06/09/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-24A	05/01/20	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-24A	10/05/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-24A	12/01/20	N	--	<0.5	--	<1	--	--	--	--	--	--	--
MW-24A	12/01/20	FD	--	<0.5	--	<1	--	--	--	--	--	--	--
MW-24A	05/05/21	N	3.6 J	<0.5	400	--	--	--	300	--	--	--	<0.05
MW-24A	12/09/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-24A	06/16/22	N	--	0.63	--	--	--	--	--	--	0.55	--	--
MW-24A	06/16/22	FD	--	<0.5	--	--	--	--	--	--	0.5	--	--
MW-24B	05/01/20	N	--	<2.5	--	--	--	--	--	--	--	--	0.87
MW-24B	10/05/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-24B	12/01/20	N	--	1.8	--	3.6	--	--	--	--	--	--	--
MW-24B	05/05/21	N	51 J	1.4	5,600	--	--	--	6,700	--	--	--	0.48
MW-24B	12/09/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-24B	12/09/21	FD	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-24B	06/16/22	N	--	1.4	--	--	--	--	--	--	1.3	--	--
MW-24BR	12/02/20	N	--	<0.5	2,700	--	45	--	4,400	--	--	--	<0.1

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MW-21	07/13/22	N	1,800	--	<1
MW-21	08/12/22	N	1,600	--	<1
MW-21	09/15/22	N	1,500	--	<1
MW-22	06/16/20	N	--	--	--
MW-22	12/08/20	N	2,000	15,000	--
MW-22	12/08/20	FD	2,000	15,000	--
MW-22	04/27/21	N	--	--	--
MW-22	11/30/21	N	--	--	1.3
MW-22	11/30/21	FD	--	--	1.4
MW-22	03/04/22	N	--	--	1
MW-22	05/05/22	N	--	--	1.8
MW-22	05/05/22	FD	--	--	1.8
MW-22	08/19/22	N	--	--	1.3
MW-23-060	06/18/20	N	--	--	--
MW-23-060	12/08/20	N	670	12,000	--
MW-23-060	04/30/21	N	--	--	--
MW-23-060	12/09/21	N	--	--	--
MW-23-060	12/09/21	FD	--	--	--
MW-23-060	06/09/22	N	--	--	--
MW-23-060	12/09/21	FD	--	--	--
MW-23-060	06/09/22	N	--	--	--
MW-23-080	06/18/20	N	--	--	--
MW-23-080	12/08/20	N	1,000	12,000	--
MW-23-080	04/30/21	N	--	--	--
MW-23-080	12/09/21	N	--	--	--
MW-23-080	06/09/22	N	--	--	--
MW-24A	05/01/20	N	--	--	--
MW-24A	10/05/20	N	--	--	--
MW-24A	12/01/20	N	--	--	--
MW-24A	12/01/20	FD	--	--	--
MW-24A	05/05/21	N	180	990	--
MW-24A	12/09/21	N	--	--	--
MW-24A	06/16/22	N	--	--	--
MW-24A	06/16/22	FD	--	--	--
MW-24B	05/01/20	N	--	--	--
MW-24B	10/05/20	N	--	--	--
MW-24B	12/01/20	N	--	--	--
MW-24B	05/05/21	N	760	13,000	--
MW-24B	12/09/21	N	--	--	--
MW-24B	12/09/21	FD	--	--	--
MW-24B	06/16/22	N	--	--	--
MW-24BR	12/02/20	N	450	8,900	--

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MW-24BR	12/10/21	N	<1	<1	<0.1	--	--	--	--	--	--	0.079	--
MW-24BR	06/17/22	N	<1	<1	--	--	--	--	--	--	--	--	--
MW-25	06/24/20	N	56	55	0.96	--	--	--	--	--	--	0.0027	4.3
MW-25	06/24/20	FD	57	56	0.93	--	--	--	--	--	--	0.0032	4.4
MW-25	12/07/20	N	68	65 J	0.79	--	0.55 J	110 J	--	0.032 J	27 J	0.00055	5.9 J
MW-25	05/25/21	N	55	56	1.5 J	--	--	--	--	--	--	0.00062	4.6
MW-25	05/25/21	FD	55	56	1.2 J	--	--	--	--	--	--	0.00051	4.7
MW-25	12/07/21	N	70	80	0.75 J	--	--	--	--	--	--	0.0036 J	14
MW-25	06/14/22	N	58	53 J	--	--	--	--	--	--	--	--	--
MW-26	04/27/20	N	2,300	2,300	0.88	--	--	--	--	--	--	0.0015	35
MW-26	12/03/20	N	2,200	2,200	0.74	33 J	1.1	120	--	0.084	40	<0.0005	33
MW-26	12/03/20	FD	2,200	2,500	0.88	33 J	1.1	130	--	0.074	41	<0.0005	32
MW-26	05/20/21	N	2,200	2,300	0.48	--	--	--	--	--	--	<0.0005	31
MW-26	12/15/21	N	2,200	2,300	0.92	33	--	--	--	0.046 J	--	0.0023	16
MW-26	02/02/22	N	1,800	--	1.2 J	36	--	--	--	0.037	--	0.006	--
MW-26	03/14/22	N	1,600	1,600	0.82 J	45	--	--	--	0.022	--	0.62	13
MW-26	03/14/22	FD	1,600	1,600	0.75 J	44	--	--	--	<0.02	--	0.64	13
MW-26	04/13/22	N	740	--	<0.1	84	--	--	--	0.033 J	--	0.72	--
MW-26	05/20/22	N	340	--	<0.1 J	87 J	--	--	--	<0.02	--	0.12	--
MW-26	06/14/22	N	140	130	<0.1	88 J	--	--	--	0.049	--	0.88	6.4
MW-26	07/13/22	N	110	--	<0.1	79	--	--	--	0.076 J	--	0.11	--
MW-26	08/12/22	N	100	94	<0.1 J	73	--	--	--	<0.02	--	0.0032 J	4.1 J
MW-26	09/15/22	N	19	--	<0.1	73	--	--	--	0.038	--	0.77	--
MW-27-020	12/03/20	N	<0.2	<1	0.86 J	--	<100	73	--	0.1 J	27 J	0.012	5.8
MW-27-020	12/01/21	N	<0.2	<1	0.71	55	--	--	--	0.032	--	0.0094	5.9
MW-27-020	03/10/22	N	<0.2	--	0.89	53	--	--	--	0.034	--	0.056	--
MW-27-020	05/05/22	N	<0.2	<1	0.55 J	75 J	--	--	--	<0.02	--	<0.0005 J	--
MW-27-020	08/23/22	N	<0.2	--	0.67	57 J	--	--	--	<0.02 J	--	0.036 J	--
MW-27-060	12/03/20	N	<0.2	<1	9.8 J	--	0.1	78	--	0.35 J	23 J	0.28	4.6
MW-27-060	12/01/21	N	<0.2	<1	12	70	--	--	--	0.39	--	0.27	4.7
MW-27-060	03/10/22	N	<0.2	--	8.5	73	--	--	--	0.34	--	0.24	--
MW-27-060	05/05/22	N	<0.2	<1	9.1 J	68 J	--	--	--	0.43	--	0.24 J	--
MW-27-060	08/23/22	N	<0.2	--	8.7	62 J	--	--	--	0.33 J	--	0.26 J	--
MW-27-085	06/18/20	N	<0.2	<1	<0.1	--	--	--	--	--	--	0.11	16
MW-27-085	12/03/20	N	<1	<1	<0.1 J	--	1.1	180	--	0.1 J	56 J	0.078	21
MW-27-085	04/27/21	N	<0.2	<1	<0.1	--	--	--	--	--	--	0.1	16 J
MW-27-085	12/01/21	N	<1	<1	<0.1	43	--	--	--	0.17	--	0.14	19
MW-27-085	03/10/22	N	<1	--	<0.1	40	--	--	--	0.14	--	0.14	--
MW-27-085	05/05/22	N	<1	<1	<0.1 J	37 J	--	--	--	0.24	--	0.13 J	--
MW-27-085	08/23/22	N	<1	--	<0.1	50 J	--	--	--	0.27 J	--	0.26 J	--

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-24BR	12/10/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-24BR	06/17/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-25	06/24/20	N	--	7.5	--	--	--	--	--	--	--	--	13
MW-25	06/24/20	FD	--	7.4	--	--	--	--	--	--	--	--	12
MW-25	12/07/20	N	7.5 J	6.7 J	180 J	--	120	--	400	--	--	--	12
MW-25	05/25/21	N	--	7.3	--	--	--	--	--	--	--	--	11
MW-25	05/25/21	FD	--	8	--	--	--	--	--	--	--	--	12
MW-25	12/07/21	N	--	6.2	--	--	--	--	--	--	--	--	10
MW-25	06/14/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-26	04/27/20	N	--	39	--	--	--	--	--	--	--	--	21
MW-26	12/03/20	N	9	31 J	470	7.5	130	--	770	--	--	--	18
MW-26	12/03/20	FD	9.6	31 J	500	7.9	140	--	760	--	--	--	18
MW-26	05/20/21	N	--	33	--	--	--	--	--	--	--	--	19
MW-26	12/15/21	N	--	13 J	--	--	--	<0.2	--	--	--	<5	13
MW-26	02/02/22	N	--	--	--	--	--	--	--	--	12	--	--
MW-26	03/14/22	N	--	8.5	--	--	--	<0.2	--	--	6.8	--	--
MW-26	03/14/22	FD	--	8.5	--	--	--	<0.2	--	--	6.7	--	--
MW-26	04/13/22	N	--	--	--	--	--	--	--	--	3.1	--	--
MW-26	05/20/22	N	--	--	--	--	--	--	--	--	1.2	--	--
MW-26	06/14/22	N	--	1 J	--	--	--	<0.2	--	--	0.73	<5	--
MW-26	07/13/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-26	08/12/22	N	--	0.53	--	--	--	<0.23	--	--	<0.5	<5	--
MW-26	09/15/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-27-020	12/03/20	N	--	0.54	66 J	--	170	--	91	--	--	--	<0.1
MW-27-020	12/01/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-27-020	03/10/22	N	--	--	--	--	--	--	--	--	<0.1	--	--
MW-27-020	05/05/22	N	--	--	--	--	--	--	--	--	0.44	--	--
MW-27-020	08/23/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-27-060	12/03/20	N	--	<0.5	68 J	--	190	--	87	0.66	--	--	<0.1
MW-27-060	12/01/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-27-060	03/10/22	N	--	--	--	--	--	--	--	--	<0.1	--	--
MW-27-060	05/05/22	N	--	--	--	--	--	--	--	--	<0.25	--	<0.1
MW-27-060	08/23/22	N	--	--	--	--	--	--	--	--	<0.25	--	<0.1
MW-27-085	06/18/20	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-27-085	12/03/20	N	--	<0.5	1,400 J	--	260	--	2,900	2.2	--	--	<0.1
MW-27-085	04/27/21	N	--	<0.5	--	--	--	--	--	--	--	--	0.061
MW-27-085	12/01/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-27-085	03/10/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-27-085	05/05/22	N	--	--	--	--	--	--	--	--	<0.25	--	<0.1
MW-27-085	08/23/22	N	--	--	--	--	--	--	--	--	<0.25	--	<0.1

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-24BR	12/10/21	N	--	--	--
MW-24BR	06/17/22	N	--	--	--
MW-25	06/24/20	N	--	--	--
MW-25	06/24/20	FD	--	--	--
MW-25	12/07/20	N	220	1,200	--
MW-25	05/25/21	N	--	--	--
MW-25	05/25/21	FD	--	--	--
MW-25	12/07/21	N	--	--	--
MW-25	06/14/22	N	--	--	--
MW-26	04/27/20	N	--	--	--
MW-26	12/03/20	N	470	2,200	--
MW-26	12/03/20	FD	460	2,200	--
MW-26	05/20/21	N	--	--	--
MW-26	12/15/21	N	430	--	<1
MW-26	02/02/22	N	400	--	<5
MW-26	03/14/22	N	380	--	<1
MW-26	03/14/22	FD	390	--	<1
MW-26	04/13/22	N	480	--	<1
MW-26	05/20/22	N	560	--	<1
MW-26	06/14/22	N	550	--	<1
MW-26	07/13/22	N	540	--	<1
MW-26	08/12/22	N	520	--	<1
MW-26	09/15/22	N	550	--	<1
MW-27-020	12/03/20	N	220	620	--
MW-27-020	12/01/21	N	--	--	1
MW-27-020	03/10/22	N	--	--	1
MW-27-020	05/05/22	N	--	--	1.5
MW-27-020	08/23/22	N	--	--	1.1
MW-27-060	12/03/20	N	210	640	--
MW-27-060	12/01/21	N	--	--	1.3
MW-27-060	03/10/22	N	--	--	1.3
MW-27-060	05/05/22	N	--	--	1.4
MW-27-060	08/23/22	N	--	--	1.4
MW-27-085	06/18/20	N	--	--	--
MW-27-085	12/03/20	N	660	6,800	--
MW-27-085	04/27/21	N	--	--	--
MW-27-085	12/01/21	N	--	--	<1
MW-27-085	03/10/22	N	--	--	<1
MW-27-085	05/05/22	N	--	--	<1
MW-27-085	08/23/22	N	--	--	<1

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-28-025	06/23/20	N	<0.2	<1	0.52	--	--	--	--	--	--	0.0022	4.1
MW-28-025	12/15/20	N	<0.2	<1	0.58	--	0.43	99 J	--	<0.02	30	0.0031	4.5
MW-28-025	04/29/21	N	<0.2	<1	0.7	--	--	--	--	--	--	0.24	5.5
MW-28-025	12/08/21	N	<0.2	<1	0.4	68	--	--	--	<0.02	--	0.006	4.6
MW-28-025	03/08/22	N	<0.2	--	0.48 J	61	--	--	--	<0.02 J	--	0.0067	--
MW-28-025	05/04/22	N	<0.2	<1	0.57	57	--	--	--	<0.02 J	--	0.046	--
MW-28-025	08/23/22	N	<0.2	--	0.38 J	58 J	--	--	--	<0.02	--	0.051 J	--
MW-28-090	06/23/20	N	<0.2	<1	1	--	--	--	--	--	--	0.28	20
MW-28-090	12/15/20	N	<0.2	<1	2	--	1.3	190 J	--	0.43 J	52	0.12	24
MW-28-090	04/29/21	N	<0.2	<1	0.43	--	--	--	--	--	--	0.29	25
MW-28-090	12/08/21	N	<0.2	<1	<0.1	27	--	--	--	0.59	--	0.14	26
MW-28-090	03/08/22	N	<0.2	--	<0.1 J	27	--	--	--	0.87 J	--	0.27	--
MW-28-090	05/04/22	N	<0.2	<1	<0.1	29	--	--	--	0.99 J	--	0.43	--
MW-28-090	08/23/22	N	<0.2	--	<0.1	32 J	--	--	--	1.10 J	--	0.41 J	--
MW-29	06/23/20	N	<0.2	<1	8.4	--	--	--	--	--	--	0.29	18
MW-29	12/04/20	N	<0.2	<1	15	--	0.57 J	84	--	1.40 J	45 J	0.22	9.2
MW-29	04/29/21	N	<0.2	<1	8	--	--	--	--	--	--	0.39	13
MW-29	12/02/21	N	<0.2	<1	--	--	--	--	--	--	--	--	--
MW-29	03/08/22	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-29	06/13/22	N	<0.2	<1 J	--	--	--	--	--	--	--	--	--
MW-29	08/23/22	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-30-030	12/07/20	N	<1	<1 J	0.91	--	1.7 J	51 J	--	0.85 J	52 J	0.25	57 J
MW-30-030	12/03/21	N	<1	<1	<0.1	250	--	--	--	0.54 J	--	0.18	48
MW-30-030	03/09/22	N	<1	--	<0.1	120	--	--	--	0.26 J	--	0.079	--
MW-30-030	05/03/22	N	<1	<1	0.2	76	--	--	--	0.17	--	0.049	--
MW-30-030	08/22/22	N	<1	--	<0.1	240 J	--	--	--	0.37 J	--	0.11 J	--
MW-30-050	12/07/20	N	<0.2	<1 J	2.7	--	0.31 J	82 J	--	0.062 J	19 J	0.2	4.3 J
MW-30-050	12/03/21	N	<0.2	2.6	2.7	21	--	--	--	0.038 J	--	0.26	4.9
MW-30-050	03/09/22	N	1.4	--	2.4	18	--	--	--	<0.02 J	--	0.0021	--
MW-30-050	05/03/22	N	<0.2	2.6	2.2	19	--	--	--	0.02	--	0.38	--
MW-30-050	06/17/22	N	<0.2	--	2 J	21	--	--	--	0.058 J	--	0.54 J	--
MW-30-050	07/12/22	N	<0.2	--	2.2	22	--	--	--	0.034 J	--	0.5	--
MW-30-050	08/10/22	N	<0.2	--	2.5	18	--	--	--	0.052 J	--	0.36	--
MW-30-050	08/10/22	FD	<0.2	--	2.4	18	--	--	--	0.047 J	--	0.37	--
MW-30-050	09/13/22	N	3.4	--	2.9	20	--	--	--	<0.02	--	0.0018	--
MW-31-060	06/24/20	N	320	280	0.36	--	--	--	--	--	--	<0.0005	--
MW-31-060	12/07/20	N	410	400 J	0.53	--	0.54 J	100 J	--	0.03 J	19 J	0.001	22 J
MW-31-060	04/30/21	N	150	150	<0.1	--	--	--	--	--	--	0.0019	--
MW-31-060	12/16/21	N	310	310	0.52	55	--	--	--	0.021 J	--	0.0013	25
MW-31-060	12/16/21	FD	310	310	0.32	57	--	--	--	<0.02	--	0.0013	26

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MW-28-025	06/23/20	N	--	1.5	--	--	--	--	--	--	--	--	<0.05
MW-28-025	12/15/20	N	--	1.5	100	--	220	--	100	--	--	--	<0.05
MW-28-025	04/29/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-28-025	12/08/21	N	--	1.3	--	--	--	--	--	--	--	--	<0.1
MW-28-025	03/08/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-28-025	05/04/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-28-025	08/23/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-28-090	06/23/20	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-28-090	12/15/20	N	--	<0.5	1,300	--	260	--	1,800	1.8	--	--	<0.05
MW-28-090	04/29/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-28-090	12/08/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-28-090	03/08/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-28-090	05/04/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-28-090	08/23/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-29	06/23/20	N	--	3.3	--	--	--	--	--	--	--	--	0.13
MW-29	12/04/20	N	--	1.5	220	--	430	--	260	--	--	--	<0.1
MW-29	04/29/21	N	--	1.7	--	--	--	--	--	--	--	--	0.15
MW-29	12/02/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-29	03/08/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-29	06/13/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-29	08/23/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-30-030	12/07/20	N	--	1.6 J	1,400 J	--	1,000	--	1,200	--	--	--	<0.1
MW-30-030	12/03/21	N	--	0.54	--	--	--	--	--	--	--	--	0.1
MW-30-030	03/09/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-30-030	05/03/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-30-030	08/22/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-30-050	12/07/20	N	--	<0.5	81 J	--	180	--	87	--	--	--	<0.1
MW-30-050	12/03/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-30-050	03/09/22	N	--	--	--	--	--	--	--	--	0.14	--	--
MW-30-050	05/03/22	N	--	--	--	--	--	--	--	--	<0.1	--	--
MW-30-050	06/17/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-30-050	07/12/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-30-050	08/10/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-30-050	08/10/22	FD	--	--	--	--	--	--	--	--	<0.5	--	--
MW-30-050	09/13/22	N	--	--	--	--	--	--	--	--	0.51	--	--
MW-31-060	06/24/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-31-060	12/07/20	N	6 J	3.3 J	450 J	--	99	--	790	--	--	--	4.1
MW-31-060	04/30/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-31-060	12/16/21	N	--	3.1	--	--	--	<0.2	--	--	--	<2.5	3.6
MW-31-060	12/16/21	FD	--	3.1	--	--	--	<0.2	--	--	--	<2.5	3.6

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-28-025	06/23/20	N	--	--	--
MW-28-025	12/15/20	N	250	750	--
MW-28-025	04/29/21	N	--	--	--
MW-28-025	12/08/21	N	--	--	<1
MW-28-025	03/08/22	N	--	--	<1
MW-28-025	05/04/22	N	--	--	<1
MW-28-025	08/23/22	N	--	--	<1
MW-28-090	06/23/20	N	--	--	--
MW-28-090	12/15/20	N	560	4,400	--
MW-28-090	04/29/21	N	--	--	--
MW-28-090	12/08/21	N	--	--	<1
MW-28-090	03/08/22	N	--	--	<1
MW-28-090	05/04/22	N	--	--	<1
MW-28-090	08/23/22	N	--	--	<1
MW-29	06/23/20	N	--	--	--
MW-29	12/04/20	N	250	1,200	--
MW-29	04/29/21	N	--	--	--
MW-29	12/02/21	N	--	--	--
MW-29	03/08/22	N	--	--	--
MW-29	06/13/22	N	--	--	--
MW-29	08/23/22	N	--	--	--
MW-30-030	12/07/20	N	1,400	5,000	--
MW-30-030	12/03/21	N	--	--	11
MW-30-030	03/09/22	N	--	--	2.9
MW-30-030	05/03/22	N	--	--	5.6
MW-30-030	08/22/22	N	--	--	12
MW-30-050	12/07/20	N	200	630	--
MW-30-050	12/03/21	N	--	--	1
MW-30-050	03/09/22	N	--	--	<1
MW-30-050	05/03/22	N	--	--	<1
MW-30-050	06/17/22	N	210	--	<1
MW-30-050	07/12/22	N	200	--	<5
MW-30-050	08/10/22	N	200	--	<1
MW-30-050	08/10/22	FD	190	--	<1
MW-30-050	09/13/22	N	230	--	<1
MW-31-060	06/24/20	N	--	--	--
MW-31-060	12/07/20	N	220	1,700	--
MW-31-060	04/30/21	N	--	--	--
MW-31-060	12/16/21	N	210	--	<1
MW-31-060	12/16/21	FD	210	--	<1

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-31-060	02/01/22	N	<1	--	6.9	480	--	--	--	0.031	--	7.80 J	--
MW-31-060	03/04/22	N	230	230	<0.1	320	--	--	--	0.047	--	2.20	22
MW-31-060	04/12/22	N	<0.2	--	3.6 J	230	--	--	--	0.21	--	5.40	--
MW-31-060	05/20/22	N	48	--	<0.1 J	79 J	--	--	--	0.14	--	0.69	--
MW-31-060	06/13/22	N	340	340 J	<0.1 J	67	--	--	--	0.044 J	--	0.024	17
MW-31-060	07/13/22	N	190	--	<0.1 J	67 J	--	--	--	0.043 J	--	0.12 J	--
MW-31-060	08/10/22	N	<1	<1	<0.1	76	--	--	--	0.26 J	--	0.85	7.6
MW-31-060	09/14/22	N	30	--	<0.1	99	--	--	--	0.17 J	--	0.98	--
MW-31-135	12/07/20	N	15	13 J	<0.1	--	2.4 J	340 J	--	<0.1 J	31 J	<0.0005	26 J
MW-31-135	12/16/21	N	13	14	<0.1	46	--	--	--	<0.02	--	<0.0005	27
MW-31-135	02/01/22	N	15	--	<0.1	49	--	--	--	0.024	--	0.0067 J	--
MW-31-135	03/07/22	N	20	24	3.8 J	62 J	--	--	--	0.48	--	0.014 J	28
MW-31-135	03/07/22	FD	19	23	3.5 J	59 J	--	--	--	0.53	--	0.018 J	27
MW-31-135	04/12/22	N	26	--	<0.1 J	55	--	--	--	<0.02	--	0.00076	--
MW-31-135	05/20/22	N	26	--	<0.1 J	51 J	--	--	--	<0.02	--	0.003	--
MW-31-135	06/13/22	N	23	21 J	<0.1 J	49	--	--	--	0.048 J	--	0.0036	29
MW-31-135	07/13/22	N	23	--	<0.1 J	44 J	--	--	--	<0.02 J	--	0.013 J	--
MW-31-135	08/10/22	N	25	25	<0.1	40	--	--	--	<0.02 J	--	0.0021	28
MW-31-135	09/14/22	N	19	--	1.1	41	--	--	--	<0.02	--	0.0031	--
MW-32-020	12/07/20	N	<1	<1 J	3.8	--	3.8 J	340 J	--	6.10 J	440 J	0.16	160 J
MW-32-020	11/30/21	N	<1	<1	<0.1 J	110	--	--	--	4.50	--	0.2	100
MW-32-020	03/04/22	N	<1	--	<0.1	170	--	--	--	3.50	--	0.13	--
MW-32-020	05/04/22	N	<1	<1	<0.1 J	77 J	--	--	--	2.20	--	0.094 J	--
MW-32-020	08/19/22	N	<1	--	2.6	120	--	--	--	3.60	--	0.28 J	--
MW-32-035	06/18/20	N	<0.2	<1	26 J	--	--	--	--	--	--	0.61	--
MW-32-035	12/07/20	N	<1	<1 J	17	--	0.94 J	300 J	--	11 J	210 J	0.75	13 J
MW-32-035	12/07/20	FD	<1	<1 J	17	--	0.9 J	300 J	--	10 J	200 J	0.73	13 J
MW-32-035	04/27/21	N	<0.2	1.1	24	--	--	--	--	--	--	0.66	--
MW-32-035	11/30/21	N	<0.2	<1	15 J	160	--	--	--	12	--	0.59	9.6
MW-32-035	03/04/22	N	<1	--	13	200	--	--	--	10	--	0.58	--
MW-32-035	05/04/22	N	<0.2	<1	5.7 J	84 J	--	--	--	1.90 J	--	0.74 J	--
MW-32-035	05/04/22	FD	<0.2	<1	10 J	83 J	--	--	--	2.90 J	--	0.62 J	--
MW-32-035	08/19/22	N	<0.2	--	17	260	--	--	--	10	--	0.77 J	--
MW-33-040	06/17/20	N	<0.2	<1	5.5	--	--	--	--	--	--	0.054	120
MW-33-040	12/02/20	N	<1	1.8	9.3	--	4.2	75	--	<0.1	180	0.016	440
MW-33-040	04/29/21	N	<0.2	<1	4.7	--	--	--	--	--	--	0.036	140
MW-33-040	11/30/21	N	<1	2.2	--	--	--	--	--	--	--	--	380
MW-33-040	03/03/22	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-33-040	06/09/22	N	<1	<1 J	--	--	--	--	--	--	--	--	--
MW-33-040	08/24/22	N	<1	--	--	--	--	--	--	--	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-31-060	02/01/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-31-060	03/04/22	N	--	8.8	--	--	--	0.25	--	--	4.4	--	--
MW-31-060	04/12/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-31-060	05/20/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-31-060	06/13/22	N	--	3.8	--	--	--	<0.2	--	--	2.6	<25	--
MW-31-060	07/13/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-31-060	08/10/22	N	--	<0.5 J	--	--	--	0.6	--	--	<0.5	<5	--
MW-31-060	09/14/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-31-135	12/07/20	N	--	0.72 J	1,800 J	--	35	--	3,900	--	--	--	--
MW-31-135	12/16/21	N	--	0.58	--	--	--	<0.2	--	--	--	<5	1.2
MW-31-135	02/01/22	N	--	--	--	--	--	--	--	--	1.4	--	--
MW-31-135	03/07/22	N	--	1	--	--	--	<0.2	--	--	1.6	--	--
MW-31-135	03/07/22	FD	--	0.9	--	--	--	<0.2	--	--	1.6	--	--
MW-31-135	04/12/22	N	--	--	--	--	--	--	--	--	1.9	--	--
MW-31-135	05/20/22	N	--	--	--	--	--	--	--	--	1.5	--	--
MW-31-135	06/13/22	N	--	0.79	--	--	--	<0.2	--	--	1.4	<5	--
MW-31-135	07/13/22	N	--	--	--	--	--	--	--	--	1.1	--	--
MW-31-135	08/10/22	N	--	0.92 J	--	--	--	<0.2	--	--	1.5	<5	--
MW-31-135	09/14/22	N	--	--	--	--	--	--	--	--	1.3	--	--
MW-32-020	12/07/20	N	--	1.5 J	5,000 J	--	1,400	--	5,800	--	--	--	--
MW-32-020	11/30/21	N	--	2.2	--	--	--	--	--	--	--	--	<0.1
MW-32-020	03/04/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-32-020	05/04/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-32-020	08/19/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-32-035	06/18/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-32-035	12/07/20	N	18 J	<0.5	1,100 J	--	720	--	2,000	--	--	--	<0.1
MW-32-035	12/07/20	FD	19 J	<0.5	1,100 J	--	730	--	2,000	--	--	--	<0.1
MW-32-035	04/27/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-32-035	11/30/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-32-035	03/04/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-32-035	05/04/22	N	--	--	--	--	--	--	--	--	<0.5	--	<0.1
MW-32-035	05/04/22	FD	--	--	--	--	--	--	--	--	<0.5	--	<0.1
MW-32-035	08/19/22	N	--	--	--	--	--	--	--	--	<0.5	--	<0.1
MW-33-040	06/17/20	N	--	<0.5	--	--	--	--	--	--	--	--	0.077
MW-33-040	12/02/20	N	--	11	3,600	--	570	--	5,500	17	--	--	0.41
MW-33-040	04/29/21	N	--	0.52	--	--	--	--	--	--	--	--	<0.05
MW-33-040	11/30/21	N	--	5.7	--	--	--	--	--	--	--	--	0.35
MW-33-040	03/03/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-33-040	06/09/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-33-040	08/24/22	N	--	--	--	--	--	--	--	--	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-31-060	02/01/22	N	48	--	<25
MW-31-060	03/04/22	N	430	--	<20
MW-31-060	04/12/22	N	540	--	<20
MW-31-060	05/20/22	N	560	--	<1
MW-31-060	06/13/22	N	570	--	<50
MW-31-060	07/13/22	N	560	--	<1
MW-31-060	08/10/22	N	540	--	<1
MW-31-060	09/14/22	N	570	--	<1
MW-31-135	12/07/20	N	500	7,900	--
MW-31-135	12/16/21	N	500	--	<1
MW-31-135	02/01/22	N	570	--	<1
MW-31-135	03/07/22	N	720	--	<1
MW-31-135	03/07/22	FD	720	--	<1
MW-31-135	04/12/22	N	740	--	<1
MW-31-135	05/20/22	N	720	--	<50
MW-31-135	06/13/22	N	700	--	<1
MW-31-135	07/13/22	N	670	--	<1
MW-31-135	08/10/22	N	690	--	<1
MW-31-135	09/14/22	N	660	--	<1
MW-32-020	12/07/20	N	3,800	16,000	--
MW-32-020	11/30/21	N	--	--	4.4
MW-32-020	03/04/22	N	--	--	4.4
MW-32-020	05/04/22	N	--	--	2.8
MW-32-020	08/19/22	N	--	--	8.2
MW-32-035	06/18/20	N	--	--	--
MW-32-035	12/07/20	N	840	5,200	--
MW-32-035	12/07/20	FD	850	5,300	--
MW-32-035	04/27/21	N	--	--	--
MW-32-035	11/30/21	N	--	--	1.9
MW-32-035	03/04/22	N	--	--	1.9
MW-32-035	05/04/22	N	--	--	1.7
MW-32-035	05/04/22	FD	--	--	1.7
MW-32-035	08/19/22	N	--	--	1.8
MW-33-040	06/17/20	N	--	--	--
MW-33-040	12/02/20	N	2,700	14,000	--
MW-33-040	04/29/21	N	--	--	--
MW-33-040	11/30/21	N	--	--	--
MW-33-040	03/03/22	N	--	--	--
MW-33-040	06/09/22	N	--	--	--
MW-33-040	08/24/22	N	--	--	--

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MW-33-090	06/17/20	N	3.3	6.3	<0.1	--	--	--	--	--	--	0.011	8.2
MW-33-090	12/02/20	N	3.1	11	1.1	--	1.2	230	--	0.42	30	0.023	9.9
MW-33-090	04/29/21	N	3.4	3.9	<0.1	--	--	--	--	--	--	0.0041	8.4
MW-33-090	11/30/21	N	3	5.6	--	--	--	--	--	--	--	--	8.1
MW-33-090	11/30/21	FD	3	6.6	--	--	--	--	--	--	--	--	8.2
MW-33-090	03/03/22	N	4.8	--	--	--	--	--	--	--	--	--	--
MW-33-090	06/09/22	N	2.7	3.2 J	--	--	--	--	--	--	--	--	--
MW-33-090	08/24/22	N	2.8	--	--	--	--	--	--	--	--	--	--
MW-33-090	08/24/22	FD	2.7	--	--	--	--	--	--	--	--	--	--
MW-33-150	06/17/20	N	4.9	11	<0.1	--	--	--	--	--	--	0.0083	48
MW-33-150	12/02/20	N	5	8.8	1.3	--	2	450	--	0.28	77	0.012	41
MW-33-150	04/29/21	N	7	8.2	<0.1	--	--	--	--	--	--	0.015	45
MW-33-150	11/30/21	N	2.8	31	--	--	--	--	--	--	--	--	39
MW-33-150	03/03/22	N	4.3	--	--	--	--	--	--	--	--	--	--
MW-33-150	06/09/22	N	3.3	5.1 J	--	--	--	--	--	--	--	--	--
MW-33-150	08/24/22	N	6.5	--	--	--	--	--	--	--	--	--	--
MW-33-210	06/17/20	N	7.2	15	<0.1	--	--	--	--	--	--	0.0072	22
MW-33-210	12/02/20	N	12	15	1.2	--	2.6	440	--	0.24	69	0.012	20
MW-33-210	04/29/21	N	7.5	8.9	<0.1	--	--	--	--	--	--	0.0078	24
MW-33-210	11/30/21	N	12	20	--	--	--	--	--	--	--	--	--
MW-33-210	03/03/22	N	8.6	--	--	--	--	--	--	--	--	--	--
MW-33-210	06/09/22	N	9.9	10 J	--	--	--	--	--	--	--	--	--
MW-33-210	08/24/22	N	11	--	--	--	--	--	--	--	--	--	--
MW-34-055	12/03/20	N	<0.2	<1	2.7 J	--	0.19	67	--	0.033 J	23 J	0.068	5.2
MW-34-055	12/03/20	FD	<0.2	<1	2.8 J	--	0.18	65	--	0.022 J	22 J	0.07	5.4
MW-34-055	06/30/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-055	07/12/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-055	07/26/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-055	08/10/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-055	08/26/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-055	09/08/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-055	09/22/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-055	10/06/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-055	10/20/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-055	11/02/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-055	11/19/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-055	12/01/21	N	<0.2	<1	4	30	--	--	--	0.096	--	0.087	4.5
MW-34-055	03/10/22	N	0.27	--	2.2	30	--	--	--	0.043	--	0.079	--
MW-34-055	05/05/22	N	<0.2	<1	2.1 J	27 J	--	--	--	0.027	--	0.058 J	--
MW-34-055	08/23/22	N	<0.2	--	3.4	30 J	--	--	--	0.094 J	--	0.11 J	--

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MW-33-090	06/17/20	N	--	<0.5	--	--	--	--	--	--	--	--	1.1
MW-33-090	12/02/20	N	--	<0.5	1,600	--	150	--	2,900	2.5	--	--	0.99
MW-33-090	04/29/21	N	--	<0.5	--	--	--	--	--	--	--	--	1.1
MW-33-090	11/30/21	N	--	<0.5	--	--	--	--	--	--	--	--	1.1
MW-33-090	11/30/21	FD	--	<0.5	--	--	--	--	--	--	--	--	1
MW-33-090	03/03/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-33-090	06/09/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-33-090	08/24/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-33-090	08/24/22	FD	--	--	--	--	--	--	--	--	--	--	--
MW-33-150	06/17/20	N	--	0.83	--	--	--	--	--	--	--	--	1.4
MW-33-150	12/02/20	N	--	0.61	2,500	--	60	--	5,100	2.2	--	--	1.4
MW-33-150	04/29/21	N	--	0.82	--	--	--	--	--	--	--	--	1.6
MW-33-150	11/30/21	N	--	0.63	--	--	--	--	--	--	--	--	1.5
MW-33-150	03/03/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-33-150	06/09/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-33-150	08/24/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-33-210	06/17/20	N	--	<0.5	--	--	--	--	--	--	--	--	1.7
MW-33-210	12/02/20	N	--	0.75	3,400	--	58	--	6,200	2.8	--	--	1.7
MW-33-210	04/29/21	N	--	<0.5	--	--	--	--	--	--	--	--	1.6
MW-33-210	11/30/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-33-210	03/03/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-33-210	06/09/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-33-210	08/24/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-055	12/03/20	N	5.4 J	<0.5	92 J	--	160	--	82	--	--	--	<0.1
MW-34-055	12/03/20	FD	5.3 J	<0.5	89 J	--	150	--	84	--	--	--	<0.1
MW-34-055	06/30/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-055	07/12/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-055	07/26/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-055	08/10/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-055	08/26/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-055	09/08/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-055	09/22/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-055	10/06/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-055	10/20/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-055	11/02/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-055	11/19/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-055	12/01/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-34-055	03/10/22	N	--	--	--	--	--	--	--	--	<0.1	--	--
MW-34-055	05/05/22	N	--	--	--	--	--	--	--	--	<0.25	--	<0.1
MW-34-055	08/23/22	N	--	--	--	--	--	--	--	--	<0.25	--	<0.1

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-33-090	06/17/20	N	--	--	--
MW-33-090	12/02/20	N	670	6,400	--
MW-33-090	04/29/21	N	--	--	--
MW-33-090	11/30/21	N	--	--	--
MW-33-090	11/30/21	FD	--	--	--
MW-33-090	03/03/22	N	--	--	--
MW-33-090	06/09/22	N	--	--	--
MW-33-090	08/24/22	N	--	--	--
MW-33-090	08/24/22	FD	--	--	--
MW-33-150	06/17/20	N	--	--	--
MW-33-150	12/02/20	N	840	11,000	--
MW-33-150	04/29/21	N	--	--	--
MW-33-150	11/30/21	N	--	--	--
MW-33-150	03/03/22	N	--	--	--
MW-33-150	06/09/22	N	--	--	--
MW-33-150	08/24/22	N	--	--	--
MW-33-210	06/17/20	N	--	--	--
MW-33-210	12/02/20	N	1,200	13,000	--
MW-33-210	04/29/21	N	--	--	--
MW-33-210	11/30/21	N	--	--	--
MW-33-210	03/03/22	N	--	--	--
MW-33-210	06/09/22	N	--	--	--
MW-33-210	08/24/22	N	--	--	--
MW-34-055	12/03/20	N	210	580	--
MW-34-055	12/03/20	FD	210	580	--
MW-34-055	06/30/21	N	--	--	--
MW-34-055	07/12/21	N	--	--	--
MW-34-055	07/26/21	N	--	--	--
MW-34-055	08/10/21	N	--	--	--
MW-34-055	08/26/21	N	--	--	--
MW-34-055	09/08/21	N	--	--	--
MW-34-055	09/22/21	N	--	--	--
MW-34-055	10/06/21	N	--	--	--
MW-34-055	10/20/21	N	--	--	--
MW-34-055	11/02/21	N	--	--	--
MW-34-055	11/19/21	N	--	--	--
MW-34-055	12/01/21	N	--	--	<1
MW-34-055	03/10/22	N	--	--	<1
MW-34-055	05/05/22	N	--	--	<1
MW-34-055	08/23/22	N	--	--	1.1

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-34-080	06/18/20	N	<0.2	<1	<0.1	--	--	--	--	--	--	0.066	--
MW-34-080	12/03/20	N	<0.2	<1	<0.1 J	--	0.98	210	--	0.17 J	93 J	0.052	13
MW-34-080	04/28/21	N	<0.2	<1	<0.1	--	--	--	--	--	--	0.064	--
MW-34-080	06/30/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-080	06/30/21	FD	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-080	07/12/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-080	07/26/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-080	08/10/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-080	08/26/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-080	09/08/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-080	09/22/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-080	10/06/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-080	10/20/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-080	11/02/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-080	11/19/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-080	12/01/21	N	<0.2	<1	<0.1	36	--	--	--	0.35	--	0.074	12
MW-34-080	03/10/22	N	<0.2	--	<0.1	34	--	--	--	0.32	--	0.092	--
MW-34-080	05/05/22	N	<0.2	<1	<0.1 J	35 J	--	--	--	0.35	--	0.066 J	--
MW-34-080	06/17/22	N	<0.2	--	<0.1 J	35	--	--	--	0.79 J	--	0.11 J	--
MW-34-080	07/14/22	N	<0.2	--	1.7	35	--	--	--	0.99	--	0.13 J	--
MW-34-080	08/11/22	N	<0.2	--	<0.1 J	39	--	--	--	0.48	--	0.13 J	--
MW-34-080	09/15/22	N	<0.2	--	<0.1	36	--	--	--	0.41	--	0.14	--
MW-34-100	02/20/20	N	<0.2	4	<0.1	--	--	--	--	--	--	0.086	53
MW-34-100	06/18/20	N	<0.2	<1	<0.1	--	--	--	--	--	--	0.11	64
MW-34-100	10/01/20	N	<0.2	<1	<0.1	--	--	--	--	--	--	0.19	85
MW-34-100	12/03/20	N	<1	<1	<0.1 J	--	1.2 J	92	--	0.088 J	25 J	0.18	57
MW-34-100	12/03/20	FD	<1	<1	<0.1 J	--	1.6 J	120	--	0.1 J	32 J	0.17	60
MW-34-100	02/25/21	N	<1	1.7	<0.1	--	--	--	--	--	--	0.16	55
MW-34-100	04/28/21	N	<0.2	<1	<0.1	--	--	--	--	--	--	0.11	63
MW-34-100	06/30/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-100	07/12/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-100	07/26/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-100	08/10/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-100	08/26/21	N	<1	<1	<0.1 J	--	--	--	--	--	--	0.16	65
MW-34-100	09/08/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-100	09/22/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-100	10/06/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-100	10/20/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-34-100	10/20/21	FD	<1	--	--	--	--	--	--	--	--	--	--
MW-34-100	11/02/21	N	<1	--	--	--	--	--	--	--	--	--	--

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MW-34-080	06/18/20	N	--	--	--	--	--	--	--	--	--	--	<0.05
MW-34-080	12/03/20	N	18 J	<0.5	1,400 J	--	310	--	2,200	--	--	--	<0.1
MW-34-080	04/28/21	N	--	--	--	--	--	--	--	--	--	--	<0.05
MW-34-080	06/30/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-080	06/30/21	FD	--	--	--	--	--	--	--	--	--	--	--
MW-34-080	07/12/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-080	07/26/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-080	08/10/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-080	08/26/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-080	09/08/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-080	09/22/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-080	10/06/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-080	10/20/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-080	11/02/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-080	11/19/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-080	12/01/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-34-080	03/10/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-34-080	05/05/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-34-080	06/17/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-34-080	07/14/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-34-080	08/11/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-34-080	09/15/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-34-100	02/20/20	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-34-100	06/18/20	N	--	<0.5	--	--	--	--	--	--	--	--	0.18
MW-34-100	10/01/20	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-34-100	12/03/20	N	26 J	<0.5	2,000 J	--	200	--	3,000	--	--	--	<0.1
MW-34-100	12/03/20	FD	28 J	<0.5	2,000 J	--	210	--	2,800	--	--	--	<0.1
MW-34-100	02/25/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-34-100	04/28/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-34-100	06/30/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-100	07/12/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-100	07/26/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-100	08/10/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-100	08/26/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-34-100	09/08/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-100	09/22/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-100	10/06/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-100	10/20/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-100	10/20/21	FD	--	--	--	--	--	--	--	--	--	--	--
MW-34-100	11/02/21	N	--	--	--	--	--	--	--	--	--	--	--

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MW-34-080	06/18/20	N	--	--	--
MW-34-080	12/03/20	N	580	4,900	--
MW-34-080	04/28/21	N	--	--	--
MW-34-080	06/30/21	N	--	--	--
MW-34-080	06/30/21	FD	--	--	--
MW-34-080	07/12/21	N	--	--	--
MW-34-080	07/26/21	N	--	--	--
MW-34-080	08/10/21	N	--	--	--
MW-34-080	08/26/21	N	--	--	--
MW-34-080	09/08/21	N	--	--	--
MW-34-080	09/22/21	N	--	--	--
MW-34-080	10/06/21	N	--	--	--
MW-34-080	10/20/21	N	--	--	--
MW-34-080	11/02/21	N	--	--	--
MW-34-080	11/19/21	N	--	--	--
MW-34-080	12/01/21	N	--	--	<1
MW-34-080	03/10/22	N	--	--	<1
MW-34-080	05/05/22	N	--	--	<20
MW-34-080	06/17/22	N	490	--	<1
MW-34-080	07/14/22	N	490	--	<1
MW-34-080	08/11/22	N	540	--	<1
MW-34-080	09/15/22	N	620	--	<1
MW-34-100	02/20/20	N	--	--	--
MW-34-100	06/18/20	N	--	--	--
MW-34-100	10/01/20	N	--	--	--
MW-34-100	12/03/20	N	870	6,200	--
MW-34-100	12/03/20	FD	840	6,100	--
MW-34-100	02/25/21	N	--	--	--
MW-34-100	04/28/21	N	--	--	--
MW-34-100	06/30/21	N	--	--	--
MW-34-100	07/12/21	N	--	--	--
MW-34-100	07/26/21	N	--	--	--
MW-34-100	08/10/21	N	--	--	--
MW-34-100	08/26/21	N	--	--	--
MW-34-100	09/08/21	N	--	--	--
MW-34-100	09/22/21	N	--	--	--
MW-34-100	10/06/21	N	--	--	--
MW-34-100	10/20/21	N	--	--	--
MW-34-100	10/20/21	FD	--	--	--
MW-34-100	11/02/21	N	--	--	--

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MW-34-100	11/19/21	N	<1	--	--	--	--	--	--	--	--	--	--
MW-34-100	12/01/21	N	<1	<1	<0.1	23	--	--	--	0.073	--	0.092	59
MW-34-100	12/01/21	FD	<1	<1	<0.1	23	--	--	--	0.052	--	0.094	59
MW-34-100	03/10/22	N	<1	--	<0.1	19	--	--	--	0.077	--	0.08	--
MW-34-100	05/05/22	N	<0.2	<1	<0.1 J	20 J	--	--	--	0.15	--	0.25 J	--
MW-34-100	08/23/22	N	<1	--	<0.1	21 J	--	--	--	0.055 J	--	0.12 J	--
MW-35-060	04/27/20	N	32	32	0.45	--	--	--	--	--	--	0.0011	15
MW-35-060	12/08/20	N	21	21	1.3	72	0.83 J	190 J	--	0.044 J	32 J	0.001	10
MW-35-060	12/08/20	FD	20	21	1.2	72	2.1 J	230 J	--	<0.1 J	33 J	0.00081	9.8
MW-35-060	04/30/21	N	20	22	<0.1	--	--	--	--	--	--	0.001	12
MW-35-060	12/06/21	N	20	20 J	--	--	--	--	--	--	--	--	8.8
MW-35-060	03/02/22	N	20	--	--	--	--	--	--	--	--	--	--
MW-35-060	06/07/22	N	20	21	--	--	--	--	--	--	--	--	--
MW-35-060	08/22/22	N	20	--	--	--	--	--	--	--	--	--	--
MW-35-060	08/22/22	FD	20	--	--	--	--	--	--	--	--	--	--
MW-35-135	04/27/20	N	25	24	<0.1	--	--	--	--	--	--	0.0084	20
MW-35-135	12/08/20	N	27	27	0.97	38	1.8 J	260 J	--	<0.1 J	42 J	0.00072	21
MW-35-135	12/08/20	FD	28	27	1	38	0.82 J	220 J	--	<0.02 J	38 J	0.00069	21
MW-35-135	04/30/21	N	24	24	<0.1	--	--	--	--	--	--	0.0025	20
MW-35-135	12/06/21	N	26	25 J	--	--	--	--	--	--	--	--	20
MW-35-135	03/02/22	N	30	--	--	--	--	--	--	--	--	--	--
MW-35-135	06/07/22	N	27	29	--	--	--	--	--	--	--	--	--
MW-35-135	08/22/22	N	27	--	--	--	--	--	--	--	--	--	--
MW-36-020	12/15/20	N	<0.2	<1	2.2	--	1.4	190 J	--	2.20 J	220	0.45	21
MW-36-020	06/29/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-020	07/13/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-020	07/27/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-020	08/09/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-020	08/25/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-020	09/07/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-020	09/21/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-020	10/06/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-020	10/18/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-020	11/01/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-020	11/18/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-020	12/03/21	N	<0.2	<1	0.48	120	--	--	--	1 J	--	0.29	17
MW-36-020	03/09/22	N	<0.2	--	0.52	88	--	--	--	1.30 J	--	0.27	--
MW-36-020	05/04/22	N	<0.2	<1	0.79 J	80 J	--	--	--	0.62	--	0.29 J	--
MW-36-020	08/23/22	N	<0.2	--	<0.1	340 J	--	--	--	3.70 J	--	0.72 J	--
MW-36-040	12/15/20	N	<0.2	<1	4.5	--	<100	49 J	--	0.34 J	13	0.12	2.9

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-34-100	11/19/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-34-100	12/01/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-34-100	12/01/21	FD	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-34-100	03/10/22	N	--	--	--	--	--	--	--	--	<0.1	--	--
MW-34-100	05/05/22	N	--	--	--	--	--	--	--	--	<0.25	--	<0.1
MW-34-100	08/23/22	N	--	--	--	--	--	--	--	--	<0.25	--	<0.1
MW-35-060	04/27/20	N	--	1.5	--	--	--	--	--	--	--	--	2.8
MW-35-060	12/08/20	N	--	1.3	990 J	2.9	84	--	2,000	--	--	--	2
MW-35-060	12/08/20	FD	--	0.99	1,100 J	3	88	--	2,000	--	--	--	2.1
MW-35-060	04/30/21	N	--	1.2	--	--	--	--	--	--	--	--	2.3
MW-35-060	12/06/21	N	--	0.92	--	--	--	--	--	--	--	--	2
MW-35-060	03/02/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-35-060	06/07/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-35-060	08/22/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-35-060	08/22/22	FD	--	--	--	--	--	--	--	--	--	--	--
MW-35-135	04/27/20	N	--	0.92	--	--	--	--	--	--	--	--	2.6
MW-35-135	12/08/20	N	--	1	2,000 J	1.5	45	--	3,400	--	--	--	2.6
MW-35-135	12/08/20	FD	--	1.1	1,900 J	1.6	46	--	3,300	--	--	--	2.6
MW-35-135	04/30/21	N	--	1.1	--	--	--	--	--	--	--	--	2.4
MW-35-135	12/06/21	N	--	1	--	--	--	--	--	--	--	--	2.5
MW-35-135	03/02/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-35-135	06/07/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-35-135	08/22/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-020	12/15/20	N	--	<0.5	1,200	--	820	--	1,100	--	--	--	--
MW-36-020	06/29/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-020	07/13/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-020	07/27/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-020	08/09/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-020	08/25/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-020	09/07/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-020	09/21/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-020	10/06/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-020	10/18/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-020	11/01/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-020	11/18/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-020	12/03/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-36-020	03/09/22	N	--	--	--	--	--	--	--	--	<0.1	--	--
MW-36-020	05/04/22	N	--	--	--	--	--	--	--	--	<0.1	--	--
MW-36-020	08/23/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-36-040	12/15/20	N	--	<0.5	160	--	270	--	86	--	--	--	<0.05

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-34-100	11/19/21	N	--	--	--
MW-34-100	12/01/21	N	--	--	<1
MW-34-100	12/01/21	FD	--	--	<1
MW-34-100	03/10/22	N	--	--	<1
MW-34-100	05/05/22	N	--	--	<1
MW-34-100	08/23/22	N	--	--	<1
MW-35-060	04/27/20	N	--	--	--
MW-35-060	12/08/20	N	310	4,100	--
MW-35-060	12/08/20	FD	320	4,100	--
MW-35-060	04/30/21	N	--	--	--
MW-35-060	12/06/21	N	--	--	--
MW-35-060	03/02/22	N	--	--	--
MW-35-060	06/07/22	N	--	--	--
MW-35-060	08/22/22	N	--	--	--
MW-35-060	08/22/22	FD	--	--	--
MW-35-135	04/27/20	N	--	--	--
MW-35-135	12/08/20	N	850	7,500	--
MW-35-135	12/08/20	FD	840	7,400	--
MW-35-135	04/30/21	N	--	--	--
MW-35-135	12/06/21	N	--	--	--
MW-35-135	03/02/22	N	--	--	--
MW-35-135	06/07/22	N	--	--	--
MW-35-135	08/22/22	N	--	--	--
MW-36-020	12/15/20	N	1,500	4,900	--
MW-36-020	06/29/21	N	--	--	--
MW-36-020	07/13/21	N	--	--	--
MW-36-020	07/27/21	N	--	--	--
MW-36-020	08/09/21	N	--	--	--
MW-36-020	08/25/21	N	--	--	--
MW-36-020	09/07/21	N	--	--	--
MW-36-020	09/21/21	N	--	--	--
MW-36-020	10/06/21	N	--	--	--
MW-36-020	10/18/21	N	--	--	--
MW-36-020	11/01/21	N	--	--	--
MW-36-020	11/18/21	N	--	--	--
MW-36-020	12/03/21	N	--	--	1.6
MW-36-020	03/09/22	N	--	--	<1
MW-36-020	05/04/22	N	--	--	1.8
MW-36-020	08/23/22	N	--	--	1.6
MW-36-040	12/15/20	N	140	630	--

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-36-040	06/29/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-040	07/13/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-040	07/27/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-040	08/09/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-040	08/25/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-040	09/07/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-040	09/21/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-040	10/06/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-040	10/18/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-040	11/01/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-040	11/18/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-040	11/18/21	FD	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-040	12/03/21	N	<0.2	<1	5	41	--	--	--	0.32 J	--	0.11	3.5
MW-36-040	12/03/21	FD	<0.2	<1	5.2	40	--	--	--	0.31 J	--	0.11	3.3
MW-36-040	03/09/22	N	<0.2	--	7.7	49	--	--	--	0.41 J	--	0.15	--
MW-36-040	05/04/22	N	<0.2	<1	6.7 J	43 J	--	--	--	0.46	--	0.15 J	--
MW-36-040	08/23/22	N	<0.2	--	6.7	55 J	--	--	--	0.47 J	--	0.17 J	--
MW-36-050	12/15/20	N	<0.2	<1	5.6	--	<100	76 J	--	0.093 J	19	0.21	3.9
MW-36-050	06/29/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-050	07/13/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-050	07/27/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-050	08/09/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-050	08/25/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-050	08/25/21	FD	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-050	09/07/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-050	09/21/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-050	10/06/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-050	10/18/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-050	11/01/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-050	11/18/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-050	12/03/21	N	<0.2	<1	5.2	25	--	--	--	0.15 J	--	0.22	4.1
MW-36-050	03/09/22	N	<0.2	--	5.2	27	--	--	--	0.13 J	--	0.22	--
MW-36-050	05/04/22	N	<0.2	<1	4.8 J	25 J	--	--	--	0.13	--	0.3 J	--
MW-36-050	08/23/22	N	<0.2	--	5.6	28 J	--	--	--	0.2 J	--	0.32 J	--
MW-36-070	12/15/20	N	0.2	<1	1.9	--	<100	71 J	--	<0.02	17	0.14	5
MW-36-070	06/29/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-070	07/13/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-070	07/27/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-070	08/09/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-070	08/25/21	N	<0.2	--	--	--	--	--	--	--	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-36-040	06/29/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-040	07/13/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-040	07/27/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-040	08/09/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-040	08/25/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-040	09/07/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-040	09/21/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-040	10/06/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-040	10/18/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-040	11/01/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-040	11/18/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-040	11/18/21	FD	--	--	--	--	--	--	--	--	--	--	--
MW-36-040	12/03/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-36-040	12/03/21	FD	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-36-040	03/09/22	N	--	--	--	--	--	--	--	--	<0.1	--	--
MW-36-040	05/04/22	N	--	--	--	--	--	--	--	--	<0.1	--	<0.1
MW-36-040	08/23/22	N	--	--	--	--	--	--	--	--	<0.25	--	<0.1
MW-36-050	12/15/20	N	--	<0.5	93	--	190	--	84	--	--	--	--
MW-36-050	06/29/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-050	07/13/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-050	07/27/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-050	08/09/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-050	08/25/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-050	08/25/21	FD	--	--	--	--	--	--	--	--	--	--	--
MW-36-050	09/07/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-050	09/21/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-050	10/06/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-050	10/18/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-050	11/01/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-050	11/18/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-050	12/03/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-36-050	03/09/22	N	--	--	--	--	--	--	--	--	<0.1	--	--
MW-36-050	05/04/22	N	--	--	--	--	--	--	--	--	<0.1	--	--
MW-36-050	08/23/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-36-070	12/15/20	N	--	<0.5	98	--	160	--	93	--	--	--	--
MW-36-070	06/29/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-070	07/13/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-070	07/27/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-070	08/09/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-070	08/25/21	N	--	--	--	--	--	--	--	--	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-36-040	06/29/21	N	--	--	--
MW-36-040	07/13/21	N	--	--	--
MW-36-040	07/27/21	N	--	--	--
MW-36-040	08/09/21	N	--	--	--
MW-36-040	08/25/21	N	--	--	--
MW-36-040	09/07/21	N	--	--	--
MW-36-040	09/21/21	N	--	--	--
MW-36-040	10/06/21	N	--	--	--
MW-36-040	10/18/21	N	--	--	--
MW-36-040	11/01/21	N	--	--	--
MW-36-040	11/18/21	N	--	--	--
MW-36-040	11/18/21	FD	--	--	--
MW-36-040	12/03/21	N	--	--	2.3
MW-36-040	12/03/21	FD	--	--	2.3
MW-36-040	03/09/22	N	--	--	1.5
MW-36-040	05/04/22	N	--	--	2
MW-36-040	08/23/22	N	--	--	1.8
MW-36-050	12/15/20	N	190	590	--
MW-36-050	06/29/21	N	--	--	--
MW-36-050	07/13/21	N	--	--	--
MW-36-050	07/27/21	N	--	--	--
MW-36-050	08/09/21	N	--	--	--
MW-36-050	08/25/21	N	--	--	--
MW-36-050	08/25/21	FD	--	--	--
MW-36-050	09/07/21	N	--	--	--
MW-36-050	09/21/21	N	--	--	--
MW-36-050	10/06/21	N	--	--	--
MW-36-050	10/18/21	N	--	--	--
MW-36-050	11/01/21	N	--	--	--
MW-36-050	11/18/21	N	--	--	--
MW-36-050	12/03/21	N	--	--	1.3
MW-36-050	03/09/22	N	--	--	<1
MW-36-050	05/04/22	N	--	--	1.2
MW-36-050	08/23/22	N	--	--	1.2
MW-36-070	12/15/20	N	210	640	--
MW-36-070	06/29/21	N	--	--	--
MW-36-070	07/13/21	N	--	--	--
MW-36-070	07/27/21	N	--	--	--
MW-36-070	08/09/21	N	--	--	--
MW-36-070	08/25/21	N	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-36-070	09/07/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-070	09/21/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-070	10/06/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-070	10/18/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-070	11/01/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-070	11/18/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-070	12/03/21	N	<0.2	<1	2.2	33	--	--	--	<0.02 J	--	0.21	4.9
MW-36-070	03/09/22	N	<0.2	--	2.4	32	--	--	--	0.029 J	--	0.22	--
MW-36-070	05/04/22	N	<0.2	<1	2.2 J	32 J	--	--	--	0.021	--	0.39 J	--
MW-36-070	08/10/22	N	<0.2	--	1.9	36	--	--	--	0.033 J	--	0.28	--
MW-36-070	08/10/22	FD	<0.2	--	2.2	36	--	--	--	0.029 J	--	0.29	--
MW-36-090	06/16/20	N	<0.2	<1	1.3	--	--	--	--	--	--	0.051	--
MW-36-090	12/15/20	N	<0.2	1.7	5.2	--	0.52	86 J	--	0.11 J	25	0.034	9.6
MW-36-090	04/28/21	N	<0.2	<1	1.2	--	--	--	--	--	--	0.038	--
MW-36-090	06/29/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-090	07/13/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-090	07/27/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-090	08/09/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-090	08/25/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-090	09/07/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-090	09/21/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-090	10/06/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-090	10/18/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-090	11/01/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-090	11/18/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-090	12/03/21	N	<0.2	<1	1.6	36	--	--	--	0.035 J	--	0.072	14
MW-36-090	03/09/22	N	<0.2	--	0.78	46	--	--	--	0.035 J	--	0.11	--
MW-36-090	05/04/22	N	<0.2	<1	0.55 J	38 J	--	--	--	0.04	--	0.11 J	--
MW-36-090	05/04/22	FD	<0.2	<1	0.51 J	39 J	--	--	--	0.037	--	0.11 J	--
MW-36-090	06/17/22	N	<0.2	--	<0.1 J	37	--	--	--	0.042 J	--	0.13 J	--
MW-36-090	07/14/22	N	<0.2	--	3.3	37	--	--	--	0.039	--	0.15 J	--
MW-36-090	08/10/22	N	<0.2	--	1.2	33	--	--	--	0.037 J	--	0.16	--
MW-36-090	09/14/22	N	<0.2	--	2	43	--	--	--	0.038 J	--	0.16	--
MW-36-100	06/16/20	N	12	11	1.5	--	--	--	--	--	--	0.24	20
MW-36-100	12/15/20	N	4.5	6	2.9	--	1.2	180 J	--	0.18 J	53	0.22	19
MW-36-100	04/28/21	N	5.5	7.1	<0.1	--	--	--	--	--	--	0.16	21
MW-36-100	06/29/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-100	07/13/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-100	07/27/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-100	08/09/21	N	<0.2	--	--	--	--	--	--	--	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-36-070	09/07/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-070	09/21/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-070	10/06/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-070	10/18/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-070	11/01/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-070	11/18/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-070	12/03/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-36-070	03/09/22	N	--	--	--	--	--	--	--	--	<0.1	--	--
MW-36-070	05/04/22	N	--	--	--	--	--	--	--	--	<0.1	--	--
MW-36-070	08/10/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-36-070	08/10/22	FD	--	--	--	--	--	--	--	--	<0.25	--	--
MW-36-090	06/16/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-090	12/15/20	N	--	<0.5	620	--	270	--	1,000	--	--	--	--
MW-36-090	04/28/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-090	06/29/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-090	07/13/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-090	07/27/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-090	08/09/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-090	08/25/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-090	09/07/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-090	09/21/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-090	10/06/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-090	10/18/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-090	11/01/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-090	11/18/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-090	12/03/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-36-090	03/09/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-36-090	05/04/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-36-090	05/04/22	FD	--	--	--	--	--	--	--	--	<0.25	--	--
MW-36-090	06/17/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-36-090	07/14/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-36-090	08/10/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-36-090	09/14/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-36-100	06/16/20	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-36-100	12/15/20	N	--	<0.5	1,400	--	290	--	1,900	--	--	--	<0.05
MW-36-100	04/28/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-36-100	06/29/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-100	07/13/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-100	07/27/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-100	08/09/21	N	--	--	--	--	--	--	--	--	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-36-070	09/07/21	N	--	--	--
MW-36-070	09/21/21	N	--	--	--
MW-36-070	10/06/21	N	--	--	--
MW-36-070	10/18/21	N	--	--	--
MW-36-070	11/01/21	N	--	--	--
MW-36-070	11/18/21	N	--	--	--
MW-36-070	12/03/21	N	--	--	<1
MW-36-070	03/09/22	N	--	--	<1
MW-36-070	05/04/22	N	--	--	<1
MW-36-070	08/10/22	N	--	--	<1
MW-36-070	08/10/22	FD	--	--	<1
MW-36-090	06/16/20	N	--	--	--
MW-36-090	12/15/20	N	390	2,400	--
MW-36-090	04/28/21	N	--	--	--
MW-36-090	06/29/21	N	--	--	--
MW-36-090	07/13/21	N	--	--	--
MW-36-090	07/27/21	N	--	--	--
MW-36-090	08/09/21	N	--	--	--
MW-36-090	08/25/21	N	--	--	--
MW-36-090	09/07/21	N	--	--	--
MW-36-090	09/21/21	N	--	--	--
MW-36-090	10/06/21	N	--	--	--
MW-36-090	10/18/21	N	--	--	--
MW-36-090	11/01/21	N	--	--	--
MW-36-090	11/18/21	N	--	--	--
MW-36-090	12/03/21	N	--	--	<1
MW-36-090	03/09/22	N	--	--	<1
MW-36-090	05/04/22	N	--	--	<1
MW-36-090	05/04/22	FD	--	--	<1
MW-36-090	06/17/22	N	350	--	<1
MW-36-090	07/14/22	N	280	--	<1
MW-36-090	08/10/22	N	230	--	<1
MW-36-090	09/14/22	N	290	--	<1
MW-36-100	06/16/20	N	--	--	--
MW-36-100	12/15/20	N	600	4,600	--
MW-36-100	04/28/21	N	--	--	--
MW-36-100	06/29/21	N	--	--	--
MW-36-100	07/13/21	N	--	--	--
MW-36-100	07/27/21	N	--	--	--
MW-36-100	08/09/21	N	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-36-100	08/25/21	N	8.7	--	--	--	--	--	--	--	--	--	--
MW-36-100	09/07/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-100	09/21/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-100	10/06/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-100	10/18/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-36-100	11/01/21	N	36	--	--	--	--	--	--	--	--	--	--
MW-36-100	11/18/21	N	8	--	--	--	--	--	--	--	--	--	--
MW-36-100	12/03/21	N	8	11	<0.1	43	--	--	--	0.26 J	--	0.23	19
MW-36-100	03/09/22	N	<0.2	--	2.8	56	--	--	--	0.49 J	--	0.48	--
MW-36-100	05/04/22	N	<0.2	<1	1.5 J	59 J	--	--	--	0.52	--	0.51 J	--
MW-36-100	06/17/22	N	0.93	--	<0.1 J	51	--	--	--	0.41 J	--	0.62 J	--
MW-36-100	06/17/22	FD	0.81	--	<0.1 J	52	--	--	--	0.35 J	--	0.56 J	--
MW-36-100	07/14/22	N	<0.2	--	4.1	59	--	--	--	0.43	--	0.48 J	--
MW-36-100	07/14/22	FD	<0.2	--	3.5	54	--	--	--	0.38	--	0.46 J	--
MW-36-100	08/10/22	N	3.5	--	13	33	--	--	--	<0.02 J	--	0.0098	--
MW-36-100	09/14/22	N	<0.2	--	10	40	--	--	--	0.17 J	--	0.34	--
MW-37D	06/24/20	N	5	6.5	--	--	--	--	--	--	--	--	63
MW-37D	12/10/20	N	4.5	5.7	--	--	1.3	220	--	<0.1 J	15	0.0023	65
MW-37D	06/07/21	N	4.8	5	--	--	--	--	--	--	--	--	65
MW-37D	12/07/21	N	6	7.4	<0.1 J	--	--	--	--	--	--	<0.0005 J	68
MW-37D	06/16/22	N	5.6	6	--	--	--	--	--	--	--	--	--
MW-37S	12/10/20	N	12	13	2	--	0.73	190	--	0.13 J	34	0.006	15 J
MW-37S	12/07/21	N	7.8	8	<0.1 J	--	--	--	--	--	--	0.0057 J	16
MW-37S	06/16/22	N	12	12	--	--	--	--	--	--	--	--	--
MW-38D	04/23/20	N	19	16	7.3	--	--	--	--	--	--	0.027	78
MW-38D	10/05/20	N	20	21	--	--	--	--	--	--	--	--	--
MW-38D	12/14/20	N	17	19	--	--	--	--	--	--	--	--	--
MW-38D	12/15/20	N	19	18	8.5	--	5.1	250 J	--	<0.1	6.9	0.029	89
MW-38D	02/25/21	N	25	22	<0.1	--	--	--	--	--	--	0.04	78
MW-38D	05/05/21	N	23	22 J	<0.1	--	--	96	--	--	--	0.02	87
MW-38D	09/22/21	N	30	36 J	<0.1 J	--	--	550 J	--	--	11 J	0.0054	38 J
MW-38D	12/08/21	N	50	47	<0.1	--	--	--	--	--	--	0.0053 J	58
MW-38D	03/03/22	N	39	36	--	--	--	--	--	--	--	--	38
MW-38D	06/08/22	N	<4	<5	--	--	--	--	--	--	--	--	28
MW-38D	06/08/22	FD	<4	<5	--	--	--	--	--	--	--	--	34
MW-38D	08/25/22	N	8.8	11	--	--	--	--	--	--	--	--	32
MW-38S	02/25/20	N	3.8	3.3	6.6	--	--	--	--	--	--	0.048	25
MW-38S	02/25/20	FD	3.9	3.2	6.6	--	--	--	--	--	--	0.048	22
MW-38S	04/23/20	N	4	4.4	5.7	--	--	--	--	--	--	0.069	21
MW-38S	04/23/20	FD	4	4.6	5.8	--	--	--	--	--	--	0.075	22

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-36-100	08/25/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-100	09/07/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-100	09/21/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-100	10/06/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-100	10/18/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-100	11/01/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-100	11/18/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-36-100	12/03/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-36-100	03/09/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-36-100	05/04/22	N	--	--	--	--	--	--	--	--	<0.25	--	<0.1
MW-36-100	06/17/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-36-100	06/17/22	FD	--	--	--	--	--	--	--	--	<0.25	--	--
MW-36-100	07/14/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-36-100	07/14/22	FD	--	--	--	--	--	--	--	--	<0.5	--	--
MW-36-100	08/10/22	N	--	--	--	--	--	--	--	--	<0.5	--	0.25
MW-36-100	09/14/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-37D	06/24/20	N	--	0.66	--	--	--	--	--	--	--	--	0.92
MW-37D	12/10/20	N	--	1.1	2,400	--	32	--	3,800	--	--	--	0.98
MW-37D	06/07/21	N	--	0.82	--	--	--	--	--	--	--	--	1.4
MW-37D	12/07/21	N	--	1	--	--	--	--	--	--	--	--	1.4
MW-37D	06/16/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-37S	12/10/20	N	--	0.82	1,300	--	44	--	2,200	--	--	--	--
MW-37S	12/07/21	N	--	0.8	--	--	--	--	--	--	--	--	1.2
MW-37S	06/16/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-38D	04/23/20	N	--	<2.5	--	--	--	--	--	--	--	--	<0.05
MW-38D	10/05/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-38D	12/14/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-38D	12/15/20	N	--	<0.5	3,800	--	43	--	5,800	--	--	--	0.52
MW-38D	02/25/21	N	--	<0.5	--	--	--	--	--	--	--	--	0.12
MW-38D	05/05/21	N	50 J	<0.5	5,700	--	--	--	7,500	--	--	--	0.075
MW-38D	09/22/21	N	47	<0.5	5,300	--	--	--	7,000	--	--	--	0.36
MW-38D	12/08/21	N	--	0.83	--	--	--	--	--	--	--	--	1.5
MW-38D	03/03/22	N	--	0.75	--	--	--	--	--	--	0.75	--	--
MW-38D	06/08/22	N	--	<2.5	--	--	--	--	--	--	<1	--	--
MW-38D	06/08/22	FD	--	<2.5	--	--	--	--	--	--	<1	--	--
MW-38D	08/25/22	N	--	<2.5	--	--	--	--	--	--	<1	--	--
MW-38S	02/25/20	N	--	2.5	--	--	--	--	--	--	--	--	4.7
MW-38S	02/25/20	FD	--	2.4	--	--	--	--	--	--	--	--	5.1
MW-38S	04/23/20	N	--	2.9	--	--	--	--	--	--	--	--	5.1
MW-38S	04/23/20	FD	--	3.1	--	--	--	--	--	--	--	--	5.5

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-36-100	08/25/21	N	--	--	--
MW-36-100	09/07/21	N	--	--	--
MW-36-100	09/21/21	N	--	--	--
MW-36-100	10/06/21	N	--	--	--
MW-36-100	10/18/21	N	--	--	--
MW-36-100	11/01/21	N	--	--	--
MW-36-100	11/18/21	N	--	--	--
MW-36-100	12/03/21	N	--	--	<1
MW-36-100	03/09/22	N	--	--	<1
MW-36-100	05/04/22	N	--	--	<1
MW-36-100	06/17/22	N	470	--	<1
MW-36-100	06/17/22	FD	470	--	<1
MW-36-100	07/14/22	N	430	--	<1
MW-36-100	07/14/22	FD	430	--	<1
MW-36-100	08/10/22	N	240	--	<1
MW-36-100	09/14/22	N	350	--	<1
MW-37D	06/24/20	N	--	--	--
MW-37D	12/10/20	N	650	7,100	--
MW-37D	06/07/21	N	--	--	--
MW-37D	12/07/21	N	--	--	--
MW-37D	06/16/22	N	--	--	--
MW-37S	12/10/20	N	330	4,200	--
MW-37S	12/07/21	N	--	--	--
MW-37S	06/16/22	N	--	--	--
MW-38D	04/23/20	N	--	--	--
MW-38D	10/05/20	N	--	--	--
MW-38D	12/14/20	N	--	--	--
MW-38D	12/15/20	N	580	11,000 J	--
MW-38D	02/25/21	N	--	--	--
MW-38D	05/05/21	N	720	12,000 J	--
MW-38D	09/22/21	N	700	13,000	--
MW-38D	12/08/21	N	--	--	--
MW-38D	03/03/22	N	--	--	--
MW-38D	06/08/22	N	--	--	--
MW-38D	06/08/22	FD	--	--	--
MW-38D	08/25/22	N	--	--	--
MW-38S	02/25/20	N	--	--	--
MW-38S	02/25/20	FD	--	--	--
MW-38S	04/23/20	N	--	--	--
MW-38S	04/23/20	FD	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-38S	11/30/20	N	7.2	7.8	6.5	--	0.99 J	23 J	--	<0.02	6.2 J	0.061	20
MW-38S	02/25/21	N	8.4	9.1	5.1	--	--	--	--	--	--	0.074	17
MW-38S	05/05/21	N	11	11 J	5.5	--	--	34	--	--	--	0.053	15
MW-38S	08/27/21	N	15	17	6.5 J	--	--	--	--	--	--	0.022	12
MW-38S	09/22/21	N	5.6	5.3 J	9 J	--	--	18 J	--	--	3.3 J	0.014	16 J
MW-38S	12/08/21	N	15	17	7.2	--	--	--	--	--	--	0.0034 J	8.2
MW-38S	03/03/22	N	31	31	--	--	--	--	--	--	--	--	7.7
MW-38S	06/08/22	N	17	16	--	--	--	--	--	--	--	--	7
MW-38S	08/25/22	N	31	31	--	--	--	--	--	--	--	--	9
MW-39-040	12/11/20	N	<0.2	<1	18	--	--	--	--	--	--	0.099	--
MW-39-040	12/07/21	N	<0.2	<1	16	74	--	--	--	0.32 J	--	0.12	7.7
MW-39-040	02/28/22	N	<0.2	--	15	85	--	--	--	0.32	--	0.11	--
MW-39-040	05/03/22	N	<0.2	<1	16	72	--	--	--	0.27	--	0.11	--
MW-39-040	06/15/22	N	<0.2	--	15	72	--	--	--	0.35	--	0.11	--
MW-39-040	07/12/22	N	<0.2	--	14	69	--	--	--	0.29 J	--	0.11	--
MW-39-040	08/09/22	N	<0.2	--	13	59 J	--	--	--	0.24 J	--	0.093 J	--
MW-39-040	09/13/22	N	<0.2	--	15	66	--	--	--	0.26 J	--	0.099	--
MW-39-040	09/13/22	FD	<0.2	--	15	61	--	--	--	0.27 J	--	0.098	--
MW-39-050	12/11/20	N	<0.2	<1	2	--	0.12	72 J	--	0.15 J	19	0.17	4.5 J
MW-39-050	12/07/21	N	<0.2	<1	16	73	--	--	--	<0.02	--	0.12	7.6
MW-39-050	02/28/22	N	<0.2	--	1.4	42	--	--	--	0.076	--	0.17	--
MW-39-050	05/03/22	N	<0.2	<1	1.8	37	--	--	--	<0.02	--	0.17	--
MW-39-050	06/15/22	N	<0.2	--	1.6	41	--	--	--	<0.02	--	0.17	--
MW-39-050	07/12/22	N	<0.2	--	1.6	38	--	--	--	<0.02 J	--	0.21	--
MW-39-050	08/09/22	N	<0.2	--	1.2	35 J	--	--	--	<0.02 J	--	0.19 J	--
MW-39-050	09/13/22	N	<0.2	--	1.6	43	--	--	--	0.021 J	--	0.21	--
MW-39-060	12/11/20	N	<0.2	<1	2.7	--	0.14	54 J	--	0.12 J	17	0.11	5.2 J
MW-39-060	12/07/21	N	<0.2	<1	16	74	--	--	--	0.11 J	--	0.12	7.7
MW-39-060	02/28/22	N	<0.2	--	2	36	--	--	--	1.80	--	0.15	--
MW-39-060	06/15/22	N	<1	--	2	24	--	--	--	<0.02	--	0.12	--
MW-39-060	07/12/22	N	<0.2	--	2.1	24	--	--	--	0.036 J	--	0.13	--
MW-39-060	08/09/22	N	<0.2	--	1.6	36 J	--	--	--	0.27 J	--	0.19 J	--
MW-39-060	09/13/22	N	<0.2	--	2	32	--	--	--	0.042 J	--	0.18	--
MW-39-070	12/11/20	N	<0.2	<1	--	--	0.22	53 J	--	0.22 J	17	0.0036	16 J
MW-39-070	12/07/21	N	<0.2	<1	16	74	--	--	--	<0.02	--	0.12	7.7
MW-39-070	02/28/22	N	<0.2	--	1.9	21	--	--	--	<0.02	--	0.0076	--
MW-39-070	05/03/22	N	<0.2	<1	1.1	31	--	--	--	<0.02	--	0.0076	--
MW-39-070	06/15/22	N	<0.2	--	0.39	40	--	--	--	<0.02	--	0.0085	--
MW-39-070	07/12/22	N	<0.2	--	0.71	50	--	--	--	<0.02 J	--	0.015	--
MW-39-070	08/09/22	N	<0.2	--	1.2	22 J	--	--	--	0.025 J	--	0.01 J	--

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MW-38S	11/30/20	N	--	3	270 J	--	150	--	310	--	--	--	5.6
MW-38S	02/25/21	N	--	3.3	--	--	--	--	--	--	--	--	5.3
MW-38S	05/05/21	N	6.4 J	4	320	--	--	--	350	--	--	--	5.9
MW-38S	08/27/21	N	--	4.4	--	--	--	--	--	--	--	--	6.1
MW-38S	09/22/21	N	3.7	2.2	190	--	--	--	140	--	--	--	6.1
MW-38S	12/08/21	N	--	3.9	--	--	--	--	--	--	--	--	7
MW-38S	03/03/22	N	--	5.7	--	--	--	--	--	--	5.6	--	--
MW-38S	06/08/22	N	--	4.5	--	--	--	--	--	--	5.2	--	--
MW-38S	08/25/22	N	--	5	--	--	--	--	--	--	5.2	--	--
MW-39-040	12/11/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-39-040	12/07/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-39-040	02/28/22	N	--	--	--	--	--	--	--	--	<0.1	--	--
MW-39-040	05/03/22	N	--	--	--	--	--	--	--	--	<0.1	--	--
MW-39-040	06/15/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-39-040	07/12/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-39-040	08/09/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-39-040	09/13/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-39-040	09/13/22	FD	--	--	--	--	--	--	--	--	<0.25	--	--
MW-39-040	09/13/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-39-040	09/13/22	FD	--	--	--	--	--	--	--	--	<0.25	--	--
MW-39-050	12/11/20	N	--	<0.5	100	--	180	--	87	--	--	--	--
MW-39-050	12/07/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-39-050	02/28/22	N	--	--	--	--	--	--	--	--	<0.1	--	--
MW-39-050	05/03/22	N	--	--	--	--	--	--	--	--	<0.1	--	--
MW-39-050	06/15/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-39-050	07/12/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-39-050	08/09/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-39-050	09/13/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-39-060	12/11/20	N	--	<0.5	120	--	190	--	93	--	--	--	<0.05
MW-39-060	12/07/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-39-060	02/28/22	N	--	--	--	--	--	--	--	--	<0.1	--	--
MW-39-060	06/15/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-39-060	07/12/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-39-060	08/09/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-39-060	09/13/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-39-070	12/11/20	N	--	<0.5	360	--	190	--	380	--	--	--	--
MW-39-070	12/07/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-39-070	02/28/22	N	--	--	--	--	--	--	--	--	<0.1	--	--
MW-39-070	05/03/22	N	--	--	--	--	--	--	--	--	<0.1	--	--
MW-39-070	06/15/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-39-070	07/12/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-39-070	08/09/22	N	--	--	--	--	--	--	--	--	<0.25	--	--

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-38S	11/30/20	N	150	940	--
MW-38S	02/25/21	N	--	--	--
MW-38S	05/05/21	N	150	920	--
MW-38S	08/27/21	N	--	--	--
MW-38S	09/22/21	N	81	580	--
MW-38S	12/08/21	N	--	--	--
MW-38S	03/03/22	N	--	--	--
MW-38S	06/08/22	N	--	--	--
MW-38S	08/25/22	N	--	--	--
MW-39-040	12/11/20	N	--	--	--
MW-39-040	12/07/21	N	--	--	2.2
MW-39-040	02/28/22	N	--	--	2.7
MW-39-040	05/03/22	N	--	--	2.3
MW-39-040	06/15/22	N	150	--	2.5
MW-39-040	07/12/22	N	130	--	2.2
MW-39-040	08/09/22	N	120	--	2.7
MW-39-040	09/13/22	N	130	--	2.6
MW-39-040	09/13/22	FD	130	--	2.7
MW-39-050	12/11/20	N	200	610	--
MW-39-050	12/07/21	N	--	--	1
MW-39-050	02/28/22	N	--	--	<1
MW-39-050	05/03/22	N	--	--	<1
MW-39-050	06/15/22	N	200	--	<1
MW-39-050	07/12/22	N	190	--	<1
MW-39-050	08/09/22	N	180	--	<1
MW-39-050	09/13/22	N	200	--	<1
MW-39-060	12/11/20	N	210	620	--
MW-39-060	12/07/21	N	--	--	<1
MW-39-060	02/28/22	N	--	--	<1
MW-39-060	06/15/22	N	200	--	<1
MW-39-060	07/12/22	N	200	--	<1
MW-39-060	08/09/22	N	200	--	<1
MW-39-060	09/13/22	N	220	--	<5
MW-39-070	12/11/20	N	270	1,200	--
MW-39-070	12/07/21	N	--	--	<1
MW-39-070	02/28/22	N	--	--	<1
MW-39-070	05/03/22	N	--	--	<1
MW-39-070	06/15/22	N	260	--	<1
MW-39-070	07/12/22	N	280	--	<1
MW-39-070	08/09/22	N	240	--	<1

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MW-39-070	08/09/22	FD	<0.2	--	1.2	24 J	--	--	--	<0.02 J	--	0.012 J	--
MW-39-070	09/13/22	N	<0.2	--	1.2	36	--	--	--	<0.02	--	0.012	--
MW-39-080	12/11/20	N	0.47	1.2	--	--	0.61	100 J	--	0.032 J	38	0.0042	26 J
MW-39-080	12/07/21	N	<0.2	<1	16 J	74 J	--	--	--	<0.02	--	0.12 J	7.7 J
MW-39-080	12/07/21	FD	<0.2	<1	1.5 J	22 J	--	--	--	<0.02	--	0.0039 J	22 J
MW-39-080	02/28/22	N	<0.2	--	0.49	21	--	--	--	<0.1	--	0.0058	--
MW-39-080	05/03/22	N	0.33	<1	<0.1	16	--	--	--	<0.02	--	0.0029	--
MW-39-080	06/15/22	N	10	--	<0.1	25	--	--	--	<0.02	--	0.0036	--
MW-39-080	07/12/22	N	13	--	<0.1	24	--	--	--	<0.02 J	--	0.0048	--
MW-39-080	08/09/22	N	0.53	--	<0.1	20 J	--	--	--	<0.02 J	--	0.0065 J	--
MW-39-080	09/13/22	N	17	--	<0.1	32	--	--	--	<0.02	--	0.0078	--
MW-39-100	06/18/20	N	93	91	<0.1	--	--	--	--	--	--	0.0042	7.5
MW-39-100	12/15/20	N	120	110	2.3	--	2.6	260 J	--	<0.1	46	0.007	7.5
MW-39-100	04/28/21	N	92	91	<0.1	--	--	--	--	--	--	0.0051	7.5
MW-39-100	12/07/21	N	39	39	<0.1	27	--	--	--	0.029 J	--	0.0058	7.4
MW-39-100	02/28/22	N	9.8	--	<0.1	35	--	--	--	0.16	--	0.013	--
MW-39-100	06/15/22	N	170	--	<0.1	29	--	--	--	<0.02	--	0.011	--
MW-39-100	07/12/22	N	240	--	<0.1	29	--	--	--	0.025 J	--	0.0084	--
MW-39-100	08/09/22	N	79	--	<0.1	26 J	--	--	--	<0.02 J	--	0.0085 J	--
MW-39-100	09/13/22	N	110	--	<0.1	31	--	--	--	<0.02	--	0.0089	--
MW-40D	06/17/20	N	12	11	<0.1	--	--	--	--	--	--	0.013	41
MW-40D	12/10/20	N	31	29	4.7	--	1.7	300	--	<0.1 J	49	0.0064	41
MW-40D	05/19/21	N	110	98	<0.1	--	--	--	--	--	--	<0.0005	49
MW-40D	12/06/21	N	45	41 J	<0.1	--	--	--	--	--	--	<0.0005 J	35
MW-40D	06/16/22	N	1.4	3.8	--	--	--	--	--	--	--	--	--
MW-40S	06/17/20	N	18	28	3.2	--	--	--	--	--	--	0.0058	30
MW-40S	12/10/20	N	5.9	29	0.55	--	--	--	--	--	--	0.0082	5.2
MW-40S	05/19/21	N	13	13	1.4	--	--	--	--	--	--	0.00083	15
MW-40S	12/06/21	N	43	45 J	4.3	--	--	--	--	--	--	<0.0005 J	32
MW-40S	12/06/21	FD	42	44 J	4.6	--	--	--	--	--	--	<0.0005 J	31
MW-40S	06/16/22	N	19	19	--	--	--	--	--	--	--	--	--
MW-41D	06/24/20	N	<1	<1	2.4	--	--	--	--	--	--	0.12	80
MW-41D	06/24/20	FD	<1	<1	2.4	--	--	--	--	--	--	0.12	82
MW-41D	12/17/20	N	1.1	1.4	<0.1	--	1.9	380	--	<0.1	31 J	0.047	81
MW-41D	06/07/21	N	<1	<1	<0.1 J	--	--	--	--	--	--	0.081 J	90
MW-41D	06/07/21	FD	<1	<1	<0.1 J	--	--	--	--	--	--	0.078 J	88
MW-41D	12/07/21	N	<1	2.8	<0.1 J	--	--	--	--	--	--	0.032 J	79
MW-41D	06/16/22	N	<1	1	--	--	--	--	--	--	--	--	--
MW-41M	12/17/20	N	9.5	8.3	<0.1	--	1.4	380	--	<0.1	33 J	<0.0005	26
MW-41M	12/07/21	N	6.9	9	<0.1 J	--	--	--	--	--	--	0.0024 J	27

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MW-39-070	08/09/22	FD	--	--	--	--	--	--	--	--	<0.25	--	--
MW-39-070	09/13/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-39-080	12/11/20	N	--	<0.5	1,100	--	250	--	1,400	--	--	--	--
MW-39-080	12/07/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-39-080	12/07/21	FD	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-39-080	02/28/22	N	--	--	--	--	--	--	--	--	0.15	--	--
MW-39-080	05/03/22	N	--	--	--	--	--	--	--	--	0.3	--	--
MW-39-080	06/15/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-39-080	07/12/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-39-080	08/09/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-39-080	09/13/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-39-100	06/18/20	N	--	<0.5	--	--	--	--	--	--	--	--	0.083
MW-39-100	12/15/20	N	--	<0.5	2,500	--	250	--	3,700	--	--	--	0.11
MW-39-100	04/28/21	N	--	<0.5	--	--	--	--	--	--	--	--	0.13
MW-39-100	12/07/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-39-100	02/28/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-39-100	06/15/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-39-100	07/12/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-39-100	08/09/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-39-100	09/13/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-40D	06/17/20	N	--	0.78	--	--	--	--	--	--	--	--	0.57
MW-40D	12/10/20	N	--	1	3,000	--	47	--	5,100	--	--	--	2
MW-40D	05/19/21	N	--	1.8	--	--	--	--	--	--	--	--	2.1
MW-40D	12/06/21	N	--	1.1	--	--	--	--	--	--	--	--	1.3
MW-40D	06/16/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-40S	06/17/20	N	--	6.1	--	--	--	--	--	--	--	--	10
MW-40S	12/10/20	N	--	1.8	--	--	--	--	--	--	--	--	3.5
MW-40S	05/19/21	N	--	3.9	--	--	--	--	--	--	--	--	5.9
MW-40S	12/06/21	N	--	11	--	--	--	--	--	--	--	--	25
MW-40S	12/06/21	FD	--	11	--	--	--	--	--	--	--	--	25
MW-40S	06/16/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-41D	06/24/20	N	--	<0.5	--	--	--	--	--	--	--	--	0.14
MW-41D	06/24/20	FD	--	<0.5	--	--	--	--	--	--	--	--	1.1
MW-41D	12/17/20	N	--	0.55	4,300 J	--	41	--	6,900	--	--	--	0.61
MW-41D	06/07/21	N	--	<0.5	--	--	--	--	--	--	--	--	0.44
MW-41D	06/07/21	FD	--	<0.5	--	--	--	--	--	--	--	--	0.5
MW-41D	12/07/21	N	--	0.65	--	--	--	--	--	--	--	--	<0.1
MW-41D	06/16/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-41M	12/17/20	N	--	<0.5	2,700 J	--	36	--	4,600	--	--	--	0.59
MW-41M	12/07/21	N	--	<0.5	--	--	--	--	--	--	--	--	0.58

Appendix B
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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-39-070	08/09/22	FD	240	--	<1
MW-39-070	09/13/22	N	280	--	<1
MW-39-080	12/11/20	N	460	3,100	--
MW-39-080	12/07/21	N	--	--	<1
MW-39-080	12/07/21	FD	--	--	<1
MW-39-080	02/28/22	N	--	--	<1
MW-39-080	05/03/22	N	--	--	<1
MW-39-080	06/15/22	N	560	--	<1
MW-39-080	07/12/22	N	510	--	<1
MW-39-080	08/09/22	N	350	--	<1
MW-39-080	09/13/22	N	580	--	<1
MW-39-100	06/18/20	N	--	--	--
MW-39-100	12/15/20	N	920	8,600	--
MW-39-100	04/28/21	N	--	--	--
MW-39-100	12/07/21	N	--	--	<1
MW-39-100	02/28/22	N	--	--	<1
MW-39-100	06/15/22	N	940	--	<1
MW-39-100	07/12/22	N	960	--	<1
MW-39-100	08/09/22	N	750	--	<1
MW-39-100	09/13/22	N	880	--	<1
MW-40D	06/17/20	N	--	--	--
MW-40D	12/10/20	N	690	11,000 J	--
MW-40D	05/19/21	N	--	--	--
MW-40D	12/06/21	N	--	--	--
MW-40D	06/16/22	N	--	--	--
MW-40S	06/17/20	N	--	--	--
MW-40S	12/10/20	N	--	--	--
MW-40S	05/19/21	N	--	--	--
MW-40S	12/06/21	N	--	--	--
MW-40S	12/06/21	FD	--	--	--
MW-40S	06/16/22	N	--	--	--
MW-41D	06/24/20	N	--	--	--
MW-41D	06/24/20	FD	--	--	--
MW-41D	12/17/20	N	760	13,000	--
MW-41D	06/07/21	N	--	--	--
MW-41D	06/07/21	FD	--	--	--
MW-41D	12/07/21	N	--	--	--
MW-41D	06/16/22	N	--	--	--
MW-41M	12/17/20	N	560	10,000	--
MW-41M	12/07/21	N	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-41M	06/16/22	N	8.9	9.7	--	--	--	--	--	--	--	--	--
MW-41S	12/17/20	N	5.5	5.2	<0.1	--	0.93	190	--	0.021	26 J	<0.0005	13
MW-41S	12/07/21	N	3.6	6.3	<0.1 J	--	--	--	--	--	--	0.0038 J	14
MW-41S	12/07/21	FD	3.7	5.1	<0.1 J	--	--	--	--	--	--	0.0033 J	14
MW-41S	06/16/22	N	4.8	5.1	--	--	--	--	--	--	--	--	--
MW-42-030	12/16/20	N	<0.2	<1	2	--	--	--	--	--	--	0.11	27 J
MW-42-030	11/30/21	N	<0.2	<1	0.72 J	160	--	--	--	0.76	--	0.14	17
MW-42-030	03/10/22	N	<0.2	--	2	110	--	--	--	0.57	--	0.13	--
MW-42-030	05/05/22	N	<0.2	<1	2.5	62	--	--	--	0.33	--	0.085	--
MW-42-030	08/18/22	N	<0.2	--	1.6	150	--	--	--	0.83	--	0.2	--
MW-42-055	06/18/20	N	<0.2	<1	12 J	--	--	--	--	--	--	0.15	--
MW-42-055	12/16/20	N	<0.2	<1	16	--	0.1	87 J	--	0.53 J	23 J	0.3	3.9 J
MW-42-055	04/27/21	N	<0.2	<1	11	--	--	--	--	--	--	0.22	--
MW-42-055	11/30/21	N	<0.2	<1	13 J	150	--	--	--	0.24	--	0.21	3.9
MW-42-055	03/10/22	N	<0.2	--	8.8	140	--	--	--	0.2	--	0.17	--
MW-42-055	05/05/22	N	<0.2	<1	8.3	130	--	--	--	0.13	--	0.19	--
MW-42-055	08/18/22	N	<0.2	--	10	150	--	--	--	0.18	--	0.25	--
MW-42-065	06/18/20	N	<0.2	<1	5.9 J	--	--	--	--	--	--	0.65	--
MW-42-065	12/16/20	N	<0.2	<1	6	--	0.47	110 J	--	0.053 J	29 J	1.30	9.5 J
MW-42-065	04/27/21	N	<0.2	<1	3.5	--	--	--	--	--	--	0.92	--
MW-42-065	11/30/21	N	<0.2	<1	6.6 J	69	--	--	--	0.046	--	1.60	7.7
MW-42-065	03/10/22	N	<0.2	--	3.1	83	--	--	--	0.092	--	1.60	--
MW-42-065	05/05/22	N	<0.2	<1	1.4	98	--	--	--	0.13	--	2.20	--
MW-42-065	08/18/22	N	<0.2	--	1.6	110	--	--	--	0.41	--	2.30	--
MW-43-025	12/08/20	N	<0.2	<1	32	--	0.56 J	140 J	--	5.40 J	55 J	0.36	6.7
MW-43-025	11/30/21	N	<0.2	<1	31 J	75	--	--	--	4.40	--	0.36	5.3
MW-43-025	03/08/22	N	<0.2	--	21 J	100	--	--	--	4.50 J	--	0.44	--
MW-43-025	05/03/22	N	<0.2	<1	20	91	--	--	--	3.50 J	--	0.44	--
MW-43-025	08/24/22	N	<0.2	--	29 J	80 J	--	--	--	5.30 J	--	0.55 J	--
MW-43-075	12/08/20	N	<0.2	<1	13	--	1.3 J	170 J	--	4.50 J	160 J	0.58	16
MW-43-075	11/30/21	N	<0.2	<1	8.7 J	42	--	--	--	3.70	--	0.54	15
MW-43-075	03/08/22	N	<1	--	8.5 J	45	--	--	--	3.70 J	--	0.57	--
MW-43-075	05/03/22	N	<1	<1	5.7	48	--	--	--	3.20 J	--	0.42	--
MW-43-075	08/24/22	N	<1	--	7 J	52 J	--	--	--	3	--	0.67 J	--
MW-43-090	12/08/20	N	<1	<1	3.1	--	0.92 J	390 J	--	1.40 J	110 J	0.42	30
MW-43-090	11/30/21	N	<1	<1	<0.1 J	55	--	--	--	1.20	--	0.52	29
MW-43-090	03/08/22	N	<1	--	<0.1 J	55	--	--	--	1.20 J	--	0.63	--
MW-43-090	05/03/22	N	<1	<1	<0.5	54	--	--	--	1.20 J	--	0.78	--
MW-43-090	08/24/22	N	<1	--	<0.1 J	54 J	--	--	--	1	--	0.64 J	--
MW-44-070	06/23/20	N	<0.2	<1	1.8	--	--	--	--	--	--	0.23	--

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-41M	06/16/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-41S	12/17/20	N	--	1.9	1,100 J	--	49	--	1,900	--	--	--	2.5
MW-41S	12/07/21	N	--	2.2	--	--	--	--	--	--	--	--	2.5
MW-41S	12/07/21	FD	--	1.9	--	--	--	--	--	--	--	--	2.5
MW-41S	06/16/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-42-030	12/16/20	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-42-030	11/30/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-42-030	03/10/22	N	--	--	--	--	--	--	--	--	<0.1	--	--
MW-42-030	05/05/22	N	--	--	--	--	--	--	--	--	<0.25	--	<0.1
MW-42-030	08/18/22	N	--	--	--	--	--	--	--	--	<0.25	--	<0.1
MW-42-055	06/18/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-42-055	12/16/20	N	--	<0.5	100 J	--	230	--	87	--	--	--	--
MW-42-055	04/27/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-42-055	11/30/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-42-055	03/10/22	N	--	--	--	--	--	--	--	--	<0.1	--	--
MW-42-055	05/05/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-42-055	08/18/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-42-065	06/18/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-42-065	12/16/20	N	--	<0.5	560 J	--	320	--	750	--	--	--	--
MW-42-065	04/27/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-42-065	11/30/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-42-065	03/10/22	N	--	--	--	--	--	--	--	--	<0.1	--	--
MW-42-065	05/05/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-42-065	08/18/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-43-025	12/08/20	N	--	<0.5	150 J	--	390	--	200	--	--	--	--
MW-43-025	11/30/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-43-025	03/08/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-43-025	05/03/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-43-025	08/24/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-43-075	12/08/20	N	--	<0.5	1,800 J	--	700	--	2,700	--	--	--	--
MW-43-075	11/30/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-43-075	03/08/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-43-075	05/03/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-43-075	08/24/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-43-090	12/08/20	N	--	<0.5	3,600 J	--	170	--	5,700	--	--	--	--
MW-43-090	11/30/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-43-090	03/08/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-43-090	05/03/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-43-090	08/24/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-44-070	06/23/20	N	--	--	--	--	--	--	--	--	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-41M	06/16/22	N	--	--	--
MW-41S	12/17/20	N	430	3,900	--
MW-41S	12/07/21	N	--	--	--
MW-41S	12/07/21	FD	--	--	--
MW-41S	06/16/22	N	--	--	--
MW-42-030	12/16/20	N	--	--	--
MW-42-030	11/30/21	N	--	--	1.8
MW-42-030	03/10/22	N	--	--	1.8
MW-42-030	05/05/22	N	--	--	2.3
MW-42-030	08/18/22	N	--	--	<5
MW-42-055	06/18/20	N	--	--	--
MW-42-055	12/16/20	N	200	660	--
MW-42-055	04/27/21	N	--	--	--
MW-42-055	11/30/21	N	--	--	<1
MW-42-055	03/10/22	N	--	--	<1
MW-42-055	05/05/22	N	--	--	<1
MW-42-055	08/18/22	N	--	--	<1
MW-42-065	06/18/20	N	--	--	--
MW-42-065	12/16/20	N	350	2,100	--
MW-42-065	04/27/21	N	--	--	--
MW-42-065	11/30/21	N	--	--	<1
MW-42-065	03/10/22	N	--	--	<1
MW-42-065	05/05/22	N	--	--	<1
MW-42-065	08/18/22	N	--	--	<1
MW-43-025	12/08/20	N	370	1,200	--
MW-43-025	11/30/21	N	--	--	1.2
MW-43-025	03/08/22	N	--	--	1.3
MW-43-025	05/03/22	N	--	--	2.2
MW-43-025	08/24/22	N	--	--	1.9
MW-43-075	12/08/20	N	1,400	7,300	--
MW-43-075	11/30/21	N	--	--	<1
MW-43-075	03/08/22	N	--	--	<1
MW-43-075	05/03/22	N	--	--	<1
MW-43-075	08/24/22	N	--	--	<1
MW-43-090	12/08/20	N	950	12,000	--
MW-43-090	11/30/21	N	--	--	<1
MW-43-090	03/08/22	N	--	--	<1
MW-43-090	05/03/22	N	--	--	<50
MW-43-090	08/24/22	N	--	--	<1
MW-44-070	06/23/20	N	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-44-070	12/11/20	N	<0.2	<1	2.7	--	0.2	72 J	--	0.41 J	18	0.19	8.8 J
MW-44-070	04/28/21	N	<0.2	<1	1.3	--	--	--	--	--	--	0.28	--
MW-44-070	06/29/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-44-070	07/12/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-44-070	07/27/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-44-070	08/10/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-44-070	08/10/21	FD	<0.2	--	--	--	--	--	--	--	--	--	--
MW-44-070	08/26/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-44-070	09/08/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-44-070	09/23/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-44-070	10/06/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-44-070	10/20/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-44-070	11/02/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-44-070	11/19/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-44-070	12/08/21	N	<0.2	<1	2.4	31	--	--	--	0.14	--	0.12	7.6
MW-44-070	03/10/22	N	<0.2	--	1.7	43	--	--	--	0.45	--	0.28	--
MW-44-070	05/06/22	N	<0.2	<1	1.6	46 J	--	--	--	0.63 J	--	0.44 J	--
MW-44-070	08/23/22	N	<0.2	--	2.8	33 J	--	--	--	0.65 J	--	0.32 J	--
MW-44-115	02/21/20	N	4.8	5.9	2.1	--	--	--	--	--	--	0.0064	62
MW-44-115	06/23/20	N	4	3.7	2.3	--	--	--	--	--	--	0.005	68
MW-44-115	10/01/20	N	3.4	4.1	2.2	--	--	--	--	--	--	0.0065	55 J
MW-44-115	10/01/20	FD	3.4	3.9	1.9	--	--	--	--	--	--	0.0059	84 J
MW-44-115	12/11/20	N	2.7	4.4	5.7	20	1.5	80 J	--	0.23 J	11	0.006	71 J
MW-44-115	02/26/21	N	2.5	4.9	1.2	--	--	--	--	--	--	0.013	71
MW-44-115	04/28/21	N	2.3	2.2	<0.1	--	--	--	--	--	--	0.0052	75
MW-44-115	06/29/21	N	<1	--	--	--	--	--	--	--	--	--	--
MW-44-115	07/12/21	N	2.5	--	--	--	--	--	--	--	--	--	--
MW-44-115	07/27/21	N	2.1	--	--	--	--	--	--	--	--	--	--
MW-44-115	07/27/21	FD	2.1	--	--	--	--	--	--	--	--	--	--
MW-44-115	08/10/21	N	0.99	--	--	--	--	--	--	--	--	--	--
MW-44-115	08/26/21	N	<1	<1	0.51 J	--	--	--	--	--	--	0.019	77
MW-44-115	09/08/21	N	1.4	--	--	--	--	--	--	--	--	--	--
MW-44-115	09/23/21	N	1	--	--	--	--	--	--	--	--	--	--
MW-44-115	09/23/21	FD	1	--	--	--	--	--	--	--	--	--	--
MW-44-115	10/06/21	N	0.9	--	--	--	--	--	--	--	--	--	--
MW-44-115	10/20/21	N	1.4	--	--	--	--	--	--	--	--	--	--
MW-44-115	11/02/21	N	1.2	--	--	--	--	--	--	--	--	--	--
MW-44-115	11/19/21	N	1.1	--	--	--	--	--	--	--	--	--	--
MW-44-115	12/08/21	N	1.8	2.2	0.86	19	--	--	--	<0.02	--	0.01	77
MW-44-115	03/10/22	N	<1	--	0.64	22	--	--	--	<0.02	--	0.014	--

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-44-070	12/11/20	N	--	<0.5	230	--	200	--	260	--	--	--	--
MW-44-070	04/28/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-070	06/29/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-070	07/12/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-070	07/27/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-070	08/10/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-070	08/10/21	FD	--	--	--	--	--	--	--	--	--	--	--
MW-44-070	08/26/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-070	09/08/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-070	09/23/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-070	10/06/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-070	10/20/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-070	11/02/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-070	11/19/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-070	12/08/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-44-070	03/10/22	N	--	--	--	--	--	--	--	--	<0.1	--	--
MW-44-070	05/06/22	N	--	--	--	--	--	--	--	--	<0.25	--	<0.1
MW-44-070	08/23/22	N	--	--	--	--	--	--	--	--	<0.25	--	<0.1
MW-44-115	02/21/20	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-44-115	06/23/20	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-44-115	10/01/20	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-44-115	10/01/20	FD	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-44-115	12/11/20	N	--	<0.5	2,300	6.6	120	--	2,900	--	--	--	<0.05
MW-44-115	02/26/21	N	--	<0.5	--	--	--	--	--	--	--	--	0.055
MW-44-115	04/28/21	N	--	<0.5	--	--	--	--	--	--	--	--	0.05
MW-44-115	06/29/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-115	07/12/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-115	07/27/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-115	07/27/21	FD	--	--	--	--	--	--	--	--	--	--	--
MW-44-115	08/10/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-115	08/26/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-44-115	09/08/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-115	09/23/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-115	09/23/21	FD	--	--	--	--	--	--	--	--	--	--	--
MW-44-115	10/06/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-115	10/20/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-115	11/02/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-115	11/19/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-115	12/08/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-44-115	03/10/22	N	--	--	--	--	--	--	--	--	<0.1	--	--

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-44-070	12/11/20	N	230	970	--
MW-44-070	04/28/21	N	--	--	--
MW-44-070	06/29/21	N	--	--	--
MW-44-070	07/12/21	N	--	--	--
MW-44-070	07/27/21	N	--	--	--
MW-44-070	08/10/21	N	--	--	--
MW-44-070	08/10/21	FD	--	--	--
MW-44-070	08/26/21	N	--	--	--
MW-44-070	09/08/21	N	--	--	--
MW-44-070	09/23/21	N	--	--	--
MW-44-070	10/06/21	N	--	--	--
MW-44-070	10/20/21	N	--	--	--
MW-44-070	11/02/21	N	--	--	--
MW-44-070	11/19/21	N	--	--	--
MW-44-070	12/08/21	N	--	--	<1
MW-44-070	03/10/22	N	--	--	<1
MW-44-070	05/06/22	N	--	--	<1
MW-44-070	08/23/22	N	--	--	<1
MW-44-115	02/21/20	N	--	--	--
MW-44-115	06/23/20	N	--	--	--
MW-44-115	10/01/20	N	--	--	--
MW-44-115	10/01/20	FD	--	--	--
MW-44-115	12/11/20	N	910	6,300	--
MW-44-115	02/26/21	N	--	--	--
MW-44-115	04/28/21	N	--	--	--
MW-44-115	06/29/21	N	--	--	--
MW-44-115	07/12/21	N	--	--	--
MW-44-115	07/27/21	N	--	--	--
MW-44-115	07/27/21	FD	--	--	--
MW-44-115	08/10/21	N	--	--	--
MW-44-115	08/26/21	N	--	--	--
MW-44-115	09/08/21	N	--	--	--
MW-44-115	09/23/21	N	--	--	--
MW-44-115	09/23/21	FD	--	--	--
MW-44-115	10/06/21	N	--	--	--
MW-44-115	10/20/21	N	--	--	--
MW-44-115	11/02/21	N	--	--	--
MW-44-115	11/19/21	N	--	--	--
MW-44-115	12/08/21	N	--	--	<1
MW-44-115	03/10/22	N	--	--	<1

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-44-115	05/06/22	N	<1	1.5	<0.1	20 J	--	--	--	0.037 J	--	0.04 J	--
MW-44-115	06/17/22	N	<1	--	<0.1 J	19	--	--	--	<0.02 J	--	0.014 J	--
MW-44-115	07/14/22	N	<0.2	--	4.7 J	19	--	--	--	<0.02	--	0.054 J	--
MW-44-115	07/14/22	FD	<0.2	--	<0.1 J	20	--	--	--	<0.02	--	0.058 J	--
MW-44-115	08/11/22	N	<1	--	<0.1 J	19	--	--	--	<0.02	--	0.046 J	--
MW-44-115	08/11/22	FD	<0.2	--	<0.1 J	21	--	--	--	<0.02	--	0.052 J	--
MW-44-115	09/13/22	N	0.66	--	<0.1	21	--	--	--	0.041 J	--	0.018	--
MW-44-115	09/13/22	FD	0.67	--	<0.1	20	--	--	--	0.037 J	--	0.018	--
MW-44-125	06/23/20	N	<0.2	1	2.6	--	--	--	--	--	--	0.33	13
MW-44-125	12/11/20	N	<0.2	<1	2.5	--	0.32	65 J	--	0.31 J	17	0.17	27 J
MW-44-125	04/28/21	N	<0.2	<1	1.7	--	--	--	--	--	--	0.31	10
MW-44-125	06/29/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-44-125	07/12/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-44-125	07/27/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-44-125	08/10/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-44-125	08/26/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-44-125	09/08/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-44-125	09/23/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-44-125	10/06/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-44-125	10/20/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-44-125	11/02/21	N	<1	--	--	--	--	--	--	--	--	--	--
MW-44-125	11/19/21	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-44-125	12/08/21	N	<1	1.9	<0.1	55	--	--	--	0.3	--	0.39	230
MW-44-125	03/10/22	N	<1	--	1.1	52	--	--	--	0.27	--	0.41	--
MW-44-125	05/06/22	N	<1	<1	<0.1	46 J	--	--	--	0.46 J	--	0.55 J	--
MW-44-125	06/17/22	N	<1	--	<0.1 J	44	--	--	--	0.37 J	--	0.44 J	--
MW-44-125	07/14/22	N	<1	--	5.4	45	--	--	--	0.42	--	0.51 J	--
MW-44-125	08/11/22	N	<1	--	<0.1 J	46	--	--	--	0.39	--	0.54 J	--
MW-44-125	09/13/22	N	<1	--	<0.1	47	--	--	--	0.41 J	--	0.56	--
MW-45-095a	12/01/21	N	<0.2	<1	<0.1	37	--	--	--	<0.02	--	0.26	14
MW-45-095A	03/08/22	N	<0.2	--	<0.1 J	31	--	--	--	<0.02 J	--	0.18	--
MW-45-095A	05/04/22	N	<0.2	<1	<0.1	24	--	--	--	<0.02	--	0.12	--
MW-45-095A	06/17/22	N	<0.2	--	<0.1 J	29	--	--	--	<0.02 J	--	0.37 J	--
MW-45-095A	07/14/22	N	<0.2	--	1.9	23	--	--	--	<0.02	--	0.12 J	--
MW-45-095A	08/11/22	N	<0.2	--	<0.1 J	28	--	--	--	<0.02	--	0.23 J	--
MW-45-095A	09/15/22	N	0.23	--	<0.1	27	--	--	--	<0.02	--	0.18	--
MW-46-175	02/21/20	N	9.1	17	--	--	--	--	--	--	--	--	190
MW-46-175	06/23/20	N	5.3	23	--	--	--	--	--	--	--	--	180
MW-46-175	10/01/20	N	5.1	5.5	--	--	--	--	--	--	--	--	190
MW-46-175	12/15/20	N	7.9	9	--	--	4.2	100 J	--	<0.1	3.5	0.015	190

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-44-115	05/06/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-44-115	06/17/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-44-115	07/14/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-44-115	07/14/22	FD	--	--	--	--	--	--	--	--	<0.5	--	--
MW-44-115	08/11/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-44-115	08/11/22	FD	--	--	--	--	--	--	--	--	<0.5	--	--
MW-44-115	09/13/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-44-115	09/13/22	FD	--	--	--	--	--	--	--	--	<0.5	--	--
MW-44-125	06/23/20	N	--	<0.5	--	--	--	--	--	--	--	--	0.18
MW-44-125	12/11/20	N	--	<0.5	440	--	120	--	2,500	--	--	--	<0.05
MW-44-125	04/28/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-44-125	06/29/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-125	07/12/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-125	07/27/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-125	08/10/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-125	08/26/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-125	09/08/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-125	09/23/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-125	09/08/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-125	09/23/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-125	10/06/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-125	10/20/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-125	11/02/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-125	11/19/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-44-125	12/08/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-44-125	03/10/22	N	--	--	--	--	--	--	--	--	0.1	--	--
MW-44-125	05/06/22	N	--	--	--	--	--	--	--	--	<0.25	--	<0.1
MW-44-125	06/17/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-44-125	07/14/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-44-125	08/11/22	N	--	--	--	--	--	--	--	--	<0.5	--	<0.1
MW-44-125	09/13/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-45-095a	12/01/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-45-095A	03/08/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-45-095A	05/04/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-45-095A	06/17/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-45-095A	07/14/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-45-095A	08/11/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-45-095A	09/15/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-46-175	02/21/20	N	--	<2.5	--	--	--	--	--	--	--	--	1
MW-46-175	06/23/20	N	--	0.55	--	--	--	--	--	--	--	--	1.1
MW-46-175	10/01/20	N	--	1	--	--	--	--	--	--	--	--	0.92
MW-46-175	12/15/20	N	--	<0.5	4,400	--	43	--	5,800	--	--	--	1

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-44-115	05/06/22	N	--	--	<1
MW-44-115	06/17/22	N	1,000	--	<50
MW-44-115	07/14/22	N	1,000	--	<1
MW-44-115	07/14/22	FD	1,000	--	<1
MW-44-115	08/11/22	N	1,000	--	<1
MW-44-115	08/11/22	FD	940	--	<1
MW-44-115	09/13/22	N	1,000	--	<1
MW-44-115	09/13/22	FD	1,200	--	<1
MW-44-125	06/23/20	N	--	--	--
MW-44-125	12/11/20	N	600	5,000	--
MW-44-125	04/28/21	N	--	--	--
MW-44-125	06/29/21	N	--	--	--
MW-44-125	07/12/21	N	--	--	--
MW-44-125	07/27/21	N	--	--	--
MW-44-125	08/10/21	N	--	--	--
MW-44-125	08/26/21	N	--	--	--
MW-44-125	09/08/21	N	--	--	--
MW-44-125	09/23/21	N	--	--	--
MW-44-125	10/06/21	N	--	--	--
MW-44-125	10/20/21	N	--	--	--
MW-44-125	11/02/21	N	--	--	--
MW-44-125	11/19/21	N	--	--	--
MW-44-125	12/08/21	N	--	--	<1
MW-44-125	03/10/22	N	--	--	<1
MW-44-125	05/06/22	N	--	--	<1
MW-44-125	06/17/22	N	1,100	--	<1
MW-44-125	07/14/22	N	1,100	--	<1
MW-44-125	08/11/22	N	1,100	--	<1
MW-44-125	09/13/22	N	1,300	--	<1
MW-45-095a	12/01/21	N	--	--	<1
MW-45-095A	03/08/22	N	--	--	<1
MW-45-095A	05/04/22	N	--	--	<1
MW-45-095A	06/17/22	N	480	--	<1
MW-45-095A	07/14/22	N	490	--	<1
MW-45-095A	08/11/22	N	430	--	<1
MW-45-095A	09/15/22	N	470	--	<1
MW-46-175	02/21/20	N	--	--	--
MW-46-175	06/23/20	N	--	--	--
MW-46-175	10/01/20	N	--	--	--
MW-46-175	12/15/20	N	960	11,000	--

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-46-175	02/25/21	N	5.1	7.6	--	--	--	--	--	--	--	--	180
MW-46-175	04/29/21	N	6.6	7	--	--	--	--	--	--	--	--	210
MW-46-175	06/30/21	N	6.5	--	--	--	--	--	--	--	--	--	--
MW-46-175	07/12/21	N	5.7	--	--	--	--	--	--	--	--	--	--
MW-46-175	07/26/21	N	4.8	--	--	--	--	--	--	--	--	--	--
MW-46-175	08/10/21	N	5.3	--	--	--	--	--	--	--	--	--	--
MW-46-175	08/26/21	N	5.3	7.2	--	--	--	--	--	--	--	--	200
MW-46-175	09/09/21	N	5.4	--	--	--	--	--	--	--	--	--	--
MW-46-175	09/23/21	N	4.3	--	--	--	--	--	--	--	--	--	--
MW-46-175	10/06/21	N	6.1	--	--	--	--	--	--	--	--	--	--
MW-46-175	10/20/21	N	3.6	--	--	--	--	--	--	--	--	--	--
MW-46-175	10/20/21	FD	3.6	--	--	--	--	--	--	--	--	--	--
MW-46-175	11/02/21	N	5.2	--	--	--	--	--	--	--	--	--	--
MW-46-175	11/19/21	N	4.2	--	--	--	--	--	--	--	--	--	--
MW-46-175	12/08/21	N	2.1	36	<0.1	31	--	--	--	0.2	--	0.021	200
MW-46-175	03/03/22	N	5.4	--	<0.1	29	--	--	--	<0.1	--	0.013	--
MW-46-175	05/05/22	N	6.9	6.7	<0.1 J	23 J	--	--	--	<0.02	--	0.0095 J	--
MW-46-175	08/24/22	N	4.3	--	<0.1 J	28 J	--	--	--	0.1 J	--	0.0083 J	--
MW-46-205	06/23/20	N	1.2	2.1	--	--	--	--	--	--	--	--	--
MW-46-205	12/15/20	N	<1	3.6	--	--	5.2	93 J	--	<0.1	3.1	0.053	340
MW-46-205	04/29/21	N	1.6	1.8	--	--	--	--	--	--	--	--	--
MW-46-205	12/08/21	N	<1	<1	<0.1	33	--	--	--	0.068	--	0.046	340
MW-46-205	12/08/21	FD	<1	<1	<0.1	33	--	--	--	<0.1	--	0.042	340
MW-46-205	03/03/22	N	<1	--	<0.1	34	--	--	--	<0.1	--	0.038	--
MW-46-205	05/05/22	N	<1	10	<0.1 J	29 J	--	--	--	0.071	--	0.038 J	--
MW-46-205	08/24/22	N	<1	--	<0.1 J	34 J	--	--	--	<0.02 J	--	0.035 J	--
MW-46-205	08/24/22	FD	<1	--	<0.1 J	33 J	--	--	--	<0.02 J	--	0.035 J	--
MW-47-055	06/25/20	N	16	16	0.17	--	--	--	--	--	--	<0.0005	--
MW-47-055	11/30/20	N	17	17	1.2	--	1.2 J	170 J	--	<0.02	41 J	0.00056	9.1
MW-47-055	04/28/21	N	14	15	<0.1	--	--	--	--	--	--	0.0014	--
MW-47-055	12/06/21	N	17	18 J	--	--	--	--	--	--	--	--	--
MW-47-055	03/03/22	N	17	--	--	--	--	--	--	--	--	--	--
MW-47-055	06/07/22	N	16	16	--	--	--	--	--	--	--	--	--
MW-47-055	08/24/22	N	17	--	--	--	--	--	--	--	--	--	--
MW-47-115	06/25/20	N	24	24	--	--	--	--	--	--	--	--	--
MW-47-115	11/30/20	N	18	18	--	--	1.5 J	270 J	--	<0.02	46 J	0.0032	24
MW-47-115	04/28/21	N	24	23	--	--	--	--	--	--	--	--	--
MW-47-115	12/06/21	N	17	17 J	--	--	--	--	--	--	--	--	--
MW-47-115	03/03/22	N	20	--	--	--	--	--	--	--	--	--	--
MW-47-115	06/07/22	N	22	24	--	--	--	--	--	--	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-46-175	02/25/21	N	--	0.62	--	--	--	--	--	--	--	--	1.1
MW-46-175	04/29/21	N	--	0.56	--	--	--	--	--	--	--	--	1
MW-46-175	06/30/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-46-175	07/12/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-46-175	07/26/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-46-175	08/10/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-46-175	08/26/21	N	--	0.79	--	--	--	--	--	--	--	--	0.94
MW-46-175	09/09/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-46-175	09/23/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-46-175	10/06/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-46-175	10/20/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-46-175	10/20/21	FD	--	--	--	--	--	--	--	--	--	--	--
MW-46-175	11/02/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-46-175	11/19/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-46-175	12/08/21	N	--	0.56	--	--	--	--	--	--	--	--	0.9
MW-46-175	03/03/22	N	--	--	--	--	--	--	--	--	0.76	--	--
MW-46-175	05/05/22	N	--	--	--	--	--	--	--	--	1	--	1
MW-46-175	08/24/22	N	--	--	--	--	--	--	--	--	1	--	1
MW-46-205	06/23/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-46-205	12/15/20	N	--	0.91	4,700	--	48	--	7,200	--	--	--	--
MW-46-205	04/29/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-46-205	12/08/21	N	--	0.82	--	--	--	--	--	--	--	--	0.93
MW-46-205	12/08/21	FD	--	0.86	--	--	--	--	--	--	--	--	0.96
MW-46-205	03/03/22	N	--	--	--	--	--	--	--	--	0.57	--	--
MW-46-205	05/05/22	N	--	--	--	--	--	--	--	--	0.88	--	--
MW-46-205	08/24/22	N	--	--	--	--	--	--	--	--	0.82	--	--
MW-46-205	08/24/22	FD	--	--	--	--	--	--	--	--	0.83	--	--
MW-47-055	06/25/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-47-055	11/30/20	N	--	0.86	730 J	--	65	--	1,500	--	--	--	--
MW-47-055	04/28/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-47-055	12/06/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-47-055	03/03/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-47-055	06/07/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-47-055	08/24/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-47-115	06/25/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-47-115	11/30/20	N	--	0.95	2,800 J	--	59	--	4,400	--	--	--	--
MW-47-115	04/28/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-47-115	12/06/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-47-115	03/03/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-47-115	06/07/22	N	--	--	--	--	--	--	--	--	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-46-175	02/25/21	N	--	--	--
MW-46-175	04/29/21	N	--	--	--
MW-46-175	06/30/21	N	--	--	--
MW-46-175	07/12/21	N	--	--	--
MW-46-175	07/26/21	N	--	--	--
MW-46-175	08/10/21	N	--	--	--
MW-46-175	08/26/21	N	--	--	--
MW-46-175	09/09/21	N	--	--	--
MW-46-175	09/23/21	N	--	--	--
MW-46-175	10/06/21	N	--	--	--
MW-46-175	10/20/21	N	--	--	--
MW-46-175	10/20/21	FD	--	--	--
MW-46-175	11/02/21	N	--	--	--
MW-46-175	11/19/21	N	--	--	--
MW-46-175	12/08/21	N	--	--	<1
MW-46-175	03/03/22	N	--	--	<1
MW-46-175	05/05/22	N	--	--	<1
MW-46-175	08/24/22	N	--	--	<50
MW-46-205	06/23/20	N	--	--	--
MW-46-205	12/15/20	N	900	13,000 J	--
MW-46-205	04/29/21	N	--	--	--
MW-46-205	12/08/21	N	--	--	<1
MW-46-205	12/08/21	FD	--	--	<1
MW-46-205	03/03/22	N	--	--	<1
MW-46-205	05/05/22	N	--	--	<1
MW-46-205	08/24/22	N	--	--	<1
MW-46-205	08/24/22	FD	--	--	<1
MW-47-055	06/25/20	N	--	--	--
MW-47-055	11/30/20	N	280	3,100	--
MW-47-055	04/28/21	N	--	--	--
MW-47-055	12/06/21	N	--	--	--
MW-47-055	03/03/22	N	--	--	--
MW-47-055	06/07/22	N	--	--	--
MW-47-055	08/24/22	N	--	--	--
MW-47-115	06/25/20	N	--	--	--
MW-47-115	11/30/20	N	800	8,700	--
MW-47-115	04/28/21	N	--	--	--
MW-47-115	12/06/21	N	--	--	--
MW-47-115	03/03/22	N	--	--	--
MW-47-115	06/07/22	N	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-47-115	08/24/22	N	24	--	--	--	--	--	--	--	--	--	--
MW-48	05/01/20	N	<1	<1	--	--	--	--	--	--	--	--	--
MW-48	12/16/20	N	<1	<1	--	--	1	350 J	--	0.025 J	35 J	0.0044	9.4 J
MW-48	05/28/21	N	<1	<1	--	--	--	--	--	--	--	--	--
MW-48	12/15/21	N	<1	1.8	<0.1	--	--	--	--	--	--	0.034	9.9
MW-48	06/10/22	N	<1	<1 J	--	--	--	--	--	--	--	--	9.6
MW-48	06/10/22	FD	<1	<1 J	--	--	--	--	--	--	--	--	9.8
MW-49-135	12/04/20	N	8.6 J	11	<0.1	--	0.75 J	270	--	0.18 J	34 J	0.1	30
MW-49-135	12/02/21	N	6.1	7.3	--	--	--	--	--	--	--	--	--
MW-49-135	03/08/22	N	1.3	--	--	--	--	--	--	--	--	--	--
MW-49-135	06/13/22	N	5	4.9 J	--	--	--	--	--	--	--	--	--
MW-49-135	08/23/22	N	7.7	--	--	--	--	--	--	--	--	--	--
MW-49-275	12/04/20	N	<1	<1	--	--	2.8 J	230	--	<0.1 J	8.2 J	0.31	260
MW-49-275	12/02/21	N	<1	2.2	--	--	--	--	--	--	--	--	--
MW-49-275	03/08/22	N	1.1	--	--	--	--	--	--	--	--	--	--
MW-49-275	06/13/22	N	<1	<1 J	--	--	--	--	--	--	--	--	--
MW-49-275	08/23/22	N	<1	--	--	--	--	--	--	--	--	--	--
MW-49-365	12/04/20	N	<1	<1	--	--	3.5 J	380	--	0.18 J	16 J	0.064	200
MW-49-365	12/02/21	N	<1	2.6	--	--	--	--	--	--	--	--	--
MW-49-365	03/08/22	N	<1	--	--	--	--	--	--	--	--	--	--
MW-49-365	06/13/22	N	<1	<1 J	--	--	--	--	--	--	--	--	--
MW-49-365	08/23/22	N	<1	--	--	--	--	--	--	--	--	--	--
MW-50-095	06/24/20	N	13	14	--	--	--	--	--	--	--	--	--
MW-50-095	12/07/20	N	13	14 J	--	--	1 J	130 J	--	0.064 J	16 J	0.0083	17 J
MW-50-095	05/26/21	N	13	13	--	--	--	--	--	--	--	--	--
MW-50-095	12/13/21	N	14	15	<0.1	--	--	--	--	--	--	<0.0005	--
MW-50-095	06/17/22	N	14	14	--	--	--	--	--	--	--	--	--
MW-50-200	06/24/20	N	3,600	3,500	--	--	--	--	--	--	--	--	--
MW-50-200	12/07/20	N	2,300	2,100 J	3.8	44 J	2.1 J	550 J	--	0.11 J	49 J	<0.0005	44 J
MW-50-200	12/07/20	FD	2,300	2,100 J	3.8	45 J	3 J	430 J	--	<0.1 J	39 J	<0.0005	44 J
MW-50-200	05/26/21	N	3,300	3,400	--	--	--	--	--	--	--	--	--
MW-50-200	12/13/21	N	1,900	1,900	3.4	--	--	--	--	--	--	<0.0005	38
MW-50-200	06/17/22	N	1,800	2,400	--	--	--	--	--	--	--	--	--
MW-51	04/27/20	N	3,200	3,200	<0.1	--	--	--	--	--	--	<0.0005	40
MW-51	04/27/20	FD	3,300	3,200	<0.1	--	--	--	--	--	--	<0.0005	42
MW-51	12/03/20	N	3,300	3,500	<0.1	43 J	1.5	190	--	0.081 J	21	<0.0005	40
MW-51	12/03/20	FD	3,300	3,700	<0.1	43 J	1.6	200	--	0.023 J	21	<0.0005	40
MW-51	05/20/21	N	2,600	2,600	<0.1	--	--	--	--	--	--	<0.0005	46
MW-51	12/15/21	N	2,900	3,100	<0.1	43	--	--	--	0.025 J	--	0.0011	42
MW-51	12/15/21	FD	2,900	3,000	<0.1	43	--	--	--	0.024 J	--	0.001	42

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MW-47-115	08/24/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-48	05/01/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-48	12/16/20	N	--	<0.5	3,700 J	--	29	--	5,500	--	--	--	--
MW-48	05/28/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-48	12/15/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-48	06/10/22	N	--	<0.5	--	--	--	--	--	--	<0.5	--	--
MW-48	06/10/22	FD	--	<0.5	--	--	--	--	--	--	<0.5	--	--
MW-49-135	12/04/20	N	--	1.2	2,600	--	62	--	4,000	--	--	--	--
MW-49-135	12/02/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-49-135	03/08/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-49-135	06/13/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-49-135	08/23/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-49-275	12/04/20	N	--	<0.5	5,900	--	36	--	7,700	--	--	--	--
MW-49-275	12/02/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-49-275	03/08/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-49-275	06/13/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-49-275	08/23/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-49-365	12/04/20	N	--	<0.5	7,700	--	43	--	15,000	--	--	--	--
MW-49-365	12/02/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-49-365	03/08/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-49-365	06/13/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-49-365	08/23/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-50-095	06/24/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-50-095	12/07/20	N	--	0.76 J	910 J	--	52	--	1,800	--	--	--	--
MW-50-095	05/26/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-50-095	12/13/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-50-095	06/17/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-50-200	06/24/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-50-200	12/07/20	N	--	1.6 J	3,800 J	3.7 J	35	--	6,700	--	--	--	--
MW-50-200	12/07/20	FD	--	1.6 J	3,500 J	3.7 J	34	--	6,800	--	--	--	--
MW-50-200	05/26/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-50-200	12/13/21	N	--	1.5	--	--	--	--	--	--	--	--	1.9
MW-50-200	06/17/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-51	04/27/20	N	--	19	--	--	--	--	--	--	--	--	9.2
MW-51	04/27/20	FD	--	20	--	--	--	--	--	--	--	--	9.2
MW-51	12/03/20	N	--	33 J	2,000	1.9	100	--	3,100	--	--	--	12
MW-51	12/03/20	FD	--	32 J	2,000	1.8	100	--	3,100	--	--	--	12
MW-51	05/20/21	N	--	12	--	--	--	--	--	--	--	--	6.4
MW-51	12/15/21	N	--	34 J	--	--	--	<0.2	--	--	--	<5	13
MW-51	12/15/21	FD	--	33 J	--	--	--	<0.2	--	--	--	<5	12

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-47-115	08/24/22	N	--	--	--
MW-48	05/01/20	N	--	--	--
MW-48	12/16/20	N	570	11,000	--
MW-48	05/28/21	N	--	--	--
MW-48	12/15/21	N	--	--	--
MW-48	06/10/22	N	--	--	--
MW-48	06/10/22	FD	--	--	--
MW-49-135	12/04/20	N	840	8,000	--
MW-49-135	12/02/21	N	--	--	--
MW-49-135	03/08/22	N	--	--	--
MW-49-135	06/13/22	N	--	--	--
MW-49-135	08/23/22	N	--	--	--
MW-49-275	12/04/20	N	1,300	14,000	--
MW-49-275	12/02/21	N	--	--	--
MW-49-275	03/08/22	N	--	--	--
MW-49-275	06/13/22	N	--	--	--
MW-49-275	08/23/22	N	--	--	--
MW-49-365	12/04/20	N	1,700	21,000	--
MW-49-365	12/02/21	N	--	--	--
MW-49-365	03/08/22	N	--	--	--
MW-49-365	06/13/22	N	--	--	--
MW-49-365	08/23/22	N	--	--	--
MW-50-095	06/24/20	N	--	--	--
MW-50-095	12/07/20	N	300	3,600	--
MW-50-095	05/26/21	N	--	--	--
MW-50-095	12/13/21	N	--	--	--
MW-50-095	06/17/22	N	--	--	--
MW-50-200	06/24/20	N	--	--	--
MW-50-200	12/07/20	N	810	13,000	--
MW-50-200	12/07/20	FD	810	14,000	--
MW-50-200	05/26/21	N	--	--	--
MW-50-200	12/13/21	N	--	--	--
MW-50-200	06/17/22	N	--	--	--
MW-51	04/27/20	N	--	--	--
MW-51	04/27/20	FD	--	--	--
MW-51	12/03/20	N	720	6,500	--
MW-51	12/03/20	FD	720	6,800	--
MW-51	05/20/21	N	--	--	--
MW-51	12/15/21	N	720	--	<1
MW-51	12/15/21	FD	720	--	<1

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-51	02/02/22	N	2,600	--	<0.1	47	--	--	--	0.15	--	0.0053	--
MW-51	03/14/22	N	2,300	2,400	<0.1 J	37	--	--	--	<0.1	--	0.0063	49
MW-51	03/14/22	FD	2,300	2,300	<0.1 J	38	--	--	--	<0.1	--	0.0061	49
MW-51	04/13/22	N	1,800	--	<0.1	37	--	--	--	0.02 J	--	0.00082	--
MW-51	05/20/22	N	870	--	<0.1 J	29 J	--	--	--	<0.02	--	<0.0005	--
MW-51	06/14/22	N	450	540	<0.1	27 J	--	--	--	<0.02	--	0.0017	76
MW-51	07/13/22	N	490	--	<0.1	40	--	--	--	0.03 J	--	0.014	--
MW-51	08/12/22	N	390	450	<0.1 J	36	--	--	--	<0.02	--	<0.0005 J	57 J
MW-51	09/15/22	N	710	--	1.3	84	--	--	--	<0.02	--	0.017	--
MW-52D	06/16/20	N	<1	<1	<0.1	--	--	--	--	--	--	0.25	--
MW-52D	12/08/20	N	<1	<1	2.3	--	2.7 J	260 J	--	0.95 J	24 J	0.23	67
MW-52D	04/27/21	N	<1	<1	<0.1	--	--	--	--	--	--	0.24	--
MW-52D	11/30/21	N	<1	<1	2 J	37	--	--	--	0.95	--	0.28	61
MW-52D	03/08/22	N	<1	--	2.1 J	39	--	--	--	0.53 J	--	0.21	--
MW-52D	05/03/22	N	<1	<1	<0.1	33	--	--	--	0.74 J	--	0.22	--
MW-52D	08/24/22	N	<1	--	<0.1 J	36 J	--	--	--	0.74	--	0.38 J	--
MW-52D	08/24/22	FD	<1	--	<0.1 J	35 J	--	--	--	0.7	--	0.33 J	--
MW-52M	06/16/20	N	<1	<1	<0.1	--	--	--	--	--	--	0.15	--
MW-52M	12/08/20	N	<1	<1	1.2	--	2.9 J	350 J	--	1.60 J	40 J	0.16	34
MW-52M	04/27/21	N	<1	<1	<0.1	--	--	--	--	--	--	0.22	--
MW-52M	11/30/21	N	<1	<1	<0.1 J	54	--	--	--	1.40	--	0.21	30
MW-52M	03/08/22	N	<1	--	<0.1 J	56	--	--	--	1 J	--	0.18	--
MW-52M	05/03/22	N	<1	<1	<0.1	58	--	--	--	0.62 J	--	0.23	--
MW-52M	08/24/22	N	<1	--	<0.1 J	56 J	--	--	--	1.60	--	0.28 J	--
MW-52S	06/16/20	N	<0.2	<1	<0.1	--	--	--	--	--	--	1.30	--
MW-52S	12/08/20	N	<1	<1	1.7	--	2.8 J	730 J	--	27 J	860 J	1.20	25
MW-52S	04/27/21	N	<0.2	<1	<0.1	--	--	--	--	--	--	1.30	--
MW-52S	11/30/21	N	<0.2	<1	<0.1 J	1,400	--	--	--	20	--	1.40	5.3
MW-52S	11/30/21	FD	<0.2	<1	<0.1 J	1,300	--	--	--	20	--	1.30	4.9
MW-52S	03/08/22	N	<1	--	<0.1 J	1,000	--	--	--	21 J	--	1.20	--
MW-52S	05/03/22	N	<1	<1	<0.1	400	--	--	--	26 J	--	1.40	--
MW-52S	08/24/22	N	<1	--	<0.1 J	850 J	--	--	--	20	--	1.30 J	--
MW-53D	06/16/20	N	<1	<1	<0.1	--	--	--	--	--	--	1.10	--
MW-53D	12/08/20	N	<1	<1	3.3	--	4.1 J	280 J	--	0.46 J	19 J	1.10	160
MW-53D	04/27/21	N	<1	<1	<0.1	--	--	--	--	--	--	0.89	--
MW-53D	11/30/21	N	<1	<1	3.6 J	44	--	--	--	0.22	--	1.30	180
MW-53D	03/08/22	N	<1	--	2.3 J	44	--	--	--	0.25 J	--	1	--
MW-53D	05/03/22	N	<1	<1	<0.1	36	--	--	--	0.38 J	--	1.40	--
MW-53D	08/24/22	N	<1	--	<0.1 J	53 J	--	--	--	0.25	--	1.20 J	--
MW-53M	06/16/20	N	<1	<1	<0.1	--	--	--	--	--	--	0.45	--

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MW-51	02/02/22	N	--	--	--	--	--	--	--	--	6.8	--	--
MW-51	03/14/22	N	--	17	--	--	--	<0.2	--	--	5.5	--	--
MW-51	03/14/22	FD	--	17	--	--	--	<0.2	--	--	5.5	--	--
MW-51	04/13/22	N	--	--	--	--	--	--	--	--	4.7	--	--
MW-51	05/20/22	N	--	--	--	--	--	--	--	--	2.1	--	--
MW-51	06/14/22	N	--	2.6 J	--	--	--	<0.2	--	--	1.2	<5	--
MW-51	07/13/22	N	--	--	--	--	--	--	--	--	1.4	--	--
MW-51	08/12/22	N	--	2.9	--	--	--	<0.23	--	--	1	<5	--
MW-51	09/15/22	N	--	--	--	--	--	--	--	--	2.6	--	--
MW-52D	06/16/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-52D	12/08/20	N	--	<0.5	4,500 J	--	62	--	7,100	--	--	--	--
MW-52D	04/27/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-52D	11/30/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-52D	03/08/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-52D	05/03/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-52D	08/24/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-52D	08/24/22	FD	--	--	--	--	--	--	--	--	<0.5	--	--
MW-52M	06/16/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-52D	08/24/22	FD	--	--	--	--	--	--	--	--	<0.5	--	--
MW-52M	06/16/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-52M	12/08/20	N	--	<0.5	3,100 J	--	85	--	5,300	--	--	--	--
MW-52M	04/27/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-52M	11/30/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-52M	03/08/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-52M	05/03/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-52M	08/24/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-52S	06/16/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-52S	12/08/20	N	--	1.9	2,900 J	--	1,500	--	3,100	--	--	--	--
MW-52S	04/27/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-52S	11/30/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-52S	11/30/21	FD	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-52S	03/08/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-52S	05/03/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-52S	08/24/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-53D	06/16/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-53D	12/08/20	N	--	<0.5	5,500 J	--	36	--	8,800	--	--	--	--
MW-53D	04/27/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-53D	11/30/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-53D	03/08/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-53D	05/03/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-53D	08/24/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-53M	06/16/20	N	--	--	--	--	--	--	--	--	--	--	--

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MW-51	02/02/22	N	660	--	<1
MW-51	03/14/22	N	670	--	<1
MW-51	03/14/22	FD	680	--	<1
MW-51	04/13/22	N	630	--	<1
MW-51	05/20/22	N	590	--	<1
MW-51	06/14/22	N	580	--	<1
MW-51	07/13/22	N	540	--	<1
MW-51	08/12/22	N	530	--	<1
MW-51	09/15/22	N	530	--	<1
MW-52D	06/16/20	N	--	--	--
MW-52D	12/08/20	N	960	12,000	--
MW-52D	04/27/21	N	--	--	--
MW-52D	11/30/21	N	--	--	<50
MW-52D	03/08/22	N	--	--	<1
MW-52D	05/03/22	N	--	--	<1
MW-52D	08/24/22	N	--	--	<1
MW-52D	08/24/22	FD	--	--	<1
MW-52M	06/16/20	N	--	--	--
MW-52M	12/08/20	N	630	10,000	--
MW-52M	04/27/21	N	--	--	--
MW-52M	11/30/21	N	--	--	<1
MW-52M	03/08/22	N	--	--	<1
MW-52M	05/03/22	N	--	--	<1
MW-52M	08/24/22	N	--	--	<1
MW-52S	06/16/20	N	--	--	--
MW-52S	12/08/20	N	4,500	12,000	--
MW-52S	04/27/21	N	--	--	--
MW-52S	11/30/21	N	--	--	1.3
MW-52S	11/30/21	FD	--	--	1.4
MW-52S	03/08/22	N	--	--	2.7
MW-52S	05/03/22	N	--	--	2.4
MW-52S	08/24/22	N	--	--	1.9
MW-53D	06/16/20	N	--	--	--
MW-53D	12/08/20	N	1,200	15,000	--
MW-53D	04/27/21	N	--	--	--
MW-53D	11/30/21	N	--	--	<1
MW-53D	03/08/22	N	--	--	<1
MW-53D	05/03/22	N	--	--	<1
MW-53D	08/24/22	N	--	--	<1
MW-53M	06/16/20	N	--	--	--

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MW-53M	12/08/20	N	<1	<1	0.77	--	3.2 J	370 J	--	0.55 J	37 J	0.41	61
MW-53M	04/27/21	N	<1	<1	<0.1	--	--	--	--	--	--	0.63	--
MW-53M	11/30/21	N	<1	<1	<0.1 J	58	--	--	--	0.38	--	0.42	54
MW-53M	03/08/22	N	<1	--	<0.1 J	70	--	--	--	0.99 J	--	0.51	--
MW-53M	05/03/22	N	<1	<1	<0.1	55	--	--	--	0.27 J	--	0.4	--
MW-53M	08/24/22	N	<1	--	<0.1 J	65 J	--	--	--	0.44	--	0.42 J	--
MW-53S	11/30/21	N	<0.2	<1	<0.1 J	200	--	--	--	5.40	--	1.20	1.6
MW-53S	03/08/22	N	<0.2	--	<0.1 J	200	--	--	--	5.40 J	--	1.20	--
MW-53S	05/03/22	N	<0.2	<1	<0.1	190	--	--	--	5 J	--	1.10	--
MW-53S	08/24/22	N	<0.2	--	<0.1 J	190 J	--	--	--	5.90	--	1.50 J	--
MW-54-085	06/19/20	N	<0.2	<1	5.19	--	--	--	--	--	--	0.472	--
MW-54-085	12/09/20	N	<0.2	<10	<10	--	1.32	159	--	<0.0002	80.2	0.733	<100
MW-54-085	06/08/21	N	<1	<10	<10	56.9	--	125	--	--	63.8	0.537	47.8
MW-54-085	12/14/21	N	<1	<10	<10	--	--	--	--	--	--	0.689	<100 J
MW-54-085	06/15/22	N	<0.2	<10	--	--	--	--	--	--	--	--	--
MW-54-140	06/19/20	N	<1	<1	2.66	--	--	--	--	--	--	0.106	--
MW-54-140	12/09/20	N	<1	<10	<10	--	1.86	144	--	<0.0002	15.3	<0.1	<100
MW-54-140	06/08/21	N	<1	<10	<10	43	--	154	--	--	18.1	<0.1	44.3
MW-54-140	12/14/21	N	<1	<10	<10	--	--	--	--	--	--	<0.1	<100 J
MW-54-140	06/15/22	N	<1	<10	--	--	--	--	--	--	--	--	--
MW-54-195	06/19/20	N	<1	<1	<1	--	--	--	--	--	--	0.35	--
MW-54-195	12/09/20	N	<1	<10	<10	--	2.93	127	--	<0.0002	4.77	0.331	107
MW-54-195	06/08/21	N	<1	<10	<10	38	--	127	--	--	4.78	0.282	109
MW-54-195	12/14/21	N	<1	<10	<10	--	--	--	--	--	--	0.285	111 J
MW-54-195	06/15/22	N	<0.2	<10	--	--	--	--	--	--	--	--	--
MW-55-045	06/19/20	N	<0.2	<1	--	--	--	--	--	--	--	--	--
MW-55-045	12/09/20	N	<0.2	<10	--	--	0.565	32.9	--	<0.0002	7.4	0.789	<100
MW-55-045	06/09/21	N	<0.2	<1	8.17 J	524	--	31.8	--	--	7.89	1 J	40.4
MW-55-045	12/14/21	N	<0.2	<1	6.35 J	--	--	--	--	--	--	0.625	--
MW-55-045	06/14/22	N	<0.2	<1	--	--	--	--	--	--	--	--	--
MW-55-120	06/19/20	N	7.94	9.2	--	--	--	--	--	--	--	--	--
MW-55-120	06/19/20	FD	7.99	9.23	--	--	--	--	--	--	--	--	--
MW-55-120	12/09/20	N	7.51	<10	--	--	1.65	62.9	--	<0.0002	1.33	<0.1	<100
MW-55-120	06/09/21	N	7.47	<10	<10	41.4	--	64.6	--	--	1.43	--	36.4
MW-55-120	12/14/21	N	7.96	<10	<10	--	--	--	--	--	--	<0.1	--
MW-55-120	12/14/21	FD	7.95	<10	<10	--	--	--	--	--	--	<0.1	--
MW-55-120	06/14/22	N	7.7	<10	--	--	--	--	--	--	--	--	--
MW-56D	06/19/20	N	<1	<1	--	--	--	--	--	--	--	--	--
MW-56D	12/09/20	N	<1	<10	--	--	2.78	412	--	1.06	82.4	0.812	<100
MW-56D	06/09/21	N	<1	<10	<10	40.6	--	421	--	--	85.3	0.809 J	37.1

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-53M	12/08/20	N	--	<0.5	4,400 J	--	46	--	6,700	--	--	--	--
MW-53M	04/27/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-53M	11/30/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-53M	03/08/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-53M	05/03/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-53M	08/24/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-53S	11/30/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-53S	03/08/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-53S	05/03/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-53S	08/24/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-54-085	06/19/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-54-085	12/09/20	N	--	<100	1,870	--	155	--	2,910	--	--	--	--
MW-54-085	06/08/21	N	11	<10	1,670	<10	--	--	2,860	3	--	--	<0.2
MW-54-085	12/14/21	N	--	<100 J	--	--	--	--	--	--	<0.5	--	--
MW-54-085	06/15/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-54-140	06/19/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-54-140	12/09/20	N	--	<100	2,660	--	107	--	4,010	--	--	--	--
MW-54-140	06/08/21	N	20.9	<10	2,770	<10	--	--	4,740	2.57	--	--	0.646
MW-54-140	12/14/21	N	--	<100 J	--	--	--	--	--	--	0.605	--	--
MW-54-140	06/15/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-54-195	06/19/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-54-195	12/09/20	N	--	<100	2,980	--	62.6	--	6,090	--	--	--	--
MW-54-195	06/08/21	N	33.4	<10	4,420	<10	--	--	7,090	4.29	--	--	<0.5
MW-54-195	12/14/21	N	--	<100 J	--	--	--	--	--	--	<1	--	--
MW-54-195	06/15/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-55-045	06/19/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-55-045	12/09/20	N	--	<100	231	--	155	--	258	--	--	--	--
MW-55-045	06/09/21	N	4.19	<1	231	1.19	--	--	274	6.01	--	--	<0.1
MW-55-045	12/14/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-55-045	06/14/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-55-120	06/19/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-55-120	06/19/20	FD	--	--	--	--	--	--	--	--	--	--	--
MW-55-120	12/09/20	N	--	<100	2,120	--	74.2	--	2,190	--	--	--	--
MW-55-120	06/09/21	N	18	<10	1,410	<10	--	--	2,170	4.93	--	--	1.28
MW-55-120	12/14/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-55-120	12/14/21	FD	--	--	--	--	--	--	--	--	--	--	--
MW-55-120	06/14/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-56D	06/19/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-56D	12/09/20	N	--	<100	4,650	--	136	--	7,370	--	--	--	--
MW-56D	06/09/21	N	37.9	<10	4,860	<10	--	--	7,880	1.83	--	--	<0.5

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-53M	12/08/20	N	740	12,000	--
MW-53M	04/27/21	N	--	--	--
MW-53M	11/30/21	N	--	--	<1
MW-53M	03/08/22	N	--	--	<50
MW-53M	05/03/22	N	--	--	<1
MW-53M	08/24/22	N	--	--	<1
MW-53S	11/30/21	N	--	--	<1
MW-53S	03/08/22	N	--	--	<1
MW-53S	05/03/22	N	--	--	1.7
MW-53S	08/24/22	N	--	--	1.5
MW-54-085	06/19/20	N	--	--	--
MW-54-085	12/09/20	N	562	5,780	--
MW-54-085	06/08/21	N	439	5,640	--
MW-54-085	12/14/21	N	--	--	--
MW-54-085	06/15/22	N	--	--	--
MW-54-140	06/19/20	N	--	--	--
MW-54-140	12/09/20	N	565	7,790	--
MW-54-140	06/08/21	N	565	6,980	--
MW-54-140	12/14/21	N	--	--	--
MW-54-140	06/15/22	N	--	--	--
MW-54-195	06/19/20	N	--	--	--
MW-54-195	12/09/20	N	869	11,500	--
MW-54-195	06/08/21	N	884	11,400	--
MW-54-195	12/14/21	N	--	--	--
MW-54-195	06/15/22	N	--	--	--
MW-55-045	06/19/20	N	--	--	--
MW-55-045	12/09/20	N	76.4	751	--
MW-55-045	06/09/21	N	84.4	689	--
MW-55-045	12/14/21	N	--	--	--
MW-55-045	06/14/22	N	--	--	--
MW-55-120	06/19/20	N	--	--	--
MW-55-120	06/19/20	FD	--	--	--
MW-55-120	12/09/20	N	239	4,050	--
MW-55-120	06/09/21	N	245	3,750	--
MW-55-120	12/14/21	N	--	--	--
MW-55-120	12/14/21	FD	--	--	--
MW-55-120	06/14/22	N	--	--	--
MW-56D	06/19/20	N	--	--	--
MW-56D	12/09/20	N	1,270	14,200	--
MW-56D	06/09/21	N	1,340	13,300	--

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-56D	12/14/21	N	<1	<10	<10	--	--	--	--	--	--	0.804	<100 J
MW-56D	06/14/22	N	<0.2	<10	--	--	--	--	--	--	--	--	--
MW-56M	06/19/20	N	<1	<1	--	--	--	--	--	--	--	--	--
MW-56M	12/09/20	N	<1	<10	--	--	1.82	377	--	2.97	99.6	0.675	<100
MW-56M	12/09/20	FD	<1	<10	--	--	1.83	375	--	2.95	96.7	0.654	<100
MW-56M	06/09/21	N	<1	<10	<10	48.9	--	374	--	--	99.3	0.657 J	<20
MW-56M	06/09/21	FD	<1	<10	<10	48.3	--	382	--	--	99.8	0.689 J	<20
MW-56M	12/14/21	N	<1	<10	<10	--	--	--	--	--	--	0.784	<100 J
MW-56M	06/14/22	N	<0.2	<10	--	--	--	--	--	--	--	--	--
MW-56S	06/19/20	N	<0.2	<1	--	--	--	--	--	--	--	--	--
MW-56S	12/09/20	N	<0.2	<10	--	--	1.99	144	--	4.92	50.3	0.754	<100
MW-56S	06/09/21	N	<0.2	<10	<10	68.2	--	148	--	--	60.3	0.823 J	28.6
MW-56S	12/14/21	N	<0.2	<10	<10	--	--	--	--	--	--	1.25	<100 J
MW-56S	06/14/22	N	<0.2	<10	--	--	--	--	--	--	--	--	--
MW-57-070	06/22/20	N	610	530	1.3	--	--	--	--	--	--	0.0015	2.4
MW-57-070	12/04/20	N	630 J	660	1.3	--	0.4 J	250	--	<0.02 J	18 J	0.00098	2.6
MW-57-070	04/30/21	N	490	540	1.1	--	--	--	--	--	--	0.0034	3.5
MW-57-070	12/10/21	N	380	410	1.2	--	--	--	--	--	--	0.0011	4
MW-57-070	06/07/22	N	570	520	--	--	--	--	--	--	--	--	--
MW-57-185	06/22/20	N	1.3	1.9	4.3	--	--	--	--	--	--	0.002	78
MW-57-185	06/22/20	FD	1.4	2	4.1	--	--	--	--	--	--	0.0021	75
MW-57-185	12/04/20	N	4.4 J	5	5.4	--	2.4 J	330	--	<0.1 J	<500 J	0.0014	83
MW-57-185	04/30/21	N	4.2	4.3	<0.1	--	--	--	--	--	--	0.0011	83
MW-57-185	12/10/21	N	<1	<1	<0.1	--	--	--	--	--	--	0.0032	78
MW-57-185	06/07/22	N	<1	<1	--	--	--	--	--	--	--	--	--
MW-58BR	02/17/20	N	120	120	0.11	--	--	--	--	--	--	0.16	22
MW-58BR	05/01/20	N	43	41	1.9	--	--	--	--	--	--	0.14	24
MW-58BR	09/29/20	N	3.9	4.5	1	--	--	--	--	--	--	0.29	29
MW-58BR	11/30/20	N	5.2	5.7	2.4	--	1.3 J	320 J	--	<0.02	31 J	0.33	27
MW-58BR	02/15/21	N	4.2	5.2	2.1	--	--	--	--	--	--	0.32	26
MW-58BR	05/17/21	N	2.7	2.8	<0.1	--	--	--	--	--	--	0.31	28
MW-58BR	05/17/21	FD	2.3	2.2	<0.1	--	--	--	--	--	--	0.28	27
MW-58BR	08/26/21	N	16	17	<0.1 J	--	--	--	--	--	--	0.38	26
MW-58BR	12/09/21	N	6.4	7.3	<0.1 J	--	--	--	--	--	--	0.35	25
MW-58BR	06/21/22	N	<0.2	<1 J	--	--	--	--	--	--	--	--	--
MW-59-100	06/22/20	N	2,100	2,200	<0.1	--	--	--	--	--	--	0.01	9
MW-59-100	12/08/20	N	2,700	2,900	2.2	69	1.5 J	550 J	--	0.042 J	25 J	0.0015	4.8
MW-59-100	12/08/20	FD	2,700	2,800	2.2	70	3.4 J	670 J	--	0.27 J	27 J	0.0013	4.7
MW-59-100	02/17/21	N	2,500	2,800	--	--	--	--	--	--	--	--	6.6
MW-59-100	06/07/21	N	1,800	1,900	<0.1 J	--	--	--	--	--	--	0.002 J	11

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-56D	12/14/21	N	--	<100 J	--	--	--	--	--	--	<1	--	--
MW-56D	06/14/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-56M	06/19/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-56M	12/09/20	N	--	<100	2,920	--	437	--	4,860	--	--	--	--
MW-56M	12/09/20	FD	--	<100	2,930	--	438	--	4,820	--	--	--	--
MW-56M	06/09/21	N	20.3	<10	2,920	<10	--	--	5,060	0.96	--	--	<0.2
MW-56M	06/09/21	FD	20.5	<10	2,900	<10	--	--	4,950	1.02	--	--	0.475
MW-56M	12/14/21	N	--	<100 J	--	--	--	--	--	--	<0.5	--	--
MW-56M	06/14/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-56S	06/19/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-56S	12/09/20	N	--	<100	1,200	--	640	--	1,300	--	--	--	--
MW-56S	06/09/21	N	10.8	<10	1,230	<10	--	--	1,590	4.68	--	--	<0.2
MW-56S	12/14/21	N	--	<100 J	--	--	--	--	--	--	<0.2	--	--
MW-56S	06/14/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-57-070	06/22/20	N	--	2.8	--	--	--	--	--	--	--	--	8.8
MW-57-070	12/04/20	N	--	3.2	75	--	110	--	550	--	--	--	8.5
MW-57-070	04/30/21	N	--	3.6	--	--	--	--	--	--	--	--	9.3
MW-57-070	12/10/21	N	--	3.7	--	--	--	--	--	--	--	--	11
MW-57-070	06/07/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-57-185	06/22/20	N	--	<0.5	--	--	--	--	--	--	--	--	0.14
MW-57-185	06/22/20	FD	--	<0.5	--	--	--	--	--	--	--	--	0.12
MW-57-185	12/04/20	N	--	<0.5	2,800	--	110	--	5,700	--	--	--	0.18
MW-57-185	04/30/21	N	--	<0.5	--	--	--	--	--	--	--	--	0.25
MW-57-185	12/10/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-57-185	06/07/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-58BR	02/17/20	N	--	2.7	--	--	--	--	--	--	--	--	1.8
MW-58BR	05/01/20	N	--	1.9	--	--	--	--	--	--	--	--	0.77
MW-58BR	09/29/20	N	--	2	--	--	--	--	--	--	--	--	0.39
MW-58BR	11/30/20	N	--	2.3	1,000 J	--	47	--	2,200	--	--	--	0.5
MW-58BR	02/15/21	N	--	2.1	--	--	--	--	--	--	--	--	0.46
MW-58BR	05/17/21	N	--	1.7	--	--	--	--	--	--	--	--	0.46 J
MW-58BR	05/17/21	FD	--	1.7	--	--	--	--	--	--	--	--	0.95 J
MW-58BR	08/26/21	N	--	2.2	--	--	--	--	--	--	--	--	0.71
MW-58BR	12/09/21	N	--	1.9	--	--	--	--	--	--	--	--	0.74
MW-58BR	06/21/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-59-100	06/22/20	N	--	1.9	--	--	--	--	--	--	--	--	2.1
MW-59-100	12/08/20	N	--	3.2 J	1,500 J	<1	110	--	3,100	--	--	--	3.4
MW-59-100	12/08/20	FD	--	4.1 J	1,400 J	<1	110	--	3,100	--	--	--	3.5
MW-59-100	02/17/21	N	--	4.3	--	--	--	--	--	--	--	--	3.6
MW-59-100	06/07/21	N	--	2	--	--	--	--	--	--	--	--	1.8

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MW-56D	12/14/21	N	--	--	--
MW-56D	06/14/22	N	--	--	--
MW-56M	06/19/20	N	--	--	--
MW-56M	12/09/20	N	835	9,310	--
MW-56M	12/09/20	FD	854	9,490	--
MW-56M	06/09/21	N	876	9,050	--
MW-56M	06/09/21	FD	945	8,890	--
MW-56M	12/14/21	N	--	--	--
MW-56M	06/14/22	N	--	--	--
MW-56S	06/19/20	N	--	--	--
MW-56S	12/09/20	N	585	3,980	--
MW-56S	06/09/21	N	650	3,840	--
MW-56S	12/14/21	N	--	--	--
MW-56S	06/14/22	N	--	--	--
MW-57-070	06/22/20	N	--	--	--
MW-57-070	12/04/20	N	110	1,300	--
MW-57-070	04/30/21	N	--	--	--
MW-57-070	12/10/21	N	--	--	--
MW-57-070	06/07/22	N	--	--	--
MW-57-185	06/22/20	N	--	--	--
MW-57-185	06/22/20	FD	--	--	--
MW-57-185	12/04/20	N	700	11,000	--
MW-57-185	04/30/21	N	--	--	--
MW-57-185	12/10/21	N	--	--	--
MW-57-185	06/07/22	N	--	--	--
MW-58BR	02/17/20	N	--	--	--
MW-58BR	05/01/20	N	--	--	--
MW-58BR	09/29/20	N	--	--	--
MW-58BR	11/30/20	N	470	4,600	--
MW-58BR	02/15/21	N	--	--	--
MW-58BR	05/17/21	N	--	--	--
MW-58BR	05/17/21	FD	--	--	--
MW-58BR	08/26/21	N	--	--	--
MW-58BR	12/09/21	N	--	--	--
MW-58BR	06/21/22	N	--	--	--
MW-59-100	06/22/20	N	--	--	--
MW-59-100	12/08/20	N	570	6,700	--
MW-59-100	12/08/20	FD	580	7,200	--
MW-59-100	02/17/21	N	--	--	--
MW-59-100	06/07/21	N	--	--	--

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MW-59-100	12/15/21	N	2,000	2,000	<0.1	--	--	--	--	--	--	0.0097	8
MW-59-100	06/09/22	N	1,700	1,700 J	--	--	--	--	--	--	--	--	--
MW-60-125	06/24/20	N	660	630	<0.1	--	--	--	--	--	--	0.0047	17
MW-60-125	10/01/20	N	580	570	<0.1	--	0.82	450 J	--	<0.02	--	0.005	18
MW-60-125	05/27/21	N	390	390	<0.1 J	--	--	--	--	--	--	0.003	16
MW-60-125	12/16/21	N	480	480	<0.1	--	--	--	--	--	--	0.0061	19
MW-60-125	06/16/22	N	270	260	--	--	--	--	--	--	--	--	--
MW-60BR-245	02/20/20	N	52	44	6	--	--	--	--	--	--	0.007	57
MW-60BR-245	09/30/20	N	21	22	<0.1	--	--	--	--	--	--	0.002	63
MW-60BR-245	12/17/20	N	16	15	<0.1	--	2.4	390	--	<0.1	7 J	0.0016	65
MW-60BR-245	02/18/21	N	22	23 J	5.6	--	--	--	--	--	--	0.0015	70
MW-60BR-245	05/27/21	N	9.4	8.9	<0.1 J	--	--	--	--	--	--	<0.0005	64
MW-60BR-245	08/26/21	N	5.5	5.5	<0.1 J	--	--	--	--	--	--	<0.0005	64
MW-60BR-245	12/16/21	N	7.1	8.6	<0.1	--	--	--	--	--	--	0.0016	--
MW-60BR-245	06/16/22	N	10	10	--	--	--	--	--	--	--	--	--
MW-61-110	12/04/20	N	430 J	440	<0.1	--	2.4 J	610	--	<0.1 J	26 J	0.24	22
MW-61-110	05/27/21	N	160	150	<0.1 J	--	--	--	--	--	--	0.3	23
MW-61-110	12/10/21	N	370	390	<0.1	--	--	--	--	--	--	0.35	22
MW-61-110	06/16/22	N	310	280	--	--	--	--	--	--	--	--	--
MW-62-065	02/19/20	N	480	460	0.13	--	--	--	--	--	--	0.0035	13
MW-62-065	04/28/20	N	580	550	<0.1	--	--	--	--	--	--	0.0049	15
MW-62-065	09/30/20	N	590	610	<0.1	--	--	--	--	--	--	0.0033	13
MW-62-065	12/04/20	N	620	570	<0.1	--	0.88 J	180	--	<0.02 J	30 J	<0.0005	12
MW-62-065	02/18/21	N	530	580 J	1.5	--	--	--	--	--	--	0.0034	14
MW-62-065	05/27/21	N	670	640	<0.1 J	--	--	--	--	--	--	0.0011	12
MW-62-065	08/27/21	N	590	660	<0.1 J	--	--	--	--	--	--	0.0017	13
MW-62-065	08/27/21	FD	600	610	<0.1 J	--	--	--	--	--	--	0.0022	13
MW-62-065	12/15/21	N	580	610	<0.1	--	--	--	--	--	--	<0.0005	11
MW-62-065	06/09/22	N	650	660 J	--	--	--	--	--	--	--	--	--
MW-62-110	02/18/20	N	<0.2	<1	5.7	--	--	--	--	--	--	0.15	49
MW-62-110	04/29/20	N	<1	<1	2.9	--	--	--	--	--	--	0.13	71
MW-62-110	09/30/20	N	<1	<1	<0.1	--	--	--	--	--	--	0.14	47
MW-62-110	12/02/20	N	<0.2	<1	8.1	--	1.5	140	--	0.35	9.2	0.21	50
MW-62-110	02/16/21	N	<0.2	<1	4.5 J	--	--	--	--	--	--	0.13	50
MW-62-110	06/08/21	N	<1	<1	<0.1 J	--	--	--	--	--	--	0.16 J	64
MW-62-110	08/27/21	N	<1	<1	<0.1 J	--	--	--	--	--	--	0.15	56
MW-62-110	12/01/21	N	<1	<1	5.2	--	--	--	--	--	--	0.18	38
MW-62-110	06/22/22	N	<1	<1 J	--	--	--	--	--	--	--	--	--
MW-62-190	04/29/20	N	<1	<1	<0.5	--	--	--	--	--	--	0.7	41
MW-62-190	04/29/20	FD	<1	<1	<0.5	--	--	--	--	--	--	0.72	40

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-59-100	12/15/21	N	--	2.1	--	--	--	--	--	--	--	--	2.3
MW-59-100	06/09/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-60-125	06/24/20	N	--	5.2	--	--	--	--	--	--	--	--	3.8
MW-60-125	10/01/20	N	--	6.5	1,300	--	60	--	2,700	1.5	--	--	4.1
MW-60-125	05/27/21	N	--	6.5	--	--	--	--	--	--	--	--	3.9
MW-60-125	12/16/21	N	--	5.8	--	--	--	--	--	--	--	--	3.8
MW-60-125	06/16/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-60BR-245	02/20/20	N	--	3	--	--	--	--	--	--	--	--	0.22
MW-60BR-245	09/30/20	N	--	3.4 J	--	--	--	--	--	--	--	--	0.18
MW-60BR-245	12/17/20	N	--	2.9	3,600 J	--	24	--	5,600	--	--	--	0.18
MW-60BR-245	02/18/21	N	--	3.1	--	--	--	--	--	--	--	--	0.25
MW-60BR-245	05/27/21	N	--	2.5	--	--	--	--	--	--	--	--	0.21
MW-60BR-245	08/26/21	N	--	3.8	--	--	--	--	--	--	--	--	0.12
MW-60BR-245	12/16/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-60BR-245	06/16/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-61-110	12/04/20	N	--	1.3	2,700	--	46	--	5,400	--	--	--	0.8
MW-61-110	05/27/21	N	--	0.83	--	--	--	--	--	--	--	--	0.38
MW-61-110	12/10/21	N	--	1.1	--	--	--	--	--	--	--	--	0.63
MW-61-110	06/16/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-62-065	02/19/20	N	--	3.8	--	--	--	--	--	--	--	--	5.1
MW-62-065	04/28/20	N	--	3.8	--	--	--	--	--	--	--	--	4.6
MW-62-065	09/30/20	N	--	4.7 J	--	--	--	--	--	--	--	--	5.1
MW-62-065	12/04/20	N	--	3.5	870	--	110	--	1,800	--	--	--	4.6
MW-62-065	02/18/21	N	--	3.8	--	--	--	--	--	--	--	--	4.8
MW-62-065	05/27/21	N	--	4.1	--	--	--	--	--	--	--	--	4.6
MW-62-065	08/27/21	N	--	3.9	--	--	--	--	--	--	--	--	5.2
MW-62-065	08/27/21	FD	--	3.6	--	--	--	--	--	--	--	--	4.9
MW-62-065	12/15/21	N	--	3.4	--	--	--	--	--	--	--	--	5
MW-62-065	06/09/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-62-110	02/18/20	N	--	<0.5	--	--	--	--	--	--	--	--	0.055
MW-62-110	04/29/20	N	--	<0.5	--	--	--	--	--	--	--	--	3.3
MW-62-110	09/30/20	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-62-110	12/02/20	N	--	<0.5	1,600	--	83	--	2,900	--	--	--	<0.1
MW-62-110	02/16/21	N	--	<0.5	--	--	--	--	--	--	--	--	--
MW-62-110	06/08/21	N	--	<0.5	--	--	--	--	--	--	--	--	0.1
MW-62-110	08/27/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-62-110	12/01/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-62-110	06/22/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-62-190	04/29/20	N	--	<2.5	--	--	--	--	--	--	--	--	<0.05
MW-62-190	04/29/20	FD	--	<2.5	--	--	--	--	--	--	--	--	<0.05

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-59-100	12/15/21	N	--	--	--
MW-59-100	06/09/22	N	--	--	--
MW-60-125	06/24/20	N	--	--	--
MW-60-125	10/01/20	N	460	6,800	--
MW-60-125	05/27/21	N	--	--	--
MW-60-125	12/16/21	N	--	--	--
MW-60-125	06/16/22	N	--	--	--
MW-60BR-245	02/20/20	N	--	--	--
MW-60BR-245	09/30/20	N	--	--	--
MW-60BR-245	12/17/20	N	780	11,000	--
MW-60BR-245	02/18/21	N	--	--	--
MW-60BR-245	05/27/21	N	--	--	--
MW-60BR-245	08/26/21	N	--	--	--
MW-60BR-245	12/16/21	N	--	--	--
MW-60BR-245	06/16/22	N	--	--	--
MW-61-110	12/04/20	N	720	11,000	--
MW-61-110	05/27/21	N	--	--	--
MW-61-110	12/10/21	N	--	--	--
MW-61-110	06/16/22	N	--	--	--
MW-62-065	02/19/20	N	--	--	--
MW-62-065	04/28/20	N	--	--	--
MW-62-065	09/30/20	N	--	--	--
MW-62-065	12/04/20	N	430	3,800	--
MW-62-065	02/18/21	N	--	--	--
MW-62-065	05/27/21	N	--	--	--
MW-62-065	08/27/21	N	--	--	--
MW-62-065	08/27/21	FD	--	--	--
MW-62-065	12/15/21	N	--	--	--
MW-62-065	06/09/22	N	--	--	--
MW-62-110	02/18/20	N	--	--	--
MW-62-110	04/29/20	N	--	--	--
MW-62-110	09/30/20	N	--	--	--
MW-62-110	12/02/20	N	550	6,200	--
MW-62-110	02/16/21	N	--	--	--
MW-62-110	06/08/21	N	--	--	--
MW-62-110	08/27/21	N	--	--	--
MW-62-110	12/01/21	N	--	--	--
MW-62-110	06/22/22	N	--	--	--
MW-62-190	04/29/20	N	--	--	--
MW-62-190	04/29/20	FD	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-62-190	12/02/20	N	<1	<1	3.4	--	2.9	290	--	1.40	18	0.9	43
MW-62-190	06/08/21	N	<1	<1	<0.1 J	--	--	--	--	--	--	0.71 J	46
MW-62-190	12/01/21	N	<1	<1	<0.1	--	--	--	--	--	--	0.57	29
MW-62-190	06/22/22	N	<1	<1 J	--	--	--	--	--	--	--	--	--
MW-63-065	02/19/20	N	1.2	2.5	<0.1	--	--	--	--	--	--	0.014	18
MW-63-065	02/19/20	FD	1.2	2.8	<0.1	--	--	--	--	--	--	0.017	18
MW-63-065	06/24/20	N	1.3	2.6	<0.1	--	--	--	--	--	--	0.01	15
MW-63-065	09/30/20	N	1.3	2.3	<0.1	--	--	--	--	--	--	0.0017	17
MW-63-065	12/07/20	N	1.7	2.7 J	<0.1	--	0.77 J	150 J	--	0.034 J	23 J	0.0014	16 J
MW-63-065	02/18/21	N	1.2	3.1 J	1.6	--	--	--	--	--	--	0.006	17
MW-63-065	05/27/21	N	1.2	3.3	<0.1 J	--	--	--	--	--	--	0.028	17
MW-63-065	08/26/21	N	1.3	1.7	<0.1 J	--	--	--	--	--	--	0.0033	16
MW-63-065	12/16/21	N	1.4	1.3	<0.1	--	--	--	--	--	--	<0.0005	16
MW-63-065	06/09/22	N	1.1	2.2 J	--	--	--	--	--	--	--	--	--
MW-64BR	02/21/20	N	<1	<1	3.2	--	--	--	--	--	--	0.91	61
MW-64BR	05/01/20	N	<0.2	1.8	0.77	--	--	--	--	--	--	0.16	37
MW-64BR	09/30/20	N	<1	<1	<0.1	--	--	--	--	--	--	1	66
MW-64BR	11/30/20	N	<1	<1	2.3	--	2 J	260 J	--	0.71 J	22 J	1	68
MW-64BR	02/18/21	N	<1	<1 J	1.9	--	--	--	--	--	--	1	65
MW-64BR	05/27/21	N	<1	<1	<0.1 J	--	--	--	--	--	--	0.96	61
MW-64BR	08/26/21	N	<1	<1	<0.1 J	--	--	--	--	--	--	0.97	60
MW-64BR	12/16/21	N	<1	<1	<0.1	--	--	--	--	--	--	1	58
MW-64BR	06/22/22	N	<1	<1 J	--	--	--	--	--	--	--	--	--
MW-65-160	02/20/20	N	250	250	0.34	--	--	--	--	--	--	0.00052	28
MW-65-160	04/29/20	N	190	210	0.63	--	--	--	--	--	--	0.052	40
MW-65-160	09/29/20	N	240	240	0.35	--	--	--	--	--	--	0.029	26
MW-65-160	12/03/20	N	210	240	<0.1	--	1.1	280	--	0.62	50	0.051	27
MW-65-160	02/16/21	N	240	250 J	0.84 J	--	--	--	--	--	--	0.0054	25
MW-65-160	05/27/21	N	270	260	<0.1 J	--	--	--	--	--	--	<0.0005	26
MW-65-160	08/25/21	N	290	310	<0.1 J	--	--	--	--	--	--	0.00075	24
MW-65-160	12/08/21	N	300	310	<0.1	--	--	--	--	--	--	0.00097 J	23
MW-65-160	03/09/22	N	250	240	--	--	--	--	--	--	--	--	26
MW-65-160	06/21/22	N	270	330 J	--	--	--	--	--	--	--	--	25 J
MW-65-160	08/25/22	N	280	300	--	--	--	--	--	--	--	--	24
MW-65-225	02/20/20	N	460	470	0.34	--	--	--	--	--	--	0.0044	27
MW-65-225	04/29/20	N	280	260	<0.1	--	--	--	--	--	--	0.092	43
MW-65-225	09/29/20	N	260	250	<0.1	--	--	--	--	--	--	0.045	43
MW-65-225	12/03/20	N	360	350	<0.1	--	1.7	270	--	0.098	21	0.026	32
MW-65-225	02/16/21	N	330	340 J	2.3 J	--	--	--	--	--	--	0.008	33
MW-65-225	05/27/21	N	460	430	<0.1 J	--	--	--	--	--	--	0.0007	22

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-62-190	12/02/20	N	--	<0.5	2,800	--	57	--	6,000	--	--	--	<0.1
MW-62-190	06/08/21	N	--	<0.5	--	--	--	--	--	--	--	--	0.11
MW-62-190	12/01/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-62-190	06/22/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-63-065	02/19/20	N	--	0.89	--	--	--	--	--	--	--	--	1
MW-63-065	02/19/20	FD	--	0.86	--	--	--	--	--	--	--	--	1.1
MW-63-065	06/24/20	N	--	0.89	--	--	--	--	--	--	--	--	1.8
MW-63-065	09/30/20	N	--	1.3 J	--	--	--	--	--	--	--	--	2.4
MW-63-065	12/07/20	N	--	1.2 J	950 J	--	200	--	1,900	--	--	--	2
MW-63-065	02/18/21	N	--	0.93	--	--	--	--	--	--	--	--	1.4
MW-63-065	05/27/21	N	--	0.99	--	--	--	--	--	--	--	--	1.3
MW-63-065	08/26/21	N	--	1.1	--	--	--	--	--	--	--	--	1.5
MW-63-065	12/16/21	N	--	0.74	--	--	--	--	--	--	--	--	1.3
MW-63-065	06/09/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-64BR	02/21/20	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-64BR	05/01/20	N	--	<0.5	--	--	--	--	--	--	--	--	0.056
MW-64BR	09/30/20	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-64BR	11/30/20	N	--	<0.5	2,600 J	--	69	--	4,300	--	--	--	0.1
MW-64BR	02/18/21	N	--	<0.5	--	--	--	--	--	--	--	--	0.075
MW-64BR	05/27/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-64BR	08/26/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-64BR	12/16/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-64BR	06/22/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-65-160	02/20/20	N	--	9.2	--	--	--	--	--	--	--	--	14
MW-65-160	04/29/20	N	--	7.2	--	--	--	--	--	--	--	--	10
MW-65-160	09/29/20	N	--	9.7	--	--	--	--	--	--	--	--	13
MW-65-160	12/03/20	N	--	9 J	460	--	130	--	990	--	--	--	11
MW-65-160	02/16/21	N	--	11	--	--	--	--	--	--	--	--	15
MW-65-160	05/27/21	N	--	10	--	--	--	--	--	--	--	--	15
MW-65-160	08/25/21	N	--	9.4	--	--	--	--	--	--	--	--	15
MW-65-160	12/08/21	N	--	10	--	--	--	--	--	--	--	--	16
MW-65-160	03/09/22	N	--	9.3	--	--	--	--	--	--	14	--	--
MW-65-160	06/21/22	N	--	9.4 J	--	--	--	--	--	--	13	--	--
MW-65-160	08/25/22	N	--	11	--	--	--	--	--	--	14	--	--
MW-65-225	02/20/20	N	--	6.9	--	--	--	--	--	--	--	--	10
MW-65-225	04/29/20	N	--	3.7	--	--	--	--	--	--	--	--	4.9
MW-65-225	09/29/20	N	--	3.7	--	--	--	--	--	--	--	--	4
MW-65-225	12/03/20	N	--	5.2 J	1,800	--	88	--	3,200	--	--	--	6
MW-65-225	02/16/21	N	--	4.9	--	--	--	--	--	--	--	--	6.9
MW-65-225	05/27/21	N	--	6.7	--	--	--	--	--	--	--	--	8.3

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-62-190	12/02/20	N	710	12,000	--
MW-62-190	06/08/21	N	--	--	--
MW-62-190	12/01/21	N	--	--	--
MW-62-190	06/22/22	N	--	--	--
MW-63-065	02/19/20	N	--	--	--
MW-63-065	02/19/20	FD	--	--	--
MW-63-065	06/24/20	N	--	--	--
MW-63-065	09/30/20	N	--	--	--
MW-63-065	12/07/20	N	570	4,400	--
MW-63-065	02/18/21	N	--	--	--
MW-63-065	05/27/21	N	--	--	--
MW-63-065	08/26/21	N	--	--	--
MW-63-065	12/16/21	N	--	--	--
MW-63-065	06/09/22	N	--	--	--
MW-64BR	02/21/20	N	--	--	--
MW-64BR	05/01/20	N	--	--	--
MW-64BR	09/30/20	N	--	--	--
MW-64BR	11/30/20	N	590	8,700	--
MW-64BR	02/18/21	N	--	--	--
MW-64BR	05/27/21	N	--	--	--
MW-64BR	08/26/21	N	--	--	--
MW-64BR	12/16/21	N	--	--	--
MW-64BR	06/22/22	N	--	--	--
MW-65-160	02/20/20	N	--	--	--
MW-65-160	04/29/20	N	--	--	--
MW-65-160	09/29/20	N	--	--	--
MW-65-160	12/03/20	N	540	2,600	--
MW-65-160	02/16/21	N	--	--	--
MW-65-160	05/27/21	N	--	--	--
MW-65-160	08/25/21	N	--	--	--
MW-65-160	12/08/21	N	--	--	--
MW-65-160	03/09/22	N	--	--	--
MW-65-160	06/21/22	N	--	--	--
MW-65-160	08/25/22	N	--	--	--
MW-65-225	02/20/20	N	--	--	--
MW-65-225	04/29/20	N	--	--	--
MW-65-225	09/29/20	N	--	--	--
MW-65-225	12/03/20	N	690	6,600	--
MW-65-225	02/16/21	N	--	--	--
MW-65-225	05/27/21	N	--	--	--

Appendix B
January 2020 to September 2022 Analytical Results
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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-65-225	08/25/21	N	200	210	<0.1 J	--	--	--	--	--	--	0.0074	39
MW-65-225	12/08/21	N	83	80	<0.1	--	--	--	--	--	--	0.043 J	50
MW-65-225	12/08/21	FD	83	81	<0.1	--	--	--	--	--	--	0.05 J	50
MW-65-225	03/09/22	N	350	340	--	--	--	--	--	--	--	--	32
MW-65-225	03/09/22	FD	340	330	--	--	--	--	--	--	--	--	33
MW-65-225	06/21/22	N	390	530 J	--	--	--	--	--	--	--	--	31 J
MW-65-225	06/21/22	FD	390	460 J	--	--	--	--	--	--	--	--	30 J
MW-65-225	08/25/22	N	430	510	--	--	--	--	--	--	--	--	28
MW-66-165	04/29/20	N	530	520	0.39	--	--	--	--	--	--	0.0077	6.2
MW-66-165	12/03/20	N	400	390	0.69 J	--	0.78	210	--	0.2 J	47 J	0.003	5.8
MW-66-165	12/03/20	FD	410	420	0.42	--	0.9	190	--	0.16	48	0.0031	5.5
MW-66-165	02/16/21	N	400	400 J	--	--	--	--	--	--	--	--	6.4
MW-66-165	05/05/21	N	520	500 J	<0.1	--	--	240	--	--	--	0.0022	5.8
MW-66-165	09/24/21	N	360	410	<0.1 J	--	--	230 J	--	--	37 J	0.0048	6.7
MW-66-165	12/07/21	N	350	350	0.49 J	--	--	--	--	--	--	<0.0005 J	5.4
MW-66-165	06/06/22	N	380	410	--	--	--	--	--	--	--	--	5.8 J
MW-66-230	04/29/20	N	6,700	6,300	8.4	--	--	--	--	--	--	0.0023	79
MW-66-230	04/29/20	FD	6,600	6,600	8.7	--	--	--	--	--	--	0.0023	81
MW-66-230	12/03/20	N	6,500	6,400	8 J	--	3	350	--	<0.1 J	7.1 J	0.0013	72
MW-66-230	12/03/20	FD	6,300	6,500	8 J	--	2.7	360	--	<0.1 J	7.1 J	0.0014	75
MW-66-230	02/16/21	N	6,000	6,500 J	--	--	--	--	--	--	--	--	75
MW-66-230	05/05/21	N	6,000	6,200 J	<0.1	--	--	96	--	--	--	0.012	74
MW-66-230	09/24/21	N	4,800	5,400	3.4 J	--	--	570 J	--	--	5.3 J	0.014	76
MW-66-230	12/07/21	N	5,000	5,200	8.9 J	--	--	--	--	--	--	0.0081 J	67
MW-66-230	06/06/22	N	6,100	5,600	--	--	--	--	--	--	--	--	89 J
MW-66BR-270	06/24/20	N	<1	<1	<0.1	--	--	--	--	--	--	6.70	1.1
MW-66BR-270	12/16/20	N	<1	1.2	<0.1	--	3	320	--	30	33 J	2.70	3.1
MW-66BR-270	12/16/20	FD	<1	<1	<0.1	--	2.6	280	--	27 J	30 J	2.80	3
MW-66BR-270	02/26/21	N	<1	<1	--	--	--	--	--	--	--	--	3.9
MW-66BR-270	05/05/21	N	<1	<1 J	<0.1	--	--	370	--	--	--	1	1.9
MW-66BR-270	10/08/21	N	<1	<1	0.11	--	--	280	--	--	18 J	0.04	12
MW-66BR-270	12/16/21	N	<1	1.9	<0.1	--	--	--	--	--	--	0.82	--
MW-66BR-270	06/20/22	N	<1	<1 J	--	--	--	--	--	--	--	--	--
MW-67-185	04/30/20	N	2,000	2,000	<0.1	--	--	--	--	--	--	<0.0005	5.1
MW-67-185	10/06/20	N	2,000	2,000	--	--	--	--	--	--	--	--	--
MW-67-185	12/02/20	N	2,900	3,000	0.74	--	0.72	640	--	0.11	160	0.0027	14
MW-67-185	02/16/21	N	640	690 J	--	--	--	--	--	--	--	--	60
MW-67-185	05/04/21	N	2,000	2,000	<0.1	--	--	820	--	--	--	<0.0005	5.6
MW-67-185	05/04/21	FD	2,000	1,900	<0.1	--	--	720	--	--	--	<0.0005	5.6
MW-67-185	09/23/21	N	<100	<5 J	2.2 J	--	--	190 J	--	--	29	1.60	89 J

Appendix B
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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-65-225	08/25/21	N	--	3	--	--	--	--	--	--	--	--	3.2
MW-65-225	12/08/21	N	--	1.8	--	--	--	--	--	--	--	--	2
MW-65-225	12/08/21	FD	--	1.7	--	--	--	--	--	--	--	--	1.9
MW-65-225	03/09/22	N	--	4.6	--	--	--	--	--	--	5.9	--	--
MW-65-225	03/09/22	FD	--	4.8	--	--	--	--	--	--	6	--	--
MW-65-225	06/21/22	N	--	4.7 J	--	--	--	--	--	--	6.4	--	--
MW-65-225	06/21/22	FD	--	4.6 J	--	--	--	--	--	--	6.4	--	--
MW-65-225	08/25/22	N	--	5.8	--	--	--	--	--	--	7.7	--	--
MW-66-165	04/29/20	N	--	29	--	--	--	--	--	--	--	--	29
MW-66-165	12/03/20	N	14 J	19	420 J	--	120	--	880	--	--	--	24
MW-66-165	12/03/20	FD	--	19 J	390	--	110	--	870	--	--	--	23
MW-66-165	02/16/21	N	--	20	--	--	--	--	--	--	--	--	22 J
MW-66-165	05/05/21	N	20 J	24	530	--	--	--	940	--	--	--	24
MW-66-165	09/24/21	N	13	17	490	--	--	--	820	--	--	--	19
MW-66-165	12/07/21	N	--	11	--	--	--	--	--	--	--	--	19
MW-66-165	06/06/22	N	--	17	--	--	--	--	--	--	21	--	--
MW-66-230	04/29/20	N	--	17	--	--	--	--	--	--	--	--	23
MW-66-230	04/29/20	FD	--	17	--	--	--	--	--	--	--	--	23
MW-66-230	04/29/20	N	--	17	--	--	--	--	--	--	--	--	23
MW-66-230	04/29/20	FD	--	17	--	--	--	--	--	--	--	--	23
MW-66-230	12/03/20	N	68 J	12	4,000 J	--	31	--	6,100	--	--	--	13
MW-66-230	12/03/20	FD	--	12	3,500 J	--	32	--	6,300	--	--	--	14
MW-66-230	02/16/21	N	--	16	--	--	--	--	--	--	--	--	23 J
MW-66-230	05/05/21	N	57 J	7.6	5,300	--	--	--	6,600	--	--	--	11
MW-66-230	09/24/21	N	56	7.1	5,200	--	--	--	7,000	--	--	--	8.8
MW-66-230	12/07/21	N	--	6.9	--	--	--	--	--	--	--	--	10
MW-66-230	06/06/22	N	--	12	--	--	--	--	--	--	13	--	--
MW-66BR-270	06/24/20	N	--	<0.5	--	--	--	--	--	--	--	--	0.47
MW-66BR-270	12/16/20	N	--	<0.5	3,500 J	--	6.4	--	5,600	--	--	--	<0.05
MW-66BR-270	12/16/20	FD	--	<0.5	3,600 J	--	5.3	--	5,600	--	--	--	<0.05
MW-66BR-270	02/26/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-66BR-270	05/05/21	N	52 J	<0.5	4,700	--	--	--	6,200	--	--	--	<0.05
MW-66BR-270	10/08/21	N	38 J	<0.5	3,600	--	--	--	5,600	--	--	--	<0.1
MW-66BR-270	12/16/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-66BR-270	06/20/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-67-185	04/30/20	N	--	380	--	--	--	--	--	--	--	--	91
MW-67-185	10/06/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-67-185	12/02/20	N	--	330	420	--	80	--	1,900	--	--	--	89
MW-67-185	02/16/21	N	--	250	--	--	--	--	--	--	--	--	78 J
MW-67-185	05/04/21	N	20	430	920 J	--	--	--	2,300	--	--	--	100
MW-67-185	05/04/21	FD	20	430	940 J	--	--	--	2,300	--	--	--	95
MW-67-185	09/23/21	N	18	54	330	--	--	--	910	--	--	--	0.12

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-65-225	08/25/21	N	--	--	--
MW-65-225	12/08/21	N	--	--	--
MW-65-225	12/08/21	FD	--	--	--
MW-65-225	03/09/22	N	--	--	--
MW-65-225	03/09/22	FD	--	--	--
MW-65-225	06/21/22	N	--	--	--
MW-65-225	06/21/22	FD	--	--	--
MW-65-225	08/25/22	N	--	--	--
MW-66-165	04/29/20	N	--	--	--
MW-66-165	12/03/20	N	420	2,200	--
MW-66-165	12/03/20	FD	420	2,200	--
MW-66-165	02/16/21	N	--	--	--
MW-66-165	05/05/21	N	450	2,300	--
MW-66-165	09/24/21	N	360	2,100	--
MW-66-165	12/07/21	N	--	--	--
MW-66-165	06/06/22	N	--	--	--
MW-66-230	04/29/20	N	--	--	--
MW-66-230	04/29/20	FD	--	--	--
MW-66-230	12/03/20	N	1,100	13,000	--
MW-66-230	12/03/20	FD	1,100	14,000	--
MW-66-230	02/16/21	N	--	--	--
MW-66-230	05/05/21	N	1,000	12,000	--
MW-66-230	09/24/21	N	990	13,000	--
MW-66-230	12/07/21	N	--	--	--
MW-66-230	06/06/22	N	--	--	--
MW-66BR-270	06/24/20	N	--	--	--
MW-66BR-270	12/16/20	N	250	12,000	--
MW-66BR-270	12/16/20	FD	250	11,000	--
MW-66BR-270	02/26/21	N	--	--	--
MW-66BR-270	05/05/21	N	290	10,000	--
MW-66BR-270	10/08/21	N	250	9,200	--
MW-66BR-270	12/16/21	N	--	--	--
MW-66BR-270	06/20/22	N	--	--	--
MW-67-185	04/30/20	N	--	--	--
MW-67-185	10/06/20	N	--	--	--
MW-67-185	12/02/20	N	640	4,900	--
MW-67-185	02/16/21	N	--	--	--
MW-67-185	05/04/21	N	590	5,300	--
MW-67-185	05/04/21	FD	580	6,100	--
MW-67-185	09/23/21	N	360	2,100	--

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-67-185	12/07/21	N	<100	<1	<0.1 J	--	--	--	--	--	--	2 J	47
MW-67-185	05/20/22	N	<40	<5 J	--	--	--	--	--	--	--	1.30	42 J
MW-67-185	06/22/22	N	<40	<25 J	--	--	--	--	--	--	--	1.60 J	40 J
MW-67-185	06/22/22	FD	<40	<25 J	--	--	--	--	--	--	--	1.70 J	42 J
MW-67-185	07/13/22	N	<80	37	--	--	--	--	--	--	--	1.10 J	34
MW-67-185	08/18/22	N	<80	<5	--	--	--	--	--	--	--	0.8 J	39
MW-67-185	09/14/22	N	<80	<5	--	--	--	--	--	--	--	1.10	41
MW-67-225	04/30/20	N	3,000	3,200	1.3	--	--	--	--	--	--	0.0052	48
MW-67-225	12/02/20	N	3,800	4,000	5	--	1.5	92	--	2.30	7.1	0.058	58
MW-67-225	02/16/21	N	4,100	3,500 J	--	--	--	--	--	--	--	--	88
MW-67-225	05/04/21	N	3,400	3,400	0.81	--	--	150	--	--	--	0.0053	54
MW-67-225	09/24/21	N	2,100	2,400	<0.1 J	--	--	140 J	--	--	6.3 J	0.032	72
MW-67-225	12/07/21	N	2,800	3,000	<0.1 J	--	--	--	--	--	--	0.0012 J	42
MW-67-225	06/21/22	N	3,400	3,100 J	--	--	--	--	--	--	--	--	65 J
MW-67-260	04/30/20	N	1,100	1,100	11	--	--	--	--	--	--	0.12	67
MW-67-260	12/02/20	N	250	250	1.6	--	0.68	370	--	0.18	<500	0.0015	24
MW-67-260	02/19/21	N	350	380	--	--	--	--	--	--	--	--	35
MW-67-260	05/04/21	N	920	940	<0.1	--	--	340	--	--	--	0.00072	63
MW-67-260	09/24/21	N	770	840	<0.1 J	--	--	340 J	--	--	0.11 J	0.00057	70
MW-67-260	12/07/21	N	810	760	<0.1 J	--	--	--	--	--	--	0.0017 J	60
MW-67-260	06/21/22	N	490	450 J	--	--	--	--	--	--	--	--	67 J
MW-68-180	02/20/20	N	25,000	27,000	1.8	--	--	--	--	--	--	0.0061	63
MW-68-180	04/30/20	N	41,000	43,000	1.8	--	--	--	--	--	--	0.0096	53
MW-68-180	09/29/20	N	54,000	51,000	2.4	--	--	--	--	--	--	0.0069	57
MW-68-180	12/16/20	N	61,000	66,000	3.1	--	0.68	590	--	0.1 J	62 J	0.00079	53
MW-68-180	12/16/20	FD	61,000	63,000	3.1	--	<500	580	--	<0.1 J	60 J	0.0028	54
MW-68-180	02/19/21	N	63,000	66,000	3.2	--	--	--	--	--	--	<0.0005	53
MW-68-180	05/04/21	N	37,000	37,000	2	--	--	420	--	--	--	<0.0005	46
MW-68-180	06/28/21	N	62,000	--	--	--	--	--	--	--	--	--	--
MW-68-180	07/27/21	N	65,000	--	--	--	--	--	--	--	--	--	--
MW-68-180	08/16/21	N	47,000	--	--	--	--	--	--	--	--	--	--
MW-68-180	09/09/21	N	48,000	60,000	1	--	--	--	--	--	--	0.0014	55
MW-68-180	09/23/21	N	46,000	56,000 J	1 J	--	--	680 J	--	--	65	<0.0005	58 J
MW-68-180	10/07/21	N	49,000	--	--	--	--	--	--	--	--	--	--
MW-68-180	11/02/21	N	34,000	--	--	--	--	--	--	--	--	--	--
MW-68-180	12/07/21	N	26,000	28,000	1.9 J	--	--	--	--	--	--	<0.0005 J	50
MW-68-180	03/09/22	N	34,000	37,000	--	--	--	--	--	--	--	--	53
MW-68-180	04/14/22	N	6,700	7,700 J	--	--	--	--	--	--	--	--	36 J
MW-68-180	05/20/22	N	4,500	4,100 J	--	--	--	--	--	--	--	--	42 J
MW-68-180	06/14/22	N	3,300	4,000 J	--	--	--	--	--	--	--	--	46 J

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-67-185	12/07/21	N	--	26	--	--	--	--	--	--	--	--	8.5
MW-67-185	05/20/22	N	--	51	--	--	--	--	--	--	<10	--	--
MW-67-185	06/22/22	N	--	58	--	--	--	--	--	--	10	--	--
MW-67-185	06/22/22	FD	--	64	--	--	--	--	--	--	<10	--	--
MW-67-185	07/13/22	N	--	94	--	--	--	--	--	--	<20	--	--
MW-67-185	08/18/22	N	--	87	--	--	--	--	--	--	23	--	--
MW-67-185	09/14/22	N	--	81	--	--	--	--	--	--	<20	--	--
MW-67-225	04/30/20	N	--	87	--	--	--	--	--	--	--	--	27
MW-67-225	12/02/20	N	--	100	1,100	--	160	--	1,300	--	--	--	28
MW-67-225	02/16/21	N	--	92	--	--	--	--	--	--	--	--	26 J
MW-67-225	05/04/21	N	17	89	1,600 J	--	--	--	1,500	--	--	--	26
MW-67-225	09/24/21	N	16	72	1,400	--	--	--	1,300	--	--	--	32
MW-67-225	12/07/21	N	--	50	--	--	--	--	--	--	--	--	15
MW-67-225	06/21/22	N	--	50 J	--	--	--	--	--	--	16	--	--
MW-67-260	04/30/20	N	--	<2.5	--	--	--	--	--	--	--	--	0.62
MW-67-260	12/02/20	N	--	1.1	1,100	--	2,100	--	730	--	--	--	0.61
MW-67-260	02/19/21	N	--	1.1	--	--	--	--	--	--	--	--	0.71
MW-67-260	05/04/21	N	67	1.4	4,400 J	--	--	--	5,500	--	--	--	0.65
MW-67-260	09/24/21	N	77	1.4	4,500	--	--	--	5,300	--	--	--	0.61
MW-67-260	12/07/21	N	--	1.4	--	--	--	--	--	--	--	--	0.66
MW-67-260	06/21/22	N	--	1.1 J	--	--	--	--	--	--	0.3	--	--
MW-68-180	02/20/20	N	--	15	--	--	--	--	--	--	--	--	29
MW-68-180	04/30/20	N	--	21	--	--	--	--	--	--	--	--	36
MW-68-180	09/29/20	N	--	28	--	--	--	--	--	--	--	--	35
MW-68-180	12/16/20	N	17 J	22	740 J	--	110	--	840	--	--	--	24 J
MW-68-180	12/16/20	FD	18 J	24	740	--	100	--	850	--	--	--	10 J
MW-68-180	02/19/21	N	--	23	--	--	--	--	--	--	--	--	23
MW-68-180	05/04/21	N	13	14	550 J	--	--	--	740	--	--	--	15
MW-68-180	06/28/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-68-180	07/27/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-68-180	08/16/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-68-180	09/09/21	N	--	25	--	--	--	--	--	--	--	--	34
MW-68-180	09/23/21	N	18	25	680	--	--	--	1,100	--	--	--	34
MW-68-180	10/07/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-68-180	11/02/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-68-180	12/07/21	N	--	15	--	--	--	--	--	--	--	--	27
MW-68-180	03/09/22	N	--	17	--	--	--	--	--	--	25	--	--
MW-68-180	04/14/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-68-180	05/20/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-68-180	06/14/22	N	--	5.9	--	--	--	--	--	--	10	--	--

Appendix B
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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-67-185	12/07/21	N	--	--	--
MW-67-185	05/20/22	N	--	--	--
MW-67-185	06/22/22	N	--	--	--
MW-67-185	06/22/22	FD	--	--	--
MW-67-185	07/13/22	N	--	--	--
MW-67-185	08/18/22	N	--	--	--
MW-67-185	09/14/22	N	--	--	--
MW-67-225	04/30/20	N	--	--	--
MW-67-225	12/02/20	N	1,300	4,300	--
MW-67-225	02/16/21	N	--	--	--
MW-67-225	05/04/21	N	1,100	4,700	--
MW-67-225	09/24/21	N	990	4,000	--
MW-67-225	12/07/21	N	--	--	--
MW-67-225	06/21/22	N	--	--	--
MW-67-260	04/30/20	N	--	--	--
MW-67-260	12/02/20	N	170	7,200	--
MW-67-260	02/19/21	N	--	--	--
MW-67-260	05/04/21	N	720	11,000	--
MW-67-260	09/24/21	N	690	11,000	--
MW-67-260	12/07/21	N	--	--	--
MW-67-260	06/21/22	N	--	--	--
MW-68-180	02/20/20	N	--	--	--
MW-68-180	04/30/20	N	--	--	--
MW-68-180	09/29/20	N	--	--	--
MW-68-180	12/16/20	N	1,700	4,200	--
MW-68-180	12/16/20	FD	1,700	4,300	--
MW-68-180	02/19/21	N	--	--	--
MW-68-180	05/04/21	N	1,100	3,000	--
MW-68-180	06/28/21	N	--	--	--
MW-68-180	07/27/21	N	--	--	--
MW-68-180	08/16/21	N	--	--	--
MW-68-180	09/09/21	N	--	--	--
MW-68-180	09/23/21	N	1,400	4,300	--
MW-68-180	10/07/21	N	--	--	--
MW-68-180	11/02/21	N	--	--	--
MW-68-180	12/07/21	N	--	--	--
MW-68-180	03/09/22	N	--	--	--
MW-68-180	04/14/22	N	--	--	--
MW-68-180	05/20/22	N	--	--	--
MW-68-180	06/14/22	N	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-68-180	06/14/22	FD	3,300	3,800 J	--	--	--	--	--	--	--	--	46 J
MW-68-180	07/13/22	N	5,000	4,900	--	--	--	--	--	--	--	--	45
MW-68-180	08/18/22	N	28,000	31,000	--	--	--	--	--	--	--	--	64
MW-68-180	09/14/22	N	36,000	40,000	--	--	--	--	--	--	--	--	45
MW-68-240	04/30/20	N	2,000	2,000	<0.5	--	--	--	--	--	--	0.017	22
MW-68-240	12/16/20	N	2,000	2,000	1.7	--	2.2	420	--	<0.02 J	21 J	0.02	24
MW-68-240	12/16/20	FD	2,000	1,900	1.9	--	2.3	440 J	--	<0.02 J	22 J	0.019	24
MW-68-240	02/19/21	N	1,900	2,000	--	--	--	--	--	--	--	--	24
MW-68-240	02/19/21	FD	1,900	2,000	--	--	--	--	--	--	--	--	24
MW-68-240	05/04/21	N	2,000	2,000	<0.1	--	--	590	--	--	--	0.023	24
MW-68-240	09/23/21	N	1,800	2,000 J	<0.1 J	--	--	660 J	--	--	19	0.018	28 J
MW-68-240	12/07/21	N	1,900	2,000	<0.1 J	--	--	--	--	--	--	0.012 J	25
MW-68-240	12/07/21	FD	1,900	1,900	<0.1 J	--	--	--	--	--	--	0.012 J	24
MW-68-240	06/14/22	N	2,100	2,400 J	--	--	--	--	--	--	--	--	22 J
MW-68BR-280	04/30/20	N	<1	<1	0.36	--	--	--	--	--	--	0.11	13
MW-68BR-280	12/16/20	N	<1	<1	0.35	--	2.2	370	--	0.03 J	3.4 J	0.059	17 J
MW-68BR-280	12/16/20	FD	<1	1.4	0.46	--	2.5	400	--	0.027 J	3.7 J	0.06	18 J
MW-68BR-280	02/19/21	N	<1	<1	--	--	--	--	--	--	--	--	20
MW-68BR-280	12/16/20	FD	<1	1.4	0.46	--	2.5	400	--	0.027 J	3.7 J	0.06	18 J
MW-68BR-280	02/19/21	N	<1	<1	--	--	--	--	--	--	--	--	20
MW-68BR-280	05/04/21	N	<1	1.3	<0.1	--	--	410	--	--	--	0.055	24
MW-68BR-280	09/23/21	N	<1	<1 J	<0.1 J	--	--	340 J	--	--	2.7	0.068	27 J
MW-68BR-280	12/02/21	N	<1	<1	<0.1 J	--	--	--	--	--	--	0.06	--
MW-68BR-280	06/14/22	N	<1	<1 J	--	--	--	--	--	--	--	--	--
MW-69-195	02/25/20	N	150	140	2	--	--	--	--	--	--	0.0065	68
MW-69-195	05/01/20	N	170	170	1.6	--	--	--	--	--	--	0.012 J	53
MW-69-195	05/01/20	FD	180	170	1.6	--	--	--	--	--	--	0.0092 J	52
MW-69-195	09/29/20	N	350	380	3.3	--	--	--	--	--	--	0.16	58
MW-69-195	12/03/20	N	6	9.4	1.7	--	1.1	79	--	0.49	12	0.023	70
MW-69-195	02/15/21	N	29	59	2.8	--	--	--	--	--	--	0.0068	67
MW-69-195	02/15/21	FD	27	59	2.8	--	--	--	--	--	--	0.007	68
MW-69-195	05/27/21	N	610	650	0.61 J	--	--	--	--	--	--	0.0014	66
MW-69-195	05/27/21	FD	610	630	0.73 J	--	--	--	--	--	--	0.0013	64
MW-69-195	08/26/21	N	480	460	1.2 J	--	--	--	--	--	--	0.0022	62
MW-69-195	12/08/21	N	410	390	0.86	--	--	--	--	--	--	0.0021 J	54
MW-69-195	03/09/22	N	430	450	--	--	--	--	--	--	--	--	59
MW-69-195	06/20/22	N	360	370 J	--	--	--	--	--	--	--	--	54 J
MW-69-195	06/20/22	FD	360	370 J	--	--	--	--	--	--	--	--	52 J
MW-69-195	08/25/22	N	120	100	--	--	--	--	--	--	--	--	61
MW-70-105	11/30/20	N	150	150	4.3	--	0.95 J	72 J	--	<0.02	11 J	0.048	84
MW-70-105	02/15/21	N	140	150	--	--	--	--	--	--	--	--	79
MW-70-105	05/17/21	N	150	140	2.7	--	--	--	--	--	--	0.035	86

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-68-180	06/14/22	FD	--	5.5	--	--	--	--	--	--	10	--	--
MW-68-180	07/13/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-68-180	08/18/22	N	--	28	--	--	--	--	--	--	24	--	--
MW-68-180	09/14/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-68-240	04/30/20	N	--	3.7	--	--	--	--	--	--	--	--	4.1
MW-68-240	12/16/20	N	46 J	3.8	2,400	--	62	--	4,900	--	--	--	3.7
MW-68-240	12/16/20	FD	43 J	3.3	3,300	--	64	--	4,900	--	--	--	4
MW-68-240	02/19/21	N	--	5	--	--	--	--	--	--	--	--	4.6
MW-68-240	02/19/21	FD	--	4.2	--	--	--	--	--	--	--	--	4.4
MW-68-240	05/04/21	N	38	4.1	4,200 J	--	--	--	5,400	--	--	--	4.2
MW-68-240	09/23/21	N	43	4.4	4,300	--	--	--	5,400	--	--	--	4.8
MW-68-240	12/07/21	N	--	3.9	--	--	--	--	--	--	--	--	5.1
MW-68-240	12/07/21	FD	--	3.4	--	--	--	--	--	--	--	--	5.1
MW-68-240	06/14/22	N	--	4.1	--	--	--	--	--	--	4.2	--	--
MW-68BR-280	04/30/20	N	--	<2.5	--	--	--	--	--	--	--	--	<0.05
MW-68BR-280	12/16/20	N	51 J	<0.5	3,800 J	--	15	--	6,900	--	--	--	<0.1
MW-68BR-280	12/16/20	FD	53 J	<0.5	4,700	--	15	--	6,700	--	--	--	<0.05
MW-68BR-280	02/19/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-68BR-280	12/16/20	FD	53 J	<0.5	4,700	--	15	--	6,700	--	--	--	<0.05
MW-68BR-280	02/19/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-68BR-280	05/04/21	N	44	<0.5	5,400 J	--	--	--	7,300	--	--	--	<0.05
MW-68BR-280	09/23/21	N	47	<0.5	5,900	--	--	--	7,200	--	--	--	<0.1
MW-68BR-280	12/02/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-68BR-280	06/14/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-69-195	02/25/20	N	--	7.9	--	--	--	--	--	--	--	--	11
MW-69-195	05/01/20	N	--	7	--	--	--	--	--	--	--	--	11
MW-69-195	05/01/20	FD	--	7.2	--	--	--	--	--	--	--	--	9.6
MW-69-195	09/29/20	N	--	10	--	--	--	--	--	--	--	--	20
MW-69-195	12/03/20	N	--	6 J	360	--	190	--	410	--	--	--	5.5
MW-69-195	02/15/21	N	--	8.3	--	--	--	--	--	--	--	--	4.7
MW-69-195	02/15/21	FD	--	7.8	--	--	--	--	--	--	--	--	4.9
MW-69-195	05/27/21	N	--	12	--	--	--	--	--	--	--	--	16
MW-69-195	05/27/21	FD	--	12	--	--	--	--	--	--	--	--	18
MW-69-195	08/26/21	N	--	11	--	--	--	--	--	--	--	--	17
MW-69-195	12/08/21	N	--	11	--	--	--	--	--	--	--	--	16
MW-69-195	03/09/22	N	--	12	--	--	--	--	--	--	18	--	--
MW-69-195	06/20/22	N	--	9.4 J	--	--	--	--	--	--	14	--	--
MW-69-195	06/20/22	FD	--	8.6 J	--	--	--	--	--	--	15	--	--
MW-69-195	08/25/22	N	--	6.1	--	--	--	--	--	--	8.4	--	--
MW-70-105	11/30/20	N	--	3.2	500 J	--	98	--	840	--	--	--	2.9
MW-70-105	02/15/21	N	--	3.3	--	--	--	--	--	--	--	--	2.5
MW-70-105	05/17/21	N	--	3.3	--	--	--	--	--	--	--	--	3.3

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-68-180	06/14/22	FD	--	--	--
MW-68-180	07/13/22	N	--	--	--
MW-68-180	08/18/22	N	--	--	--
MW-68-180	09/14/22	N	--	--	--
MW-68-240	04/30/20	N	--	--	--
MW-68-240	12/16/20	N	890	12,000	--
MW-68-240	12/16/20	FD	880	11,000	--
MW-68-240	02/19/21	N	--	--	--
MW-68-240	02/19/21	FD	--	--	--
MW-68-240	05/04/21	N	880	11,000	--
MW-68-240	09/23/21	N	890	11,000	--
MW-68-240	12/07/21	N	--	--	--
MW-68-240	12/07/21	FD	--	--	--
MW-68-240	06/14/22	N	--	--	--
MW-68BR-280	04/30/20	N	--	--	--
MW-68BR-280	12/16/20	N	680	13,000 J	--
MW-68BR-280	12/16/20	FD	680	12,000	--
MW-68BR-280	02/19/21	N	--	--	--
MW-68BR-280	05/04/21	N	690	13,000	--
MW-68BR-280	02/19/21	N	--	--	--
MW-68BR-280	05/04/21	N	690	13,000	--
MW-68BR-280	09/23/21	N	670	13,000	--
MW-68BR-280	12/02/21	N	--	--	--
MW-68BR-280	06/14/22	N	--	--	--
MW-69-195	02/25/20	N	--	--	--
MW-69-195	05/01/20	N	--	--	--
MW-69-195	05/01/20	FD	--	--	--
MW-69-195	09/29/20	N	--	--	--
MW-69-195	12/03/20	N	430	1,500	--
MW-69-195	02/15/21	N	--	--	--
MW-69-195	02/15/21	FD	--	--	--
MW-69-195	05/27/21	N	--	--	--
MW-69-195	05/27/21	FD	--	--	--
MW-69-195	08/26/21	N	--	--	--
MW-69-195	12/08/21	N	--	--	--
MW-69-195	03/09/22	N	--	--	--
MW-69-195	06/20/22	N	--	--	--
MW-69-195	06/20/22	FD	--	--	--
MW-69-195	08/25/22	N	--	--	--
MW-70-105	11/30/20	N	240	1,900	--
MW-70-105	02/15/21	N	--	--	--
MW-70-105	05/17/21	N	--	--	--

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MW-70-105	12/09/21	N	210	220	3 J	--	--	--	--	--	--	0.0028	62
MW-70-105	06/21/22	N	110	110 J	--	--	--	--	--	--	--	--	69 J
MW-70BR-225	11/30/20	N	1,300	1,300	1.7	--	1.8 J	600 J	--	<0.02	32 J	0.0071	19
MW-70BR-225	05/17/21	N	1,200	1,200	<0.1	--	--	--	--	--	--	0.014	21
MW-70BR-225	12/09/21	N	1,400	1,400	<0.1 J	--	--	--	--	--	--	0.014	19
MW-70BR-225	06/21/22	N	1,400	1,300 J	--	--	--	--	--	--	--	--	17 J
MW-70BR-287	07/24/20	N	<1	9.3	--	--	--	--	--	--	--	--	--
MW-70BR-287	07/24/20	N	3.2	21	--	--	--	--	--	--	--	--	--
MW-70BR-287	07/24/20	N	11	76	--	--	--	--	--	--	--	--	--
MW-70BR-287	08/21/20	N	350	330	<0.1	88	1.7	530	0.82	0.071	2.5	0.0039	59
MW-70BR-287	08/21/20	N	370	330	<0.1	83	1.8	520	0.54	<0.02	4.6	0.021	55
MW-70BR-287	08/21/20	N	330 J	310	<0.1	88	1.6	580	0.31	0.04	12	0.088	47
MW-70BR-287	09/28/20	N	290	290	2.3 J	94	2.6 J	470 J	1.40 J	0.2 J	0.73 J	0.0069	55
MW-70BR-287	11/18/20	N	240	200 J	<0.1	120	2.4	330 J	4.20	<0.02	7.9	0.015	54
MW-70BR-287	11/18/20	N	270	240 J	<0.1	80	2.5	330 J	0.46	<0.02	2.2	0.0021	53
MW-70BR-287	11/18/20	N	270	240 J	<0.1	86	2.5	350 J	0.3	<0.02	1.8	0.0031	52
MW-70BR-287	12/02/20	N	120	110	2.1	140	2.4 J	340 J	2	<0.02	11 J	0.047	56
MW-70BR-287	01/25/21	N	100	100	<0.1 J	100	1.9	360 J	0.41	0.05 J	6.5	0.0047	50
MW-70BR-287	02/15/21	N	160	150	<0.1 J	93	1.7	310	0.12 J	0.03	3.5	0.0015 J	52 J
MW-70BR-287	02/15/21	FD	160	150	<0.1 J	85	1.6	350	0.15 J	0.082	3.8	0.0014 J	48 J
MW-70BR-287	05/17/21	N	220	200	<0.1	80	1.9	530	0.08	<0.02	0.56	0.0024	52
MW-70BR-287	08/19/21	N	280	310	<0.1	63 J	1.7	470 J	0.074 J	<0.02	2 J	0.0011	52
MW-70BR-287	12/09/21	N	350	340	<0.1 J	--	--	--	--	--	--	<0.0005	--
MW-70BR-287	06/21/22	N	380	430 J	--	--	--	--	--	--	--	--	--
MW-71-035	05/01/20	N	<1	<1	2.2	--	--	--	--	--	--	0.066	15
MW-71-035	12/15/20	N	<1	<1	1.3	--	3	790 J	--	<0.1	81	0.28	16
MW-71-035	05/26/21	N	<1	<1	<0.1 J	--	--	--	--	--	--	0.2	15
MW-71-035	12/16/21	N	<1	<1	<0.1	42	--	--	--	0.031 J	--	0.071	15
MW-71-035	02/02/22	N	<1	--	<0.1	47	--	--	--	0.12	--	0.0057	--
MW-71-035	03/14/22	N	<1	<1	<0.1 J	47	--	--	--	0.036	--	0.02	13
MW-71-035	04/12/22	N	<1	--	<0.1 J	45	--	--	--	0.051	--	0.25	--
MW-71-035	04/12/22	FD	<1	--	<0.1 J	45	--	--	--	0.074	--	0.3	--
MW-71-035	05/18/22	N	<1	--	<0.1	41	--	--	--	0.058 J	--	0.045	--
MW-71-035	06/15/22	N	<1	<1	<0.1	58	--	--	--	0.15 J	--	1.40	21
MW-71-035	06/15/22	FD	<1	<1	<0.1	61	--	--	--	0.21 J	--	1.50	22
MW-71-035	07/13/22	N	<1	--	<0.1	49	--	--	--	0.036 J	--	0.7	--
MW-71-035	08/12/22	N	<1	<1	<0.1 J	52	--	--	--	0.38	--	2.20 J	23 J
MW-71-035	09/15/22	N	5.6	--	<0.1	41	--	--	--	<0.02	--	0.44	--
MW-72-080	02/20/20	N	96	85	12	--	--	--	--	--	--	0.015	75
MW-72-080	04/28/20	N	100	95	6.5	--	--	--	--	--	--	0.089	74

Appendix B
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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-70-105	12/09/21	N	--	4.5	--	--	--	--	--	--	--	--	5.1
MW-70-105	06/21/22	N	--	4 J	--	--	--	--	--	--	3.7	--	--
MW-70BR-225	11/30/20	N	--	2.2	2,000 J	--	47	--	3,900	--	--	--	3.2
MW-70BR-225	05/17/21	N	--	2.3	--	--	--	--	--	--	--	--	3.2
MW-70BR-225	12/09/21	N	--	2.2	--	--	--	--	--	--	--	--	3.4
MW-70BR-225	06/21/22	N	--	2.2 J	--	--	--	--	--	--	3	--	--
MW-70BR-287	07/24/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-70BR-287	07/24/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-70BR-287	07/24/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-70BR-287	08/21/20	N	43	1.2	3,300	3.3	50	<0.2	5,100	4.6	--	--	2
MW-70BR-287	08/21/20	N	43	1.3	3,200	3	60	<0.2	5,100	4.3	--	--	1.9
MW-70BR-287	08/21/20	N	43	1.5	3,000	2.3	43	<0.2	5,100	4	--	--	2.1
MW-70BR-287	09/28/20	N	43	1.4	3,000	4	100	<0.2	5,100	10	--	--	1.8
MW-70BR-287	11/18/20	N	47	1.2	3,200	1.4	74	<0.2	5,300	4.6	--	--	1.7
MW-70BR-287	11/18/20	N	48	1.1	3,300	2.1	52	<0.2	5,200	3.9	--	--	1.4
MW-70BR-287	11/18/20	N	48	1.1	3,300	2.2	65	<0.2	5,100	3.9	--	--	1.4
MW-70BR-287	12/02/20	N	43 J	1.1	2,700	<1	26	0.21	5,100	4.4	--	--	1.5
MW-70BR-287	01/25/21	N	47 J	1.6	2,600 J	1.4	28	0.22	5,000	3.9	--	--	0.17
MW-70BR-287	02/15/21	N	49 J	1.3	2,700	1.6	30	<0.22	5,000	4.3	--	--	0.59 J
MW-70BR-287	02/15/21	FD	50 J	1.4	2,900	1.8	32	<0.22	5,000	4.4	--	--	1.5 J
MW-70BR-287	05/17/21	N	42 J	1.1	4,000 J	2.5	71	<0.2	5,200	4.5	--	--	0.99
MW-70BR-287	08/19/21	N	38	1	3,800 J	1.7	34	0.28	5,100	3.7	--	--	1.3
MW-70BR-287	12/09/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-70BR-287	06/21/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-71-035	05/01/20	N	--	<0.5	--	--	--	--	--	--	--	--	0.19
MW-71-035	12/15/20	N	--	<0.5	3,000	--	190	--	5,300	--	--	--	0.092
MW-71-035	05/26/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-71-035	12/16/21	N	--	<0.5	--	--	--	<0.2	--	--	--	<5	<0.1
MW-71-035	02/02/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-71-035	03/14/22	N	--	<0.5	--	--	--	<0.23	--	--	<0.5	--	--
MW-71-035	04/12/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-71-035	04/12/22	FD	--	--	--	--	--	--	--	--	<0.5	--	--
MW-71-035	05/18/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-71-035	06/15/22	N	--	0.51 J	--	--	--	<0.2	--	--	<0.5	<5	<0.1
MW-71-035	06/15/22	FD	--	<0.5 J	--	--	--	<0.2	--	--	<0.5	<5	<0.1
MW-71-035	07/13/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-71-035	08/12/22	N	--	<0.5	--	--	--	<0.23	--	--	<0.5	<5	<0.1
MW-71-035	09/15/22	N	--	--	--	--	--	--	--	--	0.8	--	--
MW-72-080	02/20/20	N	--	<2.5	--	--	--	--	--	--	--	--	0.63
MW-72-080	04/28/20	N	--	1.3	--	--	--	--	--	--	--	--	1

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-70-105	12/09/21	N	--	--	--
MW-70-105	06/21/22	N	--	--	--
MW-70BR-225	11/30/20	N	720	8,300	--
MW-70BR-225	05/17/21	N	--	--	--
MW-70BR-225	12/09/21	N	--	--	--
MW-70BR-225	06/21/22	N	--	--	--
MW-70BR-287	07/24/20	N	--	--	--
MW-70BR-287	07/24/20	N	--	--	--
MW-70BR-287	07/24/20	N	--	--	--
MW-70BR-287	08/21/20	N	810	12,000	<1
MW-70BR-287	08/21/20	N	820	12,000	<1
MW-70BR-287	08/21/20	N	810	12,000	<1
MW-70BR-287	09/28/20	N	790	11,000	<1 J
MW-70BR-287	11/18/20	N	840	10,000	<1 J
MW-70BR-287	11/18/20	N	820	11,000	<1 J
MW-70BR-287	11/18/20	N	810	11,000	<1 J
MW-70BR-287	12/02/20	N	840	9,500	<1
MW-70BR-287	01/25/21	N	810	10,000	<1
MW-70BR-287	02/15/21	N	800	10,000	<1 J
MW-70BR-287	01/25/21	N	810	10,000	<1
MW-70BR-287	02/15/21	N	800	10,000	<1 J
MW-70BR-287	02/15/21	FD	810	11,000	<1 J
MW-70BR-287	05/17/21	N	800	11,000	<1
MW-70BR-287	08/19/21	N	800	11,000	<1
MW-70BR-287	12/09/21	N	--	--	--
MW-70BR-287	06/21/22	N	--	--	--
MW-71-035	05/01/20	N	--	--	--
MW-71-035	12/15/20	N	1,200	12,000	--
MW-71-035	05/26/21	N	--	--	--
MW-71-035	12/16/21	N	1,200	--	<1
MW-71-035	02/02/22	N	1,100	--	<1
MW-71-035	03/14/22	N	1,200	--	<1
MW-71-035	04/12/22	N	1,200	--	<1
MW-71-035	04/12/22	FD	1,200	--	<1
MW-71-035	05/18/22	N	1,100	--	<1
MW-71-035	06/15/22	N	1,200	--	<1
MW-71-035	06/15/22	FD	1,300	--	<1
MW-71-035	07/13/22	N	1,300	--	<1
MW-71-035	08/12/22	N	1,300	--	<1
MW-71-035	09/15/22	N	1,500	--	<1
MW-72-080	02/20/20	N	--	--	--
MW-72-080	04/28/20	N	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-72-080	09/29/20	N	79	75	6.8	--	--	--	--	--	--	0.086	81
MW-72-080	12/03/20	N	86	78	12 J	--	4.4	300	--	0.45 J	9.9 J	0.044	76
MW-72-080	02/18/21	N	70	72 J	11	--	--	--	--	--	--	0.12	82
MW-72-080	05/27/21	N	66	62	<0.1 J	--	--	--	--	--	--	0.05	81
MW-72-080	08/27/21	N	61	58	2.9 J	--	--	--	--	--	--	0.055	77
MW-72-080	12/09/21	N	71	66	4.4 J	--	--	--	--	--	--	0.031	72
MW-72-080	06/17/22	N	35	32	--	--	--	--	--	--	--	--	--
MW-72BR-200	02/20/20	N	1.2	2.9	12	--	--	--	--	--	--	0.1	71
MW-72BR-200	04/28/20	N	<1	2.1	6.5	--	--	--	--	--	--	0.2	73
MW-72BR-200	09/29/20	N	<1	1.7	13	--	--	--	--	--	--	0.15	83
MW-72BR-200	12/03/20	N	<1	<1	14 J	--	5	270	--	<0.1 J	4.3 J	0.12	77
MW-72BR-200	02/18/21	N	<1	<1 J	14	--	--	--	--	--	--	0.12	79
MW-72BR-200	05/27/21	N	<1	<1	1.3 J	--	--	--	--	--	--	0.13	75
MW-72BR-200	05/27/21	FD	<1	<1	3.8 J	--	--	--	--	--	--	0.13	77
MW-72BR-200	08/27/21	N	<1	3	5.7 J	--	--	--	--	--	--	0.1	80
MW-72BR-200	12/09/21	N	<1	1.5	7.6 J	--	--	--	--	--	--	0.051	--
MW-72BR-200	06/17/22	N	<1	<1	--	--	--	--	--	--	--	--	--
MW-73-080	02/20/20	N	21	19	<0.1	--	--	--	--	--	--	0.0094	33
MW-73-080	04/28/20	N	26	24	<0.1	--	--	--	--	--	--	0.0045	36
MW-73-080	09/30/20	N	18	21	0.29	--	--	--	--	--	--	0.0083	47
MW-73-080	12/03/20	N	11	11	<0.1 J	--	1.2	290	--	0.025 J	33 J	0.0057	36
MW-73-080	02/18/21	N	11	12 J	2	--	--	--	--	--	--	0.0068	37
MW-73-080	05/27/21	N	24	23	<0.1 J	--	--	--	--	--	--	0.0091	35
MW-73-080	05/27/21	FD	25	23	<0.1 J	--	--	--	--	--	--	0.01	35
MW-73-080	08/27/21	N	19	22	<0.1 J	--	--	--	--	--	--	0.0028	35
MW-73-080	12/09/21	N	9.7	11	<0.1 J	--	--	--	--	--	--	0.018	35
MW-73-080	06/17/22	N	25	22	--	--	--	--	--	--	--	--	--
MW-74-240	04/30/20	N	<0.2	1.5	11	--	--	--	--	--	--	0.017	20
MW-74-240	12/03/20	N	<0.2	<1	9.9 J	--	0.29	4.2	--	0.12 J	0.56 J	0.0043	26
MW-74-240	06/07/21	N	<0.2	<1	6.6 J	--	--	--	--	--	--	0.0055 J	44
MW-74-240	06/07/21	FD	<0.2	<1	6.8 J	--	--	--	--	--	--	0.0055 J	43
MW-74-240	12/08/21	N	<0.2	<1	6.5	--	--	--	--	--	--	0.0074 J	46
MW-74-240	06/20/22	N	<0.2	<1 J	--	--	--	--	--	--	--	--	--
MW-75-033	01/30/20	N	27	30	2.9	61	0.81	120	3.10	0.6	25	0.19	16
MW-75-033	02/17/20	N	35	34	2.6	57 J	0.51	110	0.34 J	0.035	18	0.12	16
MW-75-033	03/16/20	N	31	31	2.1	53 J	0.52	100	0.17 J	0.14 J	19	0.035	13
MW-75-033	04/20/20	N	94	88	1.7	97	0.59	190	5.30	0.12 J	38	0.02	11
MW-75-033	05/18/20	N	54	51	1.1	86	0.56	190	0.57	0.05 J	39 J	0.002	11
MW-75-033	05/18/20	FD	54	50	1.1	83	0.55	190	0.56	0.044 J	40 J	0.0018	11
MW-75-033	06/15/20	N	19	20	0.85 J	87	0.65	200	1.40	0.049	42	0.0034	10

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-72-080	09/29/20	N	--	1.4	--	--	--	--	--	--	--	--	0.59
MW-72-080	12/03/20	N	--	1.6	3,200 J	--	46	--	5,000	--	--	--	1.3
MW-72-080	02/18/21	N	--	1.8	--	--	--	--	--	--	--	--	1
MW-72-080	05/27/21	N	--	1.3	--	--	--	--	--	--	--	--	0.85
MW-72-080	08/27/21	N	--	1.4	--	--	--	--	--	--	--	--	1.2
MW-72-080	12/09/21	N	--	1.5	--	--	--	--	--	--	--	--	1.2
MW-72-080	06/17/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-72BR-200	02/20/20	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-72BR-200	04/28/20	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-72BR-200	09/29/20	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-72BR-200	12/03/20	N	--	<0.5	2,600 J	--	25	--	5,000	--	--	--	<0.1
MW-72BR-200	02/18/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-72BR-200	05/27/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-72BR-200	05/27/21	FD	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-72BR-200	08/27/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-72BR-200	12/09/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-72BR-200	06/17/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-73-080	02/20/20	N	--	3.7	--	--	--	--	--	--	--	--	2.9
MW-72BR-200	06/17/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-73-080	02/20/20	N	--	3.7	--	--	--	--	--	--	--	--	2.9
MW-73-080	04/28/20	N	--	4.2	--	--	--	--	--	--	--	--	3.9
MW-73-080	09/30/20	N	--	4.6 J	--	--	--	--	--	--	--	--	4.5
MW-73-080	12/03/20	N	--	4.1	1,100 J	--	100	--	2,900	--	--	--	3.2
MW-73-080	02/18/21	N	--	4.3	--	--	--	--	--	--	--	--	3.4
MW-73-080	05/27/21	N	--	3.8	--	--	--	--	--	--	--	--	3
MW-73-080	05/27/21	FD	--	3.8	--	--	--	--	--	--	--	--	3.5
MW-73-080	08/27/21	N	--	4.5	--	--	--	--	--	--	--	--	3.5
MW-73-080	12/09/21	N	--	3.8	--	--	--	--	--	--	--	--	3.5
MW-73-080	06/17/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-74-240	04/30/20	N	--	<0.5	--	--	--	--	--	--	--	--	<0.05
MW-74-240	12/03/20	N	--	<0.5	170 J	--	200	--	88	--	--	--	<0.1
MW-74-240	06/07/21	N	--	<0.5	--	--	--	--	--	--	--	--	0.064
MW-74-240	06/07/21	FD	--	<0.5	--	--	--	--	--	--	--	--	0.085
MW-74-240	12/08/21	N	--	<0.5	--	--	--	--	--	--	--	--	0.27
MW-74-240	06/20/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-75-033	01/30/20	N	8.5	1.8	670	4.5	100	0.14	920	3.3	--	--	2
MW-75-033	02/17/20	N	8.5	2	620	3.6	100	0.09 J	850	3.4	--	--	2.4
MW-75-033	03/16/20	N	7.7	1.9	560	3.3	100	0.12	900	3.1	--	--	2.4 J
MW-75-033	04/20/20	N	10	5.4	730	2.8	100	<0.1	1,300	2.4	--	--	2.4
MW-75-033	05/18/20	N	11 J	7	810	2.8	100	<0.2	1,400	2.4	--	--	2.9
MW-75-033	05/18/20	FD	11 J	6.8	840	2.8	99	<0.2	1,300	2.5	--	--	2.9
MW-75-033	06/15/20	N	12 J	2.6	840	2.9	88	<0.2	1,500	2.3	--	--	1.7 J

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-72-080	09/29/20	N	--	--	--
MW-72-080	12/03/20	N	690	10,000	--
MW-72-080	02/18/21	N	--	--	--
MW-72-080	05/27/21	N	--	--	--
MW-72-080	08/27/21	N	--	--	--
MW-72-080	12/09/21	N	--	--	--
MW-72-080	06/17/22	N	--	--	--
MW-72BR-200	02/20/20	N	--	--	--
MW-72BR-200	04/28/20	N	--	--	--
MW-72BR-200	09/29/20	N	--	--	--
MW-72BR-200	12/03/20	N	700	9,400	--
MW-72BR-200	02/18/21	N	--	--	--
MW-72BR-200	05/27/21	N	--	--	--
MW-72BR-200	05/27/21	FD	--	--	--
MW-72BR-200	08/27/21	N	--	--	--
MW-72BR-200	12/09/21	N	--	--	--
MW-72BR-200	06/17/22	N	--	--	--
MW-73-080	02/20/20	N	--	--	--
MW-73-080	04/28/20	N	--	--	--
MW-73-080	09/30/20	N	--	--	--
MW-73-080	12/03/20	N	400	5,800	--
MW-73-080	02/18/21	N	--	--	--
MW-73-080	05/27/21	N	--	--	--
MW-73-080	05/27/21	FD	--	--	--
MW-73-080	08/27/21	N	--	--	--
MW-73-080	12/09/21	N	--	--	--
MW-73-080	06/17/22	N	--	--	--
MW-74-240	04/30/20	N	--	--	--
MW-74-240	12/03/20	N	61	480	--
MW-74-240	06/07/21	N	--	--	--
MW-74-240	06/07/21	FD	--	--	--
MW-74-240	12/08/21	N	--	--	--
MW-74-240	06/20/22	N	--	--	--
MW-75-033	01/30/20	N	220	1,900	<1
MW-75-033	02/17/20	N	210	1,900	<10
MW-75-033	03/16/20	N	210	2,000	<1 J
MW-75-033	04/20/20	N	290	3,200	<1
MW-75-033	05/18/20	N	300	3,100	<1 J
MW-75-033	05/18/20	FD	290	3,100	<1 J
MW-75-033	06/15/20	N	260	3,300	<1

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-75-033	07/21/20	N	22	24	0.85 J	91	0.6	170	0.61	<0.02 J	36	0.023	9.5
MW-75-033	08/17/20	N	30	29	0.78	80	1.4	230	4.90 J	3.80 J	40 J	0.018	9.8
MW-75-033	09/28/20	N	23	25	1.1 J	83	0.58 J	120 J	0.65 J	0.12 J	33 J	0.022	9.8
MW-75-033	10/19/20	N	28	64	7.3 J	170	0.59	150	5.70 J	4.10 J	31 J	0.9 J	8.1
MW-75-033	12/01/20	N	39	38	2.2	57	0.73 J	110 J	1.40	0.023 J	28 J	0.018	11
MW-75-033	12/01/20	FD	38	38	2.1	58	1 J	110 J	1.50	0.03 J	28 J	0.02	11
MW-75-033	02/16/21	N	34	35	0.88 J	51	0.6	90 J	0.24 J	0.031	20 J	0.018	12 J
MW-75-033	05/17/21	N	33	32	0.7	89	0.59	200	0.39	<0.02	38	0.017	9.4
MW-75-033	08/17/21	N	29	28	<0.1	64	0.57	160	0.22 J	<0.02	31 J	0.011	8.1
MW-75-033	11/29/21	N	42	39	--	--	--	--	--	--	--	--	--
MW-75-033	03/02/22	N	39	--	--	--	--	--	--	--	--	--	--
MW-75-033	03/02/22	FD	40	--	--	--	--	--	--	--	--	--	--
MW-75-033	06/07/22	N	27	26	--	--	--	--	--	--	--	--	--
MW-75-033	08/24/22	N	36	--	--	--	--	--	--	--	--	--	--
MW-75-117	01/30/20	N	5.1	5.4	<0.5	73	1	340	0.078	0.02	87	0.38	31
MW-75-117	02/17/20	N	4.8	4.8	1.2	77 J	0.9	300	0.4 J	0.036	67	0.39	31
MW-75-117	03/16/20	N	5.3	4.7	<0.1	67 J	0.81	240	0.092 J	0.088 J	61	0.36	32
MW-75-117	03/16/20	FD	5.3	5.1	<0.1	67 J	0.8	240	0.059 J	0.042 J	60	0.38	34
MW-75-117	04/20/20	N	8	7.7	<0.1	67	0.8	200	0.29	0.081 J	49	0.36	36
MW-75-117	05/18/20	N	5.4	7.4	<0.1	66	0.8	190	0.58	0.15 J	47 J	0.3	38
MW-75-117	06/15/20	N	4.9	5.8	<0.1 J	62	0.85	180	0.48	0.12	43	0.26	39
MW-75-117	07/20/20	N	8.4	8.6	<0.1 J	69	0.82	160	0.17	<0.02	42 J	0.3 J	41
MW-75-117	08/17/20	N	1.6	3	<0.1	70	1.5	220	0.46 J	<0.02 J	54 J	0.34	40
MW-75-117	09/28/20	N	2.1	2.8	<0.1 J	83	0.93 J	230 J	0.28 J	<0.02 J	50 J	0.33	39
MW-75-117	10/20/20	N	5.6	5.5	1.3 J	73	1	210	0.7 J	<0.02	58 J	0.29	33
MW-75-117	12/01/20	N	7.8	8.2	1.1	68	1.1 J	180 J	0.37	<0.02	75 J	0.19	33
MW-75-117	02/16/21	N	6.5	6.7	<0.1 J	61	0.77	170 J	0.15 J	0.022	62 J	0.087	35 J
MW-75-117	05/17/21	N	13	13	<0.1	60	0.83	190	0.098	<0.02	42	0.059	42
MW-75-117	08/17/21	N	7.4	7	<0.1	64	0.88	240	0.033 J	<0.02	55 J	0.15	33
MW-75-117	11/29/21	N	10	10	--	--	--	--	--	--	--	--	--
MW-75-117	03/02/22	N	2.7	--	--	--	--	--	--	--	--	--	--
MW-75-117	06/07/22	N	7.4	6.7	--	--	--	--	--	--	--	--	--
MW-75-117	08/24/22	N	14	--	--	--	--	--	--	--	--	--	--
MW-75-202	01/30/20	N	<1	<5	<0.5	93	1.5	480	<0.1	0.025	60	1.90	58
MW-75-202	02/17/20	N	<1	<1	2.7	98 J	1.1	430	<0.1	0.046	49	2	61
MW-75-202	03/17/20	N	<1	<1	3.1	82 J	1.1	470	0.34 J	0.21 J	51	2.10	59
MW-75-202	04/21/20	N	<1	<1	4.2	98	1.1	440	0.17	0.2	41	2.60	62
MW-75-202	05/18/20	N	<1	2.2	3.7	93	1	400	0.16	0.19 J	52 J	2.70	61
MW-75-202	06/16/20	N	<1	<1	<0.1 J	100	1.1	380	0.21 J	0.21	62	2.50	67
MW-75-202	07/20/20	N	<1	1.1	2.5 J	81	1	380	0.077	0.036	51 J	2.20 J	59

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-75-033	07/21/20	N	10 J	2.8	810	2.9	81	<0.2	1,400	2.6	--	--	2.1 J
MW-75-033	08/17/20	N	10	2.6	780	3.2	82	<0.2	1,300	2.7	--	--	1.1
MW-75-033	09/28/20	N	6.9	2.4	630	3.3	83	<0.2	1,400	2.8	--	--	2.1
MW-75-033	10/19/20	N	11 J	2.3	760	24	78	<0.2	1,100	2.2	--	--	2.1
MW-75-033	12/01/20	N	7.5 J	2.2	490	3.1	91	<0.2	1,100	3.1	--	--	2.5
MW-75-033	12/01/20	FD	7.4 J	2.2	490	3.2	91	<0.2	1,100	3.1	--	--	2.7
MW-75-033	02/16/21	N	6.9 J	1.9	510 J	3.7	93	<0.2	1,000	3.1	--	--	2
MW-75-033	05/17/21	N	9.2 J	1.8	560 J	3.1	81	<0.2	1,400	2.7	--	--	2.2
MW-75-033	08/17/21	N	9.3 J	1.9	730 J	2.8	83	<0.2	1,300	2.5	--	--	2.2
MW-75-033	11/29/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-75-033	03/02/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-75-033	03/02/22	FD	--	--	--	--	--	--	--	--	--	--	--
MW-75-033	06/07/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-75-033	08/24/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-75-117	01/30/20	N	19	<2.5	3,000	1.1	73	0.09 J	4,200	3.2	--	--	2.1
MW-75-117	02/17/20	N	19	1.2	2,900	1.7	76	0.11	4,000	3.3	--	--	2.2
MW-75-117	03/16/20	N	18	1.2	2,400	1.1	74	0.11	3,700	3.3	--	--	1.8 J
MW-75-117	03/16/20	FD	18	1.2	2,300	1.2	75	<0.1	3,800	3.4	--	--	1.8 J
MW-75-117	04/20/20	N	18	1.5	2,400	1.4	75	<0.1	3,500	3.1	--	--	2.3
MW-75-117	05/18/20	N	18 J	1.4	2,600	1.6	72	<0.2	3,400	3.5	--	--	2.6
MW-75-117	06/15/20	N	17 J	1.4	2,300	1.6	73	--	3,300	3.5	--	--	2.5 J
MW-75-117	07/20/20	N	15 J	1.3	2,700	1.4	70	<0.2	3,400	3.2	--	--	2.5
MW-75-117	08/17/20	N	18	1.5	2,400	1.6	70	<0.2	3,600	3.4	--	--	2.4
MW-75-117	09/28/20	N	14	2	1,900	1.5	72	<0.2	3,700	3.8	--	--	2.8
MW-75-117	10/20/20	N	31 J	1.3	2,100	1.4	72	<0.2	3,800 J	3.3	--	--	2.2
MW-75-117	12/01/20	N	20 J	1.4	2,200	1.1	75	<0.2	3,800	3.5	--	--	2.5
MW-75-117	02/16/21	N	27 J	1.3	2,100 J	1.6	73	<0.22	3,800	3.6	--	--	1.8
MW-75-117	05/17/21	N	14 J	1.2	2,100 J	1.9	74	<0.2	3,200	3.6	--	--	2.6
MW-75-117	08/17/21	N	24 J	1.4	2,800 J	1.8	73	<0.2	3,700	3.1	--	--	2.3
MW-75-117	11/29/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-75-117	03/02/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-75-117	06/07/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-75-117	08/24/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-75-202	01/30/20	N	23	<2.5	4,300	<5	50	0.15	5,800	3.2	--	--	0.82
MW-75-202	02/17/20	N	22	<0.5	4,100	<1	52	0.09 J	5,500	3.7	--	--	0.62
MW-75-202	03/17/20	N	25	<0.5	3,800	<1	57	0.07 J	5,700	2.9	--	--	0.44 J
MW-75-202	04/21/20	N	23	<0.5	3,900	<1	61	0.06 J	5,800	2.9	--	--	<0.05
MW-75-202	05/18/20	N	25 J	<0.5	3,800	<1	61	0.24	5,800	2.8	--	--	0.25
MW-75-202	06/16/20	N	25 J	<0.5	4,300	<1	67	--	5,400	3.6	--	--	0.14
MW-75-202	07/20/20	N	21 J	<0.5	4,500	<1	57	<0.2	5,600	2.9	--	--	0.72

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-75-033	07/21/20	N	260	3,100	<1
MW-75-033	08/17/20	N	250	2,900	<1 J
MW-75-033	09/28/20	N	250	3,100	<1 J
MW-75-033	10/19/20	N	220	2,600	<1 J
MW-75-033	12/01/20	N	230	2,300	<1
MW-75-033	12/01/20	FD	230	2,300	<1
MW-75-033	02/16/21	N	220	2,100	<10
MW-75-033	05/17/21	N	250	3,000	<1
MW-75-033	08/17/21	N	240	3,000	<1
MW-75-033	11/29/21	N	--	--	--
MW-75-033	03/02/22	N	--	--	--
MW-75-033	03/02/22	FD	--	--	--
MW-75-033	06/07/22	N	--	--	--
MW-75-033	08/24/22	N	--	--	--
MW-75-117	01/30/20	N	640	8,500	<1
MW-75-117	02/17/20	N	610	8,400	<1
MW-75-117	03/16/20	N	570	8,200	<1 J
MW-75-117	03/16/20	FD	580	8,300	<1 J
MW-75-117	04/20/20	N	580	7,500	<1
MW-75-117	05/18/20	N	580	7,200	<1 J
MW-75-117	06/15/20	N	550	7,300	<20
MW-75-117	07/20/20	N	540	7,400	<1 J
MW-75-117	08/17/20	N	520	7,800	<10 J
MW-75-117	09/28/20	N	530	7,800	<1 J
MW-75-117	10/20/20	N	550	7,800	<1
MW-75-117	12/01/20	N	610	8,400	<1
MW-75-117	02/16/21	N	570	7,600	<1
MW-75-117	05/17/21	N	530	7,000	<1
MW-75-117	08/17/21	N	540	7,500	<1
MW-75-117	11/29/21	N	--	--	--
MW-75-117	03/02/22	N	--	--	--
MW-75-117	06/07/22	N	--	--	--
MW-75-117	08/24/22	N	--	--	--
MW-75-202	01/30/20	N	1,200	12,000	<1
MW-75-202	02/17/20	N	1,100	12,000	<1
MW-75-202	03/17/20	N	1,100	13,000	<1 J
MW-75-202	04/21/20	N	1,200	13,000	<1
MW-75-202	05/18/20	N	1,100	12,000	<1 J
MW-75-202	06/16/20	N	960	11,000	<50
MW-75-202	07/20/20	N	1,100	12,000	<20 J

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-75-202	08/17/20	N	<1	<1	2.5	77	1.2	68	<0.02 J	<0.02 J	11 J	2	59
MW-75-202	09/28/20	N	<1	<1	1.8 J	76	1 J	440 J	<0.1 J	<0.1 J	59 J	1.80	54
MW-75-202	10/19/20	N	<1	<1	1.8 J	72	1.2	400	<0.02	<0.02	56 J	1.50 J	48
MW-75-202	12/01/20	N	<1	<1	1.8	71	1.2 J	340 J	0.33	<0.02	70 J	1.50	47
MW-75-202	02/16/21	N	<1	<1	<0.1 J	66	0.98	320 J	0.059 J	0.022	44 J	0.98	62 J
MW-75-202	05/17/21	N	<1	<1	<0.1	64	1.1	550	0.038	0.043	49	1.50	52
MW-75-202	08/17/21	N	<1	<1	<0.1	61	0.97	750	0.032 J	0.022	54 J	1.50	45
MW-75-202	08/17/21	FD	<1	<1	<0.1	59	0.98	620	0.032 J	0.025	54 J	1.50	44
MW-75-202	11/29/21	N	<1	<1	--	--	--	--	--	--	--	--	--
MW-75-202	11/29/21	FD	<1	<1	--	--	--	--	--	--	--	--	--
MW-75-202	03/02/22	N	<1	--	--	--	--	--	--	--	--	--	--
MW-75-202	06/07/22	N	<1	<1	--	--	--	--	--	--	--	--	--
MW-75-202	08/25/22	N	<1	--	--	--	--	--	--	--	--	--	--
MW-75-202	08/25/22	FD	<1	--	--	--	--	--	--	--	--	--	--
MW-75-267	01/30/20	N	<1	<5	<0.5	79	2.5	350	<0.1	<0.1	17	0.93	120
MW-75-267	01/30/20	FD	<1	<5	<0.5	81	2.6	380	0.11	<0.1	18	0.95	120
MW-75-267	02/18/20	N	<1	<1	<0.5	82 J	1.8	330	0.19 J	0.11	13	0.9	130
MW-75-267	03/17/20	N	<1	<1	2.4	79 J	2.3	350	0.95 J	0.26 J	14	1.10	120
MW-75-267	04/21/20	N	<1	<1	3.8	82	1.8	360	0.25	0.23	14	1.40	98
MW-75-267	05/18/20	N	<1	<1	3.7	94	2.2	380	0.47	0.36 J	19 J	1.80	90
MW-75-267	06/16/20	N	<1	<1	<0.1 J	93	2	360	0.59 J	0.45	19	2.20	71
MW-75-267	06/16/20	FD	<1	<1	<0.1 J	92	2.2	390	0.57 J	0.49	21	2.10	71
MW-75-267	07/21/20	N	<1	<1	4.7 J	93	1.9	340	0.48	0.47 J	17	2.30	74
MW-75-267	08/17/20	N	<1	<1	4	72	2.9	370	0.49 J	0.38 J	27 J	1.80	83
MW-75-267	09/28/20	N	<1	<1	3.9 J	71	2.7 J	310 J	0.4 J	<0.1 J	21 J	1.40	90
MW-75-267	10/19/20	N	<1	<1	3.2 J	71	2.4	290	0.37 J	0.25 J	15 J	1.20 J	90
MW-75-267	12/01/20	N	<1	<1	2.3	67	3 J	270 J	0.28	0.22 J	18 J	1.10	110
MW-75-267	02/16/21	N	<1	<1	<0.1 J	62	3.4	240 J	0.14 J	0.065	11 J	0.78	130 J
MW-75-267	05/17/21	N	<1	<1	<0.1	68	2.1	400	0.27	0.19	13	1.40	100
MW-75-267	05/17/21	FD	<1	<1	<0.1	68	2	400	0.19	0.18	13	1.40	100
MW-75-267	08/17/21	N	<1	<1	<0.1	59	1.7	350	0.54 J	0.25	15 J	1.50	67
MW-75-267	11/29/21	N	<1	<1	--	--	--	--	--	--	--	--	--
MW-75-267	03/02/22	N	<1	--	--	--	--	--	--	--	--	--	--
MW-75-267	06/07/22	N	<1	<1	--	--	--	--	--	--	--	--	--
MW-75-267	08/25/22	N	<1	--	--	--	--	--	--	--	--	--	--
MW-75-337	01/30/20	N	<1	<5	<0.5	65	0.63	260	1	0.5	14	0.87	190
MW-75-337	02/17/20	N	<1	1.1	<0.5	67 J	2.1	210	0.5 J	0.42	9.2	0.87	190
MW-75-337	03/16/20	N	<1	<1	4.6	65 J	2.6	250	6 J	0.58 J	8	0.95	200
MW-75-337	04/20/20	N	<1	<1	<0.5	64	2.2	250	1.50 J	0.57 J	6	0.83	200
MW-75-337	04/20/20	FD	<1	<1	<0.5	63	2.3	260	1.10 J	0.53 J	6.1	0.82	210

Appendix B
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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-75-202	08/17/20	N	23	0.59	3,800	<1	58	0.29	6,000	3.2	--	--	0.56
MW-75-202	09/28/20	N	21	<0.5	3,200	<1	58	0.2	5,600	4	--	--	1.1
MW-75-202	10/19/20	N	56 J	<0.5	4,700	<1	56	<0.2	5,700	3.7	--	--	0.98
MW-75-202	12/01/20	N	29 J	<0.5	3,200	<1	62	<0.2	5,600	3.5	--	--	1.1
MW-75-202	02/16/21	N	37 J	<0.5	3,300 J	1.2	51	<0.22	5,700	3.7	--	--	0.64
MW-75-202	05/17/21	N	20 J	<0.5	4,300 J	<1	62	<0.2	5,500	3.6	--	--	0.81
MW-75-202	08/17/21	N	30 J	<0.5	3,800 J	1.4	65	<0.2	5,600	3.1	--	--	0.9
MW-75-202	08/17/21	FD	27 J	<0.5	3,900 J	1.2	65	<0.2	5,600	3.5	--	--	0.89
MW-75-202	11/29/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-75-202	11/29/21	FD	--	--	--	--	--	--	--	--	--	--	--
MW-75-202	03/02/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-75-202	06/07/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-75-202	08/25/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-75-202	08/25/22	FD	--	--	--	--	--	--	--	--	--	--	--
MW-75-267	01/30/20	N	61	<2.5	6,100	<5	33	0.11	8,300	4.9	--	--	0.39
MW-75-267	01/30/20	FD	66	3.1	6,300	<5	34	0.11	8,500	5.2	--	--	0.45
MW-75-267	02/18/20	N	62	<2.5	6,400	<1	37	0.19	8,400	4	--	--	0.2
MW-75-267	03/17/20	N	73	<0.5	5,700	<1	49	0.1	7,500	3.4	--	--	--
MW-75-267	04/21/20	N	60	<2.5	6,700	<1	58	0.15	7,700	3.7	--	--	0.077
MW-75-267	05/18/20	N	67 J	<2.5	7,500	<1	49	0.35	7,500	3.4	--	--	<0.05
MW-75-267	06/16/20	N	63 J	<0.5	6,500	<1	55	0.22	7,500	3.3	--	--	0.073
MW-75-267	06/16/20	FD	69 J	<0.5	6,800	<1	56	0.23	7,600	3.3	--	--	<0.05
MW-75-267	07/21/20	N	57 J	<0.5	6,600	<1	60	0.24	7,300	3.5	--	--	0.25 J
MW-75-267	08/17/20	N	580	0.65	5,200	<1	54	0.39	8,300	4.4	--	--	0.074
MW-75-267	09/28/20	N	69	<0.5	5,500	<1	52	0.28	7,600	4.9	--	--	<0.05
MW-75-267	10/19/20	N	97 J	<0.5	6,700	<1	48	0.26	7,900	4.5	--	--	0.068
MW-75-267	12/01/20	N	86 J	<0.5	4,900	<1	39	0.23	7,900	4.8	--	--	0.22
MW-75-267	02/16/21	N	79 J	<0.5	6,500 J	<1	35	<0.22	7,900	4.2	--	--	0.14
MW-75-267	05/17/21	N	53 J	<0.5	6,600 J	<1	43	0.26	7,700	3.9	--	--	0.18
MW-75-267	05/17/21	FD	53 J	<0.5	6,000 J	<1	43	0.2	7,600	4.4	--	--	0.12
MW-75-267	08/17/21	N	54 J	<0.5	4,200 J	<1	46	0.22	7,500	3.8	--	--	<0.1
MW-75-267	11/29/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-75-267	03/02/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-75-267	06/07/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-75-267	08/25/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-75-337	01/30/20	N	72	3.2	8,300	<5	74	0.17	10,000	7.7	--	--	0.066
MW-75-337	02/17/20	N	62	<2.5	7,500	<1	66	0.14	9,700	6.9	--	--	<0.05
MW-75-337	03/16/20	N	74	<0.5	6,800	<1	68	0.17	9,900	6.8	--	--	--
MW-75-337	04/20/20	N	68	<2.5	7,100	<1	60	<0.1	10,000	4.8	--	--	<0.05
MW-75-337	04/20/20	FD	68	<2.5	7,200	<1	60	<0.1	9,700	5	--	--	<0.05

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-75-202	08/17/20	N	1,100	12,000	<1 J
MW-75-202	09/28/20	N	1,100	12,000	<1 J
MW-75-202	10/19/20	N	1,100	13,000	<1 J
MW-75-202	12/01/20	N	1,100	12,000	<1
MW-75-202	02/16/21	N	1,100	12,000	<1
MW-75-202	05/17/21	N	1,100	12,000	<1
MW-75-202	08/17/21	N	1,000	13,000	<1
MW-75-202	08/17/21	FD	1,100	12,000	<1
MW-75-202	11/29/21	N	--	--	--
MW-75-202	11/29/21	FD	--	--	--
MW-75-202	03/02/22	N	--	--	--
MW-75-202	06/07/22	N	--	--	--
MW-75-202	08/25/22	N	--	--	--
MW-75-202	08/25/22	FD	--	--	--
MW-75-267	01/30/20	N	1,300	15,000	<1
MW-75-267	01/30/20	FD	1,300	15,000	<1
MW-75-267	02/18/20	N	1,300	15,000 J	<20 J
MW-75-267	03/17/20	N	1,200	15,000	<1 J
MW-75-267	04/21/20	N	1,300	14,000	<1
MW-75-267	05/18/20	N	1,200	15,000	<20 J
MW-75-267	06/16/20	N	1,200	14,000	<1
MW-75-267	06/16/20	FD	1,200	14,000	<1
MW-75-267	07/21/20	N	1,200	14,000	<1
MW-75-267	08/17/20	N	1,400	14,000	<1 J
MW-75-267	09/28/20	N	1,200	14,000	<1 J
MW-75-267	10/19/20	N	1,200	15,000	<50 J
MW-75-267	12/01/20	N	1,300	14,000	<1
MW-75-267	02/16/21	N	1,200	16,000	<1
MW-75-267	05/17/21	N	1,200	14,000	<1
MW-75-267	05/17/21	FD	1,200	14,000	<1
MW-75-267	08/17/21	N	1,200	14,000	<1
MW-75-267	11/29/21	N	--	--	--
MW-75-267	03/02/22	N	--	--	--
MW-75-267	06/07/22	N	--	--	--
MW-75-267	08/25/22	N	--	--	--
MW-75-337	01/30/20	N	1,600	19,000 J	<1
MW-75-337	02/17/20	N	1,600	18,000 J	<1
MW-75-337	03/16/20	N	1,600	19,000 J	<1 J
MW-75-337	04/20/20	N	1,600	18,000	<1
MW-75-337	04/20/20	FD	1,700	18,000	<1

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-75-337	05/18/20	N	<1	<1	<0.5	65	2.5	240	0.79	0.51 J	6.5 J	0.8	210
MW-75-337	06/15/20	N	<1	<1	<0.1 J	59	3.1	230	0.77	0.44	8	0.69	230
MW-75-337	07/21/20	N	<1	<1	4.4 J	62	2.2	210	0.35	0.28 J	5	0.61	220
MW-75-337	07/21/20	FD	<1	<1	4.3 J	62	2.9	230	0.74	0.35 J	7.1	0.62	230
MW-75-337	08/17/20	N	<1	1.1	4.7	60	3.9	220	0.6 J	0.48 J	8 J	0.59	230
MW-75-337	08/17/20	FD	<1	1.1	4.5	58	3.4	240	1.10 J	0.49 J	9.1 J	0.59	220
MW-75-337	09/28/20	N	<1	<1	4.7 J	58	4.9 J	220 J	0.58 J	0.28 J	8.7 J	0.59	230
MW-75-337	10/20/20	N	<1	<1	4.6 J	66	2.3	140	1.60 J	0.84 J	5 J	0.58	200
MW-75-337	12/01/20	N	<1	<1	5	54	3.7 J	180 J	0.77	0.4 J	8.1 J	0.6	220
MW-75-337	02/16/21	N	<1	<1	6 J	57	4	160 J	1.10 J	0.35	5.8 J	0.66	230 J
MW-75-337	05/17/21	N	<1	<1	3.9	55	2.5	260	0.42	0.26	4.4	0.46	240
MW-75-337	08/17/21	N	<1	1.4	<0.1	51	2.1	240	0.45 J	0.26	4.4 J	0.47	230
MW-75-337	11/29/21	N	<1	<1	--	--	--	--	--	--	--	--	--
MW-75-337	03/02/22	N	<1	--	--	--	--	--	--	--	--	--	--
MW-75-337	06/07/22	N	<1	<1	--	--	--	--	--	--	--	--	--
MW-75-337	08/25/22	N	<1	--	--	--	--	--	--	--	--	--	--
MW-76-039	01/29/20	N	44	43	0.38	69	0.66	160	0.63 J	0.05	26 J	0.003	15
MW-76-039	01/29/20	FD	44	45	0.21	71	0.65	170	0.95 J	0.053	26 J	0.003	16
MW-76-039	02/20/20	N	18	28 J	0.6 J	78	0.57	180	0.46 J	2 J	23	0.15 J	16
MW-76-039	02/20/20	FD	16	15 J	0.2 J	65	0.55	160	0.26 J	0.17 J	20	0.076 J	17
MW-76-039	03/17/20	N	120	110	0.31	57 J	0.45	130	0.1 J	0.086 J	19	0.0022	19
MW-76-039	04/21/20	N	35	34	<0.1	72	0.48	170	0.25	0.11	23	0.0048	14
MW-76-039	05/26/20	N	26	24	<0.1 J	75	0.44	170	0.78 J	0.042 J	23 J	0.013	12 J
MW-76-039	06/16/20	N	<1	<1	<0.1 J	79	1.2	340	0.21 J	0.073	37	0.16	32
MW-76-039	07/21/20	N	26	29	<0.1 J	94	0.56	180	0.071	<0.02 J	26	0.0036	17
MW-76-039	08/18/20	N	57	55	<0.1	74	0.49	170	0.11 J	0.044 J	25 J	0.004	18
MW-76-039	09/29/20	N	72	<1	<0.1	58	0.8 J	120 J	0.24 J	<0.1 J	21 J	0.22	34
MW-76-039	10/21/20	N	86	86	1.3	65	0.59	120 J	0.41	0.15	20	0.0097	21
MW-76-039	12/02/20	N	110	110	1.1	55	0.67	110 J	<0.02	<0.02	20	0.013	21
MW-76-039	02/17/21	N	36	37	<0.1	61	0.39	110	0.27 J	<0.02 J	20	0.011	16
MW-76-039	02/17/21	FD	36	37	<0.1	54	0.39	110	0.27 J	0.033 J	20	0.011	15
MW-76-039	05/21/21	N	27	26	<0.1 J	77	0.51	240 J	0.12 J	0.063 J	28 J	0.0076	13
MW-76-039	08/18/21	N	3.2	3.3	<0.1 J	49	1.4	420 J	0.069 J	0.023 J	25 J	0.11	28
MW-76-039	12/02/21	N	130	140	<0.1 J	39	--	--	--	<0.02 J	--	0.01	27
MW-76-039	01/31/22	N	36	--	<0.1	59	--	--	--	0.28	--	0.034	--
MW-76-039	03/07/22	N	41	39	<0.1 J	62 J	--	--	--	<0.1	--	0.011	15
MW-76-039	03/07/22	FD	40	41	<0.1 J	62 J	--	--	--	<0.1	--	0.011	16
MW-76-039	04/11/22	N	33	--	<0.1 J	61	--	--	--	0.034	--	0.005	--
MW-76-039	05/16/22	N	44	--	<0.1 J	70	--	--	--	<0.02	--	0.0014	--
MW-76-039	06/13/22	N	88	77 J	<0.1 J	66	--	--	--	<0.02 J	--	<0.0005	20

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-75-337	05/18/20	N	72 J	<2.5	8,000	<1	53	0.35	10,000	5.3	--	--	<0.05
MW-75-337	06/15/20	N	68 J	<0.5	8,600	<1	49	0.45	10,000	4.9	--	--	1.8 J
MW-75-337	07/21/20	N	66 J	<0.5	9,400	<1	46	0.23	9,900	5.6	--	--	1.9 J
MW-75-337	07/21/20	FD	70 J	<0.5	10,000	<1	46	0.23	9,700	5.7	--	--	0.071
MW-75-337	08/17/20	N	65	1.2	7,700	<1	50	0.23	11,000	5	--	--	<0.05
MW-75-337	08/17/20	FD	66	1.2	7,300	<1	50	0.24	9,900	6.4	--	--	<0.05
MW-75-337	09/28/20	N	85	0.53	7,800	<1	48	0.23	9,400	6.4	--	--	<0.05
MW-75-337	10/20/20	N	100 J	<0.5	8,200	<1	61	2.1	9,500 J	6.5	--	--	<0.05
MW-75-337	12/01/20	N	98 J	<0.5	6,000	<1	49	0.23	9,800	7	--	--	<0.1
MW-75-337	02/16/21	N	66 J	<0.5	8,500 J	<1	54	<0.22	9,600	6.1	--	--	<0.05
MW-75-337	05/17/21	N	58 J	0.6	8,600 J	<1	44	<0.2	9,600	5.9	--	--	<0.05
MW-75-337	08/17/21	N	69 J	0.52 J	8,000 J	<1	44	0.2	10,000	4.4	--	--	<0.1
MW-75-337	11/29/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-75-337	03/02/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-75-337	06/07/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-75-337	08/25/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-76-039	01/29/20	N	8.3	1.7	550	1.7	85	<0.1	890	2.8	--	--	2.3
MW-76-039	01/29/20	FD	8.8	1.9	570	1.7	86	<0.1	900	2.8	--	--	2.6
MW-76-039	02/20/20	N	9.9	1.6	550	4.2 J	86	0.05 J	870	2.5	--	--	2.7 J
MW-76-039	02/20/20	FD	8	1.6	480	1.9 J	91	0.05 J	870	2.6	--	--	2.6 J
MW-76-039	03/17/20	N	8	2.5	480	2.4	94	0.11	850	3.1	--	--	2.9 J
MW-76-039	04/21/20	N	9.3	1.7	540	2.3	79	0.11	1,000	2.5	--	--	2.4
MW-76-039	05/26/20	N	10 J	1.4	510	2	75	<0.2	1,100	2.1	--	--	2.2
MW-76-039	06/16/20	N	26 J	0.98	4,000	2.4	64	<0.2	5,100	2.8	--	--	0.6
MW-76-039	07/21/20	N	10 J	1.7	640	2	90	<0.2	1,200	2.8	--	--	2 J
MW-76-039	08/18/20	N	9.7	2	630	3.5	91	<0.2	1,100	3.1	--	--	2.3
MW-76-039	09/29/20	N	5 J	0.99	410 J	3.6	92	<0.2	990	3.1	--	--	2.4
MW-76-039	10/21/20	N	12	2.3	580	2.3	95	<0.2	920	3.5	--	--	2.5
MW-76-039	12/02/20	N	6.9	2.4	460	2.7	95	2.6	870	3.6	--	--	2.8
MW-76-039	02/17/21	N	11 J	1.8	460	2.5	78	<0.22	950	2.8	--	--	2.8
MW-76-039	02/17/21	FD	9.8 J	1.8	490	2.4	83	<0.22	940	2.8	--	--	2.6
MW-76-039	05/21/21	N	11 J	1.5	560 J	2.3	79	0.29	1,200	2.8	--	--	2 J
MW-76-039	08/18/21	N	25	1	3,800 J	4.3	49	<0.2	5,200	2.2	--	--	1.8
MW-76-039	12/02/21	N	--	2.8	--	--	--	<0.2	--	--	--	<2.5	2.8
MW-76-039	01/31/22	N	--	--	--	--	--	--	--	--	2.5	--	--
MW-76-039	03/07/22	N	--	1.8	--	--	--	<0.2	--	--	2.4	--	--
MW-76-039	03/07/22	FD	--	1.8	--	--	--	<0.2	--	--	2.5	--	--
MW-76-039	04/11/22	N	--	--	--	--	--	--	--	--	2.1	--	--
MW-76-039	05/16/22	N	--	--	--	--	--	--	--	--	2.2	--	--
MW-76-039	06/13/22	N	--	3	--	--	--	0.078 J	--	--	2.5	<2.5	--

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MW-75-337	05/18/20	N	1,700	20,000 J	<1 J
MW-75-337	06/15/20	N	1,600	18,000 J	<1
MW-75-337	07/21/20	N	1,600	18,000 J	<1
MW-75-337	07/21/20	FD	1,700	18,000 J	<1
MW-75-337	08/17/20	N	1,700	19,000	<1 J
MW-75-337	08/17/20	FD	1,600	19,000	<1 J
MW-75-337	09/28/20	N	1,600	18,000 J	<20 J
MW-75-337	10/20/20	N	1,600	18,000	<1
MW-75-337	12/01/20	N	1,700	17,000 J	<1
MW-75-337	02/16/21	N	1,600	22,000	<1
MW-75-337	05/17/21	N	1,600	18,000 J	<1
MW-75-337	08/17/21	N	1,600	18,000	<1
MW-75-337	11/29/21	N	--	--	--
MW-75-337	03/02/22	N	--	--	--
MW-75-337	06/07/22	N	--	--	--
MW-75-337	08/25/22	N	--	--	--
MW-76-039	01/29/20	N	190	2,000	<1
MW-76-039	01/29/20	FD	190	2,000	<1
MW-76-039	02/20/20	N	190	2,000	<1
MW-76-039	02/20/20	FD	190	2,000	<1
MW-76-039	03/17/20	N	190	1,900	<1 J
MW-76-039	04/21/20	N	210	2,300	<1
MW-76-039	05/26/20	N	210	2,600	<1
MW-76-039	06/16/20	N	780	11,000	<1
MW-76-039	07/21/20	N	230	2,700	<10
MW-76-039	08/18/20	N	220	2,600	<10
MW-76-039	09/29/20	N	210	2,400	<1 J
MW-76-039	10/21/20	N	200	2,100	<1 J
MW-76-039	12/02/20	N	190	1,800	<10
MW-76-039	02/17/21	N	190	2,000	<1
MW-76-039	02/17/21	FD	190	1,900	<1
MW-76-039	05/21/21	N	230	2,600	<1
MW-76-039	08/18/21	N	770	11,000	<20
MW-76-039	12/02/21	N	190	--	<1
MW-76-039	01/31/22	N	200	--	<1
MW-76-039	03/07/22	N	190	--	<1
MW-76-039	03/07/22	FD	200	--	<1
MW-76-039	04/11/22	N	210	--	<1
MW-76-039	05/16/22	N	230	--	<10
MW-76-039	06/13/22	N	230	--	<1

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-76-039	06/13/22	FD	86	76 J	<0.1 J	63	--	--	--	<0.02 J	--	0.0007	19
MW-76-039	07/11/22	N	140	--	<0.1	74	--	--	--	0.11 J	--	0.012	--
MW-76-039	08/08/22	N	140	130	<0.1	53 J	--	--	--	<0.02 J	--	<0.0005 J	23 J
MW-76-039	09/12/22	N	93	--	<0.1	59	--	--	--	0.11	--	0.032	--
MW-76-039	09/12/22	FD	94	--	<0.1	60	--	--	--	0.078	--	0.029	--
MW-76-156	01/29/20	N	1.8	2	<0.5	68	1.5	480	<0.1	<0.1	69 J	0.22	31
MW-76-156	02/20/20	N	1	2	2.3	62	1.6	440	<0.1	<0.1	44	0.22	31
MW-76-156	03/17/20	N	3.3	3.8	2.1	59 J	1.1	390	<0.02	<0.02	39	0.23	29
MW-76-156	04/21/20	N	<1	1.7	2.5	65	1.2	450	0.71	0.17	41	0.25	30
MW-76-156	05/26/20	N	<1	1.5	2.2 J	59	1.1	370	0.13 J	<0.02	35 J	0.26	29 J
MW-76-156	05/26/20	FD	<1	1.6	2.2 J	59	1.2	390	0.083 J	0.024 J	37 J	0.28	30 J
MW-76-156	06/16/20	N	<1	<1	<0.1 J	68	1.3	380	0.091 J	0.025	39	0.28	29
MW-76-156	07/21/20	N	1.7	2.4	<0.1 J	64	1.3	360	0.055	0.044 J	37	0.22	33
MW-76-156	08/18/20	N	1.4	1.5	2.3	57	2.6	390	<0.1	<0.1 J	45 J	0.18	33
MW-76-156	09/29/20	N	<1	69	0.3	69	2 J	350 J	0.24 J	<0.02 J	41 J	0.015	18
MW-76-156	10/21/20	N	2.5	3.6	2.3	56	1.5	310 J	0.12	0.052	39	0.14	31
MW-76-156	10/21/20	FD	2.9	3.5	2.4	55	1.6	320 J	0.17	0.041	41	0.14	30
MW-76-156	12/02/20	N	4.2	4.6	2.2	53	2.8 J	360 J	<0.1	<0.1	55 J	0.12	31
MW-76-156	02/17/21	N	2.9	3.3	<0.1	46	1	280	0.042 J	0.023 J	40	0.094	32
MW-76-156	05/21/21	N	<1	1.1	<0.1 J	56	1.3	490	0.11 J	0.047 J	36 J	0.16	31
MW-76-156	08/18/21	N	2.3	2.6	<0.1 J	47	1.4	410 J	<0.02 J	<0.02 J	27 J	0.11	28
MW-76-156	12/02/21	N	4	4.5	<0.1 J	47	--	--	--	0.058 J	--	0.092	31
MW-76-156	01/31/22	N	<1	--	<0.1	60	--	--	--	<0.1	--	0.13	--
MW-76-156	03/07/22	N	2	2.5	<0.1 J	70 J	--	--	--	<0.1	--	0.16	25
MW-76-156	04/11/22	N	15	--	<0.1 J	55	--	--	--	<0.02	--	0.11	--
MW-76-156	05/16/22	N	5.5	--	<0.1 J	43	--	--	--	<0.1	--	0.071	--
MW-76-156	05/16/22	FD	5.5	--	<0.1 J	44	--	--	--	0.023	--	0.07	--
MW-76-156	06/13/22	N	13	12 J	<0.1 J	43	--	--	--	<0.02 J	--	0.033	28
MW-76-156	07/11/22	N	<1	--	<0.1	91	--	--	--	0.2 J	--	1.40	--
MW-76-156	08/08/22	N	8.9	8.5	<0.1	44 J	--	--	--	0.027 J	--	0.13 J	27 J
MW-76-156	09/12/22	N	13	--	<0.1	45	--	--	--	0.025	--	0.085	--
MW-76-181	01/29/20	N	890	860	<0.5	91	1.5	570	<0.1	<0.1	96 J	0.93	33
MW-76-181	02/20/20	N	1,000	970	1.6	91	1.6	580	<0.1	<0.1	79	0.86	34
MW-76-181	03/17/20	N	1,100	1,100	1.5	78 J	1.1	580	0.1 J	0.025 J	84	0.7	33
MW-76-181	04/21/20	N	720	700	1.6	100	1	550	0.48	0.08	74	0.79	35
MW-76-181	05/26/20	N	1,200	1,100	1.7 J	70	0.95	540	0.31 J	<0.02	73 J	0.54	31 J
MW-76-181	06/16/20	N	710	660	<0.1 J	76	1.1	560	0.037 J	0.033	84	0.55	34
MW-76-181	07/21/20	N	1,100	1,100	<0.1 J	76	1.1	530	<0.02	<0.02	77	0.5	35
MW-76-181	08/18/20	N	800	760	1.7	70	2.8	570	<0.1	<0.1 J	99 J	0.5	34
MW-76-181	09/29/20	N	840	810	1.6	75	1.6 J	370 J	<0.1 J	<0.02 J	85 J	0.48	34

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-76-039	06/13/22	FD	--	2.7	--	--	--	<0.22	--	--	2.5	<2.5	--
MW-76-039	07/11/22	N	--	--	--	--	--	--	--	--	2.5	--	--
MW-76-039	08/08/22	N	--	3.7	--	--	--	<0.2	--	--	2.8	<5	--
MW-76-039	09/12/22	N	--	--	--	--	--	--	--	--	3	--	--
MW-76-039	09/12/22	FD	--	--	--	--	--	--	--	--	3	--	--
MW-76-156	01/29/20	N	27	<2.5	4,300	2.9	51	<0.1	5,300	2.8	--	--	1.6
MW-76-156	02/20/20	N	25	0.83	3,200	2.9	47	0.09 J	5,100	3.6	--	--	1.3 J
MW-76-156	03/17/20	N	27	0.86	3,200	2.6	51	0.09 J	5,200	2.8	--	--	1.6 J
MW-76-156	04/21/20	N	26	0.85	3,500	2.8	53	0.06 J	5,500	2.6	--	--	1.3
MW-76-156	05/26/20	N	31 J	0.81	4,300	2.7	51 J	<0.2	5,500	3.3	--	--	1.2
MW-76-156	05/26/20	FD	29 J	0.8	4,400	2.7	34 J	<0.2	5,400	3.1	--	--	1.2
MW-76-156	06/16/20	N	29 J	0.7	4,100	2.7	51	<0.2	5,400	2.9	--	--	1.2
MW-76-156	07/21/20	N	25 J	0.97	4,300	3.3	50	<0.2	5,200	2.9	--	--	1.7 J
MW-76-156	08/18/20	N	24	1.1	3,200	3.8	51	<0.2	5,700	3.1	--	--	1.8
MW-76-156	09/29/20	N	24 J	2.3	3,300 J	2.1	55	<0.2	5,000	3	--	--	1.5
MW-76-156	10/21/20	N	45	1.1	4,600	3.8	51	<0.2	5,200	3.4	--	--	1.7
MW-76-156	10/21/20	FD	42	1	4,100	3.8	51	<0.2	5,100	3.4	--	--	1.7
MW-76-156	12/02/20	N	25 J	1.2	2,600	3.6	53	<0.2	5,100	3.6	--	--	1.9
MW-76-156	02/17/21	N	26 J	0.93	3,900	3.8	52	<0.22	5,200	3.3	--	--	2
MW-76-156	05/21/21	N	32 J	0.79	4,000	3.8	52	<0.2	5,100	3.2	--	--	1.3 J
MW-76-156	08/18/21	N	25	1	4,800 J	4.6	51	<0.2	5,100	3.1	--	--	1.8
MW-76-156	12/02/21	N	--	1.1	--	--	--	<0.2	--	--	--	<5	2
MW-76-156	01/31/22	N	--	--	--	--	--	--	--	--	1.3	--	--
MW-76-156	03/07/22	N	--	0.93	--	--	--	<0.2	--	--	1.5	--	--
MW-76-156	04/11/22	N	--	--	--	--	--	--	--	--	1.7	--	--
MW-76-156	05/16/22	N	--	--	--	--	--	--	--	--	1.5	--	--
MW-76-156	05/16/22	FD	--	--	--	--	--	--	--	--	1.5	--	--
MW-76-156	06/13/22	N	--	0.8	--	--	--	<0.2	--	--	1.9	<5	--
MW-76-156	07/11/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-76-156	08/08/22	N	--	0.93	--	--	--	<0.2	--	--	1.9	<5	--
MW-76-156	09/12/22	N	--	--	--	--	--	--	--	--	2.2	--	--
MW-76-181	01/29/20	N	28	<2.5	4,400	1.1	71	<0.1	6,600	2.8	--	--	2.2
MW-76-181	02/20/20	N	29	1.6	3,900	1.4	71	0.07 J	6,300	3.2	--	--	4.4 J
MW-76-181	03/17/20	N	32	1.7	4,000	1.2	70	0.07 J	6,400	2.1	--	--	2.2 J
MW-76-181	04/21/20	N	28	<2.5	3,900	1.1	69	0.05 J	6,500	2.7	--	--	1.6
MW-76-181	05/26/20	N	32 J	1.9	4,400	1.3	71	<0.2	6,500	3	--	--	2.6
MW-76-181	06/16/20	N	30 J	1.5	4,700	1.3	67	<0.2	6,700	2.3	--	--	1.7
MW-76-181	07/21/20	N	29 J	2	5,200	1.4	67	1.6	6,400	2.8	--	--	2.2
MW-76-181	08/18/20	N	29	1.8	4,300	1.7	69	<0.2	6,900	2.9	--	--	2
MW-76-181	09/29/20	N	29 J	2	5,300 J	1.4	72	<0.2	6,400	2.6	--	--	2.1

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MW-76-039	06/13/22	FD	230	--	<1
MW-76-039	07/11/22	N	280	--	<1
MW-76-039	08/08/22	N	230	--	<1
MW-76-039	09/12/22	N	250	--	<1
MW-76-039	09/12/22	FD	250	--	<1
MW-76-156	01/29/20	N	840	11,000	<1
MW-76-156	02/20/20	N	840	11,000	<1
MW-76-156	03/17/20	N	820	11,000	<10 J
MW-76-156	04/21/20	N	870	12,000	<1
MW-76-156	05/26/20	N	800	12,000	<1
MW-76-156	05/26/20	FD	820	12,000	<1
MW-76-156	06/16/20	N	770	11,000	<1
MW-76-156	07/21/20	N	800	11,000	<1
MW-76-156	08/18/20	N	780	11,000	<1
MW-76-156	09/29/20	N	760	11,000	<1 J
MW-76-156	10/21/20	N	810	12,000	<1 J
MW-76-156	10/21/20	FD	800	11,000	<1 J
MW-76-156	12/02/20	N	810	11,000	<1
MW-76-156	02/17/21	N	820	11,000	<1
MW-76-156	05/21/21	N	760	11,000	<50
MW-76-156	08/18/21	N	770	11,000	<1
MW-76-156	12/02/21	N	780	--	<1
MW-76-156	01/31/22	N	870	--	<1
MW-76-156	03/07/22	N	870	--	<1
MW-76-156	04/11/22	N	860	--	<1
MW-76-156	05/16/22	N	730	--	<1
MW-76-156	05/16/22	FD	740	--	<1
MW-76-156	06/13/22	N	740	--	<1
MW-76-156	07/11/22	N	720	--	<1
MW-76-156	08/08/22	N	710	--	<1
MW-76-156	09/12/22	N	760	--	<1
MW-76-181	01/29/20	N	950	14,000	<1
MW-76-181	02/20/20	N	930	12,000	<1
MW-76-181	03/17/20	N	910	14,000	<1 J
MW-76-181	04/21/20	N	920	14,000	<1
MW-76-181	05/26/20	N	940	14,000	<1
MW-76-181	06/16/20	N	910	14,000	<1
MW-76-181	07/21/20	N	900	15,000	<1
MW-76-181	08/18/20	N	910	14,000	<1
MW-76-181	09/29/20	N	930	15,000	<1 J

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MW-76-181	10/21/20	N	1,300	1,200	1.5	73	1.4	450 J	<0.02	<0.02	83	0.39	30
MW-76-181	12/02/20	N	1,500	1,500	1.5	67	2.7	450 J	0.18 J	<0.1	90	0.31	29
MW-76-181	12/02/20	FD	1,500	1,600	1.4	68	1.7	580 J	0.31	<0.1	110	0.31	30
MW-76-181	02/17/21	N	1,500	1,600	<0.1	60	0.85	410	0.14 J	0.041 J	78	0.35	30
MW-76-181	05/21/21	N	1,500	1,500	<0.1 J	64	1.1	480 J	0.096 J	<0.02 J	76 J	0.2	29
MW-76-181	08/18/21	N	1,500	1,400	<0.1 J	65	1.3	570 J	0.097 J	<0.02 J	63 J	0.12	25
MW-76-181	12/02/21	N	1,500	1,500	1.5 J	67	--	--	--	0.052 J	--	0.089	27
MW-76-181	01/31/22	N	1,500	--	<0.1	71	--	--	--	<0.02	--	0.064	--
MW-76-181	03/07/22	N	1,600	1,500	<0.1 J	75 J	--	--	--	<0.1	--	0.15	27
MW-76-181	04/11/22	N	2,200	--	<0.1 J	58	--	--	--	<0.02	--	0.068	--
MW-76-181	05/16/22	N	2,000	--	<0.1 J	56	--	--	--	<0.1	--	0.016	--
MW-76-181	06/13/22	N	2,000	2,200	<0.1 J	58	--	--	--	<0.02	--	0.029	29
MW-76-181	07/11/22	N	1,700	--	<0.1	68	--	--	--	0.032 J	--	0.00074	--
MW-76-181	08/08/22	N	1,300	1,200	<0.1	54 J	--	--	--	<0.02 J	--	0.0096 J	30 J
MW-76-181	09/12/22	N	1,100	--	<0.1	65	--	--	--	<0.02	--	0.039	--
MW-76-218	01/29/20	N	8.4	9.6	<0.5	95	2.5	290	<0.1	0.024	6.5 J	0.27	94
MW-76-218	02/20/20	N	2.8	4.7	4.4	86	2.9	260	0.1	0.18	7.1	0.25	90
MW-76-218	03/17/20	N	51	45	4.2	79 J	1.9	250	0.39 J	0.049 J	8.1	0.26	81
MW-76-218	04/21/20	N	2.1	4.2	4.6	87	2.1	260	0.3	0.12	6.1	0.25	87
MW-76-218	05/26/20	N	<1	<1	5.1 J	84	1.8	240	0.047 J	<0.02	7.9 J	0.32	78 J
MW-76-218	06/16/20	N	4.8	5.5	<0.1 J	100	2	290	0.039 J	<0.02	14	0.36	70
MW-76-218	06/16/20	FD	5.5	5.6	<0.1 J	100	1.9	280	0.24 J	<0.02	14	0.36	70
MW-76-218	07/21/20	N	23	27	4.7 J	94	2	230	0.039	<0.02 J	8.8	0.34	87
MW-76-218	08/18/20	N	5.5	6.2	4.5	89	3.6	280	<0.1	<0.1 J	14 J	0.31	81
MW-76-218	09/29/20	N	17	16	4.5	77	2.8 J	230 J	<0.1 J	<0.1 J	12 J	0.27	88
MW-76-218	09/29/20	FD	17	16	4.5	80	2.7 J	220 J	<0.1 J	<0.1 J	11 J	0.26	87
MW-76-218	10/21/20	N	46	44	4.5	76	2.5	150 J	0.11	<0.1	6.6	0.25	90
MW-76-218	12/02/20	N	81	71	4.2	67	3.2	300 J	<0.1	<0.1	14	0.24	86
MW-76-218	02/17/21	N	26	25	<0.1	61	1.8	170	0.1 J	0.03 J	6.2	0.2	93
MW-76-218	05/21/21	N	27	26	<0.1 J	76	1.9	380 J	0.05 J	0.044 J	13 J	0.37	61
MW-76-218	08/18/21	N	320	310	<0.1 J	70	2	390 J	0.023 J	<0.02 J	15 J	0.38	47
MW-76-218	08/18/21	FD	290	310	<0.1 J	73	1.9	370 J	0.034 J	<0.02 J	15 J	0.39	48
MW-76-218	12/02/21	N	270	280	3.9 J	66	--	--	--	<0.02 J	--	0.28	68
MW-76-218	01/31/22	N	370	--	<0.1	74	--	--	--	<0.1	--	0.35	--
MW-76-218	03/07/22	N	670	700	3.5 J	79 J	--	--	--	<0.1	--	0.27	54
MW-76-218	03/07/22	FD	680	620	3 J	73 J	--	--	--	<0.1	--	0.25	47
MW-76-218	04/11/22	N	460	--	<0.1 J	63	--	--	--	<0.02	--	0.15	--
MW-76-218	05/16/22	N	120	--	3.6 J	54	--	--	--	<0.1	--	0.14	--
MW-76-218	06/13/22	N	60	53 J	<0.5 J	46 J	--	--	--	<0.02 J	--	0.098 J	77 J
MW-76-218	07/11/22	N	36	--	<0.1	87	--	--	--	0.044 J	--	0.24	--

Appendix B
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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-76-181	10/21/20	N	63	2.1	5,800	1.5	68	<0.2	6,400	3.3	--	--	2.3
MW-76-181	12/02/20	N	32	2	4,500	1.3	70	<0.2	6,400	3.4	--	--	2.5
MW-76-181	12/02/20	FD	32	2	4,500	1.4	69	<0.2	6,500	3.2	--	--	2.5
MW-76-181	02/17/21	N	31 J	1.7	4,400	1.5	71	<0.22	7,000	3	--	--	2.8
MW-76-181	05/21/21	N	34 J	2.2	4,000 J	1.8	70	<0.2	6,600	2.9	--	--	2.5 J
MW-76-181	08/18/21	N	30	1.8	5,100 J	2	64	<0.2	6,500	2.7	--	--	2.3
MW-76-181	12/02/21	N	--	1.7	--	--	--	<0.2	--	--	--	<5	2.3
MW-76-181	01/31/22	N	--	--	--	--	--	--	--	--	2.1	--	--
MW-76-181	03/07/22	N	--	1.9	--	--	--	<0.2	--	--	2.2	--	--
MW-76-181	04/11/22	N	--	--	--	--	--	--	--	--	3	--	--
MW-76-181	05/16/22	N	--	--	--	--	--	--	--	--	2.7	--	--
MW-76-181	06/13/22	N	--	2.4	--	--	--	<0.2	--	--	3	<5	--
MW-76-181	07/11/22	N	--	--	--	--	--	--	--	--	2.5	--	--
MW-76-181	08/08/22	N	--	1.2	--	--	--	<0.2	--	--	1.6	<5	--
MW-76-181	09/12/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-76-218	01/29/20	N	45	<2.5	5,400	1.3	40	<0.1	7,300	5	--	--	0.28
MW-76-218	02/20/20	N	51	0.6	5,200	1.6	37	0.17	7,100	5.1	--	--	0.52 J
MW-76-218	03/17/20	N	52	<0.5	5,000	1.2	39	0.07 J	7,300	4.3	--	--	0.46 J
MW-76-218	04/21/20	N	46	<2.5	5,000	1.4	39	0.05 J	7,700	4.5	--	--	0.54
MW-76-218	05/26/20	N	60 J	<0.5	5,500	<1	43	<0.2	7,300	4.9	--	--	<0.05
MW-76-218	06/16/20	N	56 J	0.57	3,900 J	1.4	56	0.24	6,800	4.6	--	--	0.15
MW-76-218	06/16/20	FD	53 J	0.7	5,800 J	1.3	66	0.22	6,600	3.9	--	--	0.14
MW-76-218	07/21/20	N	45 J	0.57	6,200	1.1	46	<0.2	7,200	4	--	--	0.33 J
MW-76-218	08/18/20	N	48	0.69	5,300	1.4	54	0.22	7,300	4.6	--	--	0.19
MW-76-218	09/29/20	N	51 J	0.63	4,200 J	1.4	40	<0.2	7,100	4.6	--	--	0.77
MW-76-218	09/29/20	FD	50 J	0.58	6,000 J	1.4	39	<0.2	7,100	5	--	--	0.68
MW-76-218	10/21/20	N	82	0.71	6,700	1.8	39	<0.2	7,200	4.3	--	--	0.72
MW-76-218	12/02/20	N	57	0.63	6,200	1.8	40	0.2	7,300	4.5	--	--	0.73
MW-76-218	02/17/21	N	57 J	0.65	5,900	2	36	<0.22	7,400	4.1	--	--	0.79
MW-76-218	05/21/21	N	70 J	0.89	5,100 J	1.8	48	<0.2	6,900	4.1	--	--	0.67 J
MW-76-218	08/18/21	N	45	1.3	5,600 J	3.2	43	<0.2	6,900	4	--	--	1.5
MW-76-218	08/18/21	FD	45	1.2	5,600 J	2.9	42	<0.2	7,100	4	--	--	1.5
MW-76-218	12/02/21	N	--	1	--	--	--	<0.2	--	--	--	<10	0.85
MW-76-218	01/31/22	N	--	--	--	--	--	--	--	--	1.3	--	--
MW-76-218	03/07/22	N	--	1.5	--	--	--	<0.2	--	--	1.6	--	--
MW-76-218	03/07/22	FD	--	1.2	--	--	--	<0.2	--	--	1.6	--	--
MW-76-218	04/11/22	N	--	--	--	--	--	--	--	--	1.5	--	--
MW-76-218	05/16/22	N	--	--	--	--	--	--	--	--	1.1	--	--
MW-76-218	06/13/22	N	--	0.98	--	--	--	<0.2	--	--	1.2	<50	--
MW-76-218	07/11/22	N	--	--	--	--	--	--	--	--	0.69	--	--

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-76-181	10/21/20	N	900	13,000	<1 J
MW-76-181	12/02/20	N	890	13,000	<1
MW-76-181	12/02/20	FD	920	13,000	<1
MW-76-181	02/17/21	N	940	13,000	<1
MW-76-181	05/21/21	N	940	13,000	<1
MW-76-181	08/18/21	N	870	14,000	<1
MW-76-181	12/02/21	N	870	--	<1
MW-76-181	01/31/22	N	850	--	<1
MW-76-181	03/07/22	N	880	--	<1
MW-76-181	04/11/22	N	930	--	<1
MW-76-181	05/16/22	N	910	--	<1
MW-76-181	06/13/22	N	970	--	<1
MW-76-181	07/11/22	N	900	--	<1
MW-76-181	08/08/22	N	780	--	<1
MW-76-181	09/12/22	N	820	--	<1
MW-76-218	01/29/20	N	920	14,000	<1
MW-76-218	02/20/20	N	900	14,000	<1
MW-76-218	03/17/20	N	920	14,000	<1 J
MW-76-218	04/21/20	N	920	14,000	<1
MW-76-218	05/26/20	N	960	13,000	<1
MW-76-218	06/16/20	N	900	14,000	<1
MW-76-218	06/16/20	FD	870	14,000	<1
MW-76-218	07/21/20	N	900	13,000	<1
MW-76-218	08/18/20	N	870	13,000	<1
MW-76-218	09/29/20	N	900	14,000	<1 J
MW-76-218	09/29/20	FD	910	15,000 J	<1 J
MW-76-218	10/21/20	N	890	13,000 J	<1 J
MW-76-218	12/02/20	N	930	13,000	<1
MW-76-218	02/17/21	N	920	14,000	<1
MW-76-218	05/21/21	N	900	11,000 J	<1
MW-76-218	08/18/21	N	890	13,000	<1
MW-76-218	08/18/21	FD	920	13,000 J	<1
MW-76-218	12/02/21	N	880	--	<50
MW-76-218	01/31/22	N	870	--	<1
MW-76-218	03/07/22	N	890	--	<1
MW-76-218	03/07/22	FD	890	--	<50
MW-76-218	04/11/22	N	910	--	<1
MW-76-218	05/16/22	N	940	--	<1
MW-76-218	06/13/22	N	940	--	<100
MW-76-218	07/11/22	N	680	--	<1

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-76-218	08/08/22	N	2.3	2.3	<0.1	73 J	--	--	--	<0.02 J	--	0.35 J	33
MW-76-218	09/12/22	N	<1	--	<0.1	86	--	--	--	0.029	--	0.43	--
MW-77-046	01/30/20	N	1.1	3.3	1.4	39	2	130	2.10	0.43	150	0.24	93
MW-77-046	02/18/20	N	0.9	1.8	0.56	38 J	1.8	120	0.24 J	0.17	120	0.19	100
MW-77-046	05/26/20	N	0.48	<1	2.8 J	51	0.99	85	0.22 J	0.049 J	46 J	0.35	120 J
MW-77-046	08/19/20	N	<0.2 J	<1	2.5	72	1.4	86 J	0.78	0.23 J	69	0.46	140
MW-77-046	12/02/20	N	<1	<1	3.6	95	2.9	140 J	0.69 J	0.37	180	0.44	93
MW-77-046	02/17/21	N	<0.2	<1	0.8	41	1.1	58	0.49 J	0.28 J	76	0.2	130
MW-77-046	05/18/21	N	<0.2	<1	2.1 J	49	1	87	6.10 J	0.33 J	45 J	0.39	140
MW-77-046	05/18/21	FD	<0.2	<1	2.1 J	49	0.99	87	6.70 J	0.43 J	44 J	0.38	140
MW-77-046	08/18/21	N	<0.2	<1	1.7 J	58	1.3	100 J	4.80 J	0.22 J	58 J	0.44	120
MW-77-046	12/02/21	N	<1	<1	<0.1 J	95	--	--	--	0.94 J	--	0.42	95
MW-77-046	03/01/22	N	<0.2	--	0.89	43	--	--	--	1.50	--	0.27	--
MW-77-046	05/02/22	N	<0.2	<1	0.89	50	--	--	--	0.54 J	--	0.31	--
MW-77-046	06/15/22	N	0.5	--	<0.1 J	54	--	--	--	0.13	--	0.43	--
MW-77-046	06/15/22	FD	0.53	--	0.69 J	54	--	--	--	0.13	--	0.45	--
MW-77-046	07/11/22	N	<0.2	--	1.2	55	--	--	--	0.13 J	--	0.48	--
MW-77-046	08/08/22	N	<0.2	--	2.3	97 J	--	--	--	0.027 J	--	0.8 J	--
MW-77-046	09/12/22	N	<0.2	--	3.7	59	--	--	--	0.076	--	0.47	--
MW-77-102	02/18/20	N	0.57	<1	<0.1	51 J	1.4	290	0.14 J	0.032	37	0.064	4.1
MW-77-102	05/26/20	N	0.62	1.1	<0.1 J	40	1	210	0.028 J	<0.02	29 J	0.04	3.8 J
MW-77-102	08/19/20	N	0.61 J	1	<0.1	45	1.2	190 J	0.14	0.082 J	35	0.039	4.4
MW-77-102	12/02/20	N	1.6	1.6	1.3	45	1.4	200 J	0.089	<0.02	42	0.017	3.9
MW-77-102	02/17/21	N	0.61	1.5	<0.1	41	0.98	180	0.059 J	0.021 J	36	0.016	4.5
MW-77-102	05/18/21	N	1.1 J	1.9	<0.1 J	40	1.1	230	0.16 J	0.033 J	29 J	0.022	4.4
MW-77-102	08/18/21	N	0.55	<1	<0.1 J	39	1.2	58 J	0.029 J	<0.02 J	9 J	0.028	4.2
MW-77-102	12/02/21	N	0.67	<1	<0.1 J	40	--	--	--	0.039 J	--	0.02	4.4
MW-77-102	03/01/22	N	<0.2	--	<0.1	48	--	--	--	<0.1	--	0.029	--
MW-77-102	05/02/22	N	0.59	<1	<0.1	44	--	--	--	<0.02	--	0.047	--
MW-77-102	06/15/22	N	<1	--	<0.1	50	--	--	--	0.067	--	0.078	--
MW-77-102	07/11/22	N	<0.2	--	<0.1	59	--	--	--	0.26 J	--	0.11	--
MW-77-102	08/08/22	N	<0.2	--	<0.1	42 J	--	--	--	0.4 J	--	0.053 J	--
MW-77-102	09/12/22	N	0.31	--	<0.1	52	--	--	--	0.054	--	0.055	--
MW-77-158	02/18/20	N	7.3	7	3.2	54 J	1.3	500	<0.1	<0.1	48	0.087	34
MW-77-158	05/26/20	N	8.1	7	2.7 J	44	1.1	470	0.025 J	<0.02	45 J	0.076	29 J
MW-77-158	08/19/20	N	8.3	8.1	3	48	<0.5	100 J	<0.1	<0.1	12	0.08	31
MW-77-158	12/02/20	N	10	10	2.8	45	2.3	540 J	<0.1	<0.1	72	0.04	33
MW-77-158	02/17/21	N	7.7	7.9	<0.1	43	1	340	0.066 J	0.04 J	49	0.036	32
MW-77-158	05/18/21	N	10 J	9.8	<0.1 J	44	1.2	640	0.11 J	0.044 J	47 J	0.029	28
MW-77-158	08/18/21	N	1.8	3.1	<0.1 J	46	2.6	580 J	0.1 J	0.026 J	31 J	0.079	34

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-76-218	08/08/22	N	--	0.74	--	--	--	<0.2	--	--	0.55	<5	--
MW-76-218	09/12/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-77-046	01/30/20	N	35	4	2,300	3.2	640	2.3	2,400	5.1	--	--	0.082
MW-77-046	02/18/20	N	31	4.2	2,000	2.7	650	2.2	2,400	4.8	--	--	0.06
MW-77-046	05/26/20	N	14 J	<0.5	1,600	8.5	250	0.56	1,600	5.9	--	--	<0.05
MW-77-046	08/19/20	N	16	<0.5	1,500	7.1	310	0.8	1,800	6.6	--	--	0.063 J
MW-77-046	12/02/20	N	45	1.9	2,400	2.7	850	2.9	3,000	5.5	--	--	<0.1
MW-77-046	02/17/21	N	22 J	0.58	1,200	1.7	390	1.5	1,900	5.8	--	--	0.11
MW-77-046	05/18/21	N	11 J	<0.5	1,100 J	6	280	0.41	1,500	6.7	--	--	<0.05
MW-77-046	05/18/21	FD	11 J	<0.5	1,100 J	6.3	280	0.4	1,500	6.7	--	--	<0.05
MW-77-046	08/18/21	N	17	<0.5	1,500 J	4.1	320	0.78	1,700	6.1	--	--	<0.1
MW-77-046	12/02/21	N	--	3	--	--	--	--	--	--	--	--	<0.1
MW-77-046	03/01/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-77-046	05/02/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-77-046	06/15/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-77-046	06/15/22	FD	--	--	--	--	--	--	--	--	<0.5	--	--
MW-77-046	07/11/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-77-046	08/08/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-77-046	07/11/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-77-046	08/08/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-77-046	09/12/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-77-102	02/18/20	N	17	<0.5	1,700	5	160	0.11	2,300	3.4	--	--	0.54
MW-77-102	05/26/20	N	17 J	<0.5	1,900	5	150	<0.2	2,300	2.8	--	--	0.49
MW-77-102	08/19/20	N	16	<0.5	1,600	5.8	150	<0.2	2,200	3.2	--	--	0.63 J
MW-77-102	12/02/20	N	15	<0.5	1,500	5.9	170	<0.2	2,300	3.8	--	--	0.61
MW-77-102	02/17/21	N	16 J	<0.5	1,300	5.9	160	<0.22	2,300	3.2	--	--	0.71
MW-77-102	05/18/21	N	14 J	<0.5	1,400 J	5.7	150	<0.2	2,100	3.5	--	--	0.5
MW-77-102	08/18/21	N	15	<0.5	1,600 J	5.6	150	<0.2	2,200	3.1	--	--	0.52
MW-77-102	12/02/21	N	--	<0.5	--	--	--	--	--	--	--	--	0.59
MW-77-102	03/01/22	N	--	--	--	--	--	--	--	--	0.93	--	--
MW-77-102	05/02/22	N	--	--	--	--	--	--	--	--	0.63	--	--
MW-77-102	06/15/22	N	--	--	--	--	--	--	--	--	0.91	--	--
MW-77-102	07/11/22	N	--	--	--	--	--	--	--	--	0.93	--	--
MW-77-102	08/08/22	N	--	--	--	--	--	--	--	--	0.61	--	--
MW-77-102	09/12/22	N	--	--	--	--	--	--	--	--	0.9	--	--
MW-77-158	02/18/20	N	41	<2.5	4,700	3.4	49	0.07 J	6,100	2.8	--	--	1.5
MW-77-158	05/26/20	N	50 J	0.51	6,200	2.7	45	<0.2	6,200	3.1	--	--	1.5
MW-77-158	08/19/20	N	40	0.56	4,400	3.1	49	<0.2	6,200	2.9	--	--	1.6 J
MW-77-158	12/02/20	N	47	0.6	4,800	3	52	0.22	6,100	3.6	--	--	1.5
MW-77-158	02/17/21	N	45 J	<0.5	4,400	3.1	54	<0.2	6,400	3.3	--	--	1.6
MW-77-158	05/18/21	N	40 J	0.62	4,100 J	2.8	54	<0.2	6,000	3.2	--	--	1.4
MW-77-158	08/18/21	N	38	<0.5	4,900 J	3.4	55	<0.2	6,400	3.4	--	--	0.82

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-76-218	08/08/22	N	640	--	<1
MW-76-218	09/12/22	N	680	--	<1
MW-77-046	01/30/20	N	980	6,500	1
MW-77-046	02/18/20	N	970	6,300	1.1 J
MW-77-046	05/26/20	N	390	3,600	<1
MW-77-046	08/19/20	N	500	4,300	<10
MW-77-046	12/02/20	N	1,300	8,100	1.5
MW-77-046	02/17/21	N	610	4,400	<1
MW-77-046	05/18/21	N	370	3,500	<1
MW-77-046	05/18/21	FD	370	3,400	<1
MW-77-046	08/18/21	N	510	3,900	<1
MW-77-046	12/02/21	N	--	--	1.5
MW-77-046	03/01/22	N	--	--	<1
MW-77-046	05/02/22	N	--	--	<1
MW-77-046	06/15/22	N	370	--	<1
MW-77-046	06/15/22	FD	370	--	<1
MW-77-046	07/11/22	N	370	--	<1
MW-77-046	08/08/22	N	920	--	<1
MW-77-046	09/12/22	N	530	--	<1
MW-77-102	02/18/20	N	580	4,900	<1 J
MW-77-102	05/26/20	N	540	4,800	<1
MW-77-102	08/19/20	N	520	5,000	<1
MW-77-102	12/02/20	N	570	4,700	<1
MW-77-102	02/17/21	N	590	5,200	<1
MW-77-102	05/18/21	N	540	4,700	<1
MW-77-102	08/18/21	N	550	4,700	<1
MW-77-102	12/02/21	N	--	--	<1
MW-77-102	03/01/22	N	--	--	<1
MW-77-102	05/02/22	N	--	--	<1
MW-77-102	06/15/22	N	700	--	<1
MW-77-102	07/11/22	N	710	--	<1
MW-77-102	08/08/22	N	560	--	<1
MW-77-102	09/12/22	N	590	--	<1
MW-77-158	02/18/20	N	1,200	13,000	<1 J
MW-77-158	05/26/20	N	1,100	14,000	<50
MW-77-158	08/19/20	N	1,200	14,000	<1
MW-77-158	12/02/20	N	1,200	13,000	<1
MW-77-158	02/17/21	N	1,200	14,000	<1
MW-77-158	05/18/21	N	1,200	13,000	<1
MW-77-158	08/18/21	N	1,100	13,000	<1

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-77-158	12/02/21	N	7.1	7.7	<0.1 J	43	--	--	--	0.048 J	--	0.06	32
MW-77-158	12/02/21	FD	6.9	7.9	<0.1 J	44	--	--	--	<0.02 J	--	0.062	33
MW-77-158	03/01/22	N	52	--	<0.1	49	--	--	--	<0.1	--	0.068	--
MW-77-158	05/02/22	N	7.1	8.4	<0.1	47	--	--	--	0.024 J	--	0.018	--
MW-77-158	06/15/22	N	2.4	--	<0.1	36	--	--	--	<0.02	--	0.01	--
MW-77-158	07/11/22	N	<0.2	--	<0.1	30	--	--	--	0.36 J	--	0.019	--
MW-77-158	08/08/22	N	<1	--	<0.1	46 J	--	--	--	<0.02 J	--	0.064 J	--
MW-77-158	09/12/22	N	<0.2	--	2.4	31	--	--	--	0.029	--	0.039	--
MW-77-187	02/18/20	N	1.6	2.2	3.9	53 J	2.5	130	<0.1	<0.1	3.5	0.076	260
MW-77-187	05/26/20	N	<1	<1	4.3 J	50	2.4	120	1.20 J	<0.02	3.3 J	0.11	250 J
MW-77-187	08/19/20	N	<1	1.2	4.4	47	0.66	24 J	<0.1	<0.1	1.1	0.08	260
MW-77-187	12/02/20	N	4.1	4.8	3.2	40	4	130 J	<0.1	<0.1	4.7	0.048	250
MW-77-187	02/17/21	N	2.3	2.7	<0.1	40	2.1	84	0.034 J	0.03 J	3.3	0.042	260
MW-77-187	02/17/21	FD	2.4	2.9	<0.1	42	2.1	81	0.04 J	0.028 J	3	0.043	260
MW-77-187	05/18/21	N	<1	<1	<0.1 J	43	3.4	130	0.044 J	0.037 J	3 J	0.062	260
MW-77-187	08/18/21	N	1.1	3	<0.1 J	42	4	180 J	<0.1 J	<0.1 J	6.6 J	0.065	210
MW-77-187	12/02/21	N	2.5	3.1	<0.1 J	40	--	--	--	0.05 J	--	0.05	250
MW-77-187	03/01/22	N	10	--	4.4	44	--	--	--	<0.5	--	0.035	--
MW-77-187	05/02/22	N	9.6	9.3	<0.1	41	--	--	--	<0.1	--	0.039	--
MW-77-187	06/15/22	N	33	--	<0.1	33	--	--	--	<0.02	--	0.017	--
MW-77-187	07/11/22	N	40	--	<0.1	32	--	--	--	0.33 J	--	0.017	--
MW-77-187	08/08/22	N	8.8	--	<0.1	30 J	--	--	--	0.061 J	--	0.028 J	--
MW-77-187	09/12/22	N	40	--	2.1	31	--	--	--	<0.02	--	0.013	--
MW-78-070	02/19/20	N	3,100	3,300	0.96	35	0.9 J	120 J	0.35	0.072 J	21 J	0.0016	7.4
MW-78-070	05/21/20	N	3,100	3,100	0.84	34	0.64	91 J	0.76 J	0.1	21	0.003	6.4
MW-78-070	08/18/20	N	3,100	3,200	0.81	32	1	100	2.10 J	0.063 J	20 J	0.0054	6.7
MW-78-070	12/03/20	N	3,100	3,300	1.3	32	0.88	93 J	0.14 J	<0.02	21	<0.0005	7.2
MW-78-070	12/03/20	FD	3,100	3,400	1.4	33	0.9	92 J	0.13 J	<0.02	21	<0.0005	7.2
MW-78-070	02/18/21	N	2,300	2,600	0.82	32	0.68	82 J	0.4 J	<0.02	18	0.0036	6.1
MW-78-070	05/20/21	N	1,700 J	1,700	0.82	33	0.72	100	0.077 J	0.021	18 J	<0.0005	5.3
MW-78-070	08/19/21	N	3,500	4,300	0.71	35 J	0.65	110 J	0.058 J	<0.02	22 J	<0.0005	8.7
MW-78-070	12/15/21	N	4,400	4,500	0.85	40	--	--	--	<0.02 J	--	0.00063	13
MW-78-070	02/01/22	N	2,600	--	0.54	42	--	--	--	<0.02	--	0.003 J	--
MW-78-070	02/01/22	FD	2,700	--	0.56	42	--	--	--	<0.02	--	0.0032 J	--
MW-78-070	03/10/22	N	1,800	1,800	0.7	57	--	--	--	0.049	--	0.29	13
MW-78-070	04/13/22	N	1,900	--	<0.1	76	--	--	--	0.02 J	--	0.18	--
MW-78-070	05/19/22	N	660	--	<0.1	120	--	--	--	<0.02 J	--	0.47	--
MW-78-070	06/14/22	N	790	820	<0.1	160 J	--	--	--	<0.02	--	0.5	8.3
MW-78-070	06/14/22	FD	810	900	<0.1	140 J	--	--	--	<0.02	--	0.48	7.3
MW-78-070	07/14/22	N	190	--	0.91	160	--	--	--	<0.02	--	0.17 J	--

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MW-77-158	12/02/21	N	--	0.53	--	--	--	--	--	--	--	--	1.5
MW-77-158	12/02/21	FD	--	0.78	--	--	--	--	--	--	--	--	1.5
MW-77-158	03/01/22	N	--	--	--	--	--	--	--	--	1.6	--	--
MW-77-158	05/02/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-77-158	06/15/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-77-158	07/11/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-77-158	08/08/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-77-158	09/12/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-77-187	02/18/20	N	46	<2.5	6,600	3.9	46	0.14	7,400	7.3	--	--	1.1
MW-77-187	05/26/20	N	48 J	0.62	6,500	3.1	46	<0.2	7,500	7.5	--	--	0.75
MW-77-187	08/19/20	N	41	0.67	5,800	3.4	46	<0.2	7,300	7.4	--	--	1 J
MW-77-187	12/02/20	N	53	0.72	6,300	3.1	56	<0.2	7,300	8.2	--	--	1.2
MW-77-187	02/17/21	N	47 J	0.76	6,200	3.2	48	<0.22	7,600	7.7	--	--	1.3
MW-77-187	02/17/21	FD	46 J	0.8	5,900	3.2	47	<0.22	7,600	7.8	--	--	1.3
MW-77-187	05/18/21	N	41 J	0.87	5,400 J	3.2	48	<0.2	7,200	7.7	--	--	1.1
MW-77-187	08/18/21	N	41	0.81	6,300 J	3.5	43	<0.2	6,700	6.6	--	--	1.4
MW-77-187	12/02/21	N	--	0.81	--	--	--	--	--	--	--	--	1.2
MW-77-187	03/01/22	N	--	--	--	--	--	--	--	--	1.4	--	--
MW-77-187	05/02/22	N	--	--	--	--	--	--	--	--	1.3	--	--
MW-77-187	06/15/22	N	--	--	--	--	--	--	--	--	1.2	--	--
MW-77-187	07/11/22	N	--	--	--	--	--	--	--	--	1.2	--	--
MW-77-187	08/08/22	N	--	--	--	--	--	--	--	--	0.95	--	--
MW-77-187	09/12/22	N	--	--	--	--	--	--	--	--	0.67	--	--
MW-78-070	02/19/20	N	8.1 J	8.3	340	5.7	110	0.12	450	1.5	--	--	10
MW-78-070	05/21/20	N	10 J	8	320	6.7	110	<0.2	470	1.3	--	--	9.5
MW-78-070	08/18/20	N	8.6	8.2	350	7.1	110	<0.2	460	1.6	--	--	9.5
MW-78-070	12/03/20	N	8.8	8.2	320	6.4	120	<0.2	440	1.7	--	--	9.1
MW-78-070	12/03/20	FD	8.4	7.9	310	6.5	120	<0.2	440	1.7	--	--	9.4
MW-78-070	02/18/21	N	6.9	7.4	280	6.5	120	<0.22	450	1.6	--	--	9.1
MW-78-070	05/20/21	N	7.8 J	6.4	300 J	6.6	130	<0.2	430	1.7	--	--	7.6
MW-78-070	08/19/21	N	8	8.8	340 J	6.1	100	<0.2	460	1.6	--	--	11
MW-78-070	12/15/21	N	--	9.2 J	--	--	--	<0.2	--	--	--	<2.5	12
MW-78-070	02/01/22	N	--	--	--	--	--	--	--	--	7.1	--	--
MW-78-070	02/01/22	FD	--	--	--	--	--	--	--	--	7.2	--	--
MW-78-070	03/10/22	N	--	4.4	--	--	--	<0.2	--	--	4.8	--	--
MW-78-070	04/13/22	N	--	--	--	--	--	--	--	--	4.7	--	--
MW-78-070	05/19/22	N	--	--	--	--	--	--	--	--	1.6	--	--
MW-78-070	06/14/22	N	--	1.7 J	--	--	--	<0.2	--	--	1.6	<5	--
MW-78-070	06/14/22	FD	--	1.6 J	--	--	--	<0.2	--	--	1.5	<5	--
MW-78-070	07/14/22	N	--	--	--	--	--	--	--	--	<0.5	--	--

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-77-158	12/02/21	N	--	--	<1
MW-77-158	12/02/21	FD	--	--	<1
MW-77-158	03/01/22	N	--	--	<50
MW-77-158	05/02/22	N	--	--	<1
MW-77-158	06/15/22	N	570	--	<1
MW-77-158	07/11/22	N	540	--	<1
MW-77-158	08/08/22	N	660	--	<1
MW-77-158	09/12/22	N	600	--	<1
MW-77-187	02/18/20	N	930	13,000	<1 J
MW-77-187	05/26/20	N	930	13,000 J	<1
MW-77-187	08/19/20	N	940	13,000 J	<1
MW-77-187	12/02/20	N	980	13,000 J	<1
MW-77-187	02/17/21	N	960	14,000	<1
MW-77-187	02/17/21	FD	950	14,000	<1
MW-77-187	05/18/21	N	930	12,000	<1
MW-77-187	08/18/21	N	920	12,000	<1
MW-77-187	12/02/21	N	--	--	<1
MW-77-187	03/01/22	N	--	--	<1
MW-77-187	05/02/22	N	--	--	<1
MW-77-187	06/15/22	N	940	--	<50
MW-77-187	07/11/22	N	880	--	<1
MW-77-187	08/08/22	N	860	--	<50
MW-77-187	09/12/22	N	860	--	<1
MW-78-070	02/19/20	N	300	1,400	<1 J
MW-78-070	05/21/20	N	290	1,400	<1 J
MW-78-070	08/18/20	N	290	1,400	<1
MW-78-070	12/03/20	N	300	1,300	<10
MW-78-070	12/03/20	FD	300	1,400	<1
MW-78-070	02/18/21	N	280	1,300	<1
MW-78-070	05/20/21	N	250	1,200	<1
MW-78-070	08/19/21	N	320	1,400	<1
MW-78-070	12/15/21	N	370	--	<1
MW-78-070	02/01/22	N	310	--	<1
MW-78-070	02/01/22	FD	300	--	<1
MW-78-070	03/10/22	N	270	--	<5
MW-78-070	04/13/22	N	320	--	<1
MW-78-070	05/19/22	N	360	--	<1
MW-78-070	06/14/22	N	430	--	<1
MW-78-070	06/14/22	FD	430	--	<1
MW-78-070	07/14/22	N	500	--	<1

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MW-78-070	08/11/22	N	1,200	1,300	<0.1 J	140	--	--	--	<0.02	--	0.088 J	8.2 J
MW-78-070	09/15/22	N	110	--	<0.1	180	--	--	--	<0.02	--	0.12	--
MW-78-070	09/15/22	FD	110	--	<0.1	200	--	--	--	<0.02	--	0.12	--
MW-78-142	02/19/20	N	6,800	7,000	0.7	32	2.4 J	330 J	0.43	0.062 J	19 J	0.02	21
MW-78-142	05/21/20	N	6,100	6,400	<0.1	36	2.2	200 J	2.50 J	0.13	18	0.025	22
MW-78-142	08/18/20	N	5,700	5,800	<0.1	35	0.59	29	0.7 J	<0.02 J	2.1 J	0.013	24
MW-78-142	12/03/20	N	5,700	5,600	4	28	2.5	190 J	0.84 J	<0.02	19	0.0059	22
MW-78-142	02/18/21	N	5,400	5,800	4.3	30	1.8	200 J	1.30 J	0.11	18	0.0071	22
MW-78-142	05/20/21	N	5,600 J	5,400	<0.1	27	2.2	290	0.33 J	<0.02	16 J	0.0038	21
MW-78-142	05/20/21	FD	5,600 J	5,500	<0.1	28	2	290	0.35 J	0.035	16 J	0.0037	22
MW-78-142	08/19/21	N	5,200	6,400	<0.1	29 J	2	290 J	1.20 J	0.026	18 J	0.0082	21
MW-78-142	12/15/21	N	5,500	5,400	<0.1	31	--	--	--	0.031 J	--	0.0042	21
MW-78-142	02/01/22	N	5,800	--	<0.1	32	--	--	--	0.072	--	0.0064 J	--
MW-78-142	03/10/22	N	5,700	5,600	<0.1	29	--	--	--	0.052	--	0.0045	22
MW-78-142	03/10/22	FD	5,700	5,500	<0.1	29	--	--	--	0.045	--	0.0041	22
MW-78-142	04/13/22	N	4,900	--	<0.1	27	--	--	--	0.34 J	--	0.0062	--
MW-78-142	05/19/22	N	5,200	--	<0.1	26	--	--	--	<0.02 J	--	0.0016	--
MW-78-142	06/14/22	N	5,500	6,100	<0.1	27 J	--	--	--	<0.02	--	0.0012	22
MW-78-142	07/14/22	N	4,900	--	4.5	26	--	--	--	<0.02	--	0.0017 J	--
MW-78-142	07/14/22	FD	4,800	--	4.4	26	--	--	--	<0.02	--	0.0027 J	--
MW-78-142	08/11/22	N	5,300	6,100	<0.1 J	28	--	--	--	<0.02	--	0.0032 J	20 J
MW-78-142	09/15/22	N	4,600	--	1.9	27	--	--	--	<0.02	--	0.0037	--
MW-79-058	02/21/20	N	1,800 J	980 J	2.5 J	260 J	0.77	210 J	2.90 J	2.60 J	42 J	0.24 J	5.9
MW-79-058	02/21/20	FD	620 J	1,700 J	1.1 J	190 J	0.76	210 J	1.40 J	0.48 J	41 J	0.11 J	6.2
MW-79-058	05/29/20	N	540	580	1.1	260	0.34	170	0.5	0.12	35	0.47	7.8
MW-79-058	05/29/20	FD	540	580	0.95	260	0.37	180	0.45	0.093	36	0.45	7.5
MW-79-058	08/18/20	N	2,000	2,000	0.68	180	0.78	200	0.12 J	0.025 J	42 J	0.11	7.5
MW-79-058	08/18/20	FD	2,000	2,000	0.74	180	0.71	180	0.14 J	<0.02 J	44 J	0.11	7.8
MW-79-058	12/03/20	N	2,700	2,900	1.3	130	0.95	170 J	0.084 J	<0.02	41	0.0087	7.8
MW-79-058	02/18/21	N	2,700	2,800	1.3	100	0.63	160 J	0.085 J	0.021	40	0.0022	6.8
MW-79-058	05/20/21	N	2,600 J	2,700	0.62	92	0.69	210	0.05 J	<0.02	40 J	0.0038	5.8
MW-79-058	08/19/21	N	2,600	2,700	<0.1	98 J	0.64	200 J	0.11 J	<0.02	45 J	<0.0005	10
MW-79-058	12/15/21	N	3,200	3,400	0.3	93	--	--	--	<0.02 J	--	0.00056	10
MW-79-058	02/01/22	N	2,900	--	0.7	96	--	--	--	<0.02	--	<0.0005 J	--
MW-79-058	03/14/22	N	2,900	3,000	0.34 J	84	--	--	--	0.077	--	0.0021	8.6
MW-79-058	04/13/22	N	2,800	--	0.27	80	--	--	--	0.02 J	--	<0.0005	--
MW-79-058	05/19/22	N	2,900	--	<0.1	76	--	--	--	<0.02 J	--	<0.0005	--
MW-79-058	06/14/22	N	2,800	3,200	<0.1	91 J	--	--	--	<0.02	--	<0.0005	8
MW-79-058	06/14/22	FD	2,900	2,900	<0.1	79 J	--	--	--	<0.02	--	<0.0005	7.1
MW-79-058	07/14/22	N	2,200	--	<0.1	140	--	--	--	<0.02	--	<0.0005	--

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-78-070	08/11/22	N	--	2.5	--	--	--	<0.2	--	--	2.1	<5	--
MW-78-070	09/15/22	N	--	--	--	--	--	--	--	--	0.54	--	--
MW-78-070	09/15/22	FD	--	--	--	--	--	--	--	--	<0.5	--	--
MW-78-142	02/19/20	N	33 J	22	2,600	1.8	93	0.12	3,800	3.3	--	--	8.8
MW-78-142	05/21/20	N	38 J	32	2,900	1.9	110	<0.2	3,500	3.2	--	--	8.8
MW-78-142	08/18/20	N	31	36	2,300	2.3	110	<0.2	3,200	3.2	--	--	9.9
MW-78-142	12/03/20	N	29	28	2,800	1.7	100	<0.2	3,400	3.5	--	--	8.7
MW-78-142	02/18/21	N	30	27	2,200	1.8	93	<0.22	3,600	2.9	--	--	9
MW-78-142	05/20/21	N	32 J	37	2,300 J	2.1	99	<0.2	3,400	3.5	--	--	9.1
MW-78-142	05/20/21	FD	34 J	38	2,400 J	2.1	98	<0.2	3,400	3.2	--	--	9.3
MW-78-142	08/19/21	N	28	38	2,700 J	1.9	98	<0.2	3,500	3.2	--	--	10
MW-78-142	12/15/21	N	--	33 J	--	--	--	<0.2	--	--	--	<5	9.9
MW-78-142	02/01/22	N	--	--	--	--	--	--	--	--	8.6	--	--
MW-78-142	03/10/22	N	--	36	--	--	--	<0.2	--	--	9.1	--	--
MW-78-142	03/10/22	FD	--	37	--	--	--	<0.2	--	--	9.1	--	--
MW-78-142	04/13/22	N	--	--	--	--	--	--	--	--	9.8	--	--
MW-78-142	05/19/22	N	--	--	--	--	--	--	--	--	9.6	--	--
MW-78-142	06/14/22	N	--	36 J	--	--	--	0.43	--	--	9.3	<5	--
MW-78-142	07/14/22	N	--	--	--	--	--	--	--	--	8.2	--	--
MW-78-142	07/14/22	FD	--	--	--	--	--	--	--	--	8.1	--	--
MW-78-142	08/11/22	N	--	35	--	--	--	<0.2	--	--	9	<5	--
MW-78-142	09/15/22	N	--	--	--	--	--	--	--	--	7.4	--	--
MW-79-058	02/21/20	N	16 J	11	400	7.4 J	93	0.03 J	690	<1	--	--	10
MW-79-058	02/21/20	FD	14 J	10	380	1.3 J	91	0.05 J	690	<1	--	--	10
MW-79-058	05/29/20	N	14	5.4	240	3.1	85	<0.2	510	<1	--	--	4.6
MW-79-058	05/29/20	FD	14	5.6	290	3	83	<0.2	520	<1	--	--	4.5
MW-79-058	08/18/20	N	16	10	400	4.1	82	<0.2	690	<1	--	--	10
MW-79-058	08/18/20	FD	16	9.5	380	4	82	<0.2	690	<1	--	--	10
MW-79-058	12/03/20	N	14	11	370	3.7	86	<0.2	700	1	--	--	10
MW-79-058	02/18/21	N	12	10	340	3.7	89	<0.22	710	<1	--	--	10
MW-79-058	05/20/21	N	14 J	8.3	370 J	3.7	99	<0.2	670	<1	--	--	10
MW-79-058	08/19/21	N	13	10	350 J	3.7	190	<0.2	700	<1	--	--	10
MW-79-058	12/15/21	N	--	9.4 J	--	--	--	<0.2	--	--	--	<5	11
MW-79-058	02/01/22	N	--	--	--	--	--	--	--	--	9.3	--	--
MW-79-058	03/14/22	N	--	8.8	--	--	--	<0.2	--	--	9.7	--	--
MW-79-058	04/13/22	N	--	--	--	--	--	--	--	--	10	--	--
MW-79-058	05/19/22	N	--	--	--	--	--	--	--	--	11	--	--
MW-79-058	06/14/22	N	--	11 J	--	--	--	<0.2	--	--	11	<5	--
MW-79-058	06/14/22	FD	--	9.4 J	--	--	--	<0.2	--	--	11	<5	--
MW-79-058	07/14/22	N	--	--	--	--	--	--	--	--	7.1	--	--

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-78-070	08/11/22	N	440	--	<1
MW-78-070	09/15/22	N	540	--	<1
MW-78-070	09/15/22	FD	540	--	<1
MW-78-142	02/19/20	N	930	8,400	<10 J
MW-78-142	05/21/20	N	870	8,200	<1 J
MW-78-142	08/18/20	N	850	7,700	<1
MW-78-142	12/03/20	N	860	7,600	<1
MW-78-142	02/18/21	N	880	8,000	<1
MW-78-142	05/20/21	N	880	7,600	<1
MW-78-142	05/20/21	FD	870	7,300	<1
MW-78-142	08/19/21	N	870	7,700	<20
MW-78-142	12/15/21	N	900	--	<1
MW-78-142	02/01/22	N	890	--	<1
MW-78-142	03/10/22	N	860	--	<1
MW-78-142	03/10/22	FD	880	--	<1
MW-78-142	04/13/22	N	910	--	<1
MW-78-142	05/19/22	N	910	--	<1
MW-78-142	06/14/22	N	870	--	<1
MW-78-142	07/14/22	N	850	--	<1
MW-78-142	07/14/22	FD	830	--	<1
MW-78-142	08/11/22	N	840	--	<1
MW-78-142	09/15/22	N	830	--	<1
MW-79-058	02/21/20	N	380	1,900	<1
MW-79-058	02/21/20	FD	380	2,000	<1
MW-79-058	05/29/20	N	270	1,600	<1
MW-79-058	05/29/20	FD	270	1,500	<10
MW-79-058	08/18/20	N	380	2,100	<1
MW-79-058	08/18/20	FD	390	2,100	<1
MW-79-058	12/03/20	N	410	1,900	<1
MW-79-058	02/18/21	N	400	1,900	<10
MW-79-058	05/20/21	N	400	1,800	<1
MW-79-058	08/19/21	N	410	2,000	<1
MW-79-058	12/15/21	N	410	--	<5
MW-79-058	02/01/22	N	400	--	<1
MW-79-058	03/14/22	N	400	--	<1
MW-79-058	04/13/22	N	400	--	<5
MW-79-058	05/19/22	N	410	--	<1
MW-79-058	06/14/22	N	410	--	<1
MW-79-058	06/14/22	FD	410	--	<1
MW-79-058	07/14/22	N	440	--	<1

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-79-058	08/11/22	N	2,100	2,100	<0.1 J	110	--	--	--	<0.02	--	0.013 J	20 J
MW-79-058	09/15/22	N	1,200	--	<0.1	210	--	--	--	<0.02	--	0.0052	--
MW-79-102	02/21/20	N	3,400	3,300	2.3	44	2.1	170 J	0.064	0.065 J	18 J	0.0059	28
MW-79-102	05/29/20	N	3,000	3,000	1.4	72	1.8	160	0.55	<0.1	22	0.054	28
MW-79-102	08/18/20	N	3,500 J	3,600	2	52	2.1	150	0.091 J	<0.02 J	19 J	0.021	31
MW-79-102	12/03/20	N	3,400	3,600	4.6	41	2.3	120 J	0.056 J	<0.02	20	0.0041	28
MW-79-102	02/18/21	N	3,200	3,400	4.8	37	1.6	110 J	0.033 J	<0.02	19	0.0016	28
MW-79-102	05/20/21	N	3,500 J	3,500	1.2	36	1.6	190	0.034 J	<0.02	18 J	0.00052	30
MW-79-102	08/19/21	N	2,400	2,500	1.3	32 J	1.6	140 J	0.12 J	<0.02	17 J	0.017	28
MW-79-102	12/15/21	N	2,800	2,800	1.5	37	--	--	--	<0.02 J	--	0.0052	29
MW-79-102	02/01/22	N	3,500	--	0.94	41	--	--	--	0.39	--	0.0031 J	--
MW-79-102	03/14/22	N	3,600	3,500	0.78 J	38	--	--	--	0.07	--	0.0042	29
MW-79-102	03/14/22	FD	3,600	3,600	0.75 J	38	--	--	--	0.073	--	0.0041	29
MW-79-102	04/13/22	N	2,400	--	0.9	33	--	--	--	0.051 J	--	0.0014	--
MW-79-102	05/19/22	N	2,300	--	<0.1	40	--	--	--	<0.02 J	--	<0.0005	--
MW-79-102	05/19/22	FD	2,200	--	<0.1	39	--	--	--	<0.02 J	--	<0.0005	--
MW-79-102	06/14/22	N	2,200	2,400	<0.1	38 J	--	--	--	<0.02	--	<0.0005	26
MW-79-102	07/14/22	N	1,000	--	4.1	40	--	--	--	<0.02	--	0.0019	--
MW-79-102	08/11/22	N	2,000	2,200	<0.1 J	46	--	--	--	0.022	--	<0.0005 J	27 J
MW-79-102	09/15/22	N	880	--	1.1	41	--	--	--	<0.02	--	0.0072	--
MW-80-057	02/24/20	N	750	770	2	41	1	100	0.3 J	0.079 J	12	0.0028	33
MW-80-057	05/21/20	N	800	780	1.1	79	0.84	96 J	0.26 J	0.11	17	0.005	32
MW-80-057	08/18/20	N	690	700	1.9	63	1.1	97	0.066 J	<0.02 J	15 J	0.08	33
MW-80-057	12/03/20	N	780	780	3.2	51	1.2	75 J	0.08 J	<0.02	14	0.013	29
MW-80-057	12/03/20	FD	770	790	3.3	51	1.2	77 J	0.052 J	<0.02	14	0.013	29
MW-80-057	02/18/21	N	680	740	1.6	46	0.72	73 J	0.033 J	<0.02	13	0.0073	30
MW-80-057	05/20/21	N	840 J	800	1.5	47	0.83	120	0.15 J	<0.02	14 J	0.0017	30
MW-80-057	08/19/21	N	680	760	1.2	50 J	0.82	95 J	0.058 J	<0.02	13 J	0.0018	34
MW-80-057	12/15/21	N	710	710	1.3	51	--	--	--	<0.02 J	--	0.0047	36
MW-80-057	02/01/22	N	780	--	1	54	--	--	--	<0.02	--	0.0028 J	--
MW-80-057	03/14/22	N	690	680	1 J	53	--	--	--	0.034	--	0.0041	46
MW-80-057	04/12/22	N	840	--	0.4 J	44	--	--	--	<0.02	--	0.0013	--
MW-80-057	05/18/22	N	1,000	--	<0.1	61	--	--	--	0.05 J	--	0.0059	--
MW-80-057	06/14/22	N	950	1,000	<0.1	51 J	--	--	--	<0.02	--	0.002	31
MW-80-057	06/14/22	FD	950	1,000	<0.1	51 J	--	--	--	<0.02	--	0.0022	31
MW-80-057	07/14/22	N	750	--	1.9	65	--	--	--	<0.02	--	0.007	--
MW-80-057	08/11/22	N	650	690	<0.1 J	55	--	--	--	<0.02	--	0.018 J	25 J
MW-80-057	09/15/22	N	880	--	0.61	65	--	--	--	<0.02	--	0.0099	--
MW-80-082	02/24/20	N	1,900	1,900	1.7	41	1.3	230	0.091 J	0.059 J	19	0.00065	18
MW-80-082	02/24/20	FD	1,900	1,800	1.6	39	1.3	230	0.056 J	0.037 J	20	0.00061	17

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-79-058	08/11/22	N	--	9.2	--	--	--	<0.23	--	--	6.9	<5	--
MW-79-058	09/15/22	N	--	--	--	--	--	--	--	--	4.2	--	--
MW-79-102	02/21/20	N	19 J	74	1,800	2.8	110	0.04 J	2,100	2.3	--	--	15
MW-79-102	05/29/20	N	20	70	1,700	3.1	130	<0.2	2,200	2.2	--	--	6.9
MW-79-102	08/18/20	N	18	79	1,800	3.5	130	<0.2	2,100	2.9	--	--	17
MW-79-102	12/03/20	N	22	74	1,700	2.9	130	<0.2	2,200	2.9	--	--	16
MW-79-102	02/18/21	N	17	72	1,500	2.9	130	<0.22	2,200	2.3	--	--	17
MW-79-102	05/20/21	N	20 J	75	1,900 J	3.2	130	<0.2	2,100	2.9	--	--	17
MW-79-102	08/19/21	N	16	67	1,900 J	3.4	170	<0.2	1,800	2.7	--	--	15
MW-79-102	12/15/21	N	--	57 J	--	--	--	<0.2	--	--	--	<5	16
MW-79-102	02/01/22	N	--	--	--	--	--	--	--	--	16	--	--
MW-79-102	03/14/22	N	--	65	--	--	--	<0.2	--	--	15	--	--
MW-79-102	03/14/22	FD	--	64	--	--	--	<0.2	--	--	15	--	--
MW-79-102	04/13/22	N	--	--	--	--	--	--	--	--	12	--	--
MW-79-102	05/19/22	N	--	--	--	--	--	--	--	--	7.5	--	--
MW-79-102	05/19/22	FD	--	--	--	--	--	--	--	--	7.5	--	--
MW-79-102	06/14/22	N	--	13 J	--	--	--	<0.2	--	--	5	<5	--
MW-79-102	07/14/22	N	--	--	--	--	--	--	--	--	2.2	--	--
MW-79-102	08/11/22	N	--	11	--	--	--	<0.22	--	--	3.6	<5	--
MW-79-102	09/15/22	N	--	--	--	--	--	--	--	--	1.5	--	--
MW-80-057	02/24/20	N	11 J	30	1,100	4.3	120	0.12	1,200	3.5	--	--	16
MW-80-057	05/21/20	N	16 J	28	1,200	4.1	120	<0.2	1,400	2.8	--	--	22
MW-80-057	08/18/20	N	11	34	1,000	3.5	130	0.99	1,300	3.1	--	--	17
MW-80-057	12/03/20	N	10	32	940	4.3	130	<0.2	1,300	3.2	--	--	16
MW-80-057	12/03/20	FD	10	33	940	4.3	120	<0.2	1,300	3.2	--	--	16
MW-80-057	02/18/21	N	8.5	34	870	4.5	120	<0.22	1,300	2.9	--	--	17
MW-80-057	05/20/21	N	11 J	36	910 J	4.4	110	<0.2	1,300	3	--	--	17
MW-80-057	08/19/21	N	9.5	41	1,300 J	4.3	110	<0.2	1,300	3.3	--	--	16
MW-80-057	12/15/21	N	--	31 J	--	--	--	<0.2	--	--	--	<5	17
MW-80-057	02/01/22	N	--	--	--	--	--	--	--	--	16	--	--
MW-80-057	03/14/22	N	--	26	--	--	--	<0.2	--	--	11	--	--
MW-80-057	04/12/22	N	--	--	--	--	--	--	--	--	15	--	--
MW-80-057	05/18/22	N	--	--	--	--	--	--	--	--	11	--	--
MW-80-057	06/14/22	N	--	24 J	--	--	--	<0.2	--	--	13	<5	--
MW-80-057	06/14/22	FD	--	25 J	--	--	--	<0.2	--	--	13	<5	--
MW-80-057	07/14/22	N	--	--	--	--	--	--	--	--	8.2	--	--
MW-80-057	08/11/22	N	--	20	--	--	--	<0.2	--	--	12	<5	--
MW-80-057	09/15/22	N	--	--	--	--	--	--	--	--	11	--	--
MW-80-082	02/24/20	N	25 J	12	1,900	1.2	100	0.13	2,500	2.5	--	--	10
MW-80-082	02/24/20	FD	25 J	12	1,800	1.2	99	0.08 J	2,500	2.5	--	--	9.8

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-79-058	08/11/22	N	460	--	<1
MW-79-058	09/15/22	N	510	--	<1
MW-79-102	02/21/20	N	870	5,400	<1
MW-79-102	05/29/20	N	880	5,300	<1
MW-79-102	08/18/20	N	870	5,400	<1
MW-79-102	12/03/20	N	880	5,400	<1
MW-79-102	02/18/21	N	900	5,300	<1
MW-79-102	05/20/21	N	870	5,200	<1
MW-79-102	08/19/21	N	860	4,400	<1
MW-79-102	12/15/21	N	870	--	<1
MW-79-102	02/01/22	N	890	--	<1
MW-79-102	03/14/22	N	880	--	<1
MW-79-102	03/14/22	FD	850	--	<1
MW-79-102	04/13/22	N	810	--	<1
MW-79-102	05/19/22	N	690	--	<1
MW-79-102	05/19/22	FD	700	--	<1
MW-79-102	06/14/22	N	660	--	<1
MW-79-102	07/14/22	N	610	--	<1
MW-79-102	08/11/22	N	660	--	<1
MW-79-102	09/15/22	N	620	--	<20
MW-80-057	02/24/20	N	480	3,200	<1
MW-80-057	05/21/20	N	490	3,400	<1 J
MW-80-057	08/18/20	N	490	3,200	<1
MW-80-057	12/03/20	N	510	3,100	<1
MW-80-057	12/03/20	FD	500	3,100	<1
MW-80-057	02/18/21	N	490	3,200	<1
MW-80-057	05/20/21	N	520	3,300	<1
MW-80-057	08/19/21	N	490	3,200	<1
MW-80-057	12/15/21	N	520	--	<1
MW-80-057	02/01/22	N	510	--	<1
MW-80-057	03/14/22	N	490	--	<1
MW-80-057	04/12/22	N	500	--	<1
MW-80-057	05/18/22	N	520	--	<10
MW-80-057	06/14/22	N	490	--	<1
MW-80-057	06/14/22	FD	500	--	<1
MW-80-057	07/14/22	N	490	--	<1
MW-80-057	08/11/22	N	440	--	<1
MW-80-057	09/15/22	N	510	--	<1
MW-80-082	02/24/20	N	520	5,800	<1
MW-80-082	02/24/20	FD	530	5,600	<1

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-80-082	05/21/20	N	1,600	1,600	1.2	43	1	180 J	1.10 J	<0.02	22	0.0043	17
MW-80-082	05/21/20	FD	1,600	1,600	1.2	43	0.96	170 J	1 J	0.038	21	0.0044	17
MW-80-082	08/18/20	N	1,600	1,600	1.4	37	1.6	210	0.037 J	<0.02 J	23 J	0.01	20
MW-80-082	12/03/20	N	1,600	1,700	3.6	40	1.4	180 J	0.049 J	<0.02	23	0.00092	16
MW-80-082	02/18/21	N	1,800	1,900	4.2	39	0.93	160 J	0.034 J	<0.02	22	0.00074	16
MW-80-082	02/18/21	FD	1,800	2,000	4.2	40	1	170 J	0.048 J	0.022	23	0.00092	17
MW-80-082	05/20/21	N	2,100 J	2,100	0.76	38	1	260	0.02 J	<0.02	20 J	<0.0005	18
MW-80-082	08/19/21	N	1,300	1,600	<0.1	32 J	1	180 J	0.064 J	<0.02	18 J	<0.0005	24
MW-80-082	12/15/21	N	1,200	1,200	1.5	33	--	--	--	<0.02 J	--	0.00087	26
MW-80-082	02/01/22	N	2,000	--	0.54	44	--	--	--	<0.02	--	0.00071 J	--
MW-80-082	02/01/22	FD	2,000	--	0.58	44	--	--	--	<0.02	--	0.00071 J	--
MW-80-082	03/14/22	N	2,200	2,300	0.22 J	42	--	--	--	<0.02	--	0.00078	19
MW-80-082	03/14/22	FD	2,300	2,300	0.31 J	43	--	--	--	<0.02	--	0.00089	19
MW-80-082	04/12/22	N	1,700	--	<0.1 J	39	--	--	--	<0.02	--	0.0018	--
MW-80-082	04/12/22	FD	1,700	--	1.1 J	39	--	--	--	<0.02	--	0.0014	--
MW-80-082	05/18/22	N	470	--	<0.1	42	--	--	--	<0.02 J	--	0.004	--
MW-80-082	06/14/22	N	980	1,100	<0.1	40 J	--	--	--	0.1	--	0.0015	29
MW-80-082	07/14/22	N	120	--	5.5	39	--	--	--	<0.02	--	0.009	--
MW-80-082	08/11/22	N	200	240	<0.1 J	48	--	--	--	0.033	--	0.0095 J	52 J
MW-80-082	09/15/22	N	160	--	1.8	42	--	--	--	<0.02	--	0.0034 J	--
MW-80-082	09/15/22	FD	160	--	1.8	44	--	--	--	<0.02	--	0.0051 J	--
MW-81-043	01/08/20	N	<0.2	<1	--	--	--	--	--	--	--	--	--
MW-81-043	01/28/20	N	1.8	3.8	1.9 J	320 J	0.9	170 B	1	0.6 J	46 J	0.6 J	24 J
MW-81-043	02/18/20	N	4.4	6.9	2.9	250 J	0.83	210	0.36 J	0.38	46	0.35	26
MW-81-043	03/18/20	N	2.1	3.7	2.9	220	0.89	180	2.20	0.16 J	44 J	0.32	25
MW-81-043	04/21/20	N	7.4	10	0.85	160	0.94	230	0.49	0.28	46	0.21	21
MW-81-043	05/21/20	N	2.4	4.9	1.4	190	0.96	180 J	1.80 J	0.38	59	0.32	27
MW-81-043	08/18/20	N	1.5	4.3	2.6	180	1.5	220	2.20 J	0.48 J	61 J	0.36	30
MW-81-043	12/03/20	N	7.8	8.7	3.4	120	1.1	170 J	3.20 J	0.028	58	0.22	29
MW-81-043	02/24/21	N	13	13	2	100 J	1.1	220	1.80 J	0.022	54	0.11	28
MW-81-043	05/18/21	N	8.8 J	9.5	1.1 J	95	0.94	210	0.16 J	0.16 J	49 J	0.14	26
MW-81-043	08/17/21	N	7.3	7.7	0.73	93	0.99	230	0.35 J	0.079	52 J	0.18	21
MW-81-043	12/13/21	N	8.7	9.2	0.75	110	--	--	--	<0.02 J	--	0.16	24
MW-81-043	03/01/22	N	17	--	<0.1	110	--	--	--	<0.02	--	0.15	--
MW-81-043	05/06/22	N	12	14	<0.1	86 J	--	--	--	0.12 J	--	0.088 J	--
MW-81-043	06/16/22	N	4.4	--	<0.1	78 J	--	--	--	0.093 J	--	0.064	--
MW-81-043	07/12/22	N	6.4	--	3.1	77	--	--	--	0.16 J	--	0.14	--
MW-81-043	08/10/22	N	3	--	1.2 J	110	--	--	--	0.09 J	--	0.045	--
MW-81-043	09/13/22	N	10	--	2.4	69	--	--	--	0.053 J	--	0.024	--
MW-81-098	01/28/20	N	<0.2	<1	<0.1 J	93 J	1.2	250 B	0.47	0.21 J	44 J	0.45 J	3.9 J

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-80-082	05/21/20	N	27 J	8.2	2,000	1.2	96	<0.2	2,500	2.3	--	--	8.2
MW-80-082	05/21/20	FD	27 J	7.8	2,000	1.2	97	<0.2	2,600	2.2	--	--	8.3
MW-80-082	08/18/20	N	21	15	1,600	1.2	100	<0.2	2,400	2.7	--	--	11
MW-80-082	12/03/20	N	36	11	1,600	1	110	<0.2	2,500	2.3	--	--	8.8
MW-80-082	02/18/21	N	21	12	1,500	<1	100	<0.2	2,600	2.4	--	--	11
MW-80-082	02/18/21	FD	21	13	1,400	<1	98	<0.22	2,600	2.3	--	--	9.9
MW-80-082	05/20/21	N	25 J	11	1,800 J	1.2	95	<0.2	2,600	2.5	--	--	9.9
MW-80-082	08/19/21	N	19	29	1,800 J	1.5	110	<0.2	2,200	2.7	--	--	14
MW-80-082	12/15/21	N	--	24 J	--	--	--	<0.2	--	--	--	<5	13
MW-80-082	02/01/22	N	--	--	--	--	--	--	--	--	10	--	--
MW-80-082	02/01/22	FD	--	--	--	--	--	--	--	--	10	--	--
MW-80-082	03/14/22	N	--	12	--	--	--	<0.2	--	--	9.4	--	--
MW-80-082	03/14/22	FD	--	12	--	--	--	<0.2	--	--	9.3	--	--
MW-80-082	04/12/22	N	--	--	--	--	--	--	--	--	5.9	--	--
MW-80-082	04/12/22	FD	--	--	--	--	--	--	--	--	6.2	--	--
MW-80-082	05/18/22	N	--	--	--	--	--	--	--	--	1.9	--	--
MW-80-082	06/14/22	N	--	4.2 J	--	--	--	<0.2	--	--	4.4	<5	--
MW-80-082	07/14/22	N	--	--	--	--	--	--	--	--	0.59	--	--
MW-80-082	08/11/22	N	--	1.3	--	--	--	<0.22	--	--	1.2	<5	--
MW-80-082	09/15/22	N	--	--	--	--	--	--	--	--	0.81	--	--
MW-80-082	09/15/22	FD	--	--	--	--	--	--	--	--	0.87	--	--
MW-81-043	01/08/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-81-043	01/28/20	N	11 J	1.8	1,200	4.7	120	0.08 J	1,800	4	--	--	0.74
MW-81-043	02/18/20	N	14	1.9	1,200	6.1	130	0.07 J	1,700	<1	--	--	0.68
MW-81-043	03/18/20	N	12 J	2.1	1,200	4.8	410	0.13	1,700	3.7	--	--	0.64
MW-81-043	04/21/20	N	13	1.6	1,300	7.5	130	0.11	1,900	3.7	--	--	0.85
MW-81-043	05/21/20	N	16 J	1.3	1,500	7.3	160	<0.2	2,000	4	--	--	0.62
MW-81-043	08/18/20	N	14	1.5	1,300	5.7	170	<0.2	1,900	4.5	--	--	0.53
MW-81-043	12/03/20	N	18	3.2	1,100	8.6	150	<0.2	1,900	4.9	--	--	0.62
MW-81-043	02/24/21	N	11 J	2.1	1,200 J	14	120	<0.2	1,800	4.8	--	--	0.63
MW-81-043	05/18/21	N	11 J	1.2	1,100 J	12	170	<0.2	1,900	4.1	--	--	0.57
MW-81-043	08/17/21	N	15 J	1.3	1,300 J	10	180	<0.2	2,000	3.8	--	--	0.53
MW-81-043	12/13/21	N	--	2.6	--	--	--	--	--	--	--	--	0.48
MW-81-043	03/01/22	N	--	--	--	--	--	--	--	--	0.99	--	--
MW-81-043	05/06/22	N	--	--	--	--	--	--	--	--	0.98	--	--
MW-81-043	06/16/22	N	--	--	--	--	--	--	--	--	0.98	--	--
MW-81-043	07/12/22	N	--	--	--	--	--	--	--	--	1.2	--	--
MW-81-043	08/10/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-81-043	09/13/22	N	--	--	--	--	--	--	--	--	1.7	--	--
MW-81-098	01/28/20	N	15 J	<0.5	1,800	1.7	160	0.06 J	2,500	2.4	--	--	0.22

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-80-082	05/21/20	N	480	5,200	<1 J
MW-80-082	05/21/20	FD	480	5,400	<1 J
MW-80-082	08/18/20	N	500	5,400	<1
MW-80-082	12/03/20	N	520	5,300	<1
MW-80-082	02/18/21	N	530	5,800	<1
MW-80-082	02/18/21	FD	540	5,800	<1
MW-80-082	05/20/21	N	540	5,600	<1
MW-80-082	08/19/21	N	530	4,800	<1
MW-80-082	12/15/21	N	570	--	<1
MW-80-082	02/01/22	N	550	--	<1
MW-80-082	02/01/22	FD	550	--	<1
MW-80-082	03/14/22	N	580	--	<1
MW-80-082	03/14/22	FD	580	--	<1
MW-80-082	04/12/22	N	550	--	<1
MW-80-082	04/12/22	FD	550	--	<1
MW-80-082	05/18/22	N	560	--	<1
MW-80-082	06/14/22	N	560	--	<1
MW-80-082	07/14/22	N	550	--	<1
MW-80-082	08/11/22	N	530	--	<1
MW-80-082	09/15/22	N	610	--	<1
MW-80-082	09/15/22	FD	600	--	<1
MW-81-043	01/08/20	N	--	--	--
MW-81-043	01/28/20	N	360	3,800	<1 J
MW-81-043	02/18/20	N	340	3,600	<1 J
MW-81-043	03/18/20	N	350	3,800	<1 J
MW-81-043	04/21/20	N	440	4,300	<10
MW-81-043	05/21/20	N	430	4,600	<1 J
MW-81-043	08/18/20	N	440	4,500	<1
MW-81-043	12/03/20	N	450	4,100	<1
MW-81-043	02/24/21	N	390	3,600	<1
MW-81-043	05/18/21	N	450	4,000	<1
MW-81-043	08/17/21	N	480	4,400	<1
MW-81-043	12/13/21	N	--	--	<1
MW-81-043	03/01/22	N	--	--	<1
MW-81-043	05/06/22	N	--	--	<1
MW-81-043	06/16/22	N	380	--	<1
MW-81-043	07/12/22	N	350	--	<1
MW-81-043	08/10/22	N	460	--	<10
MW-81-043	09/13/22	N	330	--	<1
MW-81-098	01/28/20	N	590	5,300	<1 J

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-81-098	02/18/20	N	<0.2	<1	<0.1	87 J	1.1	280	0.17 J	0.092	40	0.28	3.6
MW-81-098	03/18/20	N	0.31	<1	<0.1	69	1.2	270	0.13	0.075 J	37 J	0.23	3.1
MW-81-098	04/21/20	N	<0.2	<1	<0.1	75	1.2	280	1.20	0.15	38	0.25	3.6
MW-81-098	05/21/20	N	0.29	<1	<0.1	74	1.1	200 J	7.30 J	0.15	41	0.23	3.7
MW-81-098	08/18/20	N	<1	<1	<0.1	73	1.8	260	1.20 J	0.023 J	45 J	0.16	3.8
MW-81-098	08/18/20	FD	<1	1	<0.1	71	1.7	260	1.40 J	0.037 J	45 J	0.16	3.5
MW-81-098	12/03/20	N	1.2	1.5	1	72	1.4	210 J	0.42 J	<0.02	45	0.12	3.1
MW-81-098	02/24/21	N	1.4	1.5	<0.1	72 J	1.3	310	0.22 J	<0.02	42	0.11	3.2
MW-81-098	05/18/21	N	2 J	2.3	<0.1 J	67	1.1	240	0.086 J	0.092 J	33 J	0.1	3.6
MW-81-098	08/17/21	N	0.56	<1	<0.1	65	1.2	270	0.32 J	0.025	39 J	0.11	3.8
MW-81-098	08/17/21	FD	0.59	<1	<0.1	63	1.1	250	0.27 J	0.036	36 J	0.11	3.5
MW-81-098	12/13/21	N	1.2	1.7	<0.1	70	--	--	--	0.041 J	--	0.14	3.4
MW-81-098	03/01/22	N	<1	--	<0.1	100	--	--	--	<0.1	--	0.12	--
MW-81-098	05/06/22	N	<1	<1	<0.1	51 J	--	--	--	<0.02 J	--	0.16 J	--
MW-81-098	06/16/22	N	1.8	--	<0.1	68 J	--	--	--	0.059 J	--	0.24	--
MW-81-098	07/12/22	N	1.3	--	<0.1	67	--	--	--	<0.02 J	--	0.22	--
MW-81-098	08/10/22	N	0.55	--	<0.1	59	--	--	--	<0.02 J	--	0.16	--
MW-81-098	09/13/22	N	<1	--	<0.1	80	--	--	--	0.19 J	--	0.13	--
MW-82-046	02/27/20	N	<1	1	16	76 J	2.2	210	4.40 J	3.80 J	260	0.18	30
MW-82-046	05/28/20	N	<1	1.2	32	68	2.2	160	7.70	6.60	210	0.48	67
MW-82-046	08/25/20	N	<1	1.1	15	64	1.4	120 J	4.50	4	240	0.27	21 J
MW-82-046	12/01/20	N	<0.2	1.2	15	57	1.9 J	140 J	3.80	3 J	230 J	0.17	12
MW-82-046	02/25/21	N	<1	<1	9i	73	2	220	4.90 J	3.30	260	0.17	22
MW-82-046	05/18/21	N	<1	<1	21 J	64	1.9	170	6.40 J	5.40 J	200 J	0.27	55
MW-82-046	08/17/21	N	<0.2	<1	13	53	1.3	140	3.70 J	3	190 J	0.16	15
MW-82-046	12/16/21	N	<0.2	<1	15	61	--	--	--	2.90 J	--	0.17	11
MW-82-046	12/16/21	FD	<0.2	<1	15	59	--	--	--	3.20 J	--	0.17	11
MW-82-046	03/01/22	N	<1	--	13	68	--	--	--	6.60	--	0.21	--
MW-82-046	05/02/22	N	<1	<5	27	66	--	--	--	6.40 J	--	0.32	--
MW-82-046	05/02/22	FD	<1	<5	25	56	--	--	--	6.20 J	--	0.27	--
MW-82-046	06/16/22	N	<0.2	--	17	56 J	--	--	--	5.80 J	--	0.26	--
MW-82-046	07/12/22	N	<1	--	24	73	--	--	--	7.30 J	--	0.36	--
MW-82-046	08/10/22	N	<1	--	25	52	--	--	--	6 J	--	0.31	--
MW-82-046	09/13/22	N	<0.2	--	23	51	--	--	--	5.50 J	--	0.26	--
MW-82-112	02/27/20	N	0.2 J	<1	<0.1	36 J	1.4	210	0.23 J	0.059 J	17	0.053	10
MW-82-112	05/28/20	N	<0.2	<1	<0.1	35	1.5	180	0.54	0.073	18	0.072	7.6
MW-82-112	08/25/20	N	<1	1.3	<0.1	35	1.4	130 J	0.089	0.042	17	0.053	9.6 J
MW-82-112	12/01/20	N	0.44	1.1	2	34	1.7 J	160 J	0.28	<0.02	22 J	0.027	9.3
MW-82-112	02/25/21	N	0.37	1.2	<0.1	34	1.5	220	0.098 J	0.021	19	0.024	9.1
MW-82-112	05/18/21	N	<0.2	1.3	<0.1 J	30	1.2	160	0.27 J	0.11 J	15 J	0.031	6.7

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-81-098	02/18/20	N	15	<0.5	1,600	2.8	160	0.08 J	2,400	3	--	--	0.33
MW-81-098	03/18/20	N	16 J	<0.5	1,800	2.4	170	0.14	2,300	1.7	--	--	0.4
MW-81-098	04/21/20	N	15	<0.5	1,500	2.8	180	0.06 J	2,500	2.3	--	--	0.25
MW-81-098	05/21/20	N	17 J	<0.5	1,900	2.8	170	<0.2	2,300	2.3	--	--	0.31
MW-81-098	08/18/20	N	15	<0.5	1,600	4.1	180	<0.2	2,200	2.5	--	--	0.38
MW-81-098	08/18/20	FD	15	<0.5	1,500	3.7	170	<0.2	2,300	2.8	--	--	0.36
MW-81-098	12/03/20	N	18	<0.5	1,500	4.3	180	<0.2	2,300	2.5	--	--	0.48
MW-81-098	02/24/21	N	18 J	<0.5	1,700 J	4.8	170	<0.2	2,300	2.9	--	--	0.51
MW-81-098	05/18/21	N	11 J	<0.5	1,600 J	4.5	180	<0.22	2,300	2.5	--	--	0.53
MW-81-098	08/17/21	N	18 J	<0.5	1,500 J	4.4	170	<0.2	2,300	2.4	--	--	0.53
MW-81-098	08/17/21	FD	15 J	<0.5	1,500 J	4.1	180	<0.2	2,300	2.6	--	--	0.45
MW-81-098	12/13/21	N	--	<0.5	--	--	--	--	--	--	--	--	0.58
MW-81-098	03/01/22	N	--	--	--	--	--	--	--	--	0.94	--	--
MW-81-098	05/06/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-81-098	06/16/22	N	--	--	--	--	--	--	--	--	0.94	--	--
MW-81-098	07/12/22	N	--	--	--	--	--	--	--	--	0.82	--	--
MW-81-098	08/10/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-81-098	09/13/22	N	--	--	--	--	--	--	--	--	0.87	--	--
MW-82-046	02/27/20	N	24	0.67	3,800	2.5	1,300	7.7	3,400	2.4	--	--	<0.1
MW-82-046	05/28/20	N	23 J	0.72	3,100	2.1	1,200	6.2	3,100	4.4 J	--	--	0.058 J
MW-82-046	08/25/20	N	20 J	1.5	2,000	2.3	1,300	6.8	2,600	2.1	--	--	0.19
MW-82-046	12/01/20	N	20 J	4.7	1,700	1.3	980	5.3	2,000	2.3	--	--	<0.1
MW-82-046	02/25/21	N	21 J	1.2	2,700 J	2.6	1,200	8.2	3,100	2.3	--	--	0.29
MW-82-046	05/18/21	N	17 J	1.9	2,700 J	1.9	1,200	5.4	2,800	4.1	--	--	0.15
MW-82-046	08/17/21	N	18 J	1.7	2,000 J	1.8	1,100	6.5	2,300	2.6	--	--	<0.1
MW-82-046	12/16/21	N	--	2	--	--	--	--	--	--	--	--	<0.1
MW-82-046	12/16/21	FD	--	1.8	--	--	--	--	--	--	--	--	<0.1
MW-82-046	03/01/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-82-046	05/02/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-82-046	05/02/22	FD	--	--	--	--	--	--	--	--	<0.5	--	--
MW-82-046	06/16/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-82-046	07/12/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-82-046	08/10/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-82-046	09/13/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-82-112	02/27/20	N	14	<0.5	2,100	5.6	82	0.12	2,400	3	--	--	0.63
MW-82-112	05/28/20	N	16 J	<0.5	1,700	4.8	120	<0.2	2,300	2.5 J	--	--	0.29 J
MW-82-112	08/25/20	N	18 J	<0.5	2,000	6.8	100	<0.2	2,300	3.2	--	--	0.68
MW-82-112	12/01/20	N	16 J	<0.5	1,400	6.5	93	<0.2	2,400	3.3	--	--	0.74
MW-82-112	02/25/21	N	15 J	<0.5	1,500 J	7.3	89	<0.2	2,400	3.4	--	--	0.76
MW-82-112	05/18/21	N	12 J	<0.5	1,300 J	6.3	130	<0.2	2,100	2.5	--	--	0.51

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-81-098	02/18/20	N	580	5,200	<1 J
MW-81-098	03/18/20	N	590	5,200	<1 J
MW-81-098	04/21/20	N	600	5,200	<1
MW-81-098	05/21/20	N	570	5,200	<1 J
MW-81-098	08/18/20	N	560	5,300	<1
MW-81-098	08/18/20	FD	550	5,200	<1
MW-81-098	12/03/20	N	580	5,100	<1
MW-81-098	02/24/21	N	570	5,200	<20
MW-81-098	05/18/21	N	570	5,000	<20
MW-81-098	08/17/21	N	580	5,000	<1
MW-81-098	08/17/21	FD	570	5,200	<1
MW-81-098	12/13/21	N	--	--	<1
MW-81-098	03/01/22	N	--	--	<1
MW-81-098	05/06/22	N	--	--	<1
MW-81-098	06/16/22	N	660	--	<1
MW-81-098	07/12/22	N	680	--	<1
MW-81-098	08/10/22	N	580	--	<1
MW-81-098	09/13/22	N	650	--	<20
MW-82-046	02/27/20	N	1,900	11,000	<10
MW-82-046	05/28/20	N	1,500	9,400	2.3 J
MW-82-046	08/25/20	N	1,600	8,300	3.5
MW-82-046	12/01/20	N	1,500	7,200	2.1
MW-82-046	02/25/21	N	1,900	9,600	2.1
MW-82-046	05/18/21	N	1,500	8,400	2
MW-82-046	08/17/21	N	1,500	7,100	<20
MW-82-046	12/16/21	N	--	--	1.8
MW-82-046	12/16/21	FD	--	--	1.8
MW-82-046	03/01/22	N	--	--	3.4
MW-82-046	05/02/22	N	--	--	2.8
MW-82-046	05/02/22	FD	--	--	2.7
MW-82-046	06/16/22	N	1,200	--	1.8
MW-82-046	07/12/22	N	1,600	--	7
MW-82-046	08/10/22	N	1,600	--	2.2
MW-82-046	09/13/22	N	1,400	--	1.6
MW-82-112	02/27/20	N	660	5,300	<1
MW-82-112	05/28/20	N	550	4,900	<1
MW-82-112	08/25/20	N	580	5,200	<1
MW-82-112	12/01/20	N	610	5,700	<20
MW-82-112	02/25/21	N	630	5,200	<20
MW-82-112	05/18/21	N	530	4,500	<1

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-82-112	08/17/21	N	0.28	<1	<0.1	29	1.4	180	0.051 J	<0.02	15 J	0.023	8.3
MW-82-112	12/16/21	N	0.88	2	<0.1	35	--	--	--	<0.02	--	0.027	8.7
MW-82-112	03/01/22	N	<0.2	--	<0.1	38	--	--	--	0.11 J	--	0.058	--
MW-82-112	05/02/22	N	<0.2	<1	<0.1	36	--	--	--	<0.02	--	0.054	--
MW-82-112	06/16/22	N	<1	--	<0.1	52 J	--	--	--	0.061 J	--	0.12	--
MW-82-112	07/12/22	N	<0.2	--	<0.1	57	--	--	--	<0.02 J	--	0.14	--
MW-82-112	08/10/22	N	<0.2	--	<0.1	36	--	--	--	<0.02 J	--	0.061	--
MW-82-112	09/13/22	N	0.29	--	<0.1	38	--	--	--	0.035 J	--	0.084	--
MW-82-168	02/27/20	N	1.2 J	2.6	1.7	49 J	1.5	580	0.12 J	<0.1 J	84	0.25	18
MW-82-168	05/28/20	N	1.9	3.9	1.9	57	1.1	480	0.12	0.048	79	0.31	20
MW-82-168	08/25/20	N	2.9	6.1	1.9	53	0.72	350 J	0.21	0.079	77	0.26	19 J
MW-82-168	12/01/20	N	4.7	6.5	1.7	49	1.4 J	440 J	2	0.094 J	100 J	0.16	17
MW-82-168	02/25/21	N	3.5	5.9	<0.1	49	1.5	740	0.23 J	<0.1	100	0.13	17
MW-82-168	05/18/21	N	3.1 J	5	<0.1 J	49	0.99	640	0.2 J	0.035 J	68 J	0.16	19
MW-82-168	08/17/21	N	<1	<1	<0.1	49	1	700	0.27 J	0.028	67 J	0.32	18
MW-82-168	12/16/21	N	7	7.5	<0.1	48	--	--	--	0.031 J	--	0.14	15
MW-82-168	03/01/22	N	1.2	--	1.9	50	--	--	--	<0.1	--	0.2	--
MW-82-168	05/02/22	N	<1	2.7	<0.1	47	--	--	--	<0.1	--	0.14	--
MW-82-168	06/16/22	N	1.2	--	<0.1	42 J	--	--	--	0.027 J	--	0.029	--
MW-82-168	07/12/22	N	0.28	--	<0.1	41	--	--	--	0.054 J	--	0.043	--
MW-82-168	07/12/22	FD	<1	--	<0.1	41	--	--	--	0.033 J	--	0.045	--
MW-82-168	08/10/22	N	<0.2	--	<0.1	38	--	--	--	0.024 J	--	0.041	--
MW-82-168	09/13/22	N	<0.2	--	<0.1	38	--	--	--	0.035 J	--	0.042	--
MW-82-168	09/13/22	FD	<0.2	--	<0.1	39	--	--	--	0.051 J	--	0.043	--
MW-82-198	02/27/20	N	<1	3.5	3.2	41 J	2.4	110	0.11 J	0.068 J	3	0.079	150
MW-82-198	05/21/20	N	<1	9	3.9	46	1.8	93 J	1.90 J	0.19	4.8	0.23	81
MW-82-198	08/25/20	N	<1	2.7	3.2	39	1.6	71 J	0.2	<0.1	3.4	0.1	120 J
MW-82-198	12/01/20	N	<1	<1	2.3	35	3 J	90 J	0.33	<0.1	3.6 J	0.07	160
MW-82-198	02/25/21	N	<1	3.3	<0.1	40	2.6	130	4.80 J	0.27	3.4	0.059	160
MW-82-198	05/18/21	N	<1	1	<0.1 J	36	1.9	130	0.4 J	0.038 J	2.7 J	0.11	74
MW-82-198	08/17/21	N	<1	<1	<0.1	42	1.6	150	0.23 J	0.02	4.8 J	0.21	75
MW-82-198	12/16/21	N	<1	2.9	<0.1	34	--	--	--	0.12 J	--	0.057	140
MW-82-198	03/01/22	N	2.9	--	3.1	52	--	--	--	<0.5	--	0.16	--
MW-82-198	05/02/22	N	1.2	2	<0.5	47	--	--	--	<0.1	--	0.098	--
MW-82-198	06/16/22	N	4.1	--	<0.1	44 J	--	--	--	0.048 J	--	0.11	--
MW-82-198	07/12/22	N	3.1	--	<0.1	46	--	--	--	<0.02 J	--	0.1	--
MW-82-198	08/10/22	N	<1	--	<0.1	39	--	--	--	0.025 J	--	0.15	--
MW-82-198	09/13/22	N	4.1	--	<0.1	42	--	--	--	<0.02	--	0.09	--
MW-83-090	02/19/20	N	49	47	0.26	77	0.35 J	150 J	0.14	0.046 J	24 J	<0.0005	3.2
MW-83-090	05/28/20	N	44	43	<0.1	84	0.31	150	0.29 J	0.12 J	28	0.002	3

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MW-82-112	08/17/21	N	15 J	<0.5	1,600 J	6.6	100	<0.2	2,300	2.8	--	--	0.62
MW-82-112	12/16/21	N	--	<0.5	--	--	--	--	--	--	--	--	0.72
MW-82-112	03/01/22	N	--	--	--	--	--	--	--	--	0.6	--	--
MW-82-112	05/02/22	N	--	--	--	--	--	--	--	--	0.58	--	--
MW-82-112	06/16/22	N	--	--	--	--	--	--	--	--	1.1	--	--
MW-82-112	07/12/22	N	--	--	--	--	--	--	--	--	0.91	--	--
MW-82-112	08/10/22	N	--	--	--	--	--	--	--	--	0.61	--	--
MW-82-112	09/13/22	N	--	--	--	--	--	--	--	--	0.92	--	--
MW-82-168	02/27/20	N	37	<0.5	4,900	1.9	63	0.13	6,000	2.8	--	--	1.4
MW-82-168	05/28/20	N	46 J	0.74	4,300	2	64	<0.2	6,200	2.5 J	--	--	1.5 J
MW-82-168	08/25/20	N	47 J	0.83	4,200	2.1	66	<0.2	6,100	2.8	--	--	1.9
MW-82-168	12/01/20	N	48 J	0.74	3,100	1.5	65	<0.2	6,200	3	--	--	1.6
MW-82-168	02/25/21	N	33 J	0.63	5,000 J	2.2	63	<0.22	6,300	2.7	--	--	1.5
MW-82-168	05/18/21	N	32 J	0.65	4,000 J	1.9	67	<0.2	6,100	3.1	--	--	1.4
MW-82-168	08/17/21	N	37 J	<0.5	4,200 J	2	78	<0.2	6,000	2.7	--	--	0.77
MW-82-168	12/16/21	N	--	<0.5	--	--	--	--	--	--	--	--	1.6
MW-82-168	03/01/22	N	--	--	--	--	--	--	--	--	1.3	--	--
MW-82-168	05/02/22	N	--	--	--	--	--	--	--	--	1.1	--	--
MW-82-168	06/16/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-82-168	07/12/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-82-168	07/12/22	FD	--	--	--	--	--	--	--	--	<0.5	--	--
MW-82-168	08/10/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-82-168	09/13/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-82-168	09/13/22	FD	--	--	--	--	--	--	--	--	<0.5	--	--
MW-82-198	02/27/20	N	41	<0.5	6,700	2.5	43	0.09 J	6,700	5.8	--	--	1
MW-82-198	05/21/20	N	61 J	0.69	5,800	2	55	0.28	6,200	4.6	--	--	0.63
MW-82-198	08/25/20	N	57 J	0.91	5,600	3.1	39	<0.2	6,700	5.2	--	--	1.3
MW-82-198	12/01/20	N	63 J	0.79	5,500	2.4	45	0.36	6,900	6.6	--	--	1.2
MW-82-198	02/25/21	N	47 J	0.58	6,700 J	3.1	42	<0.2	7,100	6.1	--	--	1.2
MW-82-198	05/18/21	N	45 J	0.77	5,300 J	2.9	34	<0.2	6,500	3.9	--	--	1.4
MW-82-198	08/17/21	N	41 J	0.87	5,200 J	2.7	48	<0.2	6,100	4	--	--	1.1
MW-82-198	12/16/21	N	--	<0.5	--	--	--	--	--	--	--	--	1.2
MW-82-198	03/01/22	N	--	--	--	--	--	--	--	--	1.7	--	--
MW-82-198	05/02/22	N	--	--	--	--	--	--	--	--	1.5	--	--
MW-82-198	06/16/22	N	--	--	--	--	--	--	--	--	1.5	--	--
MW-82-198	07/12/22	N	--	--	--	--	--	--	--	--	1.3	--	--
MW-82-198	08/10/22	N	--	--	--	--	--	--	--	--	0.76	--	--
MW-82-198	09/13/22	N	--	--	--	--	--	--	--	--	1.2	--	--
MW-83-090	02/19/20	N	8.9 J	3.6	230	2.8	100	0.05 J	500	1.6	--	--	4.9
MW-83-090	05/28/20	N	9.5 J	2.7	230	2.6	91	<0.2	580	1.5 J	--	--	3.8 J

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MW-82-112	08/17/21	N	590	4,900	<1
MW-82-112	12/16/21	N	--	--	<1
MW-82-112	03/01/22	N	--	--	<1
MW-82-112	05/02/22	N	--	--	<1
MW-82-112	06/16/22	N	710	--	<1
MW-82-112	07/12/22	N	710	--	<1
MW-82-112	08/10/22	N	630	--	<1
MW-82-112	09/13/22	N	670	--	<1
MW-82-168	02/27/20	N	1,200	13,000	<1
MW-82-168	05/28/20	N	1,100	14,000	<1
MW-82-168	08/25/20	N	1,100	14,000	<1
MW-82-168	12/01/20	N	1,200	12,000	<1
MW-82-168	02/25/21	N	1,100	12,000	<1
MW-82-168	05/18/21	N	1,100	14,000 J	<1
MW-82-168	08/17/21	N	990	13,000	<1
MW-82-168	12/16/21	N	--	--	<1
MW-82-168	03/01/22	N	--	--	<1
MW-82-168	05/02/22	N	--	--	<1
MW-82-168	06/16/22	N	570	--	<1
MW-82-168	07/12/22	N	550	--	<1
MW-82-168	07/12/22	FD	550	--	<1
MW-82-168	08/10/22	N	520	--	<1
MW-82-168	09/13/22	N	570	--	<1
MW-82-168	09/13/22	FD	570	--	<1
MW-82-198	02/27/20	N	1,100	13,000 J	<1
MW-82-198	05/21/20	N	1,000	13,000	<1 J
MW-82-198	08/25/20	N	1,100	12,000 J	<1
MW-82-198	12/01/20	N	1,100	12,000 J	<1
MW-82-198	02/25/21	N	1,100	14,000	<1
MW-82-198	05/18/21	N	1,100	13,000	<1
MW-82-198	08/17/21	N	1,000	12,000	<1
MW-82-198	12/16/21	N	--	--	<1
MW-82-198	03/01/22	N	--	--	<1
MW-82-198	05/02/22	N	--	--	<50
MW-82-198	06/16/22	N	1,100	--	<1
MW-82-198	07/12/22	N	990	--	<1
MW-82-198	08/10/22	N	1,000	--	<1
MW-82-198	09/13/22	N	980	--	<1
MW-83-090	02/19/20	N	160	1,300	<1 J
MW-83-090	05/28/20	N	150	1,700	<1

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MW-83-090	05/28/20	FD	44	43	0.21	84	0.3	140	0.63 J	0.05 J	27	0.001	3
MW-83-090	08/26/20	N	49	48	<0.1	89	0.41 J	140	0.14 J	<0.02	31 J	<0.0005	3.5
MW-83-090	12/09/20	N	54	50	<0.1	82	0.43	150	0.075	<0.02	28	<0.0005	3.2
MW-83-090	12/09/20	FD	53	51	0.19	82	0.42	140	0.078	<0.02	27	<0.0005	3.2
MW-83-090	02/23/21	N	49	49	<0.1	80	0.5	210 J	0.36	<0.1	39 J	0.00099	3.5
MW-83-090	05/25/21	N	44	44	<0.1 J	93	0.29	170 J	0.69 J	0.094 J	29 J	0.0049 J	3.5
MW-83-090	05/25/21	FD	44	44	<0.1 J	90	0.28	170 J	0.79 J	0.078 J	29 J	0.0039 J	3.2
MW-83-090	08/23/21	N	52	55	<0.1	78	0.28	140	0.42 J	0.032 J	25 J	<0.0005	2.9
MW-83-090	12/16/21	N	67	65	0.3	--	--	--	--	--	--	0.0035	4
MW-83-090	06/22/22	N	38	34 J	--	--	--	--	--	--	--	--	--
MW-83-180	01/29/20	N	7.7	7.8	1.3	49	1.7	330	0.14	0.022	24 J	0.0011	33
MW-83-180	02/19/20	N	8.4	8.3	1.4	50	1.6 J	280 J	0.042	0.043 J	20 J	0.00085	34
MW-83-180	03/17/20	N	8.8	7.7	0.7	47 J	1.4	280	0.035 J	0.033 J	20	<0.0005	31
MW-83-180	04/23/20	N	7.9	8.1	1.1	56	1.7	280	0.4	0.34 J	20	0.0077	34
MW-83-180	05/28/20	N	9.1	9.4	4.6	50	1.4	240	0.055	<0.02	19	0.0011	35
MW-83-180	06/15/20	N	6	5.6	<0.1 J	45	1.2	210	0.48	<0.02	17	0.0025	30
MW-83-180	07/22/20	N	8.5	8.8	0.5	51	1.5	250	0.033	<0.02	19 J	0.00094	35
MW-83-180	08/26/20	N	8.4	8.8	1.2	52	1.5 J	200	0.1 J	0.052 J	21 J	0.00057	37
MW-83-180	09/29/20	N	9.4	9.3	1.2	52	1.1 J	230 J	0.061 J	<0.02 J	18 J	0.0036	37
MW-83-180	10/21/20	N	9.8	10	4.7	52	1.7	210 J	0.035	<0.02	20	0.0012	34
MW-83-180	12/09/20	N	9.6	8.6	0.84	51	1.2	220	0.023	<0.02	21	<0.0005	36
MW-83-180	02/23/21	N	4.7	6.8	<0.1	47	1.9	370 J	0.46	<0.1	26 J	<0.0005	34
MW-83-180	05/25/21	N	5.1	5.4	<0.1 J	46	1.2	290 J	1.20 J	<0.02 J	18 J	0.00077	31
MW-83-180	08/23/21	N	3.9	7.3	<0.1	47	1.2	270	0.38 J	0.09 J	16 J	<0.0005	30
MW-83-180	12/16/21	N	6.2	8.4	<0.1	--	--	--	--	--	--	0.0011	33
MW-83-180	06/22/22	N	3.7	4.3 J	--	--	--	--	--	--	--	--	--
MW-83-225	02/19/20	N	450	450	4.3	44	2.2 J	390 J	0.62	<0.02 J	22 J	0.0042	49
MW-83-225	05/28/20	N	510	490	3.9	43	1.7	320	0.59	<0.02	21	0.0044	49
MW-83-225	08/26/20	N	460	420	3.8	46	1.8 J	250	0.49 J	0.44 J	22 J	0.0042	55
MW-83-225	12/09/20	N	420	360	<0.1	40	1.7	290	0.27	<0.02	22	0.0029	50
MW-83-225	02/23/21	N	400	390	<0.1	37	3.1	530 J	0.54	<0.1	33 J	0.0019	51
MW-83-225	02/23/21	FD	390	380	<0.1	36	2.4	410 J	0.58	<0.1	26 J	0.0019	49
MW-83-225	05/25/21	N	400	390	<0.1 J	42	2.2	300 J	1 J	0.25 J	23 J	0.0032	51
MW-83-225	08/23/21	N	370	420	<0.1	38	1.5	350	1.10 J	0.082 J	15 J	0.0038	45
MW-83-225	12/16/21	N	250	220	<0.1	--	--	--	--	--	--	0.0053	47
MW-83-225	06/22/22	N	47	42 J	--	--	--	--	--	--	--	--	--
MW-83-245	02/19/20	N	1.7	2.3	5.5	120	2.5 J	390 J	0.024	0.024 J	13 J	0.088	63
MW-83-245	05/22/20	N	4.5	4.9	<0.1	96	1.9	340	3.40 J	0.025 J	12 J	0.064	65
MW-83-245	08/26/20	N	9.2	10	5.7	110	3.9 J	310	<0.1 J	<0.1	15 J	0.073	73
MW-83-245	12/09/20	N	19	16	<0.1	100	1.7	290	0.025	<0.02	11	0.068	68

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-83-090	05/28/20	FD	9.4 J	2.9	220	2.6	89	<0.2	580	1.4 J	--	--	3.7 J
MW-83-090	08/26/20	N	9.1 J	3.1	300 J	3	88	<0.2	600	1.7	--	--	3.9 J
MW-83-090	12/09/20	N	11	2.8	250	2.6	88	<0.2	560	1.4	--	--	4.4
MW-83-090	12/09/20	FD	10	2.8	260	2.7	89	<0.2	560	1.5	--	--	4.5
MW-83-090	02/23/21	N	9.4 J	3.5	260	2.8	84	<0.2	560	1.8	--	--	4.9
MW-83-090	05/25/21	N	12 J	2.7	230 J	2.9	88	<0.2	580	1.5	--	--	3.9
MW-83-090	05/25/21	FD	11 J	2.7	240 J	2.8	83	<0.2	580	1.4	--	--	4
MW-83-090	08/23/21	N	9.2 J	1.9	230	3	96	<0.2	550	1.3	--	--	4.5
MW-83-090	12/16/21	N	--	3.1	--	--	--	--	--	--	--	--	5
MW-83-090	06/22/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-83-180	01/29/20	N	19	0.72	2,400	8.7	39	<0.1	3,500	4.6	--	--	0.51
MW-83-180	02/19/20	N	18 J	0.63	2,200	9	41	0.05 J	3,400	4.8	--	--	0.5
MW-83-180	03/17/20	N	22	0.59	2,300	8.1	39	0.06 J	3,500	3.9	--	--	0.58 J
MW-83-180	04/23/20	N	19	0.58	2,200	8.7	34	0.05 J	3,700	4.3	--	--	0.53
MW-83-180	05/28/20	N	21 J	0.7	2,300	9.4	38	<0.2	3,700	5.2 J	--	--	0.55 J
MW-83-180	06/15/20	N	18 J	0.7	2,000	8.9	44	<0.2	3,300	4.4	--	--	0.68 J
MW-83-180	07/22/20	N	20 J	0.59	2,800	9.3	36	<0.2	3,500	5	--	--	0.64
MW-83-180	08/26/20	N	23 J	0.65	2,300 J	9.8	36	<0.2	3,500	4.4	--	--	0.6
MW-83-180	09/29/20	N	17 J	0.6	2,200 J	8.8	40	<0.2	3,400	4.4	--	--	0.66
MW-83-180	10/21/20	N	28	0.64	2,900	9.7	37	<0.2	3,500	4.5	--	--	0.54
MW-83-180	12/09/20	N	19	0.61	1,900	9.5	34	<0.2	3,600	4.7	--	--	0.61
MW-83-180	02/23/21	N	20 J	0.68	2,600	8.8	36	<0.2	3,700	4.6	--	--	0.66
MW-83-180	05/25/21	N	24 J	0.67	1,900 J	9.2	41	<0.2	3,400	4.6	--	--	0.69
MW-83-180	08/23/21	N	30 J	0.66	2,200	9.9	37	<0.2	3,600	4.1	--	--	0.6
MW-83-180	12/16/21	N	--	0.54	--	--	--	--	--	--	--	--	0.55
MW-83-180	06/22/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-83-225	02/19/20	N	29 J	0.57	3,400	5.5	34	0.04 J	5,100	5	--	--	0.62
MW-83-225	05/28/20	N	30 J	0.67	3,400	6	31	<0.2	5,300	4.7 J	--	--	0.68 J
MW-83-225	08/26/20	N	31 J	0.58	4,400 J	6.6	31	<0.2	5,000	4.5	--	--	0.64
MW-83-225	12/09/20	N	30	0.6	2,600	5.7	30	<0.2	5,100	4.4	--	--	0.57
MW-83-225	02/23/21	N	26 J	0.57	4,700 J	5.8	33	<0.2	5,200	4.6	--	--	0.75
MW-83-225	02/23/21	FD	25 J	0.73	3,400 J	5.6	32	<0.2	5,100	4.5	--	--	0.73
MW-83-225	05/25/21	N	32 J	0.61	3,100 J	6.3	31	<0.2	5,100	4.2	--	--	0.7
MW-83-225	08/23/21	N	28 J	1.6	3,400	6.6	35	<0.2	5,100	4.2	--	--	0.72
MW-83-225	12/16/21	N	--	<0.5	--	--	--	--	--	--	--	--	0.55
MW-83-225	06/22/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-83-245	02/19/20	N	43 J	<0.5	4,200	2.1	30	0.04 J	6,400	4.9	--	--	0.13
MW-83-245	05/22/20	N	55 J	<0.5	5,800 J	2.3	25	<0.2	6,700	5	--	--	0.12
MW-83-245	08/26/20	N	60 J	<0.5	5,700 J	2.2	24	<0.2	6,500	3.9	--	--	0.099
MW-83-245	12/09/20	N	58	<0.5	3,400	3.1	23	<0.2	6,600	4.1	--	--	0.18

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-83-090	05/28/20	FD	150	1,700	<1
MW-83-090	08/26/20	N	150	1,700	<1 J
MW-83-090	12/09/20	N	160	1,300	<1
MW-83-090	12/09/20	FD	160	1,300	<1
MW-83-090	02/23/21	N	150	1,200	<1
MW-83-090	05/25/21	N	150	1,400	<1
MW-83-090	05/25/21	FD	150	1,400	<1
MW-83-090	08/23/21	N	150	1,600	<1
MW-83-090	12/16/21	N	--	--	--
MW-83-090	06/22/22	N	--	--	--
MW-83-180	01/29/20	N	480	7,500	<1
MW-83-180	02/19/20	N	490	7,200	<1 J
MW-83-180	03/17/20	N	490	7,600	<1 J
MW-83-180	04/23/20	N	500	7,500	<1
MW-83-180	05/28/20	N	500	7,800	<1
MW-83-180	06/15/20	N	460	7,100	<1
MW-83-180	07/22/20	N	500	7,800	<1
MW-83-180	08/26/20	N	500	8,200	<10 J
MW-83-180	09/29/20	N	480	7,400	<1 J
MW-83-180	10/21/20	N	500	7,900	<20 J
MW-83-180	12/09/20	N	500	6,800	<1
MW-83-180	02/23/21	N	490	7,300	<1
MW-83-180	05/25/21	N	470	6,900	<1
MW-83-180	08/23/21	N	490	7,400	<1
MW-83-180	12/16/21	N	--	--	--
MW-83-180	06/22/22	N	--	--	--
MW-83-225	02/19/20	N	700	11,000	<1 J
MW-83-225	05/28/20	N	680	11,000	<1
MW-83-225	08/26/20	N	670	11,000	<1 J
MW-83-225	12/09/20	N	680	9,900	<1
MW-83-225	02/23/21	N	690	10,000	<1
MW-83-225	02/23/21	FD	700	11,000	<1
MW-83-225	05/25/21	N	690	10,000	<1
MW-83-225	08/23/21	N	710	10,000	<1
MW-83-225	12/16/21	N	--	--	--
MW-83-225	06/22/22	N	--	--	--
MW-83-245	02/19/20	N	670	12,000	<1 J
MW-83-245	05/22/20	N	670	14,000	<1
MW-83-245	08/26/20	N	670	15,000 J	<1 J
MW-83-245	12/09/20	N	660	12,000 J	<1

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-83-245	02/23/21	N	23	21	<0.1	85	3	490 J	<0.1	<0.1	19 J	0.08	64
MW-83-245	05/25/21	N	14	13	<0.1 J	150	1.9	460 J	<0.1	<0.1 J	4.5 J	<0.0005	68
MW-83-245	08/23/21	N	17	17	<0.1	110	1.7	370	0.11 J	0.021 J	3.1 J	0.0019	60
MW-83-245	12/16/21	N	3.6	4.1	<0.1	--	--	--	--	--	--	0.042	64
MW-83-245	06/22/22	N	2,600	2,600 J	--	--	--	--	--	--	--	--	--
MW-84-057	01/27/20	N	31	29	1.2	44	0.53	68	0.87 J	0.05 J	12	0.0022	19
MW-84-057	02/19/20	N	32	31	1.4	46	0.51 J	90 J	0.55	0.093 J	15 J	0.0034	20
MW-84-057	03/18/20	N	29	29	1.2	45 J	0.43	80	0.22 J	0.13 J	14	0.0029	19
MW-84-057	03/18/20	FD	29	29	1.2	44 J	0.43	82	0.37 J	0.12 J	14	0.0033	18
MW-84-057	04/22/20	N	30	30	1.3	47	0.38	78	0.23 J	0.089 J	13	0.0034 J	19
MW-84-057	04/22/20	FD	30	30	1.2	45	0.37	76	0.3 J	0.055 J	13	0.0026 J	18
MW-84-057	05/28/20	N	27	28	1.2	49	0.43	83	0.42	0.048	15	0.0089	18
MW-84-057	06/17/20	N	26	26	1.2 J	52	0.44	83	0.37	0.076	15	0.0032	17
MW-84-057	07/22/20	N	24	27	1.2	53	0.48	82	0.81	0.026	15 J	<0.0005	18
MW-84-057	08/21/20	N	28	28	1.2	54	0.23	80	1.60	0.075	17	0.0023	19
MW-84-057	09/29/20	N	0.42	<1	<0.1	220	0.44 J	290 J	0.045 J	<0.02 J	65 J	0.06	7.3
MW-84-057	10/20/20	N	28	27	1.2 J	49	0.42	73	0.42 J	<0.02	13 J	<0.0005	17
MW-84-057	12/10/20	N	31	32	1.2	45	0.32	72 J	0.57 J	0.046 J	15	0.00082	18
MW-84-057	02/19/21	N	32	34	1.6	47	0.42	64 J	0.5	<0.02	14	0.0021	19
MW-84-057	05/24/21	N	27	28	0.67 J	56	0.39	96 J	0.73 J	0.11 J	16 J	0.0047	17
MW-84-057	08/20/21	N	23	26	1.1	56	0.37	97	0.076 J	0.02 J	16 J	<0.0005	12
MW-84-057	11/29/21	N	27	27	0.9	--	--	--	--	--	--	0.0018	12
MW-84-057	06/06/22	N	24	25	--	--	--	--	--	--	--	--	--
MW-84-095	01/27/20	N	1.2	1.3	<0.1	220	0.55	250	0.25 J	0.055 J	48	0.06	6.3
MW-84-095	02/19/20	N	0.53	<1	0.3	220	0.82 J	120 J	0.25	<0.1 J	21 J	0.052	7.1
MW-84-095	03/18/20	N	1.5	1.2	<0.1	220 J	0.44	330	0.78 J	0.053 J	58	0.02	6.3
MW-84-095	04/22/20	N	2.1	2.6	<0.1	220	0.43	320	0.52	0.059 J	55	0.021	5.9
MW-84-095	05/28/20	N	2.1	2.2	<0.1	220	0.47	310	2	0.028	61	0.028	6.5
MW-84-095	05/28/20	FD	2.1	2.2	<0.1	230	0.49	300	2	0.066	59	0.027	6.8
MW-84-095	06/17/20	N	1.7	1.7	<0.1 J	240	0.51	300	2.60	0.055	57	0.048	7
MW-84-095	07/22/20	N	2.7	3.1	<0.1	220	0.59	290	1.20	0.048	58 J	0.023	6.4
MW-84-095	08/20/20	N	2.9	2.8	<0.1	220	0.72 J	310	1.20	0.83 J	67	0.018	6.5
MW-84-095	08/20/20	FD	3 J	2.7	<0.1	200	0.47 J	320	1.20	0.25 J	67	0.018	6.4
MW-84-095	09/29/20	N	2.9	3.6	<0.1	230	0.52 J	240 J	1.60 J	0.12 J	58 J	0.024	6.2
MW-84-095	10/20/20	N	3.3	3.1	<0.1 J	210	0.5	300	0.31 J	<0.02	56 J	0.026	5.2
MW-84-095	12/10/20	N	3.4	3.7	<0.1	220	0.38	270 J	1.90 J	0.084 J	64	0.028	5.3
MW-84-095	12/10/20	FD	3.4	3.6	<0.1	210	0.36	270 J	2.20 J	0.074 J	63	0.027	5
MW-84-095	02/19/21	N	3.3	3.7	1.1	230	0.43	260 J	0.6	<0.02	64	0.034	5.3
MW-84-095	05/24/21	N	3.3	3.5	<0.1 J	250	0.45	460 J	1.30 J	0.19 J	69 J	0.017	5.3
MW-84-095	08/20/21	N	2.6	3.5	<0.1	180	0.41	320	0.76 J	<0.02 J	54 J	<0.0005	5.4

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-83-245	02/23/21	N	42 J	<0.5	4,600	2.6	29	<0.22	6,700	4.3	--	--	0.29
MW-83-245	05/25/21	N	140 J	0.67	4,100 J	6.1	210	0.28	6,200	4.5	--	--	0.22
MW-83-245	08/23/21	N	87 J	<0.5	4,400	5.1	89	0.21	6,200	4	--	--	<0.1
MW-83-245	12/16/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-83-245	06/22/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-84-057	01/27/20	N	6.4	5.2	240 J	6.7	86	0.11	360	1.9	--	--	9.9
MW-84-057	02/19/20	N	7.8 J	5.3	280	7.7	89	0.04 J	340	1.7	--	--	11
MW-84-057	03/18/20	N	7.4	5	260	7.4	84	<0.1	360	1.7	--	--	11 J
MW-84-057	03/18/20	FD	7.8	4.8	270	7.4	85	<0.1	360	1.8	--	--	11 J
MW-84-057	04/22/20	N	8.1	5.2	280	7.7	80	<0.1	390	1.7	--	--	10
MW-84-057	04/22/20	FD	8	5.1	270	7.5	81	<0.1	370	1.9	--	--	9.5
MW-84-057	05/28/20	N	8 J	4.2	310	7.7	77	<0.2	410	2.3 J	--	--	8.2 J
MW-84-057	06/17/20	N	7.9	4	280	7.8	82	<0.2	430	1.9	--	--	7.6 J
MW-84-057	07/22/20	N	7.8 J	4	290	7.7	78	<0.2	440	2	--	--	8.2
MW-84-057	08/21/20	N	9	4.1	300	8.7	79	<0.2	430	2.1	--	--	8.7
MW-84-057	09/29/20	N	11 J	0.9	630 J	4.1	51	<0.2	1,700	3	--	--	1.2
MW-84-057	10/20/20	N	7.9 J	4.2	230	7.5	81	<0.2	390 J	2.1	--	--	9.1
MW-84-057	12/10/20	N	8.6	5	250	8.9	82	<0.2	480	2	--	--	11
MW-84-057	02/19/21	N	6.1	4.8	200	8.2	90	<0.22	360	2.1	--	--	11
MW-84-057	05/24/21	N	8.5 J	3.9	240 J	8.6	80	<0.2	450	2.3	--	--	7.6
MW-84-057	08/20/21	N	8 J	3.4	300 J	8.6	77	<0.2	510	2	--	--	7.4
MW-84-057	11/29/21	N	--	3.7	--	--	--	--	--	--	--	--	8.7
MW-84-057	06/06/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-84-095	01/27/20	N	12	0.88	640 J	3.7	54	0.15	1,700	3.1	--	--	1.1
MW-84-095	02/19/20	N	19 J	0.8	780	3.8	55	0.1	1,700	2.9	--	--	0.98
MW-84-095	03/18/20	N	14	0.87	760	4.1	56	<0.1	1,700	2.9	--	--	1.1 J
MW-84-095	04/22/20	N	13	1	830	4.5	52	<0.1	1,800	2.5	--	--	2.1
MW-84-095	05/28/20	N	15 J	0.88	730	4.7	49	<0.2	1,800	2.8 J	--	--	1.1 J
MW-84-095	05/28/20	FD	13 J	0.95	690	4.7	54	<0.2	1,800	3.1 J	--	--	1.3 J
MW-84-095	06/17/20	N	13	0.91	790	4.7	55	<0.2	1,800	2.9	--	--	1.1 J
MW-84-095	07/22/20	N	13 J	0.92	780	4.9	50	<0.2	1,700	3.2	--	--	1.3
MW-84-095	08/20/20	N	15	0.98	860	5.2	52	<0.2	1,700	2.6	--	--	1.4
MW-84-095	08/20/20	FD	15	1	860	5	52	<0.2	1,800	2.4	--	--	1.2
MW-84-095	09/29/20	N	11 J	0.95	690 J	4.8	54	<0.2	1,700	3	--	--	1.2
MW-84-095	10/20/20	N	16 J	1	730	4.5	53	<0.2	1,800 J	2.6	--	--	1.2
MW-84-095	12/10/20	N	14	0.91	750	5.2	50	<0.2	1,700	3.3	--	--	1.4
MW-84-095	12/10/20	FD	14	0.9	750	5	49	<0.2	1,700	3	--	--	1.3
MW-84-095	02/19/21	N	12	1.1	740	4.8	54	<0.2	1,800	2.9	--	--	1.3
MW-84-095	05/24/21	N	17 J	0.86	760 J	7.4	50	<0.2	1,900	3.1	--	--	1.1
MW-84-095	08/20/21	N	16 J	0.9	600 J	5.1	52	<0.2	1,700	2.8	--	--	1.3

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-83-245	02/23/21	N	690	13,000	<1
MW-83-245	05/25/21	N	630	12,000	<1
MW-83-245	08/23/21	N	630	12,000	<1
MW-83-245	12/16/21	N	--	--	--
MW-83-245	06/22/22	N	--	--	--
MW-84-057	01/27/20	N	210	1,100	<1 J
MW-84-057	02/19/20	N	210	1,100	<1 J
MW-84-057	03/18/20	N	200	1,100	<10 J
MW-84-057	03/18/20	FD	200	1,100	<1 J
MW-84-057	04/22/20	N	210	1,100	<1
MW-84-057	04/22/20	FD	200	1,100	<1
MW-84-057	05/28/20	N	190	1,100	<1
MW-84-057	06/17/20	N	180	1,200	<1
MW-84-057	07/22/20	N	180	1,100	<10
MW-84-057	08/21/20	N	170	1,200	<1
MW-84-057	09/29/20	N	230	4,000	<1 J
MW-84-057	10/20/20	N	180	1,100	<1
MW-84-057	12/10/20	N	260	1,000	<10
MW-84-057	02/19/21	N	210	1,100	<1
MW-84-057	05/24/21	N	180	1,100	<1
MW-84-057	08/20/21	N	170	1,200	<1
MW-84-057	11/29/21	N	--	--	--
MW-84-057	06/06/22	N	--	--	--
MW-84-095	01/27/20	N	230	3,800	<1 J
MW-84-095	02/19/20	N	230	3,600	<10
MW-84-095	03/18/20	N	240	3,700	<1 J
MW-84-095	04/22/20	N	250	3,900	<1
MW-84-095	05/28/20	N	250	4,400	<1
MW-84-095	05/28/20	FD	250	4,600	<1
MW-84-095	06/17/20	N	250	4,600	<1
MW-84-095	07/22/20	N	250	4,300	<1
MW-84-095	08/20/20	N	240	4,500	<1
MW-84-095	08/20/20	FD	240	4,400	<1
MW-84-095	09/29/20	N	230	4,000	<1 J
MW-84-095	10/20/20	N	240	4,200	<1
MW-84-095	12/10/20	N	240	3,500	<1
MW-84-095	12/10/20	FD	240	3,600	<1
MW-84-095	02/19/21	N	240	3,400	<1
MW-84-095	05/24/21	N	250	4,100	<1
MW-84-095	08/20/21	N	230	3,900	<1

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-84-095	11/29/21	N	3.4	4.2	<0.1	--	--	--	--	--	--	0.0058	5.4
MW-84-095	06/06/22	N	2.1	3	--	--	--	--	--	--	--	--	--
MW-84-132	01/27/20	N	<0.2	<1	<0.1	100	1.3	240	0.16 J	0.12 J	24	0.12	29
MW-84-132	02/19/20	N	0.26	<1	0.46	99	1.4 J	290 J	0.061	0.079 J	27 J	0.079	29
MW-84-132	03/18/20	N	0.5	<1	<0.1	80 J	0.97	280	0.044 J	0.043 J	30	0.054	24
MW-84-132	04/22/20	N	0.57	<1	<0.1	92	1.1	270	0.66	0.064 J	25	0.041	29
MW-84-132	05/28/20	N	0.44	1	0.32	88	1	240	0.95	0.06	28	0.035	26
MW-84-132	06/17/20	N	0.53	<1	0.43 J	92	1.1	260	0.054	<0.02	30	0.037	24
MW-84-132	07/22/20	N	0.79	1	<0.1	90	1.2	250	0.029	<0.02	29 J	0.022	28
MW-84-132	08/21/20	N	1.1	2.1	<0.1	88	0.96	230	0.035	0.034	33	0.019	29
MW-84-132	09/29/20	N	1.2	1.3	<0.1	84	0.88 J	250 J	0.08 J	<0.02 J	33 J	0.011	28
MW-84-132	10/20/20	N	1.4	1.5	<0.1 J	79	1.1	250	0.33 J	<0.02	29 J	0.013	23
MW-84-132	12/10/20	N	2	2.1	<0.1	74	1.1	200 J	0.22 J	0.17 J	26	0.0046	28
MW-84-132	02/19/21	N	2.3	2.8	2.4	70	1	200 J	0.053	0.025	31	0.0046	27
MW-84-132	05/24/21	N	2.2	3	<0.1 J	73	0.94	320 J	3.10 J	0.095 J	32 J	0.0067	23
MW-84-132	08/20/21	N	2.6	3.6	<0.1	76	0.83	300	0.047 J	0.026 J	33 J	<0.0005	18
MW-84-132	11/29/21	N	2.4	2.6	<0.1	--	--	--	--	--	--	0.00074	16
MW-84-132	06/06/22	N	1.8	2	--	--	--	--	--	--	--	--	--
MW-84-193	01/27/20	N	43	39	4.9	58	1.8	180	0.16 J	0.037 J	11	0.037	46
MW-84-193	02/19/20	N	63	56	1.5	54	1.9 J	210 J	0.16	0.031 J	11 J	0.019	47
MW-84-193	03/18/20	N	51	43	0.78	50 J	1.7	210	0.12 J	0.044 J	12	0.019	45
MW-84-193	04/22/20	N	62	61	1.2	57	1.6	210	1.70	0.17 J	9.4	0.028	48
MW-84-193	05/22/20	N	42	40	<0.1	55	1.4	160	0.56 J	0.11 J	9.6 J	0.016	50
MW-84-193	06/17/20	N	40	39	5.3 J	57	1.7	190	0.29	<0.02	10	0.0082	49
MW-84-193	07/22/20	N	52	54	1.1	56	1.8	190	0.084	<0.02	10 J	0.0065	55
MW-84-193	08/20/20	N	54 J	48	1.1	54	1.1	190	0.22	0.15 J	13	0.0051	54
MW-84-193	09/29/20	N	48	45	1.5	59	1.8 J	190 J	<0.1 J	<0.02 J	12 J	0.016	54
MW-84-193	10/20/20	N	51	45	2.7 J	49	1.9	190	0.29 J	<0.02	11 J	0.0026	47
MW-84-193	12/10/20	N	74	64	0.81	46	1.6	150 J	0.4 J	<0.02 J	12	0.0019	47
MW-84-193	02/19/21	N	86	87	5.8	47	1.5	150 J	0.093	<0.02	12	0.00085	50
MW-84-193	05/24/21	N	52	49	<0.1 J	49	1.6	230 J	0.05 J	0.07 J	9.7 J	0.0011	51
MW-84-193	08/20/21	N	23	25	<0.1	40	1.5	170	0.057 J	0.021 J	6.3 J	0.0012	50
MW-84-193	11/29/21	N	14	15	2.2	--	--	--	--	--	--	0.082	58
MW-84-193	06/06/22	N	3.9	4.7	--	--	--	--	--	--	--	--	--
MW-85-129	02/18/20	N	150	150	0.79	72 J	0.6	130	0.37 J	0.1	27	0.0034	3.1
MW-85-129	02/18/20	FD	150	150	0.81	72 J	0.59	140	0.41 J	0.084	27	0.0031	2.9
MW-85-129	05/20/20	N	130 J	120	0.51	64	0.42	110	0.34	0.069	27	0.0029	2.7
MW-85-129	08/21/20	N	140	140	0.76	70	0.19	130	0.17	<0.02	29	<0.0005	2.9
MW-85-129	12/09/20	N	140	130	0.56	69	0.47	120	0.1	<0.02	28	<0.0005	3
MW-85-129	02/22/21	N	130	130	0.62	65 J	0.39	120	0.12	0.025 J	24	<0.0005	2.7

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-84-095	11/29/21	N	--	0.86	--	--	--	--	--	--	--	--	1.3
MW-84-095	06/06/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-84-132	01/27/20	N	21	0.76	1,800 J	4.2	53	0.15	3,000	4.2	--	--	0.39
MW-84-132	02/19/20	N	19 J	0.73	1,700	4.8	57	0.05 J	2,700	3.9	--	--	0.47
MW-84-132	03/18/20	N	20	0.76	1,600	4.9	52	<0.1	2,600	3.1	--	--	0.59 J
MW-84-132	04/22/20	N	19	0.95	1,700	6.1	39	<0.1	3,000	3.7	--	--	0.72
MW-84-132	05/28/20	N	22 J	0.82	1,700	6	51	<0.2	2,700	3.5 J	--	--	0.8 J
MW-84-132	06/17/20	N	18	0.88	1,500	5.7	51	<0.2	2,600	3.7	--	--	0.77 J
MW-84-132	07/22/20	N	19 J	0.88	2,000	6.2	50	<0.2	2,700	3.4	--	--	0.84
MW-84-132	08/21/20	N	21	0.95	1,700	6.5	50	<0.2	2,700	3.8	--	--	0.74
MW-84-132	09/29/20	N	16 J	1.1	1,300 J	6.6	52	<0.2	2,500	3.5	--	--	1
MW-84-132	10/20/20	N	23 J	1	1,600	6	51	<0.2	2,700 J	4	--	--	0.83
MW-84-132	12/10/20	N	20	1.1	1,800	7.4	48	<0.2	3,700	3.6	--	--	0.94
MW-84-132	02/19/21	N	19	1.1	1,500	7.6	49	<0.22	2,800	3.9	--	--	1
MW-84-132	05/24/21	N	22 J	1.2	1,500 J	7.5	51	<0.2	2,600	3.7	--	--	0.91
MW-84-132	08/20/21	N	18 J	0.84	1,500 J	8.2	51	<0.2	2,600	3.4	--	--	1.1
MW-84-132	11/29/21	N	--	1.1	--	--	--	--	--	--	--	--	1.1
MW-84-132	06/06/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-84-193	01/27/20	N	32	<2.5	3,200 J	6.7	46	0.07 J	4,100	4.7	--	--	1
MW-84-193	02/19/20	N	30 J	1	2,700	7.5	44	0.03 J	4,000	4.4	--	--	1.1
MW-84-193	03/18/20	N	32	0.89	2,600	6.8	47	<0.1	4,100	3.8	--	--	0.95 J
MW-84-193	04/22/20	N	30	<2.5	2,700	8.1	46	<0.1	4,400	3.4	--	--	1.6
MW-84-193	05/22/20	N	30 J	0.98	3,400 J	8.2	43	<0.2	4,100	5	--	--	0.93
MW-84-193	06/17/20	N	29	1.1	2,600	8.6	45	<0.2	4,100	4.2	--	--	0.99 J
MW-84-193	07/22/20	N	30 J	0.93	3,400	8.8	43	<0.2	4,100	4.1	--	--	1
MW-84-193	08/20/20	N	32	1.1	2,700	9	44	<0.2	4,000	4	--	--	1.1
MW-84-193	09/29/20	N	29 J	1	2,500 J	8.1	45	<0.2	3,900	4.2	--	--	0.89
MW-84-193	10/20/20	N	41 J	0.98	3,400	8	43	<0.2	3,900 J	4.1	--	--	0.95
MW-84-193	12/10/20	N	32	1.1	2,800	8.6	43	<0.2	5,500	4.3	--	--	1.1
MW-84-193	02/19/21	N	30	1.2	2,400	8.7	44	<0.2	4,100	3.6	--	--	1.1
MW-84-193	05/24/21	N	35 J	1.2	2,700 J	9.1	48	<0.2	4,000	4.4	--	--	0.97
MW-84-193	08/20/21	N	28 J	0.95	2,400 J	11	47	<0.2	3,900	3.7	--	--	0.84
MW-84-193	11/29/21	N	--	1.1	--	--	--	--	--	--	--	--	0.93
MW-84-193	06/06/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-85-129	02/18/20	N	11	9.9	280	7.6	160	0.06 J	370	0.52	--	--	17
MW-85-129	02/18/20	FD	11	9.5	290	7.6	160	0.06 J	370	<0.5	--	--	18
MW-85-129	05/20/20	N	10 J	9.6	300	6.8	140	<0.2	380	0.62	--	--	18 J
MW-85-129	08/21/20	N	10	10	270	8.1	160	<0.2	380	0.67	--	--	22
MW-85-129	12/09/20	N	9.1	9.3	230	7.6	150	<0.2	400	0.71	--	--	22
MW-85-129	02/22/21	N	8.9 J	11	290 J	7.3	150	<0.2	400	0.65	--	--	15

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-84-095	11/29/21	N	--	--	--
MW-84-095	06/06/22	N	--	--	--
MW-84-132	01/27/20	N	370	6,000	<10 J
MW-84-132	02/19/20	N	350	5,600	<1 J
MW-84-132	03/18/20	N	340	5,400	<1 J
MW-84-132	04/22/20	N	380	5,700	<1
MW-84-132	05/28/20	N	340	5,800	<1
MW-84-132	06/17/20	N	320	5,700	<1
MW-84-132	07/22/20	N	340	5,700	<1
MW-84-132	08/21/20	N	340	6,100	<1
MW-84-132	09/29/20	N	310	5,400	<1 J
MW-84-132	10/20/20	N	340	5,700	<1
MW-84-132	12/10/20	N	480	5,500	<1
MW-84-132	02/19/21	N	360	5,800	<1
MW-84-132	05/24/21	N	320	5,100	<1
MW-84-132	08/20/21	N	330	5,600	<1
MW-84-132	11/29/21	N	--	--	--
MW-84-132	06/06/22	N	--	--	--
MW-84-193	01/27/20	N	530	8,000	<1 J
MW-84-193	02/19/20	N	550	8,400	<1 J
MW-84-193	03/18/20	N	530	7,800	<1 J
MW-84-193	04/22/20	N	560	8,300	<1
MW-84-193	05/22/20	N	530	8,600	<1
MW-84-193	06/17/20	N	520	8,200	<1
MW-84-193	07/22/20	N	530	8,200	<1
MW-84-193	08/20/20	N	520	8,400	<1
MW-84-193	09/29/20	N	490	8,200	<1 J
MW-84-193	10/20/20	N	510	8,400	<1
MW-84-193	12/10/20	N	740	7,900	<1
MW-84-193	02/19/21	N	530	8,200	<1
MW-84-193	05/24/21	N	510	8,000	<1
MW-84-193	08/20/21	N	530	7,700	<1
MW-84-193	11/29/21	N	--	--	--
MW-84-193	06/06/22	N	--	--	--
MW-85-129	02/18/20	N	220	1,200	<1 J
MW-85-129	02/18/20	FD	220	1,200	<1 J
MW-85-129	05/20/20	N	220	1,300	<1 J
MW-85-129	08/21/20	N	220	1,300	<1
MW-85-129	12/09/20	N	230	1,200	<10
MW-85-129	02/22/21	N	230	1,200	<1

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-85-129	05/21/21	N	120	110	0.32 J	71	0.45	140 J	0.21 J	0.22 J	27 J	<0.0005	2.8
MW-85-129	08/20/21	N	130	130	0.41	56	0.43	110	0.16 J	0.035 J	21 J	<0.0005	4.2
MW-85-129	11/30/21	N	130	140	0.65	--	--	--	--	--	--	<0.0005	5
MW-85-129	06/10/22	N	110	110 J	--	--	--	--	--	--	--	--	--
MW-85-217	02/18/20	N	1,100	1,100	6.5	29 J	2.2	260	0.46 J	0.2	11	0.045	93
MW-85-217	05/20/20	N	870 J	850	1.1	29	1.9	160	1.90	0.025	11	0.032	97
MW-85-217	08/21/20	N	1,100	970	1.9	27	1.8	170	1.10	0.034	12	0.014	100
MW-85-217	12/09/20	N	1,000	930	1.6	27	1.8	170	0.24	<0.02	11	0.0051	100
MW-85-217	02/22/21	N	1,100	37	1.1	25 J	3	290	<0.1	<0.1	14	0.002	95
MW-85-217	05/21/21	N	900	850	<0.1 J	26	2	250 J	1.40 J	0.041 J	10 J	0.0054	95
MW-85-217	08/20/21	N	520	580	<0.1	25	1.7	230	1.10 J	0.032 J	8.7 J	0.0022	81
MW-85-217	11/30/21	N	490	500	<0.1	--	--	--	--	--	--	0.003	86
MW-85-217	06/10/22	N	520	590 J	--	--	--	--	--	--	--	--	--
MW-85-237	02/18/20	N	2,100	1,900	5.5	55 J	2.5	460	0.031 J	0.045	15	0.044	77
MW-85-237	05/20/20	N	1,300 J	1,300	<0.1	49	2.2	250	0.11	0.027	14	0.041	83
MW-85-237	08/21/20	N	2,300	2,200	6.2	50	2.6	340	<0.1	<0.1	19	0.023	86
MW-85-237	12/09/20	N	2,100	2,000	<0.1	47	1.9	280	0.058	<0.02	13	0.0099	86
MW-85-237	02/22/21	N	2,100	2,100	<0.1	47 J	3.4	520	0.31	<0.1	21	0.0093	80
MW-85-237	05/21/21	N	390	370	<0.1 J	43	2.1	290 J	1.20 J	0.055 J	10 J	0.046	98
MW-85-237	08/20/21	N	1,400	1,500	<0.1	44	1.9	350	0.097 J	0.036 J	10 J	0.015	76
MW-85-237	11/30/21	N	240	250	<0.1	--	--	--	--	--	--	0.012	85
MW-85-237	06/10/22	N	1,700	2,200 J	--	--	--	--	--	--	--	--	--
MW-86-030	02/27/20	N	<0.2	<1	5.5	140 J	0.33	83	1.80 J	1.40 J	25	0.31	8.7
MW-86-030	05/28/20	N	<0.2	<1	7.8	92	0.36	42	4.10	0.96	14	0.15	18
MW-86-030	08/25/20	N	<0.2	<1	2.5	98	0.14	83 J	1.70	<0.02	30	0.16	9.2 J
MW-86-030	12/01/20	N	<0.2	<1	3	110	0.19 J	89 J	1.50	0.61 J	31 J	0.34	8.2
MW-86-030	02/24/21	N	<0.2	<1	3.9	120 J	0.29	110	1.10 J	1	34	0.44	7.3
MW-86-030	05/18/21	N	<0.2	<1	5.1 J	99	0.22	87	0.62 J	0.47 J	29 J	0.32	12
MW-86-030	08/18/21	N	<0.2	<1	1.6 J	87	0.28	84 J	0.15 J	0.042 J	29 J	0.063	10
MW-86-030	08/18/21	FD	<0.2	<1	1.7 J	87	0.28	89 J	0.059 J	0.045 J	30 J	0.072	10
MW-86-030	12/14/21	N	<0.2	<1	2.6	95	--	--	--	0.033 J	--	0.42	8
MW-86-030	03/07/22	N	<0.2	--	5.4 J	97	--	--	--	0.36	--	0.26	--
MW-86-030	05/04/22	N	<0.2	<1	8.6	83	--	--	--	0.57 J	--	0.32	--
MW-86-030	08/23/22	N	<0.2	--	2.4 J	110 J	--	--	--	<0.02	--	0.088 J	--
MW-86-066	02/27/20	N	<0.2	<1	1.1	78 J	0.77	210	0.33 J	0.42 J	35	1.10	22
MW-86-066	05/28/20	N	<0.2	<1	1.1	80	0.75	230	0.39	0.39	49	0.76	26
MW-86-066	08/25/20	N	<0.2	<1	0.63	79	0.62	150 J	0.62	0.4	43	0.72	31 J
MW-86-066	12/01/20	N	<0.2	<1	2	100	1.1 J	190 J	0.25	0.23 J	57 J	1	21
MW-86-066	02/24/21	N	<0.2	<1	<0.1	86 J	0.86	240	0.13 J	0.098	46	0.79	25
MW-86-066	02/24/21	FD	<0.2	<1	<0.1	83 J	0.89	240	0.12 J	0.11	48	0.77	25

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-85-129	05/21/21	N	9.9 J	9.6	260 J	7.6	150	<0.2	390	0.62	--	--	18 J
MW-85-129	08/20/21	N	10 J	8.2	250 J	7.5	130	<0.2	380	0.56	--	--	16
MW-85-129	11/30/21	N	--	9.6	--	--	--	--	--	--	--	--	16
MW-85-129	06/10/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-85-217	02/18/20	N	31	6.5	3,500	7	55	0.05 J	3,600	4.8	--	--	6.9
MW-85-217	05/20/20	N	33 J	4.8	3,300	6.2	54	<0.2	3,800	4.1	--	--	5.1 J
MW-85-217	08/21/20	N	30	5.7	2,800	6.7	54	<0.2	3,700	4.8	--	--	7.3
MW-85-217	12/09/20	N	30	5.4	2,200	6.5	54	<0.2	3,700	4.8	--	--	7.1
MW-85-217	02/22/21	N	27 J	6.9	3,100 J	6.6	49	<0.2	3,800	4.7	--	--	5.7
MW-85-217	05/21/21	N	32 J	5	2,500 J	6.7	53	<0.2	3,700	4.6	--	--	5.7 J
MW-85-217	08/20/21	N	27 J	3.9	3,000 J	6.7	51	<0.2	4,000	4.3	--	--	4.5
MW-85-217	11/30/21	N	--	3.4	--	--	--	--	--	--	--	--	2
MW-85-217	06/10/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-85-237	02/18/20	N	38	2.8	4,200	4.1	44	0.05 J	5,700	5	--	--	3.6
MW-85-237	05/20/20	N	44 J	2.6	4,000	4.3	48	<0.2	5,100	3.8	--	--	3.4 J
MW-85-237	08/21/20	N	42	2.8	3,500	4.3	43	<0.2	5,600	4.6	--	--	3.9
MW-85-237	12/09/20	N	43	2.8	3,000	3.8	43	<0.2	5,700	4.5	--	--	4
MW-85-237	02/22/21	N	39 J	2.8	3,800 J	4	41	<0.2	5,800	5.1	--	--	2.8
MW-85-237	05/21/21	N	36 J	2.7	2,500 J	6	54	<0.2	4,400	4.9	--	--	2.7 J
MW-85-237	08/20/21	N	34 J	3	3,900 J	5.3	44	<0.2	5,300	4.5	--	--	3
MW-85-237	11/30/21	N	--	2.4	--	--	--	--	--	--	--	--	1.6
MW-85-237	06/10/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-86-030	02/27/20	N	5.1	<0.5	170	<1	310	1.1	160	1	--	--	<0.1
MW-86-030	05/28/20	N	4.3 J	<0.5	210	2.1	350	1.7	120	3.4 J	--	--	--
MW-86-030	08/25/20	N	5.2 J	0.74	120	<1	230	0.29	130	1	--	--	0.17
MW-86-030	12/01/20	N	5.2 J	<0.5	120	<1	300	0.64	150	1.4	--	--	<0.1
MW-86-030	02/24/21	N	4.9 J	<0.5	180 J	<1	250	0.75	140	1.4	--	--	<0.05
MW-86-030	05/18/21	N	3.6 J	1.1	170 J	<1	300	0.59	130	1.8	--	--	<0.05
MW-86-030	08/18/21	N	4	1.1	220 J	<1	310	0.24	120	1.4	--	--	<0.1
MW-86-030	08/18/21	FD	4.1	0.69	190 J	<1	320	0.23	120	1.4	--	--	<0.1
MW-86-030	12/14/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-86-030	03/07/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-86-030	05/04/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-86-030	08/23/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
MW-86-066	02/27/20	N	12	<0.5	1,500	<1	170	0.11	1,800	2.2	--	--	<0.1
MW-86-066	05/28/20	N	13 J	<0.5	1,200	<1	150	0.24	2,000	2.3 J	--	--	--
MW-86-066	08/25/20	N	12 J	<0.5	950	<1	160	0.21	1,900	2.2	--	--	0.11
MW-86-066	12/01/20	N	14 J	<0.5	1,200	<1	160	<0.2	2,100	2.4	--	--	<0.1
MW-86-066	02/24/21	N	13 J	<0.5	1,000 J	1.3	150	0.33	1,900	2.4	--	--	<0.05
MW-86-066	02/24/21	FD	16 J	<0.5	1,100 J	1.3	150	0.3	1,900	2.3	--	--	<0.05

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-85-129	05/21/21	N	230	1,300	<1
MW-85-129	08/20/21	N	220	1,200	<5
MW-85-129	11/30/21	N	--	--	--
MW-85-129	06/10/22	N	--	--	--
MW-85-217	02/18/20	N	1,000	8,200	<1 J
MW-85-217	05/20/20	N	950	8,800	<1 J
MW-85-217	08/21/20	N	950	8,600	<1
MW-85-217	12/09/20	N	990	7,900	<1
MW-85-217	02/22/21	N	990	8,100	<1
MW-85-217	05/21/21	N	920	8,400	<1
MW-85-217	08/20/21	N	830	7,800	<1
MW-85-217	11/30/21	N	--	--	--
MW-85-217	06/10/22	N	--	--	--
MW-85-237	02/18/20	N	870	11,000	<1 J
MW-85-237	05/20/20	N	850	11,000	<1 J
MW-85-237	08/21/20	N	860	12,000 J	<1
MW-85-237	12/09/20	N	860	11,000	<1
MW-85-237	02/22/21	N	870	11,000	<1
MW-85-237	05/21/21	N	800	9,500	<1
MW-85-237	08/20/21	N	820	10,000	<1
MW-85-237	11/30/21	N	--	--	--
MW-85-237	06/10/22	N	--	--	--
MW-86-030	02/27/20	N	180	860	1.6
MW-86-030	05/28/20	N	120	760	3.4
MW-86-030	08/25/20	N	300	910	1.2
MW-86-030	12/01/20	N	270	900	1.5
MW-86-030	02/24/21	N	260	880	1.3
MW-86-030	05/18/21	N	280	910	1.1
MW-86-030	08/18/21	N	240	870	1.9
MW-86-030	08/18/21	FD	250	860	2.1
MW-86-030	12/14/21	N	--	--	1.5
MW-86-030	03/07/22	N	--	--	1.7
MW-86-030	05/04/22	N	--	--	3.7
MW-86-030	08/23/22	N	--	--	1.7
MW-86-066	02/27/20	N	400	4,200	<1
MW-86-066	05/28/20	N	420	4,400	<10
MW-86-066	08/25/20	N	390	4,300	<10
MW-86-066	12/01/20	N	460	4,300	<1
MW-86-066	02/24/21	N	400	4,000	<1
MW-86-066	02/24/21	FD	400	3,400	<1

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-86-066	05/18/21	N	<0.2	<1	<0.1 J	67	0.75	220	0.22 J	0.16 J	41 J	0.64	28
MW-86-066	05/18/21	FD	<0.2	<1	<0.1 J	67	0.69	210	0.21 J	0.17 J	41 J	0.64	28
MW-86-066	08/18/21	N	<0.2	<1	<0.1 J	76	0.83	230 J	0.034 J	0.021 J	42 J	0.72	22
MW-86-066	12/14/21	N	<0.2	<1	<0.1	91	--	--	--	<0.02 J	--	0.76	16
MW-86-066	03/07/22	N	<0.2	--	<0.1 J	81	--	--	--	0.023	--	0.67	--
MW-86-066	05/04/22	N	<0.2	<1	<0.1	87	--	--	--	0.086 J	--	0.72	--
MW-86-066	08/23/22	N	<0.2	--	<0.1 J	78 J	--	--	--	0.042	--	0.69 J	--
MW-86-120	02/27/20	N	<1	<1	<0.1	63 J	0.89	260	0.18 J	0.11 J	56	0.98	41
MW-86-120	05/28/20	N	<1	<1	1.3	52	0.81	260	0.79	<0.02	67	0.52	37
MW-86-120	08/25/20	N	<1	1	<0.1	51	0.69	180 J	0.24	0.044	67	0.45	41 J
MW-86-120	12/01/20	N	<1	<1	3.1	55	1.1 J	170 J	0.033	0.69 J	66 J	0.62	51
MW-86-120	02/24/21	N	<1	<1	<0.1	47 J	0.95	320	0.18 J	<0.02	68	0.45	35
MW-86-120	05/18/21	N	1.1 J	1.3	<0.1 J	39	0.79	270	0.11 J	0.039 J	57 J	0.25	35
MW-86-120	08/18/21	N	<1	<1	<0.1 J	36	0.93	270 J	0.21 J	0.058 J	52 J	0.26	33
MW-86-120	12/14/21	N	<1	<1	<0.1	42	--	--	--	<0.02 J	--	0.37	33
MW-86-120	03/07/22	N	<1	--	<0.1 J	42	--	--	--	<0.1	--	0.37	--
MW-86-120	05/04/22	N	1.3	1.5	<0.1	37	--	--	--	<0.02 J	--	0.25	--
MW-86-120	08/23/22	N	<1	--	<0.1 J	38 J	--	--	--	<0.02	--	0.3 J	--
MW-86-140	02/27/20	N	<1	1.3	1.4	67 J	0.9	430	0.24 J	0.064 J	58	1.50	44
MW-86-140	05/22/20	N	<1	<1	<0.1	63	0.73	320	0.64 J	0.11 J	51 J	1.40	41
MW-86-140	08/25/20	N	<1	<1	1.4	74	1.1	250 J	0.21	0.14	60	1.10	44 J
MW-86-140	12/01/20	N	<1	<1	0.93	63	1.1 J	350 J	0.066	0.088 J	79 J	1	39
MW-86-140	02/24/21	N	<1	<1	<0.1	56 J	1.2	480	0.16 J	<0.1	69	1	36
MW-86-140	05/18/21	N	<1	<1	<0.1 J	51	0.86	380	0.15 J	0.06 J	50 J	0.69	39
MW-86-140	08/18/21	N	<1	<1	<0.1 J	49	1	350 J	1.20 J	0.53 J	41 J	0.87	31
MW-86-140	12/14/21	N	<1	<1	<0.1	55	--	--	--	<0.02 J	--	0.73	34
MW-86-140	03/07/22	N	<1	--	<0.1 J	50	--	--	--	<0.1	--	0.82	--
MW-86-140	05/04/22	N	<1	<1	<0.1	64	--	--	--	1 J	--	0.89	--
MW-86-140	05/04/22	FD	<1	<1	<0.1	61	--	--	--	1.10 J	--	0.9	--
MW-86-140	08/23/22	N	<1	--	<0.1 J	83 J	--	--	--	0.52	--	0.79 J	--
MW-87-109	01/27/20	N	28	27	0.74	98	0.44	90	1.30 J	1 J	13	0.032	10
MW-87-109	02/25/20	N	24	23	0.6	110	0.4	120	1.70 J	0.055 J	16	0.00074	9.4
MW-87-109	03/18/20	N	26	25	0.62	98 J	0.36	110	0.39 J	0.062 J	16	0.0022	9
MW-87-109	04/23/20	N	20	19	0.54	150	0.41	130	2.60	0.22 J	19	0.0074	7.8
MW-87-109	05/29/20	N	21	22	0.37	130	0.32	120	3.70	0.12	21	0.0049	8.3
MW-87-109	06/15/20	N	22	34	0.48 J	120	0.37	120	1	0.12	18	0.0049	8.6
MW-87-109	07/22/20	N	24	25	0.68	120	0.39	120	2.10	0.12	18 J	0.0072	8.6
MW-87-109	08/26/20	N	27	27	0.53	140	0.61 J	97	0.62 J	0.32 J	19 J	0.0011	8.2
MW-87-109	09/30/20	N	24	25	0.3	140	0.38	120	0.87	0.04 J	20 J	0.00072	8
MW-87-109	10/20/20	N	25	25	0.62 J	140	0.38	110	1.80 J	0.53 J	16 J	0.014	8.3

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MW-86-066	05/18/21	N	10 J	<0.5	1,200 J	1	150	<0.2	1,900	2.5	--	--	0.25
MW-86-066	05/18/21	FD	11 J	<0.5	1,100 J	1	160	<0.2	1,900	2.3	--	--	0.29
MW-86-066	08/18/21	N	12	<0.5	1,300 J	1.6	150	<0.2	2,000	2	--	--	<0.1
MW-86-066	12/14/21	N	--	<0.5	--	--	--	--	--	--	--	--	0.53
MW-86-066	03/07/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-86-066	05/04/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-86-066	08/23/22	N	--	--	--	--	--	--	--	--	0.65	--	--
MW-86-120	02/27/20	N	16	<0.5	3,100	<1	96	0.06 J	3,600	3	--	--	0.29
MW-86-120	05/28/20	N	22 J	<0.5	2,900	1	88	<0.2	3,400	3.1 J	--	--	0.64 J
MW-86-120	08/25/20	N	25 J	<0.5	3,100	1.4	89	<0.2	3,500	3	--	--	0.83
MW-86-120	12/01/20	N	16 J	<0.5	1,900	<1	100	<0.2	3,600	3.4	--	--	0.3
MW-86-120	02/24/21	N	16 J	<0.5	2,700 J	1.3	95	<0.2	3,700	2.9	--	--	0.42
MW-86-120	05/18/21	N	22 J	<0.5	2,400 J	1.2	90	<0.2	3,400	3.2	--	--	1.1
MW-86-120	08/18/21	N	16	<0.5	2,600 J	1.7	87	<0.2	3,500	3.1	--	--	0.67
MW-86-120	12/14/21	N	--	<0.5	--	--	--	--	--	--	--	--	0.41
MW-86-120	03/07/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-86-120	05/04/22	N	--	--	--	--	--	--	--	--	0.91	--	--
MW-86-120	08/23/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-86-140	02/27/20	N	24	<0.5	4,600	<1	79	0.07 J	5,200	2.4	--	--	0.17
MW-86-140	05/22/20	N	24 J	<0.5	3,800 J	<1	67	<0.2	4,900	3.5	--	--	0.48
MW-86-140	08/25/20	N	24 J	0.59	3,900	<1	82	<0.2	4,700	3	--	--	0.52
MW-86-140	12/01/20	N	28 J	<0.5	3,200	<1	74	<0.2	5,300	3.4	--	--	0.58
MW-86-140	02/24/21	N	23 J	<0.5	3,100 J	<1	75	<0.2	5,300	3.6	--	--	0.48
MW-86-140	05/18/21	N	22 J	<0.5	3,900 J	<1	83	<0.2	4,600	3	--	--	0.82
MW-86-140	08/18/21	N	23	<0.5	2,700 J	1.3	97	0.79	4,000	3.1	--	--	0.15
MW-86-140	12/14/21	N	--	<0.5	--	--	--	--	--	--	--	--	0.78
MW-86-140	03/07/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-86-140	05/04/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-86-140	05/04/22	FD	--	--	--	--	--	--	--	--	<0.5	--	--
MW-86-140	08/23/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
MW-87-109	01/27/20	N	7.8	6.8	290	3.2	77	0.06 J	530	2.4	--	--	7.7
MW-87-109	02/25/20	N	9.3 J	5.4	330	3.2	77	0.04 J	570	2.1	--	--	7.8
MW-87-109	03/18/20	N	9	5.9	310	3.1	77	<0.1	530	2.2	--	--	9.4 J
MW-87-109	04/23/20	N	10	4.1	340	2.8	73	0.03 J	680	1.9	--	--	6.3
MW-87-109	05/29/20	N	10	4.6	350	3.1	79	<0.2	680	1.9	--	--	6.9
MW-87-109	06/15/20	N	12 J	4.7	340	3.1	79	<0.2	630	2.2	--	--	7.2 J
MW-87-109	07/22/20	N	9.4 J	4.7	340	3.4	72	<0.2	610	2.1	--	--	7.9
MW-87-109	08/26/20	N	10 J	5.7	340 J	3.6	73	<0.2	610	2.2	--	--	7.9 J
MW-87-109	09/30/20	N	10	5.2 J	340	3.3	68	<0.2	660	2	--	--	7.3
MW-87-109	10/20/20	N	11 J	5.9	350	3.1	73	<0.2	590 J	2.6	--	--	7.6

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-86-066	05/18/21	N	410	4,100	<1
MW-86-066	05/18/21	FD	400	4,000	<1
MW-86-066	08/18/21	N	430	4,600	<1
MW-86-066	12/14/21	N	--	--	<1
MW-86-066	03/07/22	N	--	--	<1
MW-86-066	05/04/22	N	--	--	<1
MW-86-066	08/23/22	N	--	--	<1
MW-86-120	02/27/20	N	1,000	8,600	<1
MW-86-120	05/28/20	N	1,000	8,300	<1
MW-86-120	08/25/20	N	1,000	8,400	<1
MW-86-120	12/01/20	N	1,100	8,400	<1
MW-86-120	02/24/21	N	1,000	8,300	<1
MW-86-120	05/18/21	N	1,000	8,100	<1
MW-86-120	08/18/21	N	1,000	8,200	<1
MW-86-120	12/14/21	N	--	--	<1
MW-86-120	03/07/22	N	--	--	<1
MW-86-120	05/04/22	N	--	--	<1
MW-86-120	08/23/22	N	--	--	<20
MW-86-140	02/27/20	N	1,000	12,000	<1
MW-86-140	05/22/20	N	950	11,000	<1
MW-86-140	08/25/20	N	930	11,000 J	<1
MW-86-140	12/01/20	N	1,000	11,000	<1
MW-86-140	02/24/21	N	960	11,000	<1
MW-86-140	05/18/21	N	920	10,000	<1
MW-86-140	08/18/21	N	840	8,600	<1
MW-86-140	12/14/21	N	--	--	<1
MW-86-140	03/07/22	N	--	--	<1
MW-86-140	05/04/22	N	--	--	<1
MW-86-140	05/04/22	FD	--	--	<1
MW-86-140	08/23/22	N	--	--	<1
MW-87-109	01/27/20	N	180	1,300	<1 J
MW-87-109	02/25/20	N	170	1,400	<1
MW-87-109	03/18/20	N	170	1,400	<1 J
MW-87-109	04/23/20	N	170	1,600	<1
MW-87-109	05/29/20	N	170	1,800	<1
MW-87-109	06/15/20	N	160	1,600	<1
MW-87-109	07/22/20	N	160	1,600	<1
MW-87-109	08/26/20	N	160	1,600	<1 J
MW-87-109	09/30/20	N	160	1,800	<1
MW-87-109	10/20/20	N	170	1,500	<1

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-87-109	12/17/20	N	28	27	0.43	120	0.23	120	1	<0.02	16 J	0.0044	8.3
MW-87-109	02/25/21	N	24	24	0.32	150	0.34	130	1.60 J	<0.02	18	0.0016	7.7
MW-87-109	05/20/21	N	33 J	32	0.4	120	0.33	140	0.13 J	<0.02	17 J	<0.0005	8
MW-87-109	08/23/21	N	27	28	<0.1	120	0.32	120	0.24 J	0.039 J	17 J	0.00092	6.8
MW-87-109	11/30/21	N	18	20	<0.1	--	--	--	--	--	--	<0.0005	5.5
MW-87-109	06/08/22	N	26	26	--	--	--	--	--	--	--	--	--
MW-87-139	01/27/20	N	9.5	8.3	<0.1	270	0.68	370	0.038 J	<0.02	66	0.0072	4.4
MW-87-139	02/18/20	N	6.6	6	<0.1	260 J	<0.5	410	<0.1	<0.1	67	0.0072	5.4
MW-87-139	03/18/20	N	7.3	6.3	<0.1	250 J	0.63	430	0.035 J	<0.02	77	0.0027	4.7
MW-87-139	04/23/20	N	4.8	4.2	<0.1	250	0.8	430	0.85	0.068 J	72	0.037	5.2
MW-87-139	05/29/20	N	6.2	6.8	0.42	170	0.33	220	0.69	0.08	49	0.013	9.9
MW-87-139	06/15/20	N	6.6	6.5	<0.1 J	250	0.6	410	0.12	0.09	73	0.0021	5.1
MW-87-139	07/22/20	N	5.9	6.5	<0.1	260	0.63	410	1.20	0.051	72 J	0.034	5.4
MW-87-139	08/26/20	N	9.7	9.4	<0.1	280	0.64 J	330	0.89 J	0.24 J	91 J	<0.0005	5.2
MW-87-139	09/30/20	N	9.9	10	<0.1	270	0.64	400	0.16	0.04 J	83 J	0.0011	4.9
MW-87-139	10/20/20	N	<0.2	1.3	0.34 J	200	0.45	280	0.35 J	0.2 J	49 J	0.33	2.9
MW-87-139	12/17/20	N	10	9.9	<0.1	250	0.65	430	0.17	0.078	74 J	0.0041	4.7
MW-87-139	02/26/21	N	9.5	9.4	<0.1	280	0.64	370	0.059 J	<0.02	79	<0.0005	4.7
MW-87-139	05/20/21	N	12 J	11	<0.1	260	0.47	570	0.099 J	<0.02	80 J	<0.0005	4.2
MW-87-139	08/23/21	N	11	11	<0.1	260	0.44	490	0.14 J	0.026 J	74 J	0.0032	3.9
MW-87-139	11/30/21	N	9.8	9.9	<0.1	--	--	--	--	--	--	<0.0005	4.7
MW-87-139	06/08/22	N	8.7	8.5	--	--	--	--	--	--	--	--	--
MW-87-192	01/27/20	N	0.44	<1	<0.1	91	1.3	220	0.59 J	0.35 J	24	0.046	27
MW-87-192	02/18/20	N	0.58	<1	<0.1	95 J	1.4	310	0.14 J	0.049	28	0.026	26
MW-87-192	03/18/20	N	0.57	<1	<0.1	87 J	1.1	260	0.04 J	0.089 J	27	0.03	26
MW-87-192	04/22/20	N	0.76	<1	<0.1	90	1.1	260	0.082	0.021 J	24	0.016	25
MW-87-192	05/29/20	N	0.66	<1	<0.1	90	1.1	220	0.035	<0.02	30	0.014	25
MW-87-192	06/17/20	N	0.54	<1	<0.1 J	92	1.2	240	0.091	<0.02	25	0.017	26
MW-87-192	07/22/20	N	0.75	1.2	<0.1	93	1.2	240	0.056	<0.02	26 J	0.015	27
MW-87-192	08/26/20	N	1	1.1	<0.1	85	1.3 J	180	0.075 J	0.027 J	31 J	0.011	25
MW-87-192	09/30/20	N	0.77	1.2	<0.1	84	1.4	220	0.18	0.039 J	29 J	0.0064	27
MW-87-192	10/20/20	N	0.87	<1	<0.1 J	82	1.1	230	0.43 J	0.17 J	24 J	0.0086	25
MW-87-192	12/17/20	N	1.1	1.3	<0.1	69	1.2	260	0.021	<0.02	26 J	0.0033	26
MW-87-192	02/26/21	N	1.1	1.4	<0.1	72	1.3	200	0.04 J	0.033	29	0.0015	26
MW-87-192	05/20/21	N	1.5 J	1.5	<0.1	71	1.1	290	0.09 J	0.059	28 J	<0.0005	23
MW-87-192	08/23/21	N	1.4	2.1	<0.1	73	0.97	260	0.061 J	0.045 J	25 J	<0.0005	20
MW-87-192	11/30/21	N	1.7	2.2	<0.1	--	--	--	--	--	--	<0.0005	22
MW-87-192	06/08/22	N	1.2	1.3	--	--	--	--	--	--	--	--	--
MW-87-275	01/27/20	N	<1	<1	3.8	76	1.5	230	<0.02 J	<0.02	19	0.02	42
MW-87-275	02/18/20	N	<1	<1	0.79	83 J	1.6	300	0.071 J	<0.02	21	0.0092	41

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-87-109	12/17/20	N	8.8 J	5.3	320	3.4	74	0.35	580	2.3	--	--	8.5
MW-87-109	02/25/21	N	12 J	4.5	340 J	3.2	71	<0.2	710	2.3	--	--	7.3
MW-87-109	05/20/21	N	11 J	5.2	330 J	3.4	74	<0.2	610	2.6	--	--	6.3
MW-87-109	08/23/21	N	10 J	4.1	290	3.5	71	<0.2	610	2.3	--	--	8.5
MW-87-109	11/30/21	N	--	2.9	--	--	--	--	--	--	--	--	5.1
MW-87-109	06/08/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-87-139	01/27/20	N	16	0.89	800 J	3.2	49	0.06 J	2,200	2.6	--	--	1.2
MW-87-139	02/18/20	N	17	0.86	1,200	3.7	48	0.07 J	2,200	2.7	--	--	1.1
MW-87-139	03/18/20	N	16	0.85	950	3	48	<0.1	2,200	2.3	--	--	1.1 J
MW-87-139	04/23/20	N	16	0.9	1,000	3.1	46	0.33	2,500	2.5	--	--	1.3
MW-87-139	05/29/20	N	30	0.59	740	5.5	92	<0.2	1,500	2.1	--	--	1.2
MW-87-139	06/15/20	N	16 J	0.92	990	3.3	50	<0.2	2,400	2.6	--	--	1.2 J
MW-87-139	07/22/20	N	16 J	0.9	940	3.4	46	<0.2	2,300	2.5	--	--	1.4
MW-87-139	08/26/20	N	18 J	0.98	1,200 J	3.9	47	<0.2	2,200	2.4	--	--	1.2 J
MW-87-139	09/30/20	N	17	0.95 J	1,000	3.7	48	<0.2	2,200	2.6	--	--	1.2
MW-87-139	10/20/20	N	35 J	<0.5	550	<1	120	0.44	1,400 J	2.1	--	--	0.11
MW-87-139	12/17/20	N	16 J	0.72	960	3.8	50	0.3	2,100	2.3	--	--	1.2
MW-87-139	02/26/21	N	19 J	0.87	1,000	3.2	44	<0.2	2,300	2.7	--	--	1.3
MW-87-139	05/20/21	N	20 J	0.88	860 J	3.2	46	<0.2	2,100	2.8	--	--	1.1
MW-87-139	08/23/21	N	19 J	0.71	680	3.7	49	<0.2	2,200	2.4	--	--	1.3
MW-87-139	11/30/21	N	--	1.1	--	--	--	--	--	--	--	--	1.3
MW-87-139	06/08/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-87-192	01/27/20	N	18	0.96	2,000 J	5.7	50	0.05 J	2,800	3.9	--	--	0.66
MW-87-192	02/18/20	N	19	0.94	1,900	6.5	49	0.05 J	2,700	3.7	--	--	0.79
MW-87-192	03/18/20	N	18	1	1,700	5.7	47	<0.1	2,800	3.1	--	--	0.73 J
MW-87-192	04/22/20	N	16	1.2	1,700	6.5	44	<0.1	2,800	3	--	--	0.88
MW-87-192	05/29/20	N	18	1.1	1,700	6.4	45	<0.2	2,700	3.4	--	--	0.7
MW-87-192	06/17/20	N	16	0.93	1,600	6.3	50	<0.2	2,800	3.7	--	--	0.7 J
MW-87-192	07/22/20	N	17 J	1.1	1,900	6.7	48	<0.2	2,700	3.6	--	--	0.78
MW-87-192	08/26/20	N	22 J	1	2,400 J	6.7	48	<0.2	2,600	3.3	--	--	0.86 J
MW-87-192	09/30/20	N	18	1.8 J	1,700	6.8	47	<0.2	2,700	3.7	--	--	0.87
MW-87-192	10/20/20	N	23 J	1.1	2,000	6.4	55	<0.2	2,800 J	3.7	--	--	0.81
MW-87-192	12/17/20	N	17 J	1.1	1,600	7.1	47	<0.2	2,700	3.1	--	--	0.94
MW-87-192	02/26/21	N	16 J	1.1	1,900	7.3	44	<0.2	2,800	3.7	--	--	0.94
MW-87-192	05/20/21	N	21 J	1.1	1,600 J	7.5	47	<0.2	2,600	4	--	--	0.98
MW-87-192	08/23/21	N	21 J	2.6	1,500	8.2	48	<0.2	2,700	3.5	--	--	1
MW-87-192	11/30/21	N	--	1.3	--	--	--	--	--	--	--	--	1.1
MW-87-192	06/08/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-87-275	01/27/20	N	24	1	2,700 J	4	44	0.04 J	3,500	4.5	--	--	0.77
MW-87-275	02/18/20	N	23	0.85	2,300	4.2	22	0.05 J	3,400	4.4	--	--	0.59

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-87-109	12/17/20	N	170	1,400	<1
MW-87-109	02/25/21	N	170	1,500	<1
MW-87-109	05/20/21	N	170	1,400	<10
MW-87-109	08/23/21	N	170	1,600	<1
MW-87-109	11/30/21	N	--	--	--
MW-87-109	06/08/22	N	--	--	--
MW-87-139	01/27/20	N	330	5,000	<1
MW-87-139	02/18/20	N	350	5,100	<1 J
MW-87-139	03/18/20	N	340	4,900	<1 J
MW-87-139	04/23/20	N	360	5,000	<1
MW-87-139	05/29/20	N	250	3,600	<1
MW-87-139	06/15/20	N	340	5,400	<1
MW-87-139	07/22/20	N	350	5,500	<1
MW-87-139	08/26/20	N	350	5,800	<1 J
MW-87-139	09/30/20	N	340	5,400	<1
MW-87-139	10/20/20	N	220	3,700	<1
MW-87-139	12/17/20	N	350	4,700	<1
MW-87-139	02/26/21	N	340	4,200	<1
MW-87-139	05/20/21	N	340	4,400	<1
MW-87-139	08/23/21	N	360	5,400	<1
MW-87-139	11/30/21	N	--	--	--
MW-87-139	06/08/22	N	--	--	--
MW-87-192	01/27/20	N	340	5,500	<1
MW-87-192	02/18/20	N	340	5,700	<1 J
MW-87-192	03/18/20	N	340	5,700	<1 J
MW-87-192	04/22/20	N	350	5,400	<1
MW-87-192	05/29/20	N	330	5,700	<1
MW-87-192	06/17/20	N	340	6,200	<1
MW-87-192	07/22/20	N	340	5,800	<1
MW-87-192	08/26/20	N	330	5,900	<1 J
MW-87-192	09/30/20	N	340	5,700	<1
MW-87-192	10/20/20	N	340	5,700	<1
MW-87-192	12/17/20	N	340	5,300	<1
MW-87-192	02/26/21	N	340	5,400	<1
MW-87-192	05/20/21	N	330	5,100	<1
MW-87-192	08/23/21	N	330	5,700	<1
MW-87-192	11/30/21	N	--	--	--
MW-87-192	06/08/22	N	--	--	--
MW-87-275	01/27/20	N	430	7,100	<1
MW-87-275	02/18/20	N	450	6,800	<1 J

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-87-275	03/18/20	N	<1	<1	<0.1	71 J	1.6	280	0.039 J	0.15 J	23	0.093	41
MW-87-275	04/22/20	N	<1	<1	<0.1	72	1.4	270	0.16	0.066 J	19	0.0069	43
MW-87-275	05/29/20	N	<1	<1	<0.1	70	1.7	300	0.11	<0.1	28	0.017	42
MW-87-275	06/17/20	N	0.86	1.1	3.7 J	70	1.5	240	0.13	<0.02	20	0.0062	43
MW-87-275	07/22/20	N	0.85	1.1	<0.1	74	1.6	240	0.1	<0.02	20 J	0.021	47
MW-87-275	07/22/20	FD	<1	1.1	<0.1	74	1.6	240	0.06	<0.02	20 J	0.023	45
MW-87-275	08/26/20	N	<1	1	<0.1	79	1.4 J	180	0.14 J	0.052 J	23 J	0.026	48
MW-87-275	08/26/20	FD	<1	<1	<0.1	81	1.4 J	180	0.13 J	<0.02	23 J	0.026	48
MW-87-275	09/30/20	N	<1	<1	<0.1	71	1.5	230	0.12 J	<0.02 J	22 J	0.023	46
MW-87-275	09/30/20	FD	<1	<1	<0.1	71	1.4	230	0.17 J	0.095 J	21 J	0.023	45
MW-87-275	10/20/20	N	0.95	1.1	0.82 J	66	1.4	230	0.13 J	<0.02	19 J	0.0042	41
MW-87-275	10/20/20	FD	0.93	1.1	0.96 J	64	1.5	230	0.3 J	<0.02	20 J	0.0044	42
MW-87-275	12/17/20	N	1.1	1.3	<0.1	61	1.5	270	0.029	<0.02	21 J	0.003	45
MW-87-275	02/26/21	N	1	1.5	<0.1	60	1.6	200	0.063 J	0.061	23	0.00061	43
MW-87-275	05/20/21	N	1.1 J	1.2	<0.1	60	1.4	290	0.02 J	<0.02	20 J	0.0072	44
MW-87-275	08/23/21	N	<1	1.5	<0.1	58	1.3	270	0.21 J	0.025 J	19 J	0.028	41
MW-87-275	11/30/21	N	1.3	1.8	<0.1	--	--	--	--	--	--	<0.0005	43
MW-87-275	06/08/22	N	<1	1.2	--	--	--	--	--	--	--	--	--
MW-88-107	01/29/20	N	49	50	1.6	55	0.5	72	0.2	0.034 J	12 J	0.015	12
MW-88-107	02/25/20	N	59	54	1.5	53	0.43	70	0.29 J	0.044 J	9.6	0.015	10
MW-88-107	05/28/20	N	69	70	1.5	57	0.41	77	0.27	<0.02	12	0.0077	10
MW-88-107	08/19/20	N	76	75	1.6	51	0.5	67 J	1.50	0.095 J	11	0.009	11
MW-88-107	12/10/20	N	89	88	1.9	47	0.3	61 J	0.26 J	0.088 J	9.3	0.0027	8.7
MW-88-107	02/24/21	N	81	80	1.6	54 J	0.49	75	0.42 J	0.021	12	0.00074	9.2
MW-88-107	05/19/21	N	120	110	1.5	51	0.4	95	0.076 J	0.024	12 J	0.00066	8.7
MW-88-107	08/20/21	N	120	130	3.8 J	50	0.42	100	0.17 J	0.024 J	14 J	<0.0005	9.4
MW-88-107	08/20/21	FD	120	130	1 J	50	0.42	100	0.22 J	0.072 J	14 J	<0.0005	9.3
MW-88-107	12/08/21	N	130	140	1.7	--	--	--	--	--	--	0.002 J	--
MW-88-107	06/08/22	N	94	92	--	--	--	--	--	--	--	--	--
MW-89-183	02/19/20	N	0.89	1.7	<0.1	180	0.79 J	400 J	0.23	0.078 J	66 J	0.0021	7.8
MW-89-183	05/20/20	N	0.76 J	<1	<0.1	160	0.72	270	1.40	0.052	65	0.004	10
MW-89-183	08/19/20	N	0.83	1.3	<0.1	150	0.73	290 J	0.52	0.048 J	64	0.0019	9.5
MW-89-183	12/10/20	N	0.72	1.1	<0.1	130	0.66	300 J	0.38 J	0.075 J	66	0.016	8.1
MW-89-183	02/24/21	N	0.64	2.1	<0.1	150 J	0.78	420	0.87 J	0.072	75	0.0071	7.4
MW-89-183	05/19/21	N	1	1.4	<0.1	120	0.79	400	0.1 J	<0.02	59 J	<0.0005	9.7
MW-89-183	08/25/21	N	0.93	1.5	<0.1	130	0.63	310	0.32 J	0.031 J	48	<0.0005 J	8.3
MW-89-183	12/06/21	N	0.98	1.2 J	<0.1	--	--	--	--	--	--	<0.0005 J	7
MW-89-183	06/16/22	N	1	1.1	--	--	--	--	--	--	--	--	--
MW-89-273	02/19/20	N	0.86	1.7	4	32	1.4 J	140 J	0.15	0.058 J	7.9 J	0.0017	43
MW-89-273	05/20/20	N	0.58 J	1.9	3.3	36	1.2	100	2.80	0.057	8.6	0.0039	42

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-87-275	03/18/20	N	23	0.66	2,200	3.3	43	<0.1	3,600	4.2	--	--	0.59 J
MW-87-275	04/22/20	N	22	1	2,300	3.9	29	<0.1	3,600	4.1	--	--	0.69
MW-87-275	05/29/20	N	26	0.82	2,400	3.9	42	<0.2	3,500	4.7	--	--	0.73
MW-87-275	06/17/20	N	22	1.1	2,300	4.2	46	<0.2	3,500	4	--	--	0.7 J
MW-87-275	07/22/20	N	20 J	0.9	1,900	4.3	42	<0.2	3,400	4.4	--	--	0.77
MW-87-275	07/22/20	FD	21 J	0.92	2,700	4.2	40	<0.2	3,400	4.5	--	--	0.82
MW-87-275	08/26/20	N	27 J	0.87	2,800 J	4.4	48	<0.2	3,400	4.2	--	--	0.67 J
MW-87-275	08/26/20	FD	24 J	0.94	2,200 J	4.3	45	<0.2	3,400	4	--	--	0.69 J
MW-87-275	09/30/20	N	24	2.3 J	2,300	4.3	44	<0.2	3,400	4.3	--	--	0.74
MW-87-275	09/30/20	FD	22	1.3 J	2,100	4.3	45	<0.2	3,500	3.7	--	--	0.64
MW-87-275	10/20/20	N	27 J	1	2,400	3.9	44	<0.2	3,400 J	4.1	--	--	0.78
MW-87-275	10/20/20	FD	28 J	0.97	2,400	3.9	47	<0.2	3,400 J	4.3	--	--	0.73
MW-87-275	12/17/20	N	22 J	1	2,000	4.5	46	<0.2	3,400	4.3	--	--	0.83
MW-87-275	02/26/21	N	20 J	1	2,100	4.1	39	<0.2	3,300	4	--	--	0.8
MW-87-275	05/20/21	N	26 J	0.91	2,100 J	4.6	45	<0.2	3,400	4.6	--	--	0.79
MW-87-275	08/23/21	N	19 J	0.72	1,800	5.1	47	<0.2	3,700	4.1	--	--	0.76
MW-87-275	11/30/21	N	--	1.1	--	--	--	--	--	--	--	--	1
MW-87-275	06/08/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-88-107	01/29/20	N	10	4.4	300	8.6	140	<0.1	350	0.96	--	--	9.1
MW-88-107	02/25/20	N	9.6 J	4.4	290	9.9	140	0.05 J	360	0.81	--	--	10
MW-88-107	05/28/20	N	10 J	4	310	8.6	140	<0.2	380	1 J	--	--	10 J
MW-88-107	08/19/20	N	9.6	4	310	9	140	<0.2	360	1.1	--	--	11 J
MW-88-107	12/10/20	N	9.4	4.5	260	13	140	<0.2	350	1.1	--	--	11
MW-88-107	02/24/21	N	9 J	3.9	290 J	12	130	<0.2	380	1.2	--	--	10
MW-88-107	05/19/21	N	11 J	4.3	280	11	130	<0.2	420	1.1	--	--	11
MW-88-107	08/20/21	N	13 J	3.8	330 J	14	130	<0.2	490	1	--	--	12
MW-88-107	08/20/21	FD	14 J	4.4	270 J	13	120	<0.2	490	1	--	--	12
MW-88-107	12/08/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-88-107	06/08/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-89-183	02/19/20	N	15 J	1.9	1,100	3.1	55	0.08 J	2,100	2.9	--	--	2.2
MW-89-183	05/20/20	N	16 J	2.7	990	3.5	50	<0.2	2,100	3.4	--	--	2.6
MW-89-183	08/19/20	N	15	2.7	1,200	4	51	<0.2	2,100	3	--	--	3.3 J
MW-89-183	12/10/20	N	15	2.4	1,100	3.6	51	<0.2	2,100	3.6	--	--	2.8
MW-89-183	02/24/21	N	14 J	2.2	1,500 J	3.6	53	<0.2	2,100	3.4	--	--	2.6
MW-89-183	05/19/21	N	16 J	3.1	1,100	3.9	53	<0.2	2,000	3.8	--	--	2.9
MW-89-183	08/25/21	N	21 J	2.8	1,300	4.3	50	<0.2	2,100	3.2	--	--	2.7 J
MW-89-183	12/06/21	N	--	2.5	--	--	--	--	--	--	--	--	2.8
MW-89-183	06/16/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-89-273	02/19/20	N	17 J	3.3	1,500	13	63	0.06 J	2,000	4.8	--	--	2.9
MW-89-273	05/20/20	N	23 J	3.5	1,600	14	58	<0.2	2,100	4.5	--	--	2.1 J

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-87-275	03/18/20	N	460	7,400	<1 J
MW-87-275	04/22/20	N	470	7,300	<1
MW-87-275	05/29/20	N	450	8,000	<1
MW-87-275	06/17/20	N	440	7,600	<50
MW-87-275	07/22/20	N	440	7,700	<1
MW-87-275	07/22/20	FD	440	7,600	<1
MW-87-275	08/26/20	N	430	7,700	<1 J
MW-87-275	08/26/20	FD	430	7,500	<1 J
MW-87-275	09/30/20	N	440	7,800	<50
MW-87-275	09/30/20	FD	440	7,400	<1
MW-87-275	10/20/20	N	440	7,600	<1
MW-87-275	10/20/20	FD	440	7,400	<1
MW-87-275	12/17/20	N	440	7,300	<1
MW-87-275	02/26/21	N	430	6,400	<1
MW-87-275	05/20/21	N	460	7,100	<1
MW-87-275	08/23/21	N	460	7,500	<1
MW-87-275	11/30/21	N	--	--	--
MW-87-275	06/08/22	N	--	--	--
MW-88-107	01/29/20	N	170	1,000	<1
MW-88-107	02/25/20	N	170	1,100	<1
MW-88-107	05/28/20	N	180	1,100	<1
MW-88-107	08/19/20	N	170	1,100	<1
MW-88-107	12/10/20	N	170	1,100	<1
MW-88-107	02/24/21	N	170	1,100	<1
MW-88-107	05/19/21	N	180	1,200	<1
MW-88-107	08/20/21	N	200	1,300	<1
MW-88-107	08/20/21	FD	200	1,300	<1
MW-88-107	12/08/21	N	--	--	--
MW-88-107	06/08/22	N	--	--	--
MW-89-183	02/19/20	N	460	4,700	<1 J
MW-89-183	05/20/20	N	490	5,100	<10 J
MW-89-183	08/19/20	N	480	5,200	<1
MW-89-183	12/10/20	N	500	4,300	<1
MW-89-183	02/24/21	N	480	4,400	<1
MW-89-183	05/19/21	N	490	4,400	<1
MW-89-183	08/25/21	N	490	5,000	<1
MW-89-183	12/06/21	N	--	--	--
MW-89-183	06/16/22	N	--	--	--
MW-89-273	02/19/20	N	470	4,400	<1 J
MW-89-273	05/20/20	N	490	4,500	<1 J

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-89-273	08/19/20	N	0.61	1	3.5	32	1.2	100 J	0.03	0.025 J	8.6	<0.0005	39
MW-89-273	12/10/20	N	0.47	<1	3.3	30	1.1	100 J	0.52 J	0.064 J	8.8	0.0008	35
MW-89-273	02/24/21	N	0.43	<1	3.1	31 J	1.2	140	0.72 J	<0.02	8.2	0.00084	36
MW-89-273	05/19/21	N	0.58	<1	3	29	1.1	150	0.045 J	<0.02	7.7 J	0.00058	34
MW-89-273	08/25/21	N	0.51	<1	1.2	32	0.92	120	0.08 J	0.064 J	6.1	<0.0005 J	33
MW-89-273	12/06/21	N	0.52	1.4 J	3.5	--	--	--	--	--	--	0.0018 J	32
MW-89-273	06/16/22	N	0.58	1.1	--	--	--	--	--	--	--	--	--
MW-90-031	02/25/20	N	<1	1.6	<0.1	120	2.1	360	9.30 J	9.70 J	250	0.35	16
MW-90-031	05/26/20	N	<1	<1	3.7 J	97	1.4	300	8.80 J	8.80 J	220 J	0.3	14 J
MW-90-031	08/18/20	N	<1	<1	<0.1	100	1.5	210	11 J	6.90 J	180 J	0.3	16
MW-90-031	12/02/20	N	<1	<1	3.7	110	3.4 J	270 J	10	9.80 J	280 J	0.32	17
MW-90-031	02/17/21	N	<1	<1	<0.1	100	1.5	240	8.70 J	8.90 J	250	0.3	16
MW-90-031	05/25/21	N	<1	<1	<0.1 J	88	1.7	520 J	8 J	8.80 J	250 J	0.26	16
MW-90-031	08/18/21	N	<1	<1	<0.1 J	73	1.7	350 J	6.70 J	7.10 J	190 J	0.27	13
MW-90-031	12/08/21	N	<1	<1	<0.1	97	--	--	--	7	--	0.25	18
MW-90-031	03/04/22	N	<1	--	<0.1	97	--	--	--	3.60	--	0.24	--
MW-90-031	05/05/22	N	<1	<1	<0.1	87	--	--	--	6.20	--	0.25	--
MW-90-031	08/19/22	N	<1	--	<0.1	110	--	--	--	7.80	--	0.063 J	--
MW-91-045	01/28/20	N	<0.2	<1	3.6 J	320 J	0.54	85 B	0.45	0.27 J	32 J	0.27 J	9.8 J
MW-91-045	02/26/20	N	<0.2	<1	5.4	200 J	0.61	65	0.41 J	0.14 J	20	0.17	9.8
MW-91-045	05/19/20	N	<0.2	<1	6.1	150	0.43	45	0.71 J	0.13 J	15	0.12	10
MW-91-045	05/19/20	FD	<0.2	<1	5.8	140	0.46	48	2.50 J	0.073 J	16	0.12	10
MW-91-045	08/20/20	N	<0.2 J	<1	6.1	200	0.52	68	0.19	0.12 J	27	0.19	8.9
MW-91-045	12/08/20	N	<0.2	<1	6.9	150	0.6	46	0.68 J	0.095 J	17	0.14	9.1
MW-91-045	02/23/21	N	<0.2	<1	6.4	120	0.44	40 J	0.13	0.038 J	13 J	0.11	7.5
MW-91-045	05/26/21	N	<0.2	<1	6.5	100	0.59	37	0.49 J	<0.02	13 J	0.088	9.2 J
MW-91-045	06/08/21	N	<0.2	<10	<10	96	--	42	--	--	13.5	<0.1	<20
MW-91-045	08/24/21	N	<0.2	<1	5.1	110	0.44	36	0.51 J	<0.02 J	13	0.089 J	9.4
MW-91-045	12/14/21	N	<0.2	<1	7 J	--	--	--	--	--	--	0.144	<10 J
MW-91-045	06/15/22	N	<0.2	<1	--	--	--	--	--	--	--	--	--
MW-91-120	01/28/20	N	4.4	6.8	1 J	36 J	1.1	210 B	0.46	0.083 J	26 J	0.26 J	16 J
MW-91-120	02/26/20	N	<0.2	<1	<0.1	35 J	1.4	230	0.82 J	0.068 J	38	0.48	23
MW-91-120	05/19/20	N	<0.2	2	<0.1	43	1.1	220	0.94 J	0.076 J	80	1.40	26
MW-91-120	08/20/20	N	<0.2	<1	<0.1	41	1.2	200	0.058	<0.02 J	100	1.80	32
MW-91-120	12/08/20	N	2.3	2.4	<0.1	33	1.1	190	0.055 J	<0.02	56	0.35	14
MW-91-120	02/23/21	N	<0.2	1.8	<0.1	31	1	230 J	0.27	0.054 J	37 J	0.24	21
MW-91-120	05/26/21	N	<0.2	<1	<0.1	33	1.3	180	1.10 J	<0.02	87 J	1.10	23 J
MW-91-120	06/08/21	N	<1	<10	<10	31.5	--	203	--	--	82.8	1.13	<20
MW-91-120	08/24/21	N	<0.2	<1	<0.1	33	0.94	190	0.064 J	<0.02 J	67	1 J	25
MW-91-120	12/14/21	N	7.67	<10	<10	--	--	--	--	--	--	0.162	<100 J

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-89-273	08/19/20	N	18	3.9	1,600	17	55	<0.2	2,100	4.6	--	--	2.8 J
MW-89-273	12/10/20	N	18	3.5	1,400	16	57	<0.2	2,100	5.1	--	--	3
MW-89-273	02/24/21	N	18 J	3.5	1,200 J	16	57	<0.2	2,100	5.6	--	--	2.7
MW-89-273	05/19/21	N	17 J	3.6	1,600	16	62	<0.2	2,100	5	--	--	2.8
MW-89-273	08/25/21	N	26 J	3.7	1,600	17	59	<0.2	2,100	4.8	--	--	2.8 J
MW-89-273	12/06/21	N	--	3.7	--	--	--	--	--	--	--	--	2.7
MW-89-273	06/16/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-90-031	02/25/20	N	19 J	0.68	3,600	2.2	820	8.9	4,400	1.6	--	--	0.082
MW-90-031	05/26/20	N	17 J	<0.5	3,600	1.9	830	9.7	3,900	1.7	--	--	0.14
MW-90-031	08/18/20	N	16	0.56	2,900	2.3	810	9.4	3,900	1.7	--	--	0.094
MW-90-031	12/02/20	N	17 J	0.58	2,600	2.2	870	10	4,100	2.1	--	--	<0.1
MW-90-031	02/17/21	N	17 J	<0.5	3,400	2.3	910	13	4,600	1.7	--	--	0.11
MW-90-031	05/25/21	N	23 J	<0.5	2,300 J	2.1	840	9	3,400	1.5	--	--	<0.05
MW-90-031	08/18/21	N	16	<0.5	2,900 J	2.8	820	9.2	3,300	1.6	--	--	<0.1
MW-90-031	12/08/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
MW-90-031	03/04/22	N	--	--	--	--	--	--	--	--	0.66	--	--
MW-90-031	05/05/22	N	--	--	--	--	--	--	--	--	<0.5	--	<0.1
MW-90-031	08/19/22	N	--	--	--	--	--	--	--	--	<0.5	--	<0.1
MW-91-045	01/28/20	N	8.5 J	<0.5	480	<1	180	0.16	810	2.7	--	--	0.17
MW-91-045	02/26/20	N	7 J	<0.5	440	<1	170	<0.1	610	2.9	--	--	0.1
MW-91-045	05/19/20	N	7.3 J	<0.5	440	<1	160	<0.2	470	2.7	--	--	<0.05
MW-91-045	05/19/20	FD	6.9 J	<0.5	450	<1	150	<0.2	470	2.7	--	--	<0.05
MW-91-045	08/20/20	N	6.9	<0.5	410	<1	170	<0.2	580	2.6	--	--	<0.05
MW-91-045	12/08/20	N	4.1	<0.5	300 J	1.5	160	<0.2	450	3	--	--	0.53
MW-91-045	02/23/21	N	4.2 J	0.82	330	2	150	<0.2	390	3.2	--	--	0.44
MW-91-045	05/26/21	N	4.3 J	<0.5	290	1.7	150	<0.2	350	3.5	--	--	0.19
MW-91-045	06/08/21	N	4.03	<10	285	<10	--	--	391	2.81	--	--	<0.1
MW-91-045	08/24/21	N	5.5 J	<0.5	310	2.1	150	<0.2	360	3.2	--	--	0.19
MW-91-045	12/14/21	N	--	<10 J	--	--	--	--	--	--	0.303	--	--
MW-91-045	06/15/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-91-120	01/28/20	N	13 J	0.99	2,400	<1	130	0.11	3,000	2.4	--	--	1.8
MW-91-120	02/26/20	N	11 J	<0.5	2,000	<1	150	<0.1	2,900	2	--	--	0.54
MW-91-120	05/19/20	N	15 J	<0.5	2,500	1.3	170	<0.2	2,700	2.3	--	--	0.66
MW-91-120	08/20/20	N	15	<0.5	1,900	2	170	<0.2	2,600	2.4	--	--	0.82
MW-91-120	12/08/20	N	14	<0.5	1,800 J	<1	140	<0.2	2,900	2.2	--	--	1.2
MW-91-120	02/23/21	N	13 J	<0.5	2,300	<1	140	<0.22	3,000	2.4	--	--	0.89
MW-91-120	05/26/21	N	14 J	<0.5	1,900	2.1	160	<0.2	2,600	2.7	--	--	1.2
MW-91-120	06/08/21	N	11.2	<10	1,840	<10	--	--	3,180	1.41	--	--	1.16
MW-91-120	08/24/21	N	18 J	<0.5	2,100	1.7	150	<0.2	2,600	2.5	--	--	0.83
MW-91-120	12/14/21	N	--	<100 J	--	--	--	--	--	--	1.3	--	--

Appendix B
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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-89-273	08/19/20	N	480	4,600	<1
MW-89-273	12/10/20	N	490	4,500	<1
MW-89-273	02/24/21	N	480	4,500	<1
MW-89-273	05/19/21	N	480	4,200	<1
MW-89-273	08/25/21	N	460	4,300	<1
MW-89-273	12/06/21	N	--	--	--
MW-89-273	06/16/22	N	--	--	--
MW-90-031	02/25/20	N	1,600	11,000	1.7
MW-90-031	05/26/20	N	1,500	10,000	1.5
MW-90-031	08/18/20	N	1,500	9,900	1.7
MW-90-031	12/02/20	N	1,600	9,800	2
MW-90-031	02/17/21	N	1,700	10,000	1.7
MW-90-031	05/25/21	N	1,500	8,600	<20
MW-90-031	08/18/21	N	1,500	8,200	2.5
MW-90-031	12/08/21	N	--	--	1.8
MW-90-031	03/04/22	N	--	--	1.8
MW-90-031	05/05/22	N	--	--	2
MW-90-031	08/19/22	N	--	--	2.2
MW-91-045	01/28/20	N	120	1,700	<1 J
MW-91-045	02/26/20	N	140	1,400	<1
MW-91-045	05/19/20	N	130	1,200	<1
MW-91-045	05/19/20	FD	130	1,200	<1
MW-91-045	08/20/20	N	120	1,400	<1
MW-91-045	12/08/20	N	110	1,100	<1
MW-91-045	02/23/21	N	110	960	<1
MW-91-045	05/26/21	N	100	890	<1
MW-91-045	06/08/21	N	113	986	--
MW-91-045	08/24/21	N	100	910	<1
MW-91-045	12/14/21	N	--	--	--
MW-91-045	06/15/22	N	--	--	--
MW-91-120	01/28/20	N	770	6,400	<1 J
MW-91-120	02/26/20	N	890	7,200	<1
MW-91-120	05/19/20	N	910	7,000	<1
MW-91-120	08/20/20	N	880	6,600	<1
MW-91-120	12/08/20	N	850	6,700	<1
MW-91-120	02/23/21	N	850	7,100	<1
MW-91-120	05/26/21	N	850	5,800	<1
MW-91-120	06/08/21	N	869	4,820	--
MW-91-120	08/24/21	N	850	6,500	<1
MW-91-120	12/14/21	N	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-91-120	06/15/22	N	<0.2	<10	--	--	--	--	--	--	--	--	--
MW-91-170	01/28/20	N	1.3	1.8	3.5 J	64 J	1.3	120 B	0.13	0.16 J	5.4 J	0.2 J	190 J
MW-91-170	02/26/20	N	<1	3.6	<0.1	55 J	1.7	140	0.48 J	0.24 J	4.6	0.14	180
MW-91-170	02/26/20	FD	<1	3.4	<0.1	56 J	1.6	130	0.73 J	0.22 J	4.2	0.14	180
MW-91-170	05/19/20	N	<0.2	<1	<0.1	67	1.2	130	0.26 J	0.061 J	5.8	0.27	120
MW-91-170	08/20/20	N	<0.2	<1	<0.1	66	1.3	130	0.057	<0.02 J	7.5	0.28	110
MW-91-170	12/08/20	N	2.1	2.5	<0.1	62	1.4	120	0.071 J	0.026 J	6.3	0.26	170
MW-91-170	02/23/21	N	1.6	2	<0.1	48	2.4	200 J	0.51	<0.1	6.8 J	0.14	180
MW-91-170	05/26/21	N	<1	<1	<0.1	55	1.6	130	1.60 J	0.041	6.3 J	0.31	110 J
MW-91-170	06/08/21	N	<1	<10	<10	51.9	--	161	--	--	6.72	0.261	80.5
MW-91-170	08/24/21	N	<1	<1	<0.1	55	1	150	0.14 J	0.2 J	5.1	0.27 J	94
MW-91-170	12/14/21	N	1.66	<10	<10	--	--	--	--	--	--	0.256	130 J
MW-91-170	06/15/22	N	<0.2	<10	--	--	--	--	--	--	--	--	--
MW-91-320	01/28/20	N	<1	<1	<0.5 J	190 J	3.2	310 B	0.55	0.53 J	27 J	0.78 J	39 J
MW-91-320	02/26/20	N	<1	3.1	3.1	160 J	3.6	350	0.82 J	0.59 J	24	0.8	39
MW-91-320	05/19/20	N	<1	<1	<0.5	130	3	390	0.73 J	0.53 J	22	1	43
MW-91-320	08/20/20	N	<1	<1	6.4	120	4.4	300	0.99	1 J	25	0.98	51
MW-91-320	12/08/20	N	<0.2	<1	5.2	91	4	370	0.81 J	0.8 J	29	0.9	54
MW-91-320	02/23/21	N	<1	<1	6.2	77	4.4	480 J	0.93	0.81 J	29 J	0.96	56
MW-91-320	05/26/21	N	<1	<1	<0.1	72	4.7	370	1.90 J	2	28 J	1.70	46 J
MW-91-320	06/08/21	N	<2	<10	<10	69.1	--	421	--	--	24.1	1.89	41.4
MW-91-320	08/24/21	N	<1	<1	<0.1	77	2.5	410	0.77 J	0.66 J	13	1.50 J	60
MW-91-320	12/14/21	N	<2	<10	<10	--	--	--	--	--	--	1.42	<100 J
MW-91-320	06/15/22	N	<0.2	<10	--	--	--	--	--	--	--	--	--
MW-92-037	01/28/20	N	<0.2	<1	21 J	14 J	0.54	8.1 B	0.34	0.057 J	1.2 J	0.0074 J	14 J
MW-92-037	02/26/20	N	<1	<1	22	18 J	0.61	7.5	0.33 J	0.053 J	1.1	0.0068	14
MW-92-037	05/19/20	N	0.25	<1	21	22	0.43	7.6	0.19 J	0.045 J	0.99	0.0094	15
MW-92-037	08/20/20	N	<0.2	<1	25	35	0.59	8.9	0.44	0.056 J	1.3	0.013	17
MW-92-037	12/08/20	N	<0.2	<1	22	60	0.58	9.5	0.14 J	0.032 J	1.3	0.02	16
MW-92-037	02/23/21	N	<0.2	<1	21	53	0.55	10 J	0.091	<0.02	1.4 J	0.027	16
MW-92-037	05/26/21	N	0.5	<1	12	99	0.71	19	0.15 J	0.045	2.8 J	0.057	26 J
MW-92-037	05/26/21	FD	0.49	<1	12	97	0.82	19	0.2 J	0.042	3.2 J	0.057	25 J
MW-92-037	06/08/21	N	<0.2	<10	13.7 J	75.9	--	18.8	--	--	2.8	<0.1	<20
MW-92-037	08/24/21	N	0.21	<1	19	45	0.51	8.9	0.069 J	0.041 J	1.3	0.022 J	16
MW-92-037	12/14/21	N	<0.2	<1	22.2 J	--	--	--	--	--	--	0.0327	12.9 J
MW-92-037	06/15/22	N	<0.2	<1	--	--	--	--	--	--	--	--	--
MW-92-072	01/28/20	N	<0.2	<1	17 J	60 J	0.64	15 B	0.079	0.089 J	1.4 J	0.014 J	20 J
MW-92-072	01/28/20	FD	<0.2	<1	17 J	62 J	0.66	15 B	0.085	0.094 J	1.5 J	0.015 J	20 J
MW-92-072	02/26/20	N	<0.2	<1	18	54 J	0.75	17	0.11 J	0.027 J	1.3	0.013	21
MW-92-072	05/19/20	N	<0.2	<1	17	53	0.56	14	0.08 J	0.04 J	1.2	0.011 J	22

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-91-120	06/15/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-91-170	01/28/20	N	17 J	<2.5	3,200	<1	43	0.08 J	3,900	6	--	--	0.85
MW-91-170	02/26/20	N	16 J	0.81	3,400	1.1	40	<0.1	3,700	5.4	--	--	0.93
MW-91-170	02/26/20	FD	16 J	0.78	3,300	1	41	<0.1	3,800	5.5	--	--	0.84
MW-91-170	05/19/20	N	17 J	<0.5	3,600	<1	51	0.21	3,600	4.2	--	--	0.39
MW-91-170	08/20/20	N	16	<0.5	2,200	<1	55	<0.2	3,400	4.2	--	--	0.39
MW-91-170	12/08/20	N	20	<0.5	2,500 J	<1	47	<0.2	3,800	5	--	--	0.72
MW-91-170	02/23/21	N	14 J	0.95	2,900	1.4	42	<0.2	3,800	5.8	--	--	1.3
MW-91-170	05/26/21	N	16 J	0.56	2,400	1.1	52	<0.2	3,500	4.1	--	--	0.78
MW-91-170	06/08/21	N	13.2	<10	2,550	<10	--	--	3,970	2.84	--	--	0.857
MW-91-170	08/24/21	N	24 J	<0.5	2,900	1.1	55	<0.2	3,500	3.9	--	--	0.2
MW-91-170	12/14/21	N	--	<100 J	--	--	--	--	--	--	0.655	--	--
MW-91-170	06/15/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-91-320	01/28/20	N	64 J	<2.5	7,600	<1	75	0.2	11,000	6.9	--	--	<0.05
MW-91-320	02/26/20	N	78 J	<2.5	10,000	<1	69	<0.1	11,000	5.2	--	--	<0.1
MW-91-320	05/19/20	N	79 J	<2.5	9,200	<1	70	0.31	10,000	3.7	--	--	0.21
MW-91-320	08/20/20	N	76	<0.5	7,300	<1	64	0.27	10,000	4.9	--	--	<0.05
MW-91-320	12/08/20	N	78	<0.5	6,400 J	<1	61	0.26	11,000	5.1	--	--	<0.05
MW-91-320	02/23/21	N	75 J	<0.5	8,500	<1	53	0.3	11,000	4.5	--	--	0.059
MW-91-320	05/26/21	N	76 J	<0.5	8,400	<1	100	0.27	10,000	4.8	--	--	<0.05
MW-91-320	06/08/21	N	61.5	<10	7,310	<10	--	--	11,900	2.28	--	--	<0.5
MW-91-320	08/24/21	N	89 J	<0.5	7,900	<1	66	0.27	12,000	2.9	--	--	<0.1
MW-91-320	12/14/21	N	--	<100 J	--	--	--	--	--	--	<2	--	--
MW-91-320	06/15/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-92-037	01/28/20	N	4.1 J	<0.5	290	<1	130	0.07 J	370	4.2	--	--	<0.05
MW-92-037	02/26/20	N	5 J	<0.5	300	<1	120	<0.1	360	4.1	--	--	<0.1
MW-92-037	05/19/20	N	5.1 J	<0.5	390	<1	110	<0.2	340	4.1	--	--	<0.05
MW-92-037	08/20/20	N	5.2	<0.5	310	<1	130	0.22	350	4.4	--	--	<0.05
MW-92-037	12/08/20	N	3.6	<0.5	300 J	<1	120	<0.2	390	4.1	--	--	0.067
MW-92-037	02/23/21	N	4.2 J	<0.5	340	<1	140	<0.2	370	4.8	--	--	<0.05
MW-92-037	05/26/21	N	4.5 J	<2.5	480	1.2	270	0.38	460	7.5	--	--	<0.05
MW-92-037	05/26/21	FD	4.3 J	<0.5	440	1.2	270	0.37	460	7.4	--	--	<0.05
MW-92-037	06/08/21	N	3.33	<10	429	<10	--	--	494	6.18	--	--	<0.1
MW-92-037	08/24/21	N	5 J	<0.5	330	<1	140	0.24	330	4.4	--	--	<0.1
MW-92-037	12/14/21	N	--	<10 J	--	--	--	--	--	--	<0.1	--	--
MW-92-037	06/15/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-92-072	01/28/20	N	8.1 J	0.61	410	7	110	0.06 J	560	4.8	--	--	0.68
MW-92-072	01/28/20	FD	7.8 J	0.56	410	6.7	120	0.05 J	570	4.8	--	--	0.67
MW-92-072	02/26/20	N	8.9 J	0.58	460	6.4	120	<0.1	540	4.7	--	--	0.65
MW-92-072	05/19/20	N	9.2 J	0.57	450	6.7	120	<0.2	530	4.7	--	--	0.65 J

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-91-120	06/15/22	N	--	--	--
MW-91-170	01/28/20	N	640	8,000	<1 J
MW-91-170	02/26/20	N	620	7,700	<1
MW-91-170	02/26/20	FD	640	7,900	<1
MW-91-170	05/19/20	N	600	8,000	<1
MW-91-170	08/20/20	N	580	7,600	<1
MW-91-170	12/08/20	N	630	7,700	<1
MW-91-170	02/23/21	N	630	8,200	<1
MW-91-170	05/26/21	N	590	7,200	<1
MW-91-170	06/08/21	N	618	6,660	--
MW-91-170	08/24/21	N	590	7,500	<1
MW-91-170	12/14/21	N	--	--	--
MW-91-170	06/15/22	N	--	--	--
MW-91-320	01/28/20	N	1,400	19,000 J	<20 J
MW-91-320	02/26/20	N	1,500	19,000 J	<1
MW-91-320	05/19/20	N	1,600	20,000	<1
MW-91-320	08/20/20	N	1,600	19,000	<1
MW-91-320	12/08/20	N	1,600	20,000	<1
MW-91-320	02/23/21	N	1,800	21,000	<1
MW-91-320	05/26/21	N	1,700	19,000	<1
MW-91-320	06/08/21	N	1,870	17,200	--
MW-91-320	08/24/21	N	1,800	19,000	<1
MW-91-320	12/14/21	N	--	--	--
MW-91-320	06/15/22	N	--	--	--
MW-92-037	01/28/20	N	81	870	<1 J
MW-92-037	02/26/20	N	83	870	<10
MW-92-037	05/19/20	N	94	870	<10
MW-92-037	08/20/20	N	81	870	<10
MW-92-037	12/08/20	N	83	930	<1
MW-92-037	02/23/21	N	89	890	<10
MW-92-037	05/26/21	N	120	1,300	<1
MW-92-037	05/26/21	FD	120	1,300	<1
MW-92-037	06/08/21	N	111	1,310	--
MW-92-037	08/24/21	N	80	810	<5
MW-92-037	12/14/21	N	--	--	--
MW-92-037	06/15/22	N	--	--	--
MW-92-072	01/28/20	N	95	1,200	<1 J
MW-92-072	01/28/20	FD	95	1,200	<1 J
MW-92-072	02/26/20	N	94	1,200	<1
MW-92-072	05/19/20	N	95	1,200	<1

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-92-072	05/19/20	FD	<0.2	<1	17	55	0.54	14	0.068 J	0.068 J	1.2	0.017 J	22
MW-92-072	08/20/20	N	<0.2	<1	19	60	0.91	16	0.11	0.058 J	1.7	0.012	24
MW-92-072	12/08/20	N	<0.2	<1	17	71	0.69	15	0.035 J	<0.02	1.5	0.016	21
MW-92-072	02/23/21	N	<0.2	<1	17	69	0.57	16 J	0.03	0.022 J	1.4 J	0.017	21
MW-92-072	05/26/21	N	<0.2	<1	16	65	0.72	16	0.026 J	<0.02	1.5 J	0.014	22 J
MW-92-072	06/08/21	N	<0.2	<10	17.6 J	63.3	--	19.5	--	--	1.54	<0.1	<20
MW-92-072	08/24/21	N	<0.2	<1	16	72	0.59	16	0.032 J	<0.02 J	1.4	0.014 J	23
MW-92-072	12/14/21	N	<0.2	<1	17.1 J	--	--	--	--	--	--	0.0194	19 J
MW-92-072	06/15/22	N	<0.2	<1	--	--	--	--	--	--	--	--	--
MW-92-102	01/28/20	N	<0.2	<1	9.9 J	120 J	0.91	17 B	0.058	0.03 J	1.6 J	0.0096 J	42 J
MW-92-102	02/26/20	N	<0.2	<1	10	110 J	1.1	22	0.31 J	0.087 J	1.5	0.0084	41
MW-92-102	05/19/20	N	<0.2	<1	9.4	110	0.83	20	0.19 J	0.033 J	1.8	0.01	42
MW-92-102	08/20/20	N	<0.2	<1	10	120	0.98	19	0.31	0.031 J	1.8	0.0097	47
MW-92-102	12/08/20	N	1.3	1.4	18	100	1	15	0.18 J	0.03 J	1.3	0.0067	46
MW-92-102	02/23/21	N	2.9	2.9	15	95	0.81	18 J	0.038	0.033 J	1.2 J	0.0051	42
MW-92-102	05/26/21	N	0.3	<1	13	86	1.1	18	0.05 J	0.058	1.5 J	0.01	48 J
MW-92-102	06/08/21	N	<0.2	<10	11.6 J	74.7	--	22.2	--	--	1.53	<0.1	38.1
MW-92-102	06/08/21	FD	<0.2	<10	11.1 J	76.2	--	22	--	--	1.55	<0.1	37.4
MW-92-102	08/24/21	N	1	1.3	0.55 J	4.8 J	0.77	16	<0.02 J	<0.02 J	1.1	<0.0005 J	1.5 J
MW-92-102	08/24/21	FD	1	1.1	14 J	85 J	0.77	17	0.043 J	<0.02 J	1.2	0.005 J	45 J
MW-92-102	12/14/21	N	4.85	5.18 J	18.7 J	--	--	--	--	--	--	<0.01	33.3 J
MW-92-102	06/15/22	N	3.93	3.87	--	--	--	--	--	--	--	--	--
MW-92-122	01/28/20	N	<1	<1	4.6 J	92 J	3.5	59 B	0.25	0.28 J	5.4 J	0.19 J	210 J
MW-92-122	02/26/20	N	<1	<1	4.4	91 J	3.2	71	0.44 J	0.14 J	3.9	0.2	220
MW-92-122	05/19/20	N	<1	<1	1.9	93	2.6	65	0.33 J	0.27 J	4.7	0.15	230
MW-92-122	08/20/20	N	<1	3.8	3.8	96	2.9	76	2.40	0.27 J	7	0.17	230
MW-92-122	12/08/20	N	<1	<1	5.3	88	2.4	55	0.49 J	0.14 J	4.8	0.13	230
MW-92-122	02/23/21	N	<1	<1	3.1	93	3.8	85 J	0.66	0.2 J	6.2 J	0.14	200
MW-92-122	05/26/21	N	<1	<1	2.3	96	3.3	60	0.23 J	0.19	4.5 J	0.17	200 J
MW-92-122	06/08/21	N	<1	<10	<10	98.1	--	80	--	--	4.76	0.188	174
MW-92-122	08/24/21	N	<1	<1	<0.1	100	2.4	77	0.16 J	0.16 J	3.5	0.19 J	210
MW-92-122	12/14/21	N	<1	<10	10.4 J	--	--	--	--	--	--	0.188	180 J
MW-92-122	06/15/22	N	<0.2	<10	--	--	--	--	--	--	--	--	--
MW-93-050	06/03/20	N	0.29	<1	--	--	--	--	--	--	--	--	--
MW-93-050	06/18/20	N	2.2	2.4	0.71 J	42	0.62	91	0.65 J	0.12	27 J	0.59	38
MW-93-050	07/21/20	N	0.81	1	<0.1 J	65	0.58	130	0.18	<0.02 J	33	0.17	27
MW-93-050	08/19/20	N	3.2 J	3.2	<0.1	70	0.54	130 J	0.48	<0.02	38	0.038	25
MW-93-050	09/29/20	N	3.5	3.6	<0.1	70	0.51 J	140 J	0.21 J	0.072 J	37 J	0.0024	24
MW-93-050	10/21/20	N	4.5	4.5	1.2	66	0.73	130 J	0.11	0.06	33	0.0049	25
MW-93-050	11/16/20	N	6.3	6.2 J	<0.1	53	1	110 J	1	<0.02	32	0.0051	28

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-92-072	05/19/20	FD	9.4 J	<0.5	450	6.7	120	<0.2	520	4.4	--	--	0.37 J
MW-92-072	08/20/20	N	9.7	0.61	450	7.7	120	<0.2	540	4.9	--	--	0.44
MW-92-072	12/08/20	N	8.5	0.7	380 J	7.4	110	<0.2	600	4.6	--	--	0.77
MW-92-072	02/23/21	N	8.8 J	0.8	420	8.3	110	<0.2	570	5.2	--	--	0.57
MW-92-072	05/26/21	N	8.7 J	<0.5	450	6.1	120	<0.2	570	5.3	--	--	0.1
MW-92-072	06/08/21	N	8.45	<10	456	<10	--	--	615	4.41	--	--	<0.1
MW-92-072	08/24/21	N	14 J	<0.5	540	7.2	120	<0.2	580	4.5	--	--	0.26
MW-92-072	12/14/21	N	--	<10 J	--	--	--	--	--	--	0.469	--	--
MW-92-072	06/15/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-92-102	01/28/20	N	10 J	0.57	700	5.1	110	0.05 J	1,000	5.6	--	--	0.49
MW-92-102	02/26/20	N	12 J	<0.5	820	5.2	110	<0.1	1,000	5.4	--	--	0.42
MW-92-102	05/19/20	N	13 J	<0.5	840	3	120	<0.2	1,000	5.1	--	--	0.1
MW-92-102	08/20/20	N	12	<0.5	760	6.2	110	<0.2	1,000	5.3	--	--	0.27
MW-92-102	12/08/20	N	11	0.74	660 J	13	120	<0.2	1,000	5.7	--	--	0.95
MW-92-102	02/23/21	N	10 J	0.82	770	13	120	<0.2	960	6	--	--	0.76
MW-92-102	05/26/21	N	10 J	<0.5	710	7.3	120	0.28	930	6	--	--	0.2
MW-92-102	06/08/21	N	9.88	<10	706	<10	--	--	1,060	5.09	--	--	0.238
MW-92-102	06/08/21	FD	9.89	<10	695	<10	--	--	1,080	5	--	--	<0.1
MW-92-102	08/24/21	N	11 J	<0.5	560	1 J	110	<0.2	950	5.6	--	--	0.84
MW-92-102	08/24/21	FD	13 J	0.77	700	12 J	130	<0.2	940	5.4	--	--	0.86
MW-92-102	12/14/21	N	--	<10 J	--	--	--	--	--	--	1.23	--	--
MW-92-102	06/15/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-92-122	01/28/20	N	31 J	<2.5	4,000	<1	84	0.05 J	4,800	7.5	--	--	0.062
MW-92-122	02/26/20	N	30 J	<0.5	3,300	<1	91	<0.1	4,700	7	--	--	<0.1
MW-92-122	05/19/20	N	37 J	<0.5	4,300	<1	110	<0.2	4,500	6.7	--	--	<0.05
MW-92-122	08/20/20	N	36	<0.5	3,200	<1	97	<0.2	4,800	7	--	--	<0.05
MW-92-122	12/08/20	N	41	<0.5	2,900 J	<1	91	<0.2	5,000	7.5	--	--	0.069
MW-92-122	02/23/21	N	34 J	<0.5	3,800	<1	100	0.25	4,800	7.8	--	--	<0.05
MW-92-122	05/26/21	N	28 J	<0.5	3,200	<1	120	0.34	4,600	7.6	--	--	<0.05
MW-92-122	06/08/21	N	30.4	<10	3,270	<10	--	--	5,100	5.18	--	--	<0.2
MW-92-122	08/24/21	N	46 J	<0.5	4,400	<1	110	0.2	4,700	6.6	--	--	<0.1
MW-92-122	12/14/21	N	--	<100 J	--	--	--	--	--	--	<0.5	--	--
MW-92-122	06/15/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-93-050	06/03/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-93-050	06/18/20	N	9	1.6	580	1.7	130	<0.2	990	2.6	--	--	1.6 J
MW-93-050	07/21/20	N	11 J	1.2	790	1.5	110	<0.2	1,300	2.5	--	--	1.3 J
MW-93-050	08/19/20	N	11	1.3	840	2	100	<0.2	1,300	2.4	--	--	2.1 J
MW-93-050	09/29/20	N	7.6 J	1.5	690 J	2.2	100	<0.2	1,300	2.3	--	--	2
MW-93-050	10/21/20	N	14	1.7	830	2.3	110	<0.2	1,200	2.2	--	--	2.1
MW-93-050	11/16/20	N	11	1.8	680	2.1	110	<0.2	1,200	2.4	--	--	2.3

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-92-072	05/19/20	FD	94	1,200	<1
MW-92-072	08/20/20	N	97	1,200	<1
MW-92-072	12/08/20	N	100	1,300	<1
MW-92-072	02/23/21	N	97	1,200	<1
MW-92-072	05/26/21	N	98	1,200	<1
MW-92-072	06/08/21	N	106	1,300	--
MW-92-072	08/24/21	N	100	1,200	<1
MW-92-072	12/14/21	N	--	--	--
MW-92-072	06/15/22	N	--	--	--
MW-92-102	01/28/20	N	130	2,100	<1 J
MW-92-102	02/26/20	N	140	2,100	<1
MW-92-102	05/19/20	N	130	2,100	<1
MW-92-102	08/20/20	N	130	2,100	<1
MW-92-102	12/08/20	N	130	2,000	<1
MW-92-102	02/23/21	N	130	1,900	<1
MW-92-102	05/26/21	N	130	1,800	<1
MW-92-102	06/08/21	N	132	2,090	--
MW-92-102	06/08/21	FD	133	2,000	--
MW-92-102	08/24/21	N	130	1,900	<1
MW-92-102	08/24/21	FD	130	1,900	<1
MW-92-102	12/14/21	N	--	--	--
MW-92-102	06/15/22	N	--	--	--
MW-92-122	01/28/20	N	350	9,400	<1 J
MW-92-122	02/26/20	N	360	8,900	<1
MW-92-122	05/19/20	N	370	9,400	<1
MW-92-122	08/20/20	N	380	9,600	<1
MW-92-122	12/08/20	N	380	8,700	<1
MW-92-122	02/23/21	N	380	8,300	<1
MW-92-122	05/26/21	N	390	8,700	<1
MW-92-122	06/08/21	N	412	8,720	--
MW-92-122	08/24/21	N	410	8,500	<1
MW-92-122	12/14/21	N	--	--	--
MW-92-122	06/15/22	N	--	--	--
MW-93-050	06/03/20	N	--	--	--
MW-93-050	06/18/20	N	210	2,200	<1
MW-93-050	07/21/20	N	220	2,800	<1
MW-93-050	08/19/20	N	220	3,000	<1
MW-93-050	09/29/20	N	210	3,000	<1 J
MW-93-050	10/21/20	N	210	2,700	<1 J
MW-93-050	11/16/20	N	200	2,500	<1 J

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-93-050	12/09/20	N	7.9	7.4	<0.1	59	0.82	130	0.14	<0.02	31	0.0033	26
MW-93-050	02/15/21	N	8.3	8	<0.1 J	60	0.5	100	0.51 J	0.026	29 J	0.0055 J	23 J
MW-93-050	05/18/21	N	12 J	11	<0.1 J	54	0.49	120	0.24 J	<0.02 J	28 J	<0.0005	30
MW-93-050	08/19/21	N	12	13	<0.1	58 J	0.5	140 J	0.18 J	0.046	35 J	0.0015	22
MW-93-050	12/13/21	N	17	19	<0.1	--	--	--	--	--	--	0.0053	--
MW-93-050	06/23/22	N	19	18	--	--	--	--	--	--	--	--	--
MW-93-213	06/04/20	N	<1	<1	--	--	--	--	--	--	--	--	--
MW-93-213	06/18/20	N	<1	<1	4.4 J	99	1	230	2.60 J	0.41	43 J	0.85	89
MW-93-213	07/21/20	N	<1	<1	<0.1 J	110	1.1	280	0.43	0.095 J	52	1	80
MW-93-213	08/19/20	N	<1	2.6	<0.1	96	1.8	350 J	4.90	0.88 J	56	0.83	77
MW-93-213	09/29/20	N	<1	<1	0.62	90	0.65 J	130 J	0.59 J	0.36 J	40 J	0.84	99
MW-93-213	10/21/20	N	4.3	4.6	1	69	1.3	260 J	0.13	0.048	57	0.42	71
MW-93-213	11/16/20	N	2	2.8 J	<0.1	64	1.4	270 J	1.10	0.057 J	65	0.33	68
MW-93-213	12/09/20	N	8.3	7.8	<0.1	56	0.85	260	0.59	<0.02	60	0.17	68
MW-93-213	02/15/21	N	4.7	5.8	<0.1 J	50	0.8	230	0.59 J	0.066	59 J	0.14 J	69 J
MW-93-213	02/15/21	FD	4.7	5.6	<0.1 J	53	0.78	240	0.39 J	0.095	59 J	0.15 J	70 J
MW-93-213	05/18/21	N	<1	<1	<0.1 J	55	0.92	260	0.11 J	0.025 J	40 J	0.33	71
MW-93-213	08/19/21	N	<1	1.5	<0.1	55 J	0.84	320 J	0.13 J	0.025	55 J	0.25	66
MW-93-213	12/13/21	N	4.7	6.8	<0.1	--	--	--	--	--	--	0.14	--
MW-93-213	06/23/22	N	<1	1.6	--	--	--	--	--	--	--	--	--
MW-95-113	06/10/20	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-95-113	06/18/20	N	0.32	<1	0.62 J	38	0.28	97	0.8 J	0.097	26 J	0.22	9
MW-95-113	07/21/20	N	0.44	1.2	0.59 J	40	0.26	100	0.19	0.049 J	26	0.049	6.4
MW-95-113	08/19/20	N	0.76	1.8	0.71	42	0.31	96 J	2.80	0.66 J	27	0.04	4.9
MW-95-113	09/30/20	N	1.4	1.6	0.51	42	0.31	100	2.10	0.11 J	30 J	0.019	4.5
MW-95-113	10/20/20	N	1.4	2.1	0.87 J	40	0.25	89	0.95 J	0.9 J	23 J	0.017	3.9
MW-95-113	11/18/20	N	1.6	1.7 J	0.93	39	0.37	88 J	0.75	0.12 J	27	0.0024	4.6
MW-95-113	12/15/20	N	<0.2	<1	1.1	35	0.17	72 J	3.50 J	0.12 J	22	0.13	6.4
MW-95-113	02/25/21	N	1.6	1.6	0.84	42	0.23	94	3 J	<0.02	23	0.019	4.2
MW-95-113	05/19/21	N	0.82	1.6	2.2	46	0.22	110	1 J	0.18	26 J	0.25	4.1
MW-95-113	08/25/21	N	2.1	2.3	0.97	44	0.24	80	0.82 J	0.031 J	21	0.018 J	4
MW-95-113	12/08/21	N	0.95	2.5	1.4	--	--	--	--	--	--	0.13 J	4.3
MW-95-113	06/22/22	N	3.5	3.7	--	--	--	--	--	--	--	--	--
MW-95-157	06/09/20	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-95-157	06/25/20	N	0.63	16	<0.1	230	0.6	310	5	0.27	70	1.10	14
MW-95-157	07/21/20	N	2.3	2.6	<0.1 J	150	0.6	300	0.2	<0.02 J	67	0.16	8.5
MW-95-157	08/19/20	N	4.2 J	4	<0.1	120	0.67	250 J	0.66	0.027 J	72	0.087	7.4
MW-95-157	09/30/20	N	4.1	4.8	<0.1	110	0.64	270	0.076	0.044 J	72 J	0.038	6.8
MW-95-157	10/20/20	N	<0.2	<1	1.4 J	260	0.61	240	0.77 J	0.32 J	61 J	1	4.7
MW-95-157	11/18/20	N	<0.2	1.7 J	1.3	300	0.68 J	200 J	0.033	0.36 J	64	1.10	3.5 J

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-93-050	12/09/20	N	6.8	1.4	610	2.6	100	<0.2	1,300	2.5	--	--	2
MW-93-050	02/15/21	N	8.7 J	1.4	690 J	2.7	93	<0.22	1,300	2.6	--	--	2.2
MW-93-050	05/18/21	N	8.2 J	1.6	500 J	2.8	110	<0.2	1,100	3.1	--	--	2.6
MW-93-050	08/19/21	N	9.5	1.5	580 J	2.8	100	<0.2	1,300	2.8	--	--	2.6
MW-93-050	12/13/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-93-050	06/23/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-93-213	06/04/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-93-213	06/18/20	N	20	<0.5	2,400	<1	65	0.31	4,200	3.6	--	--	0.43 J
MW-93-213	07/21/20	N	22 J	0.8	4,000	<1	59	0.21	4,600	3.7	--	--	0.74 J
MW-93-213	08/19/20	N	22	0.91	3,300	1.3	57	0.2	4,600	2.9	--	--	1.3 J
MW-93-213	09/29/20	N	19 J	<0.5	2,300 J	<1	79	0.54	3,600	4	--	--	<0.05
MW-93-213	10/21/20	N	35	1.3	4,200	<1	58	<0.2	4,600	4	--	--	1.7
MW-93-213	11/16/20	N	26	1.2	3,100	<1	58	<0.2	4,800	3.5	--	--	1.4
MW-93-213	12/09/20	N	18	1	2,400	<1	59	<0.2	4,800	3.6	--	--	1.8
MW-93-213	02/15/21	N	27 J	1.2	2,700	<1	56	<0.22	4,700	3.6	--	--	2
MW-93-213	02/15/21	FD	24 J	1.1	2,700	<1	56	<0.22	4,700	3.5	--	--	2.1
MW-93-213	05/18/21	N	19 J	1.3	3,000 J	<1	61	<0.2	4,200	3.8	--	--	1.7
MW-93-213	08/19/21	N	18	0.99	3,300 J	<1	60	<0.2	4,600	3.6	--	--	1.5
MW-93-213	12/13/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-93-213	06/23/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-95-113	06/10/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-95-113	06/18/20	N	10	4.9	140	3.6	100	<0.2	310	0.56	--	--	5 J
MW-95-113	07/21/20	N	10 J	5.5	140	4.1	110	<0.2	290	<0.5	--	--	5.7 J
MW-95-113	08/19/20	N	12	5.3	150	5.8	120	<0.2	290	0.58	--	--	5.6 J
MW-95-113	09/30/20	N	9.7	5.2 J	140	6.2	110	<0.2	290	<0.5	--	--	5.7
MW-95-113	10/20/20	N	13 J	5.4	140	6.6	110	<0.2	280 J	<0.5	--	--	4.8
MW-95-113	11/18/20	N	10	4.8	140	5.5	120	<0.2	280	<0.5	--	--	5.2 J
MW-95-113	12/15/20	N	9.6	3.8	130	4.4	120	<0.2	250	0.71	--	--	4.4
MW-95-113	02/25/21	N	8.4 J	4.8	180 J	6.6	110	<0.2	280	0.62	--	--	5.7
MW-95-113	05/19/21	N	10 J	5	160	7	110	<0.22	300	0.62	--	--	5.6
MW-95-113	08/25/21	N	12 J	4.7	160	11	92	<0.2	280	<0.5	--	--	6.2 J
MW-95-113	12/08/21	N	--	5.3	--	--	--	--	--	--	--	--	6.1
MW-95-113	06/22/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-95-157	06/09/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-95-157	06/25/20	N	19	5.4	700	1.9	75	<0.2	1,500	1.1	--	--	6.2
MW-95-157	07/21/20	N	19 J	6.3	720	2.7	76	<0.2	1,500	<1	--	--	6.7 J
MW-95-157	08/19/20	N	18	6.3	710	3.7	75	<0.2	1,500	<1	--	--	7.1 J
MW-95-157	09/30/20	N	17	7.7 J	630	4.2	75	<0.2	1,500	0.61	--	--	7.8
MW-95-157	10/20/20	N	36 J	<0.5	1,100	<1	120	0.38	1,300 J	1.1	--	--	<0.05
MW-95-157	11/18/20	N	23	0.55	580	<1	78 J	<0.2	1,500	<1	--	--	8 J

Appendix B
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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-93-050	12/09/20	N	220	2,600	<1
MW-93-050	02/15/21	N	210	2,600	<1 J
MW-93-050	05/18/21	N	200	2,400	<1
MW-93-050	08/19/21	N	220	2,900	<1
MW-93-050	12/13/21	N	--	--	--
MW-93-050	06/23/22	N	--	--	--
MW-93-213	06/04/20	N	--	--	--
MW-93-213	06/18/20	N	630	8,600	<1
MW-93-213	07/21/20	N	800	9,600	<1
MW-93-213	08/19/20	N	820	10,000	<1
MW-93-213	09/29/20	N	550	7,900	<1 J
MW-93-213	10/21/20	N	830	11,000	<1 J
MW-93-213	11/16/20	N	850	10,000	<1 J
MW-93-213	12/09/20	N	900	10,000	<1
MW-93-213	02/15/21	N	880	10,000	<1 J
MW-93-213	02/15/21	FD	880	11,000	<1 J
MW-93-213	05/18/21	N	710	8,800	<1
MW-93-213	08/19/21	N	790	9,200	<1
MW-93-213	12/13/21	N	--	--	--
MW-93-213	06/23/22	N	--	--	--
MW-95-113	06/10/20	N	--	--	--
MW-95-113	06/18/20	N	150	1,000	<1
MW-95-113	07/21/20	N	150	950	<1
MW-95-113	08/19/20	N	150	970	<1
MW-95-113	09/30/20	N	150	930	<1
MW-95-113	10/20/20	N	150	930	<1
MW-95-113	11/18/20	N	150	840	<1 J
MW-95-113	12/15/20	N	130	730	<10
MW-95-113	02/25/21	N	150	810	<1
MW-95-113	05/19/21	N	150	850	<1
MW-95-113	08/25/21	N	140	910	<1
MW-95-113	12/08/21	N	--	--	--
MW-95-113	06/22/22	N	--	--	--
MW-95-157	06/09/20	N	--	--	--
MW-95-157	06/25/20	N	280	3,500	<1
MW-95-157	07/21/20	N	290	3,800	<1
MW-95-157	08/19/20	N	290	4,100	<1
MW-95-157	09/30/20	N	280	4,000	<1
MW-95-157	10/20/20	N	200	3,200	<1
MW-95-157	11/18/20	N	290 J	3,500 J	<1 J

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-95-157	11/18/20	FD	<0.2	3.4 J	1.5	270	0.87 J	230 J	<0.02	0.45 J	71	1	5 J
MW-95-157	12/15/20	N	5.5	5.6	<0.1	93	0.62	290 J	0.099 J	<0.02	62	0.027	5.7
MW-95-157	02/25/21	N	7.8	7.6	<0.1	89	0.54	290	0.25 J	0.031	62	0.016	5
MW-95-157	05/19/21	N	9.9	9.3	<0.1	81	0.53	330	0.043 J	<0.02	65 J	0.0085	4.8
MW-95-157	08/25/21	N	8.7	9.9	<0.1	75	0.49	280	0.079 J	0.056 J	57	0.002 J	4.1
MW-95-157	12/08/21	N	8.6	11	<0.1	--	--	--	--	--	--	0.0057 J	3.8
MW-95-157	06/22/22	N	3.7	7.1 J	--	--	--	--	--	--	--	--	--
MW-96-045	09/22/20	N	<0.2	<1	--	--	--	--	--	--	--	--	--
MW-96-045	10/21/20	N	<0.2	<1	6.1	51	2.3	79 J	2.30	0.25	75	0.82	130
MW-96-045	11/17/20	N	<1	<1 J	1.1	39	2.9	90 J	4.50	0.067 J	110	0.64	120
MW-96-045	12/02/20	N	<0.2	<1	4.1	38	2.3 J	80 J	0.89	0.085 J	83 J	0.68	110
MW-96-045	12/02/20	FD	<0.2	<1	4.1	39	3.6 J	85 J	0.79	<0.1	72 J	0.69	110
MW-96-045	01/26/21	N	<1	<1	<0.1 J	34	2.5	92 J	2.70	0.13 J	140	0.81	110
MW-96-045	02/17/21	N	<1	<1	<0.1	30	1.8	83	0.56 J	0.047 J	80	0.59	110
MW-96-045	03/17/21	N	<1	<1	3.4	57	1.8 J	160	2.40 J	0.067 J	32 J	1	91
MW-96-045	04/26/21	N	<0.2	<1	<0.1	56	1.4	150	0.84	0.1	34	1.20	79
MW-96-045	05/18/21	N	<0.2	<1	<0.1 J	56	1.3	150	3.10 J	0.091 J	31 J	1.20	72
MW-96-045	06/09/21	N	<0.2	<1	3.5	52	1.6 J	180	1.60 J	0.032 J	33	1	78
MW-96-045	08/19/21	N	<0.2	<1	<0.1	47 J	1.6	140 J	0.52 J	0.044	58 J	0.094	93
MW-96-045	12/15/21	N	<1	1.5	--	--	--	--	--	--	--	--	--
MW-96-045	12/15/21	FD	<1	<1	--	--	--	--	--	--	--	--	--
MW-96-045	03/02/22	N	<0.2	--	--	--	--	--	--	--	--	--	--
MW-96-045	06/09/22	N	<0.2	<1 J	--	--	--	--	--	--	--	--	--
MW-96-045	08/11/22	N	<1	--	--	--	--	--	--	--	--	--	--
MW-96-217	09/16/20	N	<1	<1	--	--	--	--	--	--	--	--	--
MW-96-217	10/21/20	N	<1	1.8	1.9	120	1.7	340 J	1.10	0.73	49	1.60	73
MW-96-217	11/17/20	N	<1	2.6 J	<0.1	130	1.7	290 J	0.87	0.4 J	48	1.50	75
MW-96-217	12/02/20	N	<1	1.4	1.5	110	1.5 J	300 J	0.62	0.22 J	52 J	1.20	74
MW-96-217	01/26/21	N	<1	<1	<0.1 J	85	1.4	290 J	0.46	0.18 J	47	0.78	68
MW-96-217	02/17/21	N	<1	<1	<0.1	69	0.97	310	0.37 J	0.053 J	46	0.83	66
MW-96-217	03/17/21	N	<1	<1	1.8	64	1.4 J	550	0.12 J	<0.1	51 J	0.93	65
MW-96-217	04/26/21	N	<1	<1	<0.1	63	1.7	610	0.13	<0.1	62	0.69	64
MW-96-217	05/18/21	N	<1	<1	<0.1 J	56	1	670	0.061 J	0.079 J	42 J	0.61	62
MW-96-217	06/09/21	N	<1	<1	1.8	48	1.2 J	570	0.12 J	<0.1	53	0.48	57
MW-96-217	08/19/21	N	<1	<1	<0.1	47 J	0.93	490 J	0.078 J	<0.02	49 J	0.51	59
MW-96-217	12/15/21	N	<1	<1	--	--	--	--	--	--	--	--	--
MW-96-217	03/02/22	N	<1	--	--	--	--	--	--	--	--	--	--
MW-96-217	06/09/22	N	<1	<1 J	--	--	--	--	--	--	--	--	--
MW-96-217	08/11/22	N	<1	--	--	--	--	--	--	--	--	--	--
MW-97-042	10/27/20	N	<0.2	<1	--	--	--	--	--	--	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-95-157	11/18/20	FD	23	0.63	540	<1	110 J	<0.2	1,400	1.3	--	--	8.3
MW-95-157	12/15/20	N	18	5.7	710	4.4	76	<0.2	1,500	<1	--	--	7.8
MW-95-157	02/25/21	N	18 J	6.3	670 J	5.5	54	<0.2	1,500	1	--	--	8.9
MW-95-157	05/19/21	N	20 J	6.7	650	5.9	73	<0.22	1,500	<1	--	--	8.7
MW-95-157	08/25/21	N	27 J	7	910	7.4	69	<0.2	1,600	<1	--	--	9.3 J
MW-95-157	12/08/21	N	--	6.5	--	--	--	--	--	--	--	--	9.5
MW-95-157	06/22/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-96-045	09/22/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-96-045	10/21/20	N	23	<0.5	2,300	4.6	250	0.21	2,800	7.4	--	--	0.33
MW-96-045	11/17/20	N	13	0.55	2,400	4.5	280	<0.2	2,900	7.4	--	--	0.54
MW-96-045	12/02/20	N	8.7 J	0.91	2,100	5.9	250	<0.2	2,700	7.4	--	--	0.7
MW-96-045	12/02/20	FD	6.2 J	0.79	1,900	5.9	250	<0.2	2,700	7.6	--	--	0.72
MW-96-045	01/26/21	N	15 J	0.81	2,300 J	5.9	250	<0.2	3,100	6.8	--	--	0.79
MW-96-045	02/17/21	N	12 J	0.71	2,000	6.1	240	<0.22	3,000	6.8	--	--	0.7
MW-96-045	03/17/21	N	7.7	0.81	2,000	6.5	240	<0.2	2,500	6.3	--	--	0.56
MW-96-045	04/26/21	N	7.4	0.71	1,800	7.2	200	<0.2	2,400	6.3	--	--	0.83
MW-96-045	05/18/21	N	6.1 J	0.67	1,700 J	6.7	220	<0.2	2,400	6.2	--	--	0.84
MW-96-045	06/09/21	N	7.3 J	0.6	2,400	7.6	220	<0.2	2,500	5.8	--	--	0.84
MW-96-045	08/19/21	N	7.7	1.1	2,600 J	9.9	240	<0.2	2,800	6.6	--	--	0.71
MW-96-045	12/15/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-96-045	12/15/21	FD	--	--	--	--	--	--	--	--	--	--	--
MW-96-045	03/02/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-96-045	06/09/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-96-045	08/11/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-96-217	09/16/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-96-217	10/21/20	N	64	<0.5	5,200	<1	51	0.24	5,800	3.8	--	--	0.13
MW-96-217	11/17/20	N	36	<0.5	3,900	<1	61	<0.2	5,500	3.6	--	--	<0.05
MW-96-217	12/02/20	N	35 J	<0.5	3,400	<1	62	<0.2	5,500	4.1	--	--	<0.1
MW-96-217	01/26/21	N	37 J	0.73	4,200 J	<1	54	<0.22	6,200	3.3	--	--	1
MW-96-217	02/17/21	N	35 J	<0.5	4,600	<1	49	<0.22	6,200	3.7	--	--	0.3
MW-96-217	03/17/21	N	30	<0.5	4,500	<1	45	<0.2	6,100	3.4	--	--	0.62
MW-96-217	04/26/21	N	27	<0.5	4,600	1.2	51	<0.2	6,100	3.5	--	--	0.67
MW-96-217	05/18/21	N	26 J	<0.5	4,700 J	<1	53	<0.2	6,000	3.8	--	--	0.72
MW-96-217	06/09/21	N	33 J	<0.5	4,900	1.4	51	<0.2	6,000	3.8	--	--	0.84
MW-96-217	08/19/21	N	22	<0.5	3,800 J	1.4	50	<0.2	6,200	3.5	--	--	0.86
MW-96-217	12/15/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-96-217	03/02/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-96-217	06/09/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-96-217	08/11/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-97-042	10/27/20	N	--	--	--	--	--	--	--	--	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-95-157	11/18/20	FD	230 J	2,800 J	<1 J
MW-95-157	12/15/20	N	290	3,200	<1
MW-95-157	02/25/21	N	300	3,100	<1
MW-95-157	05/19/21	N	300	3,300	<1
MW-95-157	08/25/21	N	300	4,000	<1
MW-95-157	12/08/21	N	--	--	--
MW-95-157	06/22/22	N	--	--	--
MW-96-045	09/22/20	N	--	--	--
MW-96-045	10/21/20	N	1,200	7,600	<1 J
MW-96-045	11/17/20	N	1,200	7,200	<1 J
MW-96-045	12/02/20	N	1,000	6,900	<1
MW-96-045	12/02/20	FD	1,100	7,100	<1
MW-96-045	01/26/21	N	1,300	7,600	<1 J
MW-96-045	02/17/21	N	1,100	6,700	<1
MW-96-045	03/17/21	N	820	6,200	<1
MW-96-045	04/26/21	N	620	5,200	<1
MW-96-045	05/18/21	N	610	5,400	<1
MW-96-045	06/09/21	N	610	5,000	<1
MW-96-045	08/19/21	N	1,100	6,700	<1
MW-96-045	12/15/21	N	--	--	--
MW-96-045	12/15/21	FD	--	--	--
MW-96-045	03/02/22	N	--	--	--
MW-96-045	06/09/22	N	--	--	--
MW-96-045	08/11/22	N	--	--	--
MW-96-217	09/16/20	N	--	--	--
MW-96-217	10/21/20	N	1,000	13,000	<1 J
MW-96-217	11/17/20	N	970	11,000	<1 J
MW-96-217	12/02/20	N	1,000	11,000	<1
MW-96-217	01/26/21	N	1,000	13,000	<20 J
MW-96-217	02/17/21	N	1,100	13,000	<1
MW-96-217	03/17/21	N	1,200	13,000 J	<50
MW-96-217	04/26/21	N	1,200	12,000 J	<1
MW-96-217	05/18/21	N	1,200	12,000	<1
MW-96-217	06/09/21	N	1,200	12,000	<50
MW-96-217	08/19/21	N	1,200	13,000	<1
MW-96-217	12/15/21	N	--	--	--
MW-96-217	03/02/22	N	--	--	--
MW-96-217	06/09/22	N	--	--	--
MW-96-217	08/11/22	N	--	--	--
MW-97-042	10/27/20	N	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-97-042	11/17/20	N	<0.2	<1 J	5.5	25	1.1	40 J	0.22	<0.1	11	0.28	42
MW-97-042	12/10/20	N	<0.2	<1	6.1	26	0.54	44 J	1.60 J	0.32 J	13	0.29	34
MW-97-042	01/26/21	N	11	13	4.7 J	24	0.62	38 J	0.57 J	0.11 J	10	0.19	31
MW-97-042	01/26/21	FD	12	14	4.7 J	22	0.62	38 J	1.40 J	0.031 J	10	0.2	32
MW-97-042	02/15/21	N	0.25	<1	2.9 J	59	0.38	78	0.41 J	0.077	20 J	0.38 J	18 J
MW-97-042	03/17/21	N	<0.2	1	3.2	71	0.55 J	140	0.25 J	0.13 J	25 J	0.45	12
MW-97-042	03/17/21	FD	<0.2	1.2	3.5	74	0.5 J	140	0.24 J	0.085 J	24 J	0.47	13
MW-97-042	04/26/21	N	1.4	1.6	1.5	96	0.46	170	0.19	0.022	31	0.33	9.9
MW-97-042	04/26/21	FD	1.4	1.8	1.4	95	0.51	170	0.26	0.13	28	0.33	9.6
MW-97-042	05/17/21	N	3.1	3.4	0.84	100	0.51	180	0.56	0.038	27	0.24	9
MW-97-042	06/09/21	N	2.1	2.4	3.1	82	0.58 J	180	0.042 J	0.025 J	29	0.16	13
MW-97-042	08/17/21	N	3.3	3.4	1.6	61	0.57	120	0.17 J	0.045	21 J	0.11	16
MW-97-042	12/13/21	N	4.4	6	--	--	--	--	--	--	--	--	--
MW-97-042	03/02/22	N	6.7	--	--	--	--	--	--	--	--	--	--
MW-97-042	06/07/22	N	20	19	--	--	--	--	--	--	--	--	--
MW-97-042	08/22/22	N	21	--	--	--	--	--	--	--	--	--	--
MW-97-202	10/22/20	N	7.9	26	--	--	--	--	--	--	--	--	--
MW-97-202	11/17/20	N	<1	<1 J	3	150	2	410 J	0.6	0.37 J	99	1	38
MW-97-202	12/10/20	N	<1	<1	7.1	140	0.89	350 J	0.59 J	0.45 J	85	1.30	36
MW-97-202	01/26/21	N	<1	<1	2.7 J	150	1.1	350 J	0.54	0.46 J	86	1.60	34
MW-97-202	02/15/21	N	<1	<1	<0.1 J	130	0.77	370	0.51 J	0.47	87 J	1.50 J	34 J
MW-97-202	03/16/21	N	<1	<1	5.9	130	1.6 J	640	0.83 J	0.58 J	110 J	1.40	35
MW-97-202	04/26/21	N	<1	<1	<0.1	130	1.1	630	0.48	0.53	87	1.40	35
MW-97-202	05/17/21	N	<1	<1	<0.1	130	1	590	0.46	0.42	83	1.40	34
MW-97-202	06/09/21	N	<1	<1	8.3	120	1.5 J	670	0.58 J	0.63 J	120	1.30	31
MW-97-202	08/17/21	N	<1	3	<0.1	120	0.96	560	0.47 J	0.52	65 J	1.70	30
MW-97-202	08/17/21	FD	<1	3	<0.1	120	0.87	560	0.47 J	0.46	63 J	1.70	29
MW-97-202	12/13/21	N	<1	<1	--	--	--	--	--	--	--	--	--
MW-97-202	03/02/22	N	<1	--	--	--	--	--	--	--	--	--	--
MW-97-202	06/07/22	N	<1	3.8	--	--	--	--	--	--	--	--	--
MW-97-202	08/22/22	N	<1	--	--	--	--	--	--	--	--	--	--
MW-98-055	10/29/20	N	1.2	8.7	--	--	--	--	--	--	--	--	--
MW-98-055	10/29/20	FD	7.5	6.5	--	--	--	--	--	--	--	--	--
MW-98-055	11/17/20	N	3.1	7.1 J	2.5	110	1.1	79 J	0.44	0.094 J	30	0.25	47
MW-98-055	12/14/20	N	14	16	1.9	82	0.62	80 J	0.36	0.078 J	28	0.16	33
MW-98-055	01/25/21	N	11	15	1.6 J	82	0.64	80 J	1.80	0.11 J	23	0.16	22
MW-98-055	02/16/21	N	24	27	1.3 J	82	0.51	84 J	0.47 J	0.046	23 J	0.16	19 J
MW-98-055	03/16/21	N	4	3.5	3.6	78	0.57 J	120	0.28 J	0.038 J	23 J	0.16	18
MW-98-055	04/26/21	N	50	53	1.4	72	0.58	140	0.46	0.04	25	0.094	16
MW-98-055	05/20/21	N	69 J	69	1.6	64	0.55	140	0.19 J	<0.02	24 J	0.081	15

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-97-042	11/17/20	N	9.5	1.3	610	<1	130	0.24	810	3.6	--	--	0.59
MW-97-042	12/10/20	N	7.7	0.55	570	<1	120	0.26	900	3.5	--	--	0.37
MW-97-042	01/26/21	N	6.9 J	1.5	490 J	1.3	120	<0.22	780	3.4	--	--	0.83 J
MW-97-042	01/26/21	FD	6.5 J	1.5	480 J	1.2	130	0.25	790	3.2	--	--	0.57 J
MW-97-042	02/15/21	N	8.3 J	0.63	500	<1	98	<0.22	990	2.4	--	--	0.42
MW-97-042	03/17/21	N	11	0.8	630	<1	90	<0.2	1,000	2.2	--	--	0.59
MW-97-042	03/17/21	FD	11	0.76	600	<1	89	<0.22	1,100	2.2	--	--	0.65
MW-97-042	04/26/21	N	11	0.8	620	1.1	89	<0.2	1,100	2	--	--	0.63
MW-97-042	04/26/21	FD	10	0.72	620	1.1	82	<0.2	1,100	1.9	--	--	0.62
MW-97-042	05/17/21	N	9.3 J	0.87	590 J	1.3	85	<0.2	1,100	1.9	--	--	0.99
MW-97-042	06/09/21	N	11 J	0.7	650	2.1	92	<0.2	1,100	2.1	--	--	0.36
MW-97-042	08/17/21	N	8.9 J	<0.5	610 J	1.4	110	<0.2	940	2.1	--	--	0.47
MW-97-042	12/13/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-97-042	03/02/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-97-042	06/07/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-97-042	08/22/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-97-202	10/22/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-97-202	11/17/20	N	38	<0.5	3,500	<1	77	0.34	6,000	3.1	--	--	<0.05
MW-97-202	12/10/20	N	29	<0.5	3,500	<1	81	0.39	6,200	3.5	--	--	0.25
MW-97-202	01/26/21	N	31 J	<0.5	3,500 J	<1	100	0.37	5,900	2.7	--	--	0.072
MW-97-202	02/15/21	N	36 J	<0.5	3,300	<1	90	0.32	6,000	3	--	--	0.51
MW-97-202	03/16/21	N	31	<0.5	4,200	<1	75	0.27	6,100	3	--	--	0.42
MW-97-202	04/26/21	N	28	<0.5	4,200	<1	81	0.56	6,500	3.3	--	--	0.21
MW-97-202	05/17/21	N	24 J	<0.5	4,300 J	<1	81	0.55	6,200	3.2	--	--	0.32
MW-97-202	06/09/21	N	38 J	<0.5	5,600	<1	79	0.29	6,200	3.1	--	--	0.15
MW-97-202	08/17/21	N	31 J	<0.5	3,900 J	<1	97	0.31	6,100	2.9	--	--	0.21
MW-97-202	08/17/21	FD	26 J	<0.5	3,900 J	<1	94	0.26	6,100	3	--	--	0.18
MW-97-202	12/13/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-97-202	03/02/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-97-202	06/07/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-97-202	08/22/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-98-055	10/29/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-98-055	10/29/20	FD	--	--	--	--	--	--	--	--	--	--	--
MW-98-055	11/17/20	N	18	2.3	700	<1	170	0.35	900	1.9	--	--	1.5
MW-98-055	12/14/20	N	16	2.2	770	1.7	140	<0.2	870	2	--	--	1.8
MW-98-055	01/25/21	N	13 J	3.4	630 J	2.3	140	0.22	840	1.6	--	--	2.8
MW-98-055	02/16/21	N	12 J	3.4	530 J	2.4	120	<0.22	790	1.7	--	--	2.7
MW-98-055	03/16/21	N	13	5.1	670	2.3	120	<0.2	820	1.7	--	--	4.2
MW-98-055	04/26/21	N	10	4.8	650	3.6	110	<0.2	850	1.5	--	--	4.9
MW-98-055	05/20/21	N	12 J	4.9	610 J	3.4	100	<0.2	830	1.7	--	--	4.5

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-97-042	11/17/20	N	210	1,800	<1 J
MW-97-042	12/10/20	N	230	1,800	<1
MW-97-042	01/26/21	N	200	1,700	<1 J
MW-97-042	01/26/21	FD	200	1,700	<1 J
MW-97-042	02/15/21	N	210	2,000	<1 J
MW-97-042	03/17/21	N	220	2,200	<1
MW-97-042	03/17/21	FD	220	2,200	<1
MW-97-042	04/26/21	N	220	2,300	<1
MW-97-042	04/26/21	FD	220	2,200	<1
MW-97-042	05/17/21	N	220	2,400	<10
MW-97-042	06/09/21	N	220	2,300	<1
MW-97-042	08/17/21	N	210	2,100	<1
MW-97-042	12/13/21	N	--	--	--
MW-97-042	03/02/22	N	--	--	--
MW-97-042	06/07/22	N	--	--	--
MW-97-042	08/22/22	N	--	--	--
MW-97-202	10/22/20	N	--	--	--
MW-97-202	11/17/20	N	950	12,000	<1 J
MW-97-202	12/10/20	N	990	12,000	<1
MW-97-202	01/26/21	N	990	12,000	<1 J
MW-97-202	02/15/21	N	990	12,000	<20 J
MW-97-202	03/16/21	N	970	12,000	<1
MW-97-202	04/26/21	N	990	12,000	<1
MW-97-202	05/17/21	N	960	13,000	<1
MW-97-202	06/09/21	N	950	12,000	<1
MW-97-202	08/17/21	N	970	13,000	<1
MW-97-202	08/17/21	FD	980	14,000	<1
MW-97-202	12/13/21	N	--	--	--
MW-97-202	03/02/22	N	--	--	--
MW-97-202	06/07/22	N	--	--	--
MW-97-202	08/22/22	N	--	--	--
MW-98-055	10/29/20	N	--	--	--
MW-98-055	10/29/20	FD	--	--	--
MW-98-055	11/17/20	N	470	2,400	1 J
MW-98-055	12/14/20	N	430	2,200	<1
MW-98-055	01/25/21	N	500	2,200	<1
MW-98-055	02/16/21	N	510	2,300	<1
MW-98-055	03/16/21	N	520	2,300	<1
MW-98-055	04/26/21	N	500	2,200	<10
MW-98-055	05/20/21	N	490	2,200	<1

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
MW-98-055	06/09/21	N	66	67	3.2	63	0.65 J	140	0.79 J	0.043 J	29	0.087	15
MW-98-055	06/09/21	FD	66	67	3	65	0.68 J	150	0.7 J	0.085 J	31	0.089	16
MW-98-055	08/20/21	N	84	93	<0.1	56	0.54	100	0.27 J	0.029 J	19 J	0.031	18
MW-98-055	12/16/21	N	240	230	2.8	--	--	--	--	--	--	0.0013	--
MW-98-055	06/09/22	N	130	120 J	--	--	--	--	--	--	--	--	--
MW-98-077	10/30/20	FD	250	260	--	--	--	--	--	--	--	--	--
MW-98-077	10/30/20	N	260	230	--	--	--	--	--	--	--	--	--
MW-98-077	11/17/20	N	26	29 J	<0.1	200	1.8	300 J	0.71	0.066 J	17	0.52	18
MW-98-077	12/14/20	N	140	140	<0.1	140	1.5	270 J	0.52	0.085 J	14	0.31	14
MW-98-077	01/25/21	N	310	310	<0.1 J	110	1.5	250 J	0.19	<0.02 J	11	0.12	15
MW-98-077	02/16/21	N	360	340	<0.1 J	93	1.2	230 J	0.3 J	<0.02	9.6 J	0.071	16 J
MW-98-077	03/16/21	N	440	410	3.5	100	1.4 J	410	0.043 J	<0.02	10 J	0.12	11
MW-98-077	04/26/21	N	480	480	<0.1	83	1.5	350	0.41	<0.02	8.9	0.065	16
MW-98-077	05/20/21	N	490 J	470	<0.1	86	1.4	390	0.13 J	<0.02	9.5 J	0.039	14
MW-98-077	06/09/21	N	540	510	4.6	84	1.7 J	420	0.42 J	0.025 J	11	0.053	13
MW-98-077	08/20/21	N	340	390	4.3	38	0.77	63	0.085 J	0.03 J	3.9 J	0.002	28
MW-98-077	12/16/21	N	340	320	3	--	--	--	--	--	--	0.0028	--
MW-98-077	06/09/22	N	440	430 J	--	--	--	--	--	--	--	--	--
OW-01D	10/07/20	N	0.6	<1	--	--	--	--	--	--	--	--	18 J
OW-01D	10/07/20	FD	0.59	<1	--	--	--	--	--	--	--	--	18 J
OW-01D	12/15/21	N	0.5	2.8	<0.1	32	1.1 J	140	--	--	24 J	0.0047	23
OW-01M	10/07/20	N	2.3	5.1	--	--	--	--	--	--	--	--	18 J
OW-01M	12/15/21	N	1.2	4.1	<0.1	63	1 J	150	--	--	24 J	0.0048	24
OW-01S	10/07/20	N	2.6	5.2	--	--	--	--	--	--	--	--	2.1 J
OW-01S	12/15/21	N	8.4	31	<0.1	110	0.88 J	350	--	--	54 J	0.026	8.9
OW-02D	10/08/20	N	0.5	1.4	--	--	--	--	--	--	--	--	23
OW-02D	12/15/21	N	0.28	1.8	<0.1	24	1.1 J	190	--	--	31 J	0.0017	24
OW-02M	10/08/20	N	2	3.2	--	--	--	--	--	--	--	--	20
OW-02M	12/15/21	N	1.1	1.6	<0.1	38	1.1 J	150	--	--	25 J	<0.0005	23
OW-02S	10/08/20	N	16	16	--	--	--	--	--	--	--	--	22
OW-02S	12/15/21	N	15	15	<0.1	130	0.59 J	130	--	--	16 J	0.00083	21
OW-05D	10/08/20	N	0.63	1.8	3	25	1.2	110	0.085 J	0.096 J	30	0.00058	26
OW-05D	12/01/21	N	0.42	1.9	<0.1 J	28	1.1	200	--	--	31	<0.0005	29
OW-05M	10/08/20	N	0.49	16	1	33	1.1	97	2.90 J	0.23 J	26	0.016	23
OW-05M	12/01/21	N	0.59	1.1	<0.1 J	31	1.1	150	--	--	24	<0.0005	26
OW-05S	10/08/20	N	10	10	--	--	--	--	--	--	--	--	10
OW-05S	12/01/21	N	9.7	10	<0.1 J	130	0.34	430	--	--	69	<0.0005	7.6
PGE-07BR	12/03/20	N	<1	<1	--	--	2.9	430	--	0.14	16	0.32	8.1
PGE-08	12/09/20	N	<1	<1	--	--	3.2 J	150 J	--	0.08 J	3.8 J	0.45	110
PGE-08	12/08/21	N	<1	<1	<0.1	--	--	--	--	--	--	0.47 J	--

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
MW-98-055	06/09/21	N	12 J	4.9	700	3.6	110	<0.2	850	1.6	--	--	4.7
MW-98-055	06/09/21	FD	13 J	4.4	770	3.5	100	<0.2	850	1.6	--	--	5.1
MW-98-055	08/20/21	N	13 J	5.7	560 J	4.7	100	<0.2	870	1.4	--	--	6
MW-98-055	12/16/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-98-055	06/09/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-98-077	10/30/20	FD	--	--	--	--	--	--	--	--	--	--	--
MW-98-077	10/30/20	N	--	--	--	--	--	--	--	--	--	--	--
MW-98-077	11/17/20	N	44	17	2,400	1.1	70	0.23	4,000	2.2	--	--	2.8
MW-98-077	12/14/20	N	37	17	2,300	2.2	70	<0.2	3,700	2.2	--	--	4.3
MW-98-077	01/25/21	N	36 J	21	2,100 J	3.4	75	<0.22	3,500	2.1	--	--	5.5
MW-98-077	02/16/21	N	47 J	19	1,900 J	4.1	80	<0.22	3,200	2.2	--	--	5
MW-98-077	03/16/21	N	38	22	2,400	2.6	64	<0.2	4,000	1.8	--	--	4.3
MW-98-077	04/26/21	N	32	21	2,100	4.2	77	<0.2	3,300	2.3	--	--	5.5
MW-98-077	05/20/21	N	40 J	21	2,100 J	3.7	74	<0.2	3,500	2.6	--	--	4.6
MW-98-077	06/09/21	N	43 J	20	3,000	3.6	73	<0.2	3,600	2.2	--	--	5.2
MW-98-077	08/20/21	N	9.3 J	18	870 J	8	100	<0.2	1,100	2.6	--	--	7.9
MW-98-077	12/16/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-98-077	06/09/22	N	--	--	--	--	--	--	--	--	--	--	--
MW-98-077	12/16/21	N	--	--	--	--	--	--	--	--	--	--	--
MW-98-077	06/09/22	N	--	--	--	--	--	--	--	--	--	--	--
OW-01D	10/07/20	N	--	--	1,400	--	--	--	2,200	2.2	--	--	2.5
OW-01D	10/07/20	FD	--	--	1,400	--	--	--	2,200	2	--	--	2.5
OW-01D	12/15/21	N	17 J	8.2	1,400	3.2	86	--	2,000	2.3	--	--	7 J
OW-01M	10/07/20	N	--	--	1,400	--	--	--	2,200	2.2	--	--	2.7
OW-01M	12/15/21	N	15 J	8.2	1,500	3	110	--	2,000	2.1	--	--	7.8 J
OW-01S	10/07/20	N	--	--	1,400	--	--	--	2,100	1.3	--	--	2.9
OW-01S	12/15/21	N	17 J	2.9	1,000	2.5	270	--	1,700	1.4	--	--	3 J
OW-02D	10/08/20	N	--	--	1,600	--	--	--	2,200	2.7	--	--	3.1
OW-02D	12/15/21	N	21 J	8.4	1,600	1.9	86	--	2,100	3.1	--	--	7.4 J
OW-02M	10/08/20	N	--	--	1,600	--	--	--	2,200	2.1	--	--	2.8
OW-02M	12/15/21	N	14 J	7.8	1,600	2.8	97	--	2,000	2.5	--	--	7.5 J
OW-02S	10/08/20	N	--	--	670	--	--	--	1,100	3.2	--	--	3.2
OW-02S	12/15/21	N	11 J	2	640	3.4	58	--	1,100	2.7	--	--	3.2 J
OW-05D	10/08/20	N	14	4.3	1,600	2.3	71	<0.2	2,100	3	--	--	2.4
OW-05D	12/01/21	N	17 J	9.3	1,300	2.4	76	--	2,000	2.8	--	--	7.8
OW-05M	10/08/20	N	11	4.6	1,500	2	86	<0.2	2,100	2.6	--	--	3.1
OW-05M	12/01/21	N	15 J	9.2	1,400	1.8	79	--	1,900	3	--	--	9
OW-05S	10/08/20	N	--	--	660	--	--	--	1,700	1.7	--	--	3.2
OW-05S	12/01/21	N	17 J	2.4	660	2	48	--	1,700	1.7	--	--	2.8
PGE-07BR	12/03/20	N	--	<0.5 J	4,000	--	17	--	7,400	--	--	--	--
PGE-08	12/09/20	N	--	<0.5	3,600 J	--	52	--	6,000	--	--	--	<0.05
PGE-08	12/08/21	N	--	--	--	--	--	--	--	--	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
MW-98-055	06/09/21	N	500	2,200	<1
MW-98-055	06/09/21	FD	490	2,200	<1
MW-98-055	08/20/21	N	470	2,200	<1
MW-98-055	12/16/21	N	--	--	--
MW-98-055	06/09/22	N	--	--	--
MW-98-077	10/30/20	FD	--	--	--
MW-98-077	10/30/20	N	--	--	--
MW-98-077	11/17/20	N	630	8,200	<20 J
MW-98-077	12/14/20	N	650	7,900	<1
MW-98-077	01/25/21	N	610	7,400	<1
MW-98-077	02/16/21	N	580	6,400	<1
MW-98-077	03/16/21	N	640	8,300	<1
MW-98-077	04/26/21	N	590	6,800	<1
MW-98-077	05/20/21	N	640	7,300	<1
MW-98-077	06/09/21	N	610	7,800	<1
MW-98-077	08/20/21	N	470	2,600	<1
MW-98-077	12/16/21	N	--	--	--
MW-98-077	06/09/22	N	--	--	--
OW-01D	10/07/20	N	480	4,300	--
OW-01D	10/07/20	FD	480	4,300	--
OW-01D	12/15/21	N	510	4,100	--
OW-01M	10/07/20	N	490	4,300	--
OW-01M	12/15/21	N	510	4,100	--
OW-01S	10/07/20	N	470	4,500	--
OW-01S	12/15/21	N	360	4,000	--
OW-02D	10/08/20	N	490	4,400	--
OW-02D	12/15/21	N	500	4,100	--
OW-02M	10/08/20	N	490	4,400	--
OW-02M	12/15/21	N	510	4,100	--
OW-02S	10/08/20	N	180	2,600	--
OW-02S	12/15/21	N	180	2,200	--
OW-05D	10/08/20	N	470	4,500	--
OW-05D	12/01/21	N	500	4,000	--
OW-05M	10/08/20	N	490	4,400	--
OW-05M	12/01/21	N	510	4,000	--
OW-05S	10/08/20	N	350	4,600	--
OW-05S	12/01/21	N	360	4,000	--
PGE-07BR	12/03/20	N	410	10,000	--
PGE-08	12/09/20	N	2,000	14,000	--
PGE-08	12/08/21	N	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
PGE-08	06/10/22	N	<1	<1 J	--	--	--	--	--	--	--	--	--
PM-03	12/14/20	N	9.6	9.5	--	--	0.11	76 J	--	0.11 J	19	0.0008	5.8
PM-04	12/14/20	N	16	16	--	--	0.33	110 J	--	0.039 J	34	0.0029	5.4
PT5D	12/16/21	N	31	29	1.5	20	--	--	--	<0.02	--	0.031	100
PT5D	03/04/22	N	5.5	--	1.6	27	--	--	--	0.05	--	0.11	--
PT5D	05/05/22	N	<0.2	2.1	2.3	22	--	--	--	0.027	--	0.1	--
PT5D	08/15/22	N	10	--	<0.1	29 J	--	--	--	<0.02	--	0.013 J	--
PT5M	12/16/21	N	<0.2	<1	1.7	23	--	--	--	<0.02	--	0.94	11
PT5M	03/04/22	N	<0.2	--	1.1	32	--	--	--	0.14	--	1.20	--
PT5M	05/05/22	N	<0.2	<1	0.75	44	--	--	--	0.023	--	2.10	--
PT5M	08/15/22	N	<0.2	--	1.1	41 J	--	--	--	<0.02	--	1.10 J	--
PT5S	12/16/21	N	<0.2	<1	13	84	--	--	--	0.65 J	--	0.21	6.1
PT5S	03/04/22	N	<0.2	--	9.5	90	--	--	--	0.87	--	0.24	--
PT5S	05/05/22	N	<0.2	<1	7	96	--	--	--	1.20	--	0.26	--
PT5S	08/15/22	N	<0.2	--	14	110 J	--	--	--	1.10	--	0.29 J	--
PT8D	10/06/20	N	390	370	--	--	--	--	--	--	--	--	--
PT8D	05/04/21	N	240	230	<0.1	--	--	660	--	--	--	0.23	62
PT8D	12/10/21	N	200	200	<0.1	--	--	--	--	--	--	0.27	--
PT8D	06/23/22	N	220	250	--	--	--	--	--	--	--	--	--
PT9D	10/06/20	N	5,200	5,200	--	--	--	--	--	--	--	--	--
PT9D	05/05/21	N	4,900	5,100 J	<0.1	--	--	100	--	--	--	0.0023	88
PT9D	12/10/21	N	7,000	6,100	<0.1	--	--	--	--	--	--	0.0035	90
PT9D	06/23/22	N	5,000	5,500	--	--	--	--	--	--	--	--	--
PT9M	10/06/20	N	690	660	--	--	--	--	--	--	--	--	--
PT9M	05/05/21	N	570	580 J	<0.1	--	--	160	--	--	--	0.03	5.1
PT9M	12/10/21	N	64	87	<0.1	--	--	--	--	--	--	0.11	7.2
PT9M	06/23/22	N	310	340	--	--	--	--	--	--	--	--	--
PT9S	10/06/20	N	42	58	--	--	--	--	--	--	--	--	--
PT9S	05/05/21	N	28	29 J	0.77	--	--	160	--	--	--	0.97	18
PT9S	12/10/21	N	34	35	<0.1	--	--	--	--	--	--	0.32	8.6
PT9S	06/23/22	N	41	40	--	--	--	--	--	--	--	--	--
R-19	01/30/20	N	<0.2	<1	2.1	110	--	--	0.047	0.038 J	--	0.0025 J	4.7
R-19	02/20/20	N	<0.2	<1	2.1	120	--	--	0.093 J	0.027 J	--	0.0013	4.7 J
R-19	04/30/20	N	<0.2	<1	2.1	110	--	--	0.047	0.026 J	--	0.0014	4.4
R-19	08/20/20	N	<0.2	<1	2.5	110 J	--	--	0.041 J	<0.02 J	--	0.00072	4.5
R-19	11/19/20	N	<0.2	<1	2.4	110	--	--	<0.02	<0.02	--	0.0016	4.7
R-19	01/28/21	N	<0.2	<1	2.2	120	--	--	0.076	0.023	--	0.0018	4.7
R-19	01/28/21	FD	<0.2	<1	2.3	120	--	--	0.043	0.029	--	0.0016	4.5
R-19	02/18/21	N	<0.2	<1	2.5	120	--	--	0.035 J	<0.02 J	--	0.0014	4.7
R-19	05/20/21	N	<0.2	<1	2	100	--	--	<0.02	<0.02	--	<0.0005	4.3

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PGE-08	06/10/22	N	--	--	--	--	--	--	--	--	--	--	--
PM-03	12/14/20	N	--	1.7	170	--	85	--	320	--	--	--	3.2
PM-04	12/14/20	N	--	1.4	320	--	64	--	650	--	--	--	2.2
PT5D	12/16/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
PT5D	03/04/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
PT5D	05/05/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
PT5D	08/15/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
PT5M	12/16/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
PT5M	03/04/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
PT5M	05/05/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
PT5M	08/15/22	N	--	--	--	--	--	--	--	--	<0.5	--	--
PT5S	12/16/21	N	--	<0.5	--	--	--	--	--	--	--	--	<0.1
PT5S	03/04/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
PT5S	05/05/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
PT5S	08/15/22	N	--	--	--	--	--	--	--	--	<0.25	--	--
PT8D	10/06/20	N	--	--	--	--	--	--	--	--	--	--	--
PT8D	05/04/21	N	47	0.76	5,500 J	--	--	--	7,200	--	--	--	0.76
PT8D	12/10/21	N	--	--	--	--	--	--	--	--	--	--	--
PT8D	06/23/22	N	--	--	--	--	--	--	--	--	--	--	--
PT9D	10/06/20	N	--	--	--	--	--	--	--	--	--	--	--
PT9D	05/05/21	N	44 J	3.3	5,200	--	--	--	6,700	--	--	--	3.5
PT9D	12/10/21	N	--	4.6	--	--	--	--	--	--	--	--	6.4
PT9D	06/23/22	N	--	--	--	--	--	--	--	--	--	--	--
PT9M	10/06/20	N	--	--	--	--	--	--	--	--	--	--	--
PT9M	05/05/21	N	38 J	2.6	2,500	--	--	--	3,600	--	--	--	2.4
PT9M	12/10/21	N	--	5.7	--	--	--	--	--	--	--	--	7.2
PT9M	06/23/22	N	--	--	--	--	--	--	--	--	--	--	--
PT9S	10/06/20	N	--	--	--	--	--	--	--	--	--	--	--
PT9S	05/05/21	N	9.5 J	1.8	550	--	--	--	860	--	--	--	2.6
PT9S	12/10/21	N	--	6	--	--	--	--	--	--	--	--	5
PT9S	06/23/22	N	--	--	--	--	--	--	--	--	--	--	--
R-19	01/30/20	N	--	1.6	--	--	--	--	--	--	--	--	0.37
R-19	02/20/20	N	--	1.5	--	--	--	--	--	--	--	--	0.33
R-19	04/30/20	N	--	1.5	--	--	--	--	--	--	--	--	0.38
R-19	08/20/20	N	--	1.5	--	--	--	--	--	--	--	--	0.36
R-19	11/19/20	N	--	1.4	--	--	--	--	--	--	--	--	--
R-19	01/28/21	N	--	1.7	--	--	--	--	--	--	--	--	0.4
R-19	01/28/21	FD	--	1.6	--	--	--	--	--	--	--	--	0.39
R-19	02/18/21	N	--	1.6	--	--	--	--	--	--	--	--	0.39
R-19	05/20/21	N	--	1.3	--	--	--	--	--	--	--	--	0.42

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
PGE-08	06/10/22	N	--	--	--
PM-03	12/14/20	N	62	760	--
PM-04	12/14/20	N	180	1,500	--
PT5D	12/16/21	N	--	--	<1
PT5D	03/04/22	N	--	--	<1
PT5D	05/05/22	N	--	--	<20
PT5D	08/15/22	N	--	--	<1
PT5M	12/16/21	N	--	--	<1
PT5M	03/04/22	N	--	--	<1
PT5M	05/05/22	N	--	--	<1
PT5M	08/15/22	N	--	--	<1
PT5S	12/16/21	N	--	--	3
PT5S	03/04/22	N	--	--	1.9
PT5S	05/05/22	N	--	--	1.1
PT5S	08/15/22	N	--	--	1.9
PT8D	10/06/20	N	--	--	--
PT8D	05/04/21	N	780	12,000 J	--
PT8D	12/10/21	N	--	--	--
PT8D	06/23/22	N	--	--	--
PT9D	10/06/20	N	--	--	--
PT9D	05/05/21	N	960	13,000	--
PT9D	12/10/21	N	--	--	--
PT9D	06/23/22	N	--	--	--
PT9M	10/06/20	N	--	--	--
PT9M	05/05/21	N	690	8,700	--
PT9M	12/10/21	N	--	--	--
PT9M	06/23/22	N	--	--	--
PT9S	10/06/20	N	--	--	--
PT9S	05/05/21	N	270	1,900	--
PT9S	12/10/21	N	--	--	--
PT9S	06/23/22	N	--	--	--
R-19	01/30/20	N	--	--	--
R-19	02/20/20	N	--	--	--
R-19	04/30/20	N	--	--	--
R-19	08/20/20	N	--	--	--
R-19	11/19/20	N	--	--	--
R-19	01/28/21	N	--	--	--
R-19	01/28/21	FD	--	--	--
R-19	02/18/21	N	--	--	--
R-19	05/20/21	N	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
R-19	08/19/21	N	<0.2	<1	2.3	100	--	--	0.021	<0.02 J	--	<0.0005	4
R-19	08/19/21	FD	<0.2	<1	2.1	100	--	--	0.022	<0.02 J	--	<0.0005	4.1
R-19	11/18/21	N	<0.2	<1	3.1 J	--	--	--	--	--	--	0.00056	4.4
R-19	02/17/22	N	<0.2	--	2	--	--	--	--	--	--	<0.0005	--
R-19	05/19/22	N	<0.2	<1 J	1.9 J	--	--	--	--	--	--	<0.0005	--
R-19	08/18/22	N	<0.2	--	2.5	--	--	--	--	--	--	0.0012	--
R-28	01/29/20	N	<0.2	<1	2.2	120	--	--	0.18	<0.02	--	0.0026	4.7
R-28	02/19/20	N	<0.2	<1	2.1	120 J	--	--	0.15 J	0.063 J	--	0.0018	4.6
R-28	04/29/20	N	<0.2	<1	2.3	120	--	--	0.075 J	0.088 J	--	0.0016	4.5
R-28	08/19/20	N	<0.2	<1	2.5	110 J	--	--	0.038 J	0.041 J	--	0.00095	4.7
R-28	11/18/20	N	<0.2	<1	2.5	110	<100	58	0.04	<0.02	25	0.0015	4.5
R-28	11/18/20	FD	<0.2	<1	2.5	110	0.13	59	0.045	<0.02	25	0.0013	4.5
R-28	01/27/21	N	<0.2	<1	2.2	120	--	--	0.025	0.02 J	--	0.0023	4.7
R-28	02/17/21	N	<0.2	<1	2.4	120	--	--	0.085 J	<0.02 J	--	0.0016	4.8
R-28	05/19/21	N	<0.2	<1	1.9	100	--	--	<0.02	<0.02 J	--	0.00085	4.3
R-28	08/18/21	N	<0.2	<1	2.1	100	--	--	0.022 J	<0.02	--	<0.0005	4.3
R-28	11/17/21	N	<0.2	<1	3.3	--	--	--	--	--	--	0.00095	4.7 J
R-28	02/16/22	N	<0.2	--	2	--	--	--	--	--	--	<0.0005 J	--
R-28	05/18/22	N	<0.2	<1	2 J	--	--	--	--	--	--	0.00058	--
R-28	08/17/22	N	<0.2	--	2.2	--	--	--	--	--	--	0.0023 J	--
RRB	01/30/20	N	<0.2	<1	2.4	80	--	--	1.10	<0.1 J	--	0.021 J	7
RRB	02/20/20	N	<0.2	<1	2.1	97 J	--	--	0.16	0.021	--	0.0027	4.8
RRB	04/30/20	N	<0.2	<1	2.2	110	--	--	0.024	<0.02	--	0.0018	4.7
RRB	08/20/20	N	<0.2	<1	2.3	110 J	--	--	0.03 J	<0.02 J	--	0.0071	4.7
RRB	11/19/20	N	<0.2	<1	2.2	110	--	--	0.041	<0.02	--	0.0052	4.6
RRB	01/28/21	N	<0.2	<1	0.63	98	--	--	35	0.041	--	0.01	4.4
RRB	02/18/21	N	<0.2	<1	2.3	120	--	--	0.087 J	<0.02 J	--	0.0041	4.7
RRB	05/20/21	N	<0.2	<1	2.2	110	--	--	<0.02	<0.02	--	0.016	4.4
RRB	08/19/21	N	<0.2	<1	2.2	110	--	--	0.057	<0.02 J	--	0.0064	4.3
RRB	11/18/21	N	<0.2	<1	2.8 J	--	--	--	--	--	--	0.024	4.5
RRB	11/18/21	FD	<0.2	<1	2.9 J	--	--	--	--	--	--	0.025	4.4
RRB	02/17/22	N	<0.2	--	1.5	--	--	--	--	--	--	0.014	--
RRB	05/19/22	N	<0.2	<1 J	2 J	--	--	--	--	--	--	0.0076	--
RRB	08/18/22	N	<0.2	--	2.4	--	--	--	--	--	--	0.017	--
RRB	08/18/22	FD	<0.2	--	2.1	--	--	--	--	--	--	0.015	--
SW1	01/29/20	N	<0.2	<1	--	--	--	--	--	--	--	--	--
SW1	02/19/20	N	<0.2	<1	--	--	--	--	--	--	--	--	--
SW1	04/30/20	N	<0.2	<1	--	--	--	--	--	--	--	--	--
SW1	08/20/20	N	<0.2	<1	--	--	--	--	--	--	--	--	--
SW1	11/18/20	N	<0.2	<1	--	--	--	--	--	--	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
R-19	08/19/21	N	--	1.5	--	--	--	--	--	--	--	--	0.36
R-19	08/19/21	FD	--	1.5	--	--	--	--	--	--	--	--	0.35
R-19	11/18/21	N	--	1.9	--	--	--	--	--	--	--	--	0.31
R-19	02/17/22	N	--	--	--	--	--	--	--	--	--	--	--
R-19	05/19/22	N	--	--	--	--	--	--	--	--	--	--	--
R-19	08/18/22	N	--	--	--	--	--	--	--	--	--	--	--
R-28	01/29/20	N	--	1.6	--	--	--	--	--	--	--	--	0.32
R-28	02/19/20	N	--	1.6	--	--	--	--	--	--	--	--	0.33
R-28	04/29/20	N	--	1.7	--	--	--	--	--	--	--	--	0.41
R-28	08/19/20	N	--	1.5	--	--	--	--	--	--	--	--	0.37
R-28	11/18/20	N	4.7	1.6	86	--	140	--	88	--	--	--	0.28
R-28	11/18/20	FD	4.7	1.5	86	--	140	--	88	--	--	--	0.3
R-28	01/27/21	N	--	1.5	--	--	--	--	--	--	--	--	0.27
R-28	02/17/21	N	--	1.7	--	--	--	--	--	--	--	--	0.47
R-28	05/19/21	N	--	1.4	--	--	--	--	--	--	--	--	0.36
R-28	08/18/21	N	--	1.6	--	--	--	--	--	--	--	--	0.35
R-28	11/17/21	N	--	2	--	--	--	--	--	--	--	--	0.3
R-28	02/16/22	N	--	--	--	--	--	--	--	--	--	--	--
R-28	05/18/22	N	--	--	--	--	--	--	--	--	--	--	--
R-28	08/17/22	N	--	--	--	--	--	--	--	--	--	--	--
RRB	01/30/20	N	--	2.3	--	--	--	--	--	--	--	--	1.1
RRB	02/20/20	N	--	1.5	--	--	--	--	--	--	--	--	0.22
RRB	04/30/20	N	--	2.9	--	--	--	--	--	--	--	--	0.31
RRB	08/20/20	N	--	1.4	--	--	--	--	--	--	--	--	0.25
RRB	11/19/20	N	--	1.4	--	--	--	--	--	--	--	--	--
RRB	01/28/21	N	--	0.61	--	--	--	--	--	--	--	--	0.076
RRB	02/18/21	N	--	1.3	--	--	--	--	--	--	--	--	0.38
RRB	05/20/21	N	--	1.2	--	--	--	--	--	--	--	--	0.32
RRB	08/19/21	N	--	1.3	--	--	--	--	--	--	--	--	0.23
RRB	11/18/21	N	--	1.6	--	--	--	--	--	--	--	--	0.2
RRB	11/18/21	FD	--	1.5	--	--	--	--	--	--	--	--	0.22
RRB	02/17/22	N	--	--	--	--	--	--	--	--	--	--	--
RRB	05/19/22	N	--	--	--	--	--	--	--	--	--	--	--
RRB	08/18/22	N	--	--	--	--	--	--	--	--	--	--	--
RRB	08/18/22	FD	--	--	--	--	--	--	--	--	--	--	--
SW1	01/29/20	N	--	--	--	--	--	--	--	--	--	--	--
SW1	02/19/20	N	--	--	--	--	--	--	--	--	--	--	--
SW1	04/30/20	N	--	--	--	--	--	--	--	--	--	--	--
SW1	08/20/20	N	--	--	--	--	--	--	--	--	--	--	--
SW1	11/18/20	N	--	--	--	--	--	--	--	--	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
R-19	08/19/21	N	--	--	--
R-19	08/19/21	FD	--	--	--
R-19	11/18/21	N	--	--	--
R-19	02/17/22	N	--	--	--
R-19	05/19/22	N	--	--	--
R-19	08/18/22	N	--	--	--
R-28	01/29/20	N	--	--	--
R-28	02/19/20	N	--	--	--
R-28	04/29/20	N	--	--	--
R-28	08/19/20	N	--	--	--
R-28	11/18/20	N	210	580	--
R-28	11/18/20	FD	210	580	--
R-28	01/27/21	N	--	--	--
R-28	02/17/21	N	--	--	--
R-28	05/19/21	N	--	--	--
R-28	08/18/21	N	--	--	--
R-28	11/17/21	N	--	--	--
R-28	02/16/22	N	--	--	--
R-28	05/18/22	N	--	--	--
R-28	08/17/22	N	--	--	--
RRB	01/30/20	N	--	--	--
RRB	02/20/20	N	--	--	--
RRB	04/30/20	N	--	--	--
RRB	08/20/20	N	--	--	--
RRB	11/19/20	N	--	--	--
RRB	01/28/21	N	--	--	--
RRB	02/18/21	N	--	--	--
RRB	05/20/21	N	--	--	--
RRB	08/19/21	N	--	--	--
RRB	11/18/21	N	--	--	--
RRB	11/18/21	FD	--	--	--
RRB	02/17/22	N	--	--	--
RRB	05/19/22	N	--	--	--
RRB	08/18/22	N	--	--	--
RRB	08/18/22	FD	--	--	--
SW1	01/29/20	N	--	--	--
SW1	02/19/20	N	--	--	--
SW1	04/30/20	N	--	--	--
SW1	08/20/20	N	--	--	--
SW1	11/18/20	N	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
SW1	01/27/21	N	<0.2	<1	--	--	--	--	--	--	--	--	--
SW1	02/17/21	N	<0.2	<1	--	--	--	--	--	--	--	--	--
SW1	05/19/21	N	<0.2	<1	--	--	--	--	--	--	--	--	--
SW1	08/18/21	N	<0.2	<1	--	--	--	--	--	--	--	--	--
SW1	11/17/21	N	<0.2	<1	2.2	--	--	--	--	--	--	0.0069	5.6 J
SW1	02/16/22	N	<0.2	--	1.4	--	--	--	--	--	--	0.021 J	--
SW1	05/18/22	N	<0.2	<1	1.6 J	--	--	--	--	--	--	0.011	--
SW1	08/17/22	N	<0.2	--	2.4	--	--	--	--	--	--	0.0077 J	--
SW2	01/29/20	N	<0.2	<1	--	--	--	--	--	--	--	--	--
SW2	02/19/20	N	<0.2	<1	--	--	--	--	--	--	--	--	--
SW2	04/30/20	N	<0.2	<1	--	--	--	--	--	--	--	--	--
SW2	08/20/20	N	<0.2	<1	--	--	--	--	--	--	--	--	--
SW2	11/18/20	N	<0.2	<1	--	--	--	--	--	--	--	--	--
SW2	01/27/21	N	<0.2	<1	--	--	--	--	--	--	--	--	--
SW2	02/17/21	N	<0.2	<1	--	--	--	--	--	--	--	--	--
SW2	05/19/21	N	<0.2	<1	--	--	--	--	--	--	--	--	--
SW2	08/18/21	N	<0.2	<1	--	--	--	--	--	--	--	--	--
SW2	11/17/21	N	<0.2	<1	2.3	--	--	--	--	--	--	0.0076	5.1 J
SW2	02/16/22	N	<0.2	--	1.7	--	--	--	--	--	--	0.015 J	--
SW2	05/18/22	N	<0.2	<1	1.9 J	--	--	--	--	--	--	0.0018	--
SW2	08/17/22	N	<0.2	--	2.2	--	--	--	--	--	--	0.0091 J	--
TOPOCK-2	09/20/21	N	11.8	13	12.1	51.9	0.557	37	--	<0.1	4.2	<0.01	19.1
TOPOCK-2	05/18/22	N	13.8	17.9	15.3	63.6	0.402	26.5	--	<1	3.94	<0.1	<20
TOPOCK-3	09/20/21	N	14.2	14.9	13.4	69.3	0.508	30.1	--	<0.1	4.1	<0.01	16.3
TOPOCK-3	05/18/22	N	11.4	14.9	12.1	58	0.527	37.9	--	2.29	4.55	<0.1	20.5
TW-01	11/04/20	N	1,400	1,400	0.71	26	1.6	170	0.065 J	<0.02	21	<0.0005	26
TW-01	06/10/21	N	1,400	1,500	<0.1	30	1.3 J	200	--	<0.02	17	<0.0005	25
TW-01	06/10/21	FD	1,400	1,500	<0.1	29	1.6 J	210	--	<0.02	19	<0.0005	24
TW-01	06/15/21	N	1,400	1,500	--	--	--	--	--	--	--	--	--
TW-01	06/16/21	N	1,400	1,500	--	--	--	--	--	--	--	--	--
TW-01	06/17/21	N	1,400	1,500	--	--	--	--	--	--	--	--	--
TW-01	06/18/21	N	1,400	1,500	--	--	--	--	--	--	--	--	--
TW-01	06/19/21	N	1,500	1,500	--	--	--	--	--	--	--	--	--
TW-01	06/20/21	N	1,500	1,500	--	--	--	--	--	--	--	--	--
TW-01	06/21/21	N	1,400	1,500	--	--	--	--	--	--	--	--	--
TW-01	06/28/21	N	1,500	1,600	<0.1	32	1.2	200	--	0.023 J	20 J	<0.0005	34 J
TW-01	07/08/21	N	--	--	<0.1	--	--	210	--	--	24	<0.0005	35
TW-01	07/12/21	N	1,500	1,700	<0.1	--	--	210	--	--	22 J	--	35
TW-01	07/12/21	FD	1,500	1,700	<0.1	--	--	210	--	--	24 J	--	35
TW-01	07/20/21	N	--	--	<0.1	--	--	230	--	--	22	<0.0005	30

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
SW1	01/27/21	N	--	--	--	--	--	--	--	--	--	--	--
SW1	02/17/21	N	--	--	--	--	--	--	--	--	--	--	--
SW1	05/19/21	N	--	--	--	--	--	--	--	--	--	--	--
SW1	08/18/21	N	--	--	--	--	--	--	--	--	--	--	--
SW1	11/17/21	N	--	1.1	--	--	--	--	--	--	--	--	<0.05
SW1	02/16/22	N	--	--	--	--	--	--	--	--	--	--	--
SW1	05/18/22	N	--	--	--	--	--	--	--	--	--	--	--
SW1	08/17/22	N	--	--	--	--	--	--	--	--	--	--	--
SW2	01/29/20	N	--	--	--	--	--	--	--	--	--	--	--
SW2	02/19/20	N	--	--	--	--	--	--	--	--	--	--	--
SW2	04/30/20	N	--	--	--	--	--	--	--	--	--	--	--
SW2	08/20/20	N	--	--	--	--	--	--	--	--	--	--	--
SW2	11/18/20	N	--	--	--	--	--	--	--	--	--	--	--
SW2	01/27/21	N	--	--	--	--	--	--	--	--	--	--	--
SW2	02/17/21	N	--	--	--	--	--	--	--	--	--	--	--
SW2	05/19/21	N	--	--	--	--	--	--	--	--	--	--	--
SW2	08/18/21	N	--	--	--	--	--	--	--	--	--	--	--
SW2	11/17/21	N	--	0.99	--	--	--	--	--	--	--	--	<0.05
SW2	02/16/22	N	--	--	--	--	--	--	--	--	--	--	--
SW2	05/18/22	N	--	--	--	--	--	--	--	--	--	--	--
SW2	08/17/22	N	--	--	--	--	--	--	--	--	--	--	--
TOPOCK-2	09/20/21	N	6.71	<1	259	17.9	--	--	343	4.22	--	--	--
TOPOCK-2	05/18/22	N	5.37	<10	190	24.6	104	--	246	4.45	--	--	--
TOPOCK-3	09/20/21	N	5.67	<1	203	18.1	--	--	333	4.21	--	--	--
TOPOCK-3	05/18/22	N	6.72	<10	266	22.2	91.5	--	404	4.61	--	--	--
TW-01	11/04/20	N	17 J	10	1,000	9.4	--	<0.2	--	2.9	--	--	13
TW-01	06/10/21	N	18 J	10	1,100	9.3	--	<0.2	1,600	2.6	--	--	14
TW-01	06/10/21	FD	19 J	10	1,200	9.3	--	<0.2	1,500	2.6	--	--	15
TW-01	06/15/21	N	--	--	--	--	--	--	--	--	--	--	--
TW-01	06/16/21	N	--	--	--	--	--	--	--	--	--	--	--
TW-01	06/17/21	N	--	--	--	--	--	--	--	--	--	--	--
TW-01	06/18/21	N	--	--	--	--	--	--	--	--	--	--	--
TW-01	06/19/21	N	--	--	--	--	--	--	--	--	--	--	--
TW-01	06/20/21	N	--	--	--	--	--	--	--	--	--	--	--
TW-01	06/21/21	N	--	--	--	--	--	--	--	--	--	--	--
TW-01	06/28/21	N	17	10	1,100	11	--	<0.2	1,500	3.5	--	--	14
TW-01	07/08/21	N	19 J	11	1,000	--	--	--	1,600	--	--	--	14
TW-01	07/12/21	N	20 J	10	1,000	--	--	--	1,600	--	--	--	14
TW-01	07/12/21	FD	20 J	9.8	1,100	--	--	--	1,600	--	--	--	15
TW-01	07/20/21	N	17 J	11	1,200	--	--	--	1,600	--	--	--	13

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SW1	01/27/21	N	--	--	--
SW1	02/17/21	N	--	--	--
SW1	05/19/21	N	--	--	--
SW1	08/18/21	N	--	--	--
SW1	11/17/21	N	--	--	--
SW1	02/16/22	N	--	--	--
SW1	05/18/22	N	--	--	--
SW1	08/17/22	N	--	--	--
SW2	01/29/20	N	--	--	--
SW2	02/19/20	N	--	--	--
SW2	04/30/20	N	--	--	--
SW2	08/20/20	N	--	--	--
SW2	11/18/20	N	--	--	--
SW2	01/27/21	N	--	--	--
SW2	02/17/21	N	--	--	--
SW2	05/19/21	N	--	--	--
SW2	08/18/21	N	--	--	--
SW2	11/17/21	N	--	--	--
SW2	02/16/22	N	--	--	--
SW2	05/18/22	N	--	--	--
SW2	08/17/22	N	--	--	--
TOPOCK-2	09/20/21	N	83.9	765	--
TOPOCK-2	05/18/22	N	72.1	630	<1
TOPOCK-3	09/20/21	N	72	549	--
TOPOCK-3	05/18/22	N	97.9	814	<1
TW-01	11/04/20	N	520	3,500	<1
TW-01	06/10/21	N	550	3,600	<1
TW-01	06/10/21	FD	540	3,600	<1
TW-01	06/15/21	N	--	3,600	--
TW-01	06/16/21	N	--	3,500	--
TW-01	06/17/21	N	--	3,600	--
TW-01	06/18/21	N	--	3,600	--
TW-01	06/19/21	N	--	3,600	--
TW-01	06/20/21	N	--	3,600	--
TW-01	06/21/21	N	--	3,300	--
TW-01	06/28/21	N	530	3,600	<10
TW-01	07/08/21	N	530	--	--
TW-01	07/12/21	N	520	3,800	--
TW-01	07/12/21	FD	520	3,700	--
TW-01	07/20/21	N	510	--	--

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TW-01	07/26/21	N	1,400	1,500	<0.1	--	--	230	--	--	22	--	30
TW-01	08/03/21	N	--	--	<0.1	--	--	240	--	--	25	<0.0005	30
TW-01	08/16/21	N	1,400	1,400	<0.1	35	1.3	230	--	<0.02	24 J	<0.0005	30
TW-01	08/16/21	FD	1,400	1,500	<0.1	34	1.3	220	--	<0.02	24 J	<0.0005	29
TW-01	08/25/21	N	--	--	<0.1 J	--	--	250	--	--	23	<0.0005	31
TW-01	09/01/21	N	--	1,500 J	<0.1	--	--	240	--	--	23	<0.0005	22
TW-01	09/02/21	N	1,200	--	--	--	--	--	--	--	--	--	--
TW-01	09/09/21	N	1,200	1,300	<0.1	42	1.2	240	--	<0.02 J	23 J	<0.0005	39
TW-01	09/09/21	FD	1,300	1,500	<0.1	42	1.2	230	--	<0.02 J	23 J	<0.0005	38
TW-01	09/15/21	N	--	--	<0.1	--	--	240	--	--	23 J	<0.0005	37
TW-01	09/23/21	N	1,200	1,400 J	<0.1 J	--	--	280 J	--	--	25	<0.0005	38 J
TW-01	09/23/21	FD	1,200	1,400 J	<0.1 J	--	--	270 J	--	--	24	<0.0005	39 J
TW-01	09/30/21	N	--	--	<0.1 J	--	--	310 J	--	--	30	<0.0005	40
TW-01	10/07/21	N	1,300	1,300	0.79	37	1.4	260	--	<0.02	25 J	<0.0005	34
TW-01	10/07/21	FD	1,300	1,300	0.72	36	1.5	250	--	<0.02	26 J	<0.0005	34
TW-01	10/20/21	N	1,300	1,400	0.92	--	--	270 J	--	--	26	<0.0005	33
TW-01	10/20/21	FD	1,300	1,400	1	--	--	290 J	--	--	27	<0.0005	34
TW-01	11/02/21	N	1,300	1,300	1.1	38 J	1.4	280	--	<0.02	26 J	<0.0005	32
TW-01	11/02/21	FD	1,300	1,300	1	41 J	1.4	260	--	<0.02	25 J	<0.0005	31
TW-01	11/11/21	N	1,300	--	--	--	--	--	--	--	--	--	--
TW-01	11/15/21	N	1,300	1,300	1.7 J	--	--	240	--	--	24 J	--	32 J
TW-01	11/22/21	N	1,200	--	--	--	--	--	--	--	--	--	--
TW-01	12/02/21	N	1,200	--	--	--	--	--	--	--	--	--	--
TW-01	12/08/21	N	1,200	1,300	0.76	--	--	--	--	--	--	<0.0005 J	31
TW-02D	02/19/20	N	740	670	--	--	--	--	--	--	--	0.14	18
TW-02D	07/08/21	N	340	370	--	--	--	190	--	<0.02	28	0.067	--
TW-02D	08/04/21	N	350	360	--	--	--	170	--	<0.02	20	0.052	--
TW-02D	09/08/21	N	27	33	--	--	--	200	--	<0.02	34 J	0.13	18
TW-02D	09/08/21	FD	27	34	--	--	--	--	--	--	--	0.14	18
TW-02D	03/09/22	N	64	62	5.8	52	--	--	--	0.039 J	--	0.14	92
TW-02D	04/14/22	N	710	--	<0.1	43	--	--	--	0.024	--	0.12	--
TW-02D	05/19/22	N	8.5	--	<0.1	51	--	--	--	0.56 J	--	0.27	--
TW-02D	06/15/22	N	840	780	<0.1	34	--	--	--	<0.02	--	0.012 J	65
TW-02D	06/15/22	FD	840	800	<0.1	36	--	--	--	<0.02	--	0.015 J	68
TW-02D	07/13/22	N	490	--	<0.1	26	--	--	--	0.02 J	--	0.054	--
TW-02D	08/09/22	N	200	210	<0.1	24 J	--	--	--	<0.02 J	--	0.039 J	32 J
TW-02D	09/14/22	N	560	--	3.1	23	--	--	--	<0.02	--	0.0077	--
TW-02S	03/09/22	N	110	99	1.4	42	--	--	--	0.031 J	--	<0.0005	9.7
TW-02S	04/14/22	N	130	--	1.1	48	--	--	--	<0.02	--	<0.0005	--
TW-02S	05/19/22	N	97	--	0.57	52	--	--	--	<0.02 J	--	<0.0005	--

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Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
TW-01	07/26/21	N	17 J	10	1,200	--	--	--	1,600	--	--	--	14
TW-01	08/03/21	N	18	12	1,100	--	--	--	1,600	--	--	--	13
TW-01	08/16/21	N	17	12	1,100	10	--	<0.2	1,700	3.4	--	--	12
TW-01	08/16/21	FD	24	12	1,300	10	--	<0.2	1,700	3.2	--	--	13
TW-01	08/25/21	N	18	12	1,100	--	--	--	1,700	--	--	--	12
TW-01	09/01/21	N	18	9.2	1,200	--	--	--	1,700	3.5	--	--	12
TW-01	09/02/21	N	--	--	--	--	--	--	--	--	--	--	--
TW-01	09/09/21	N	18	14	700 J	14	--	<0.2	1,700	3.5	--	--	12
TW-01	09/09/21	FD	17	14	1,300 J	14	--	<0.2	1,700	3.4	--	--	11
TW-01	09/15/21	N	20 J	14	1,200 J	--	--	--	1,700	--	--	--	12
TW-01	09/23/21	N	19	12	1,200	--	--	--	1,700	--	--	--	11
TW-01	09/23/21	FD	18	13	1,200	--	--	--	1,700	--	--	--	11
TW-01	09/30/21	N	20	14	1,300	--	--	--	1,700	--	--	--	15
TW-01	10/07/21	N	22 J	12	1,200	12	--	<0.2	1,800	3.9	--	--	11
TW-01	10/07/21	FD	21 J	12	1,200	12	--	<0.2	1,800	4.2	--	--	12
TW-01	10/20/21	N	19	13	1,200 J	--	--	--	1,800	--	--	--	11
TW-01	10/20/21	FD	20	14	1,300 J	--	--	--	1,800	--	--	--	11
TW-01	11/02/21	N	18 J	13	1,300 J	13	--	<0.2	1,800	3.8	--	--	11
TW-01	11/02/21	FD	18 J	14	1,600 J	13	--	<0.2	1,700	4.1	--	--	11
TW-01	11/11/21	N	--	--	--	--	--	--	--	--	--	--	--
TW-01	11/15/21	N	18 J	13	1,200	--	--	--	1,800	--	--	--	11
TW-01	11/22/21	N	--	--	--	--	--	--	--	--	--	--	--
TW-01	12/02/21	N	--	--	--	--	--	--	--	--	--	--	--
TW-01	12/08/21	N	--	13	--	--	--	--	--	--	--	--	11
TW-02D	02/19/20	N	--	3.4	--	--	260	--	1,400	--	--	--	--
TW-02D	07/08/21	N	--	--	1,400	--	150	--	2,100	--	--	--	2.4
TW-02D	08/04/21	N	--	--	1,300	--	160	--	2,100	--	--	--	2.4
TW-02D	09/08/21	N	--	0.92	1,500	--	200	--	1,900	--	--	--	1.1
TW-02D	09/08/21	FD	--	0.73	--	--	190	--	1,900	--	--	--	--
TW-02D	03/09/22	N	--	0.63	--	--	--	<0.2	--	--	1.1	--	--
TW-02D	04/14/22	N	--	--	--	--	--	--	--	--	1.8 J	--	--
TW-02D	05/19/22	N	--	--	--	--	--	--	--	--	0.36	--	--
TW-02D	06/15/22	N	--	0.98 J	--	--	--	<0.2	--	--	1.5	<5	--
TW-02D	06/15/22	FD	--	1.1 J	--	--	--	<0.2	--	--	1.4	<5	--
TW-02D	07/13/22	N	--	--	--	--	--	--	--	--	0.89	--	--
TW-02D	08/09/22	N	--	0.84	--	--	--	<0.2	--	--	1.5	<5	--
TW-02D	09/14/22	N	--	--	--	--	--	--	--	--	0.97	--	--
TW-02S	03/09/22	N	--	2.5	--	--	--	<0.2	--	--	4	--	--
TW-02S	04/14/22	N	--	--	--	--	--	--	--	--	3.6 J	--	--
TW-02S	05/19/22	N	--	--	--	--	--	--	--	--	3.4	--	--

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
TW-01	07/26/21	N	510	3,900	--
TW-01	08/03/21	N	520	--	--
TW-01	08/16/21	N	530	4,000	<5
TW-01	08/16/21	FD	530	3,900	<1
TW-01	08/25/21	N	510	--	--
TW-01	09/01/21	N	510	4,000	--
TW-01	09/02/21	N	--	--	--
TW-01	09/09/21	N	510	4,000	<1
TW-01	09/09/21	FD	500	4,100	<1
TW-01	09/15/21	N	520	--	--
TW-01	09/23/21	N	520	4,100	--
TW-01	09/23/21	FD	510	3,900	--
TW-01	09/30/21	N	540	--	--
TW-01	10/07/21	N	520	3,800	<1
TW-01	10/07/21	FD	510	4,000	<1
TW-01	10/20/21	N	510	3,900	--
TW-01	10/20/21	FD	520	3,900	--
TW-01	11/02/21	N	510	3,900	<1
TW-01	11/02/21	FD	510	4,000	<1
TW-01	11/11/21	N	--	--	--
TW-01	11/15/21	N	500	3,800	--
TW-01	11/22/21	N	--	--	--
TW-01	12/02/21	N	--	--	--
TW-01	12/08/21	N	--	--	--
TW-02D	02/19/20	N	390	3,400	--
TW-02D	07/08/21	N	470	4,400	--
TW-02D	08/04/21	N	480	4,500	--
TW-02D	09/08/21	N	460	4,100	--
TW-02D	09/08/21	FD	460	4,200	--
TW-02D	03/09/22	N	940	--	<50
TW-02D	04/14/22	N	950	--	<1
TW-02D	05/19/22	N	400	--	<1
TW-02D	06/15/22	N	850	--	<1
TW-02D	06/15/22	FD	920	--	<1
TW-02D	07/13/22	N	720	--	<1
TW-02D	08/09/22	N	650	--	<1
TW-02D	09/14/22	N	740	--	<1
TW-02S	03/09/22	N	180	--	<1
TW-02S	04/14/22	N	190	--	<1
TW-02S	05/19/22	N	190	--	<1

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Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
TW-02S	06/15/22	N	91	80	0.3	52	--	--	--	<0.02	--	<0.0005	8.9
TW-02S	07/13/22	N	100	--	0.52	66	--	--	--	<0.02	--	<0.0005	--
TW-02S	08/09/22	N	130	130	<0.1	77 J	--	--	--	<0.02 J	--	0.0015 J	8 J
TW-02S	09/14/22	N	130	--	0.81	110	--	--	--	<0.02	--	<0.0005	--
TW-03D	01/08/20	N	470	460	--	--	--	190	--	<0.02	36	0.02	--
TW-03D	02/05/20	N	460	480	--	--	--	210	--	<0.02	41 J	0.021	--
TW-03D	03/04/20	N	450	390	--	--	--	230	--	<0.02	33	0.019 J	--
TW-03D	04/07/20	N	440	420	--	--	--	200	--	<0.1 J	30	0.021	--
TW-03D	05/05/20	N	450	410	--	--	--	200	--	<0.02	27	0.019	--
TW-03D	07/23/20	N	390	410	--	--	--	170	--	<0.02	27	0.019	--
TW-03D	08/04/20	N	440	430	--	--	--	190	--	<0.1	26	0.019	--
TW-03D	09/01/20	N	430	420	--	--	--	200	--	0.036 J	29	0.02	--
TW-03D	10/07/20	N	420	400	--	--	--	190	--	0.093 J	37 J	0.019	--
TW-03D	11/03/20	N	440	420	--	--	--	160	--	0.079 J	30	0.019	--
TW-03D	12/03/20	N	440	430	--	--	--	160 J	--	<0.02	32	0.017	--
TW-03D	01/06/21	N	440	410	--	--	--	180	--	<0.02	29	0.018	--
TW-03D	02/03/21	N	420	430	--	--	--	150	--	0.093 J	26	0.019	--
TW-03D	03/03/21	N	400	420	--	--	--	170 J	--	0.12 J	36 J	0.019	--
TW-03D	04/07/21	N	410	400	--	--	--	180	--	0.027	24 J	0.019	--
TW-03D	05/05/21	N	390	360	--	--	--	200	--	0.18 J	24	0.019	--
TW-03D	06/02/21	N	390	370	--	--	--	160 J	--	<0.02	26 J	0.019	--
TW-03D	10/07/21	N	390	380	--	--	--	210	--	<0.02	28	0.0071	--
TW-03D	11/02/21	N	400	390	--	--	--	230 J	--	<0.02	30	0.01	--
TW-03D	12/16/21	N	400	390	<0.1	36	--	--	--	<0.02	--	0.013	22
TW-03D	03/09/22	N	920	840	<0.1	42	--	--	--	<0.02 J	--	0.03	65
TW-03D	04/14/22	N	780	--	<0.1	45	--	--	--	<0.02	--	0.14	--
TW-03D	05/19/22	N	610	--	<0.1	43	--	--	--	<0.02 J	--	0.15	--
TW-03D	06/15/22	N	700	750	<0.1	43	--	--	--	<0.02	--	0.11	72
TW-03D	06/15/22	FD	730	760	<0.1	41	--	--	--	<0.02	--	0.097	66
TW-03D	07/13/22	N	520	--	<0.1	32	--	--	--	<0.02	--	0.048	--
TW-03D	08/09/22	N	160	150	<0.1	45 J	--	--	--	<0.02 J	--	0.055 J	32 J
TW-03D	09/14/22	N	550	--	1.8	29	--	--	--	0.095 J	--	0.019	--
TW-04	06/25/20	N	3.7	4.1	--	--	--	--	--	--	--	0.07	41
TW-04	11/30/20	N	6.4	6.6	--	--	3.2 J	330 J	--	<0.1	71 J	0.048	56
TW-04	06/07/21	N	7.9	7.4	--	--	--	--	--	--	--	0.0063 J	28
TW-04	12/06/21	N	9.1	9.3 J	--	--	--	--	--	--	--	--	--
TW-04	03/03/22	N	12	--	--	--	--	--	--	--	--	--	--
TW-04	06/07/22	N	8.1	8.4	--	--	--	--	--	--	--	--	--
TW-04	08/22/22	N	12	--	--	--	--	--	--	--	--	--	--
TW-05	06/25/20	N	12	12	--	--	--	--	--	--	--	0.0046	32

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TW-02S	06/15/22	N	--	1.9 J	--	--	--	<0.2	--	--	3.3	<10	--
TW-02S	07/13/22	N	--	--	--	--	--	--	--	--	2.8	--	--
TW-02S	08/09/22	N	--	2.2	--	--	--	<0.2	--	--	3	<5	--
TW-02S	09/14/22	N	--	--	--	--	--	--	--	--	2.6	--	--
TW-03D	01/08/20	N	--	--	1,800	--	160	--	2,100	--	--	--	2.6
TW-03D	02/05/20	N	--	--	1,300	--	150	--	2,200	--	--	--	2.5
TW-03D	03/04/20	N	--	--	1,400	--	160	--	2,100	--	--	--	2.9
TW-03D	04/07/20	N	--	--	1,500	--	170	--	2,100	--	--	--	2.9
TW-03D	05/05/20	N	--	--	1,400	--	160	--	2,300	--	--	--	3.4
TW-03D	07/23/20	N	--	--	1,400	--	150	--	2,100	--	--	--	2.3
TW-03D	08/04/20	N	--	--	1,300 J	--	150	--	2,100	--	--	--	2.5
TW-03D	09/01/20	N	--	--	1,400	--	150	--	2,000	--	--	--	2.9
TW-03D	10/07/20	N	--	--	1,500	--	150	--	2,100	--	--	--	2.8
TW-03D	11/03/20	N	--	--	1,500 J	--	150	--	2,000	--	--	--	2.5
TW-03D	12/03/20	N	--	--	1,600 J	--	160	--	2,000	--	--	--	--
TW-03D	01/06/21	N	--	--	1,500 J	--	150	--	2,100	--	--	--	2.8
TW-03D	02/03/21	N	--	--	1,300	--	150	--	2,100	--	--	--	3
TW-03D	03/03/21	N	--	--	1,500	--	140	--	2,100	--	--	--	2.6
TW-03D	04/07/21	N	--	--	1,500	--	150	--	2,100	--	--	--	2.8
TW-03D	05/05/21	N	--	--	1,400	--	160	--	2,100	--	--	--	2.6
TW-03D	06/02/21	N	--	--	1,600 J	--	160	--	2,000	--	--	--	2.7
TW-03D	10/07/21	N	--	--	1,500 J	--	150	--	2,100	--	--	--	2.4 J
TW-03D	11/02/21	N	--	--	1,400 J	--	150	--	2,100	--	--	--	2.6
TW-03D	12/16/21	N	--	3.4	--	--	--	<0.23	--	--	--	<5	2.4
TW-03D	03/09/22	N	--	1.1	--	--	--	<0.2	--	--	1.5	--	--
TW-03D	04/14/22	N	--	--	--	--	--	--	--	--	1.7 J	--	--
TW-03D	05/19/22	N	--	--	--	--	--	--	--	--	1.5	--	--
TW-03D	06/15/22	N	--	1.1 J	--	--	--	<0.2	--	--	1.4	--	--
TW-03D	06/15/22	FD	--	1 J	--	--	--	<0.2	--	--	1.4	--	--
TW-03D	07/13/22	N	--	--	--	--	--	--	--	--	0.95	--	--
TW-03D	08/09/22	N	--	0.94	--	--	--	<0.2	--	--	1.6	<5	--
TW-03D	09/14/22	N	--	--	--	--	--	--	--	--	1	--	--
TW-04	06/25/20	N	--	0.58	--	--	--	--	--	--	--	--	--
TW-04	11/30/20	N	--	0.63	4,000 J	--	68	--	6,700	--	--	--	--
TW-04	06/07/21	N	--	<0.5	--	--	--	--	--	--	--	--	--
TW-04	12/06/21	N	--	--	--	--	--	--	--	--	--	--	--
TW-04	03/03/22	N	--	--	--	--	--	--	--	--	--	--	--
TW-04	06/07/22	N	--	--	--	--	--	--	--	--	--	--	--
TW-04	08/22/22	N	--	--	--	--	--	--	--	--	--	--	--
TW-05	06/25/20	N	--	0.58	--	--	--	--	--	--	--	--	--

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Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
TW-02S	06/15/22	N	190	--	<1
TW-02S	07/13/22	N	180	--	<1
TW-02S	08/09/22	N	170	--	<1
TW-02S	09/14/22	N	230	--	<1
TW-03D	01/08/20	N	510	4,500	--
TW-03D	02/05/20	N	510	4,500	--
TW-03D	03/04/20	N	500	4,600	--
TW-03D	04/07/20	N	500	4,700	--
TW-03D	05/05/20	N	500	4,700	--
TW-03D	07/23/20	N	490	4,500	--
TW-03D	08/04/20	N	490	4,600	--
TW-03D	09/01/20	N	470	4,500	--
TW-03D	10/07/20	N	480	4,400	--
TW-03D	11/03/20	N	470	4,300	--
TW-03D	12/03/20	N	480	4,500	--
TW-03D	01/06/21	N	470	4,400	--
TW-03D	02/03/21	N	500	4,400	--
TW-03D	03/03/21	N	480	4,400	--
TW-03D	04/07/21	N	490	4,400	--
TW-03D	05/05/21	N	470	4,400	--
TW-03D	06/02/21	N	480	4,300	--
TW-03D	10/07/21	N	480	4,400	--
TW-03D	11/02/21	N	480	4,500	--
TW-03D	12/16/21	N	500	--	<1
TW-03D	03/09/22	N	920	--	<1
TW-03D	04/14/22	N	880	--	<1
TW-03D	05/19/22	N	850	--	<1
TW-03D	06/15/22	N	870	--	<1
TW-03D	06/15/22	FD	870	--	<1
TW-03D	07/13/22	N	750	--	<1
TW-03D	08/09/22	N	660	--	<1
TW-03D	09/14/22	N	790	--	<1
TW-04	06/25/20	N	--	--	--
TW-04	11/30/20	N	1,100	14,000	--
TW-04	06/07/21	N	--	--	--
TW-04	12/06/21	N	--	--	--
TW-04	03/03/22	N	--	--	--
TW-04	06/07/22	N	--	--	--
TW-04	08/22/22	N	--	--	--
TW-05	06/25/20	N	--	--	--

Appendix B
January 2020 to September 2022 Analytical Results
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Monitoring Well ID	Sample Date	Sample Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Barium (µg/L)	Dissolved Boron (mg/L)	Dissolved Calcium (mg/L)	Total Iron (mg/L)	Dissolved Iron (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Manganese (mg/L)	Dissolved Molybdenum (µg/L)
TW-05	12/07/20	N	18	16 J	--	--	2.5 J	380 J	--	<0.1 J	36 J	0.0015	25 J
TW-05	05/28/21	N	12	12	--	--	--	--	--	--	--	--	32
TW-05	12/13/21	N	14	15	<0.1	--	--	--	--	--	--	0.0014	--
TW-05	06/17/22	N	13	12	--	--	--	--	--	--	--	--	--

Abbreviations:

-- = not applicable or not available

< = not detected at reporting limit, as shown

N = primary sample

FD = field duplicate

J = estimated concentration

mg/L= milligram(s) per liter

µg/L = microgram(s) per liter

Appendix B
January 2020 to September 2022 Analytical Results
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Monitoring Well ID	Sample Date	Sample Type	Dissolved Potassium (mg/L)	Dissolved Selenium (µg/L)	Dissolved Sodium (mg/L)	Dissolved Vanadium (µg/L)	Alkalinity (mg/L)	Ammonia (as Nitrogen) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate (as Nitrogen) (mg/L)	Nitrite (as Nitrogen) (mg/L)	Nitrate/ Nitrite as N (mg/L)
TW-05	12/07/20	N	--	0.96 J	2,600 J	--	38	--	5,200	--	--	--	--
TW-05	05/28/21	N	--	0.77	--	--	--	--	--	--	--	--	--
TW-05	12/13/21	N	--	--	--	--	--	--	--	--	--	--	--
TW-05	06/17/22	N	--	--	--	--	--	--	--	--	--	--	--

Abbreviations:

-- = not applicable or not available

< = not detected at reporting limit, as shown

N = primary sample

FD = field duplicate

J = estimated concentration

mg/L= milligram(s) per liter

µg/L = microgram(s) per liter

Appendix B
January 2020 to September 2022 Analytical Results
Third Quarter 2022 Quarterly Progress Report
Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Monitoring Well ID	Sample Date	Sample Type	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
TW-05	12/07/20	N	600	11,000	--
TW-05	05/28/21	N	--	--	--
TW-05	12/13/21	N	--	--	--
TW-05	06/17/22	N	--	--	--

Abbreviations:

-- = not applicable or not available

< = not detected at reporting limit, as shown

N = primary sample

FD = field duplicate

J = estimated concentration

mg/L= milligram(s) per liter

µg/L = microgram(s) per liter

Appendix C

Laboratory Reports, Third Quarter 2022

For additional help with the information provided in the lab reports, please contact Alison Schaffer, Arcadis Report Lead, at 303.471.3575

July 27, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N051580

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on July 11, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Dilution was necessary for sample N051580-002 due to matrix interference. Sample was analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Sample was reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for EPA 6020_Dissolved:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Manganese in QC samples N051585-001CMS and N051585-001CMSD since the analyte concentration in the sample is disproportionate to the spike level. Post Spike (PS) passed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for SM 5310C:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria in QC samples N051569-014CMS and N051569-014CMSD at lower dilution possibly due to matrix interference. QC samples were diluted and recovery passed criteria. Thus sample reference N051569-014 and MS/MSD were reported at 5x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N051580
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N051580-001A	MW-76-039-0722	Groundwater	7/11/2022 3:37:00 PM	7/11/2022	7/27/2022
N051580-001B	MW-76-039-0722	Groundwater	7/11/2022 3:37:00 PM	7/11/2022	7/27/2022
N051580-001C	MW-76-039-0722	Groundwater	7/11/2022 3:37:00 PM	7/11/2022	7/27/2022
N051580-001D	MW-76-039-0722	Groundwater	7/11/2022 3:37:00 PM	7/11/2022	7/27/2022
N051580-002A	MW-76-156-0722	Groundwater	7/11/2022 2:54:00 PM	7/11/2022	7/27/2022
N051580-002B	MW-76-156-0722	Groundwater	7/11/2022 2:54:00 PM	7/11/2022	7/27/2022
N051580-002C	MW-76-156-0722	Groundwater	7/11/2022 2:54:00 PM	7/11/2022	7/27/2022
N051580-002D	MW-76-156-0722	Groundwater	7/11/2022 2:54:00 PM	7/11/2022	7/27/2022
N051580-003A	MW-76-181-0722	Groundwater	7/11/2022 3:41:00 PM	7/11/2022	7/27/2022
N051580-003B	MW-76-181-0722	Groundwater	7/11/2022 3:41:00 PM	7/11/2022	7/27/2022
N051580-003C	MW-76-181-0722	Groundwater	7/11/2022 3:41:00 PM	7/11/2022	7/27/2022
N051580-003D	MW-76-181-0722	Groundwater	7/11/2022 3:41:00 PM	7/11/2022	7/27/2022
N051580-004A	MW-76-218-0722	Groundwater	7/11/2022 2:51:00 PM	7/11/2022	7/27/2022
N051580-004B	MW-76-218-0722	Groundwater	7/11/2022 2:51:00 PM	7/11/2022	7/27/2022
N051580-004C	MW-76-218-0722	Groundwater	7/11/2022 2:51:00 PM	7/11/2022	7/27/2022
N051580-004D	MW-76-218-0722	Groundwater	7/11/2022 2:51:00 PM	7/11/2022	7/27/2022
N051580-005A	EB-701-Q322	Groundwater	7/11/2022 4:00:00 PM	7/11/2022	7/27/2022
N051580-006A	MW-77-046-0722	Groundwater	7/11/2022 1:19:00 PM	7/11/2022	7/27/2022
N051580-006B	MW-77-046-0722	Groundwater	7/11/2022 1:19:00 PM	7/11/2022	7/27/2022
N051580-006C	MW-77-046-0722	Groundwater	7/11/2022 1:19:00 PM	7/11/2022	7/27/2022
N051580-006D	MW-77-046-0722	Groundwater	7/11/2022 1:19:00 PM	7/11/2022	7/27/2022
N051580-007A	MW-77-102-0722	Groundwater	7/11/2022 1:27:00 PM	7/11/2022	7/27/2022
N051580-007B	MW-77-102-0722	Groundwater	7/11/2022 1:27:00 PM	7/11/2022	7/27/2022
N051580-007C	MW-77-102-0722	Groundwater	7/11/2022 1:27:00 PM	7/11/2022	7/27/2022
N051580-007D	MW-77-102-0722	Groundwater	7/11/2022 1:27:00 PM	7/11/2022	7/27/2022
N051580-008A	MW-77-158-0722	Groundwater	7/11/2022 2:19:00 PM	7/11/2022	7/27/2022
N051580-008B	MW-77-158-0722	Groundwater	7/11/2022 2:19:00 PM	7/11/2022	7/27/2022
N051580-008C	MW-77-158-0722	Groundwater	7/11/2022 2:19:00 PM	7/11/2022	7/27/2022
N051580-008D	MW-77-158-0722	Groundwater	7/11/2022 2:19:00 PM	7/11/2022	7/27/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N051580
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N051580-009A	MW-77-187-0722	Groundwater	7/11/2022 1:56:00 PM	7/11/2022	7/27/2022
N051580-009B	MW-77-187-0722	Groundwater	7/11/2022 1:56:00 PM	7/11/2022	7/27/2022
N051580-009C	MW-77-187-0722	Groundwater	7/11/2022 1:56:00 PM	7/11/2022	7/27/2022
N051580-009D	MW-77-187-0722	Groundwater	7/11/2022 1:56:00 PM	7/11/2022	7/27/2022
N051580-010A	EB-702-Q322	Groundwater	7/11/2022 3:55:00 PM	7/11/2022	7/27/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 3:37:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220713B**	QC Batch: **R163929**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	140	0.50	4.0		µg/L	20	7/14/2022 01:14 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714B**	QC Batch: **R163962**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	7/15/2022 12:17 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-181-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 3:41:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220713B**	QC Batch: **R163929**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	1700	5.0	40		µg/L	200	7/13/2022 06:16 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-218-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:51:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220713B**	QC Batch: **R163929**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	36	0.50	4.0		µg/L	20	7/13/2022 09:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-701-Q322
Lab Order:	N051580	**Collection Date:**	7/11/2022 4:00:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220713B**	QC Batch: **R163929**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/13/2022 11:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220713B**	QC Batch: **R163929**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/13/2022 10:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:27:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220713B**	QC Batch: **R163929**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/13/2022 10:24 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220713B**	QC Batch: **R163929**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/13/2022 10:43 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:56:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
EPA 218.6							
RunID: **NV00922-IC7_220713B** QC Batch: **R163929** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	40	0.13	1.0		µg/L	5	7/13/2022 09:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-702-Q322
Lab Order:	N051580	**Collection Date:**	7/11/2022 3:55:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220713B**	QC Batch: **R163929**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/13/2022 11:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	LCS-R163929	SampType:	LCS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	LCSW	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4720885

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.258	0.20	5.000	0	105	90	110				

Sample ID	MB-R163929	SampType:	MBLK	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	PBW	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4720888

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID	N051580-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4720890

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2743.000	40	1000	1665	108	90	110				

Sample ID	N051580-003AMSD	SampType:	MSD	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4720891

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2718.320	40	1000	1665	105	90	110	2743	0.904	20	

Sample ID	N051590-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4720894

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.197	0.20	1.000	1.182	102	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051590-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4720896

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.894	0.20	1.000	1.859	103	90	110				

Sample ID	N051590-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4720900

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	3.127	0.20	1.000	2.058	107	90	110				

Sample ID	N051580-004AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4720904

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	137.962	4.0	100.0	36.04	102	90	110				

Sample ID	N051580-009AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4720906

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	64.120	1.0	25.00	39.50	98.5	90	110				

Sample ID	N051580-006AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4720910

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.029	0.20	1.000	0	103	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051580-007AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4720912

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.061	0.20	1.000	0	106	90	110				

Sample ID	N051580-005AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4720914

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.010	0.20	1.000	0	101	90	110				

Sample ID	N051580-010AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4720916

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.052	0.20	1.000	0	105	90	110				

Sample ID	N051580-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4720925

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	241.446	4.0	100.0	137.1	104	90	110				

Sample ID	N051566-001ADUP	SampType:	DUP	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4721089

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	44.303	1.0						44.68	0.851	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051580-008AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4722816

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.139	0.20	1.000	0.09830	104	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	LCS-R163962	SampType:	LCS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163962		
Client ID:	LCSW	Batch ID:	R163962	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722449		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	5.205	0.20	5.000	0	104	90	110						

Sample ID	MB-R163962	SampType:	MBLK	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163962		
Client ID:	PBW	Batch ID:	R163962	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722450		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	ND	0.20											

Sample ID	N051611-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163962		
Client ID:	ZZZZZZ	Batch ID:	R163962	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722452		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	9.280	0.20	5.000	4.097	104	90	110						

Sample ID	N051611-002AMSD	SampType:	MSD	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163962		
Client ID:	ZZZZZZ	Batch ID:	R163962	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722453		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	9.396	0.20	5.000	4.097	106	90	110	9.280	1.25	20			

Sample ID	N051610-001ADUP	SampType:	DUP	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163962		
Client ID:	ZZZZZZ	Batch ID:	R163962	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722455		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	1.353	0.20						1.357	0.288	20			

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051610-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163962
Client ID:	ZZZZZZ	Batch ID:	R163962	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722456

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.386	0.20	1.000	1.357	103	90	110				

Sample ID	N051610-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163962
Client ID:	ZZZZZZ	Batch ID:	R163962	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722460

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.167	0.20	1.000	0.08050	109	90	110				

Sample ID	N051610-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163962
Client ID:	ZZZZZZ	Batch ID:	R163962	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722462

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.654	0.20	1.000	0.6166	104	90	110				

Sample ID	N051610-004AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163962
Client ID:	ZZZZZZ	Batch ID:	R163962	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722464

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.951	0.20	1.000	0.8887	106	90	110				

Sample ID	N051610-005AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163962
Client ID:	ZZZZZZ	Batch ID:	R163962	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722466

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.213	0.20	1.000	1.216	99.7	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **N051610-006AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163962**
Client ID: **ZZZZZZ**	Batch ID: **R163962**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722468**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.898	0.20	1.000	1.824	107	90	110				

Sample ID **N051610-007AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163962**
Client ID: **ZZZZZZ**	Batch ID: **R163962**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722472**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.156	0.20	1.000	1.086	107	90	110				

Sample ID **N051610-008AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163962**
Client ID: **ZZZZZZ**	Batch ID: **R163962**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722474**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.547	0.20	1.000	1.514	103	90	110				

Sample ID **N051580-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163962**
Client ID: **ZZZZZZ**	Batch ID: **R163962**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4722479**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.859	1.0	5.000	0	97.2	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 3:37:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	280	3.0	25		mg/L	50	7/18/2022 01:42 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712B**	QC Batch: **R163861**			PrepDate:			Analyst: **RAB**
Nitrate as N	2.5	0.048	0.25		mg/L	5	7/12/2022 11:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	720	6.1	50		mg/L	100	7/18/2022 03:36 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712B**	QC Batch: **R163861**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/13/2022 12:24 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051580-003

Client Sample ID: MW-76-181-0722
Collection Date: 7/11/2022 3:41:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	900	6.1	50		mg/L	100	7/18/2022 03:53 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712B**	QC Batch: **R163861**			PrepDate:			Analyst: **RAB**
Nitrate as N	2.5	0.095	0.50		mg/L	10	7/13/2022 12:57 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051580-004

Client Sample ID: MW-76-218-0722
Collection Date: 7/11/2022 2:51:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	680	6.1	50		mg/L	100	7/18/2022 04:09 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712B**	QC Batch: **R163861**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.69	0.095	0.50		mg/L	10	7/13/2022 01:14 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	370	3.0	25		mg/L	50	7/18/2022 02:31 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712B**	QC Batch: **R163861**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/13/2022 01:31 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:27:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	710	6.1	50		mg/L	100	7/18/2022 09:27 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712B**	QC Batch: **R163861**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.93	0.095	0.50		mg/L	10	7/13/2022 01:48 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	540	3.0	25		mg/L	50	7/18/2022 02:47 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712B**	QC Batch: **R163861**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/13/2022 02:05 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:56:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	880	6.1	50		mg/L	100	7/18/2022 09:44 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712B**	QC Batch: **R163861**			PrepDate:			Analyst: **RAB**
Nitrate as N	1.2	0.095	0.50		mg/L	10	7/13/2022 02:21 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	MB-R164035_SO4	SampType:	MBLK	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164035
Client ID:	PBW	Batch ID:	R164035	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4730575

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.50									

Sample ID	LCS-R164035_SO4	SampType:	LCS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164035
Client ID:	LCSW	Batch ID:	R164035	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4730576

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	4.003	0.50	4.000	0	100	90	110				

Sample ID	N051585-001BMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164035
Client ID:	ZZZZZZ	Batch ID:	R164035	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4730578

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	283.296	10	80.00	199.3	105	80	120				

Sample ID	N051585-001BMSD	SampType:	MSD	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164035
Client ID:	ZZZZZZ	Batch ID:	R164035	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4730579

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	283.230	10	80.00	199.3	105	80	120	283.3	0.0233	20	

Sample ID	N051580-001BDUP	SampType:	DUP	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164035
Client ID:	ZZZZZZ	Batch ID:	R164035	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4730581

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	281.510	25						283.8	0.805	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	N051580-001BMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164035
Client ID:	ZZZZZZ	Batch ID:	R164035	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4730582

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	479.655	25	200.0	283.8	97.9	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	LCS-R163861_NO3	SampType:	LCS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163861
Client ID:	LCSW	Batch ID:	R163861	TestNo:	EPA 300.0			Analysis Date:	7/12/2022	SeqNo:	4719454

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.225	0.050	1.250	0	98.0	90	110				

Sample ID	MB-R163861_NO3	SampType:	MBLK	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163861
Client ID:	PBW	Batch ID:	R163861	TestNo:	EPA 300.0			Analysis Date:	7/12/2022	SeqNo:	4719455

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID	N051569-014BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163861
Client ID:	ZZZZZZ	Batch ID:	R163861	TestNo:	EPA 300.0			Analysis Date:	7/12/2022	SeqNo:	4719461

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	19.932	0.50	12.50	7.443	99.9	80	120				

Sample ID	N051569-014BMSD	SampType:	MSD	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163861
Client ID:	ZZZZZZ	Batch ID:	R163861	TestNo:	EPA 300.0			Analysis Date:	7/12/2022	SeqNo:	4719462

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	19.864	0.50	12.50	7.443	99.4	80	120	19.93	0.342	20	

Sample ID	N051580-001BDUP	SampType:	DUP	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163861
Client ID:	ZZZZZZ	Batch ID:	R163861	TestNo:	EPA 300.0			Analysis Date:	7/13/2022	SeqNo:	4719466

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	2.440	0.25						2.456	0.694	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	N051580-002BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163861
Client ID:	ZZZZZZ	Batch ID:	R163861	TestNo:	EPA 300.0			Analysis Date:	7/13/2022	SeqNo:	4719468

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.020	0.50	12.50	0.1910	94.6	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 3:37:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220712B**	QC Batch: **R163890**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/12/2022 10:13 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220712B**	QC Batch: **R163890**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/12/2022 10:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-181-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 3:41:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220712B**	QC Batch: **R163890**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/12/2022 10:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-218-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:51:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220712B**	QC Batch: **R163890**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/12/2022 10:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220712B**	QC Batch: **R163890**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/12/2022 11:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:27:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220712B**	QC Batch: **R163890**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/12/2022 11:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220712B**	QC Batch: **R163890**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/12/2022 11:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:56:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220712B**	QC Batch: **R163890**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/13/2022 12:01 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID **LCS-R163890**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163890**
Client ID: **LCSW**	Batch ID: **R163890**	TestNo: **SM 5310C**		Analysis Date: **7/12/2022**	SeqNo: **4719734**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.186	1.0	5.000	0	104	85	115				

Sample ID **MB-R163890**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163890**
Client ID: **PBW**	Batch ID: **R163890**	TestNo: **SM 5310C**		Analysis Date: **7/12/2022**	SeqNo: **4719735**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID **N051569-014CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163890**
Client ID: **ZZZZZZ**	Batch ID: **R163890**	TestNo: **SM 5310C**		Analysis Date: **7/12/2022**	SeqNo: **4719743**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	23.129	5.0	25.00	0	92.5	75	125				

Sample ID **N051569-014CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163890**
Client ID: **ZZZZZZ**	Batch ID: **R163890**	TestNo: **SM 5310C**		Analysis Date: **7/12/2022**	SeqNo: **4719744**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	23.169	5.0	25.00	0	92.7	75	125	23.13	0.171	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 3:37:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220716A**	QC Batch: **93727**				PrepDate:	**7/13/2022**	Analyst: **DJ**
Iron	110	13	20		µg/L	1	7/16/2022 01:24 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220716A**	QC Batch: **93727**				PrepDate:	**7/13/2022**	Analyst: **DJ**
Iron	200	13	20		µg/L	1	7/16/2022 01:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-181-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 3:41:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93727**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Iron	32	13	20		µg/L	1	7/16/2022 02:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-218-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:51:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93727**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Iron	44	13	20		µg/L	1	7/16/2022 02:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93727**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Iron	130	13	20		µg/L	1	7/16/2022 02:14 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:27:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93727**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Iron	260	13	20		µg/L	1	7/16/2022 02:19 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93727**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Iron	360	13	20		µg/L	1	7/16/2022 02:25 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:56:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93727**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Iron	330	13	20		µg/L	1	7/16/2022 02:31 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-93727**	SampType: **MBLK**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **7/13/2022**	RunNo: **163995**
Client ID: **PBW**	Batch ID: **93727**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4724311**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-93727**	SampType: **LCS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **7/13/2022**	RunNo: **163995**
Client ID: **LCSW**	Batch ID: **93727**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4724312**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	90.215	20	100.0	0	90.2	85	115				

Sample ID: **N051569-014DMS**	SampType: **MS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **7/13/2022**	RunNo: **163995**
Client ID: **ZZZZZZ**	Batch ID: **93727**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4724318**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	93.229	20	100.0	0	93.2	75	125				

Sample ID: **N051569-015D-MS**	SampType: **MS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **7/13/2022**	RunNo: **163995**
Client ID: **ZZZZZZ**	Batch ID: **93727**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4724323**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	99.723	20	100.0	0	99.7	75	125				

Sample ID: **N051569-015D-MSD**	SampType: **MSD**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **7/13/2022**	RunNo: **163995**
Client ID: **ZZZZZZ**	Batch ID: **93727**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4724324**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	100.325	20	100.0	0	100	75	125	99.72	0.602	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **N051569-014DMSD** SampType: **MSD** TestCode: **6010_WDPG** Units: **µg/L** Prep Date: **7/13/2022** RunNo: **164336**
Client ID: **ZZZZZZ** Batch ID: **93727** TestNo: **EPA 6010B** **EPA 3010A** Analysis Date: **7/26/2022** SeqNo: **4750419**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	93.940	20	100.0	0	93.9	75	125	93.23	0.760	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 3:37:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/15/2022 06:27 AM
Barium	74	0.083	1.0		µg/L	1	7/16/2022 05:58 AM
Manganese	12	0.026	0.50		µg/L	1	7/15/2022 06:27 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/15/2022 06:33 AM
Barium	91	0.083	1.0		µg/L	1	7/16/2022 06:04 AM
Manganese	1400	0.66	12		µg/L	25	7/15/2022 10:53 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-181-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 3:41:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:		**7/13/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/15/2022 06:39 AM
Barium	68	0.083	1.0		µg/L	1	7/16/2022 06:10 AM
Manganese	0.74	0.026	0.50		µg/L	1	7/16/2022 06:10 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-218-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:51:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/15/2022 06:45 AM
Barium	87	0.083	1.0		µg/L	1	7/16/2022 06:16 AM
Manganese	240	0.13	2.5		µg/L	5	7/15/2022 11:16 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:		**7/13/2022**	Analyst: **DJ**
Arsenic	1.2	0.050	0.10		µg/L	1	7/15/2022 06:51 AM
Barium	55	0.083	1.0		µg/L	1	7/16/2022 06:22 AM
Manganese	480	0.13	2.5		µg/L	5	7/15/2022 11:22 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:27:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:		**7/13/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/15/2022 06:57 AM
Barium	59	0.083	1.0		µg/L	1	7/16/2022 06:28 AM
Manganese	110	0.026	0.50		µg/L	1	7/15/2022 06:57 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/15/2022 07:03 AM
Barium	30	0.083	1.0		µg/L	1	7/16/2022 06:34 AM
Manganese	19	0.026	0.50		µg/L	1	7/15/2022 07:03 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:56:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/15/2022 07:09 AM
Barium	32	0.083	1.0		µg/L	1	7/16/2022 06:40 AM
Manganese	17	0.026	0.50		µg/L	1	7/15/2022 07:09 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID **MB-93751**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/13/2022**	RunNo: **163938**
Client ID: **PBW**	Batch ID: **93751**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/15/2022**	SeqNo: **4724025**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Manganese	ND	0.50									

Sample ID **LCS-93751**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/13/2022**	RunNo: **163938**
Client ID: **LCSW**	Batch ID: **93751**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/15/2022**	SeqNo: **4724026**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.177	0.10	10.00	0	91.8	85	115				
Manganese	102.233	0.50	100.0	0	102	85	115				

Sample ID **N051585-001CMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/13/2022**	RunNo: **163938**
Client ID: **ZZZZZZ**	Batch ID: **93751**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/15/2022**	SeqNo: **4724042**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.270	0.10	10.00	2.174	101	75	125				

Sample ID **N051585-001CMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/13/2022**	RunNo: **163938**
Client ID: **ZZZZZZ**	Batch ID: **93751**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/15/2022**	SeqNo: **4724043**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.007	0.10	10.00	2.174	98.3	75	125	12.27	2.17	20	

Sample ID **N051585-001CMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/13/2022**	RunNo: **163938**
Client ID: **ZZZZZZ**	Batch ID: **93751**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/15/2022**	SeqNo: **4724077**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	551.450	2.5	100.0	503.7	47.8	75	125				S

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N051585-001CMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	163938
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/15/2022	SeqNo:	4724078

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	548.074	2.5	100.0	503.7	44.4	75	125	551.4	0.614	20	S

Sample ID	MB-93751	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	164015
Client ID:	PBW	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727218

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	ND	1.0									

Sample ID	LCS-93751	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	164015
Client ID:	LCSW	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727219

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	10.019	1.0	10.00	0	100	85	115				

Sample ID	N051585-001CMS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	164015
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727235

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	30.736	1.0	10.00	22.41	83.3	75	125				

Sample ID	N051585-001CMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	164015
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727236

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	30.097	1.0	10.00	22.41	76.9	75	125	30.74	2.10	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N051585-001C-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	163938
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/15/2022	SeqNo:	4724041

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.029	0.10	10.00	2.174	98.6	80	120				

Sample ID	N051585-001C-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	163938
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/15/2022	SeqNo:	4724076

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	615.078	2.5	100.0	503.7	111	80	120				

Sample ID	N051585-001C-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	164015
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727234

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	30.947	1.0	10.00	22.41	85.4	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ASSET LABORATORIES

ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

Page 1 of 1

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement: Excel EDD; Geotracker; Labspec; Others ✓; Specify: RWQCB
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	QA/QC: RTNE; RWQCB ✓; CalTrans; LEVEL III; LEVEL IV; Regulatory; Specify State:
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Sample Receipt Condition: Y / N
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	1. Chilled: Y
Submitted By: Riggie Tap	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	2. Headspace: N
Title: Field Tech		Global ID:	3. Container Intact: Y
Signature: Date: 7/11/22	Sampled By: Riggie Tap		4. Seal Present: N
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.		5. IR number: 3
Project Name: PG&E Topock - PCM	Signature:	Date: 7/11/22	6. Method of Cooling: ICE
Project Number: 30121866.3Q22GW			Sample Temp: 2.4°C

Matrix: Ground; X Sediment; Potable; Soil; NPDES; Other Solid; Surface

Courier: ASSET

Tracking No.:

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	TRUE	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N051580-01	MW-76-039-0722	7/11/2022	1537		X	X	X			X				E	6	P	BNS	
2	-02	MW-76-156-0722	7/11/2022	1454		X	X	X			X				E	6	P	BNS	
3	-03	MW-76-181-0722	7/11/2022	[redacted]	1541	X	X	X			X				E	6	P	BNS	
4	-04	MW-76-218-0722	7/11/2022	1451		X	X	X			X				E	6	P	BNS	
5	-05	EB-701-Q322	7/11/2022	1600		X									E	1	P	BNS	
6	-06	MW-77-046-0722	7/11/2022	1319		X	X	X			X				E	6	P	BNS	
7	-07	MW-77-102-0722	7/11/2022	1327		X	X	X			X				E	6	P	BNS	
8	-08	MW-77-158-0722	7/11/2022	1419		X	X	X			X				E	6	P	BNS	
9	-09	MW-77-187-0722	7/11/2022	1356		X	X	X			X				E	6	P	BNS	
10	-10	EB-702-Q322	7/11/2022	1555		X									E	1	P	BNS	
11																			
12																			
13																			
14																			

Relinquished by (Signature and Printed Name):	Date/Time:	Received by (Signature and Printed Name):	Date/Time:
Riggie Tap 7/11/22	1645	MBCARTIN	7/11/22 @ 1645
REL/REC: MBCARTIN			7/11/22 @ 1900

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [X] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives: H=HCL; N=HNO_3; S=H_2SO_4; C=4°C; Z=$Zn(AC)_2$; O=NaOH; T=$Na_2S_2O_3$; Others/Specify: B (NH4)2SO4/NH4OH

Container Type: T=Tube; V=VOA; P=Pint; J=Jar; B=Tedlar; G=Glass; M=Metal; M=Metal; C=Can

White=Laboratory Copy

Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	7/11/2022	Workorder:	N051580
Rep sample Temp (Deg C):	2.4	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For:

Checklist Completed By: GGJ GGarcia 7/12/2022

Reviewed By: MBC 7/20/2022

ASSET Laboratories

WORK ORDER Summary

20-Jul-22

WorkOrder: N051580

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/11/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051580-001A	MW-76-039-0722	7/11/2022 3:37:00 PM	7/25/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051580-001B			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051580-001C			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051580-001D			7/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051580-002A	MW-76-156-0722	7/11/2022 2:54:00 PM	7/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051580-002B			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051580-002C			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051580-002D			7/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051580-003A	MW-76-181-0722	7/11/2022 3:41:00 PM	7/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051580-003B			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051580-003C			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

20-Jul-22

WorkOrder: N051580

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/11/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051580-003C	MW-76-181-0722	7/11/2022 3:41:00 PM	7/25/2022	Groundwater	EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051580-003D			7/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051580-004A	MW-76-218-0722	7/11/2022 2:51:00 PM	7/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051580-004B			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051580-004C			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051580-004D			7/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051580-005A	EB-701-Q322	7/11/2022 4:00:00 PM	7/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051580-006A	MW-77-046-0722	7/11/2022 1:19:00 PM	7/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051580-006B			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051580-006C			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051580-006D			7/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051580-007A	MW-77-102-0722	7/11/2022 1:27:00 PM	7/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051580-007B			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

20-Jul-22

WorkOrder: N051580

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/11/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051580-007C	MW-77-102-0722	7/11/2022 1:27:00 PM	7/25/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051580-007D			7/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051580-008A	MW-77-158-0722	7/11/2022 2:19:00 PM	7/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051580-008B			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051580-008C			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051580-008D			7/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051580-009A	MW-77-187-0722	7/11/2022 1:56:00 PM	7/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051580-009B			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051580-009C			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051580-009D			7/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051580-010A	EB-702-Q322	7/11/2022 3:55:00 PM	7/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

20-Jul-22

WorkOrder: N051580

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/11/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051580-011A	FOLDER	7/25/2022	7/25/2022		Folder	Folder	☐	☐	☐	LAB
			7/25/2022		Folder	Level IV Report	☐	☐	☐	LAB
			7/25/2022			QA Review	☐	☐	☐	LAB
			7/25/2022		Folder	Folder	☐	☐	☐	LAB

July 27, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N051585

RE: PG&E Topock - PCM, 30121866.3Q22GW

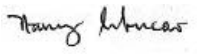
Attention: Dan Bush

Enclosed are the results for sample(s) received on July 12, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,



Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Dilution was necessary for some samples due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for EPA 6010B_Dissolved:

Matrix Spike Duplicate (MSD) is outside recovery criteria for Iron in QC samples N051585-001CMSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020_Dissolved:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Manganese in QC samples N051585-001CMS and N051585-001CMSD since the analyte concentration in the sample is disproportionate to the spike level. Post Spike (PS) passed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for SM 5310C:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria in QC samples N051585-001DMS and N051585-001DMSD at 1x dilution possibly due to matrix interference. QC samples were diluted and recovery passed criteria. Thus sample reference N051585-001 and MS/MSD were reported at 5x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Matrix Spike (MS) is outside recovery criteria in QC sample N051569-015CMS at lower dilution possibly due to matrix interference. QC sample was diluted and recovery passed criteria. Thus sample reference N051569-015 and MS/MSD were reported at 5x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

% RSD of N051585-005 at 1x dilution failed possibly due to matrix. Sample at 5x dilution was analyzed for several runs and result is comparable thus, sample was reported at 5x dilution.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N051585
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N051585-001A	MW-30-050-0722	Groundwater	7/12/2022 8:22:00 AM	7/12/2022	7/27/2022
N051585-001B	MW-30-050-0722	Groundwater	7/12/2022 8:22:00 AM	7/12/2022	7/27/2022
N051585-001C	MW-30-050-0722	Groundwater	7/12/2022 8:22:00 AM	7/12/2022	7/27/2022
N051585-001D	MW-30-050-0722	Groundwater	7/12/2022 8:22:00 AM	7/12/2022	7/27/2022
N051585-002A	EB-704-Q322	Groundwater	7/12/2022 1:40:00 PM	7/12/2022	7/27/2022
N051585-003A	MW-81-043-0722	Groundwater	7/12/2022 12:54:00 PM	7/12/2022	7/27/2022
N051585-003B	MW-81-043-0722	Groundwater	7/12/2022 12:54:00 PM	7/12/2022	7/27/2022
N051585-003C	MW-81-043-0722	Groundwater	7/12/2022 12:54:00 PM	7/12/2022	7/27/2022
N051585-003D	MW-81-043-0722	Groundwater	7/12/2022 12:54:00 PM	7/12/2022	7/27/2022
N051585-004A	MW-81-098-0722	Groundwater	7/12/2022 1:22:00 PM	7/12/2022	7/27/2022
N051585-004B	MW-81-098-0722	Groundwater	7/12/2022 1:22:00 PM	7/12/2022	7/27/2022
N051585-004C	MW-81-098-0722	Groundwater	7/12/2022 1:22:00 PM	7/12/2022	7/27/2022
N051585-004D	MW-81-098-0722	Groundwater	7/12/2022 1:22:00 PM	7/12/2022	7/27/2022
N051585-005A	MW-82-046-0722	Groundwater	7/12/2022 8:44:00 AM	7/12/2022	7/27/2022
N051585-005B	MW-82-046-0722	Groundwater	7/12/2022 8:44:00 AM	7/12/2022	7/27/2022
N051585-005C	MW-82-046-0722	Groundwater	7/12/2022 8:44:00 AM	7/12/2022	7/27/2022
N051585-005D	MW-82-046-0722	Groundwater	7/12/2022 8:44:00 AM	7/12/2022	7/27/2022
N051585-006A	MW-82-112-0722	Groundwater	7/12/2022 9:27:00 AM	7/12/2022	7/27/2022
N051585-006B	MW-82-112-0722	Groundwater	7/12/2022 9:27:00 AM	7/12/2022	7/27/2022
N051585-006C	MW-82-112-0722	Groundwater	7/12/2022 9:27:00 AM	7/12/2022	7/27/2022
N051585-006D	MW-82-112-0722	Groundwater	7/12/2022 9:27:00 AM	7/12/2022	7/27/2022
N051585-007A	MW-82-168-0722	Groundwater	7/12/2022 10:14:00 AM	7/12/2022	7/27/2022
N051585-007B	MW-82-168-0722	Groundwater	7/12/2022 10:14:00 AM	7/12/2022	7/27/2022
N051585-007C	MW-82-168-0722	Groundwater	7/12/2022 10:14:00 AM	7/12/2022	7/27/2022
N051585-007D	MW-82-168-0722	Groundwater	7/12/2022 10:14:00 AM	7/12/2022	7/27/2022
N051585-008A	MW-908-Q322	Groundwater	7/12/2022 10:24:00 AM	7/12/2022	7/27/2022
N051585-008B	MW-908-Q322	Groundwater	7/12/2022 10:24:00 AM	7/12/2022	7/27/2022
N051585-008C	MW-908-Q322	Groundwater	7/12/2022 10:24:00 AM	7/12/2022	7/27/2022
N051585-008D	MW-908-Q322	Groundwater	7/12/2022 10:24:00 AM	7/12/2022	7/27/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N051585
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N051585-009A	MW-82-198-0722	Groundwater	7/12/2022 11:11:00 AM	7/12/2022	7/27/2022
N051585-009B	MW-82-198-0722	Groundwater	7/12/2022 11:11:00 AM	7/12/2022	7/27/2022
N051585-009C	MW-82-198-0722	Groundwater	7/12/2022 11:11:00 AM	7/12/2022	7/27/2022
N051585-009D	MW-82-198-0722	Groundwater	7/12/2022 11:11:00 AM	7/12/2022	7/27/2022
N051585-010A	EB-703-Q322	Groundwater	7/12/2022 1:30:00 PM	7/12/2022	7/27/2022
N051585-011A	MW-39-040-0722	Groundwater	7/12/2022 9:22:00 AM	7/12/2022	7/27/2022
N051585-011B	MW-39-040-0722	Groundwater	7/12/2022 9:22:00 AM	7/12/2022	7/27/2022
N051585-011C	MW-39-040-0722	Groundwater	7/12/2022 9:22:00 AM	7/12/2022	7/27/2022
N051585-011D	MW-39-040-0722	Groundwater	7/12/2022 9:22:00 AM	7/12/2022	7/27/2022
N051585-012A	MW-39-050-0722	Groundwater	7/12/2022 11:13:00 AM	7/12/2022	7/27/2022
N051585-012B	MW-39-050-0722	Groundwater	7/12/2022 11:13:00 AM	7/12/2022	7/27/2022
N051585-012C	MW-39-050-0722	Groundwater	7/12/2022 11:13:00 AM	7/12/2022	7/27/2022
N051585-012D	MW-39-050-0722	Groundwater	7/12/2022 11:13:00 AM	7/12/2022	7/27/2022
N051585-013A	MW-39-060-0722	Groundwater	7/12/2022 12:55:00 PM	7/12/2022	7/27/2022
N051585-013B	MW-39-060-0722	Groundwater	7/12/2022 12:55:00 PM	7/12/2022	7/27/2022
N051585-013C	MW-39-060-0722	Groundwater	7/12/2022 12:55:00 PM	7/12/2022	7/27/2022
N051585-013D	MW-39-060-0722	Groundwater	7/12/2022 12:55:00 PM	7/12/2022	7/27/2022
N051585-014A	MW-39-070-0722	Groundwater	7/12/2022 10:03:00 AM	7/12/2022	7/27/2022
N051585-014B	MW-39-070-0722	Groundwater	7/12/2022 10:03:00 AM	7/12/2022	7/27/2022
N051585-014C	MW-39-070-0722	Groundwater	7/12/2022 10:03:00 AM	7/12/2022	7/27/2022
N051585-014D	MW-39-070-0722	Groundwater	7/12/2022 10:03:00 AM	7/12/2022	7/27/2022
N051585-015A	MW-39-080-0722	Groundwater	7/12/2022 11:53:00 AM	7/12/2022	7/27/2022
N051585-015B	MW-39-080-0722	Groundwater	7/12/2022 11:53:00 AM	7/12/2022	7/27/2022
N051585-015C	MW-39-080-0722	Groundwater	7/12/2022 11:53:00 AM	7/12/2022	7/27/2022
N051585-015D	MW-39-080-0722	Groundwater	7/12/2022 11:53:00 AM	7/12/2022	7/27/2022
N051585-016A	MW-39-100-0722	Groundwater	7/12/2022 1:32:00 PM	7/12/2022	7/27/2022
N051585-016B	MW-39-100-0722	Groundwater	7/12/2022 1:32:00 PM	7/12/2022	7/27/2022
N051585-016C	MW-39-100-0722	Groundwater	7/12/2022 1:32:00 PM	7/12/2022	7/27/2022
N051585-016D	MW-39-100-0722	Groundwater	7/12/2022 1:32:00 PM	7/12/2022	7/27/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-050-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 8:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/14/2022 09:49 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-704-Q322
Lab Order:	N051585	**Collection Date:**	7/12/2022 1:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/14/2022 05:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-043-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 12:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	6.4	0.025	0.20		µg/L	1	7/14/2022 10:08 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-098-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 1:22:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	1.3	0.13	1.0		µg/L	5	7/14/2022 04:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-046-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 8:44:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	7/14/2022 10:27 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-112-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 9:27:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/14/2022 11:04 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-168-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	0.28	0.025	0.20		µg/L	1	7/14/2022 11:23 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-908-Q322
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	7/14/2022 06:21 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-198-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:11:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	3.1	0.13	1.0		µg/L	5	7/14/2022 03:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-703-Q322
Lab Order:	N051585	**Collection Date:**	7/12/2022 1:30:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/14/2022 05:41 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-040-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 9:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/14/2022 12:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:13:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/14/2022 12:58 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-060-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 12:55:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/14/2022 02:14 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-070-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:03:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/14/2022 02:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	13	0.13	1.0		µg/L	5	7/14/2022 06:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 1:32:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	240	0.50	4.0		µg/L	20	7/14/2022 01:55 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	MB-R163961	SampType:	MBLK	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	PBW	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722387

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID	LCS-R163961	SampType:	LCS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	LCSW	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722388

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.176	0.20	5.000	0	104	90	110				

Sample ID	N051585-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722390

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.040	0.20	1.000	0	104	90	110				

Sample ID	N051585-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722392

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	11.629	0.20	5.000	6.426	104	90	110				

Sample ID	N051585-005AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722394

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.078	1.0	5.000	0	102	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051585-006AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722398

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.078	0.20	1.000	0	108	90	110				

Sample ID	N051585-007AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722400

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.364	0.20	1.000	0.2778	109	90	110				

Sample ID	N051585-011AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722402

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.102	0.20	1.000	0.05030	105	90	110				

Sample ID	N051585-012AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722406

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.092	0.20	1.000	0	109	90	110				

Sample ID	N051609-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722408

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	450.275	10	250.0	192.3	103	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051609-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722410

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	48.862	1.0	25.00	22.90	104	90	110				

Sample ID	N051585-016AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722412

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	346.638	4.0	100.0	240.2	106	90	110				

Sample ID	N051585-013AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722414

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.070	0.20	1.000	0	107	90	110				

Sample ID	N051585-014AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722418

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.027	0.20	1.000	0	103	90	110				

Sample ID	N051585-016AMSD	SampType:	MSD	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722419

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	342.342	4.0	100.0	240.2	102	90	110	346.6	1.25	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051609-001ADUP	SampType:	DUP	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722420

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	189.770	10						192.3	1.32	20	

Sample ID	N051585-009AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722422

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	8.210	1.0	5.000	3.120	102	90	110				

Sample ID	N051585-004AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722424

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	6.065	1.0	5.000	1.253	96.2	90	110				

Sample ID	N051585-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722428

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.049	0.20	1.000	0	105	90	110				

Sample ID	N051585-010AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722430

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.050	0.20	1.000	0	105	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051585-008AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722432

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.335	1.0	5.000	0	107	90	110				

Sample ID	N051585-015AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722436

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	38.852	1.0	25.00	12.77	104	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051585-001

Client Sample ID: MW-30-050-0722
Collection Date: 7/12/2022 8:22:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	200	1.2	10		mg/L	20	7/18/2022 12:53 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712C**	QC Batch: **R163862**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/13/2022 12:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-043-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 12:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	350	3.0	25		mg/L	50	7/18/2022 05:55 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712B**	QC Batch: **R163861**			PrepDate:			Analyst: **RAB**
Nitrate as N	1.2	0.095	0.50		mg/L	10	7/13/2022 03:29 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051585-004

Client Sample ID: MW-81-098-0722
Collection Date: 7/12/2022 1:22:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	680	6.1	50		mg/L	100	7/18/2022 06:12 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712B**	QC Batch: **R163861**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.82	0.095	0.50		mg/L	10	7/13/2022 03:45 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-046-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 8:44:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	1600	12	100		mg/L	200	7/18/2022 06:28 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712C**	QC Batch: **R163862**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/13/2022 07:07 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051585-006

Client Sample ID: MW-82-112-0722
Collection Date: 7/12/2022 9:27:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	710	6.1	50		mg/L	100	7/18/2022 06:44 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712C**	QC Batch: **R163862**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.91	0.095	0.50		mg/L	10	7/13/2022 07:24 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-168-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	550	3.0	25		mg/L	50	7/18/2022 07:01 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712C**	QC Batch: **R163862**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/13/2022 04:53 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-908-Q322
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	550	3.0	25		mg/L	50	7/18/2022 07:50 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712C**	QC Batch: **R163862**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/13/2022 10:36 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051585-009

Client Sample ID: MW-82-198-0722
Collection Date: 7/12/2022 11:11:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220719B**	QC Batch: **R164142**			PrepDate:			Analyst: **RAB**
Sulfate	990	6.1	50		mg/L	100	7/20/2022 03:21 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712C**	QC Batch: **R163862**			PrepDate:			Analyst: **RAB**
Nitrate as N	1.3	0.095	0.50		mg/L	10	7/13/2022 10:52 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-040-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 9:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	130	0.61	5.0		mg/L	10	7/18/2022 08:22 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712C**	QC Batch: **R163862**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	7/13/2022 11:09 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:13:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	190	1.2	10		mg/L	20	7/18/2022 08:39 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712C**	QC Batch: **R163862**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	7/13/2022 05:09 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-060-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 12:55:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	200	1.2	10		mg/L	20	7/18/2022 08:55 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712C**	QC Batch: **R163862**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	7/13/2022 11:26 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051585-014

Client Sample ID: MW-39-070-0722
Collection Date: 7/12/2022 10:03:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	280	3.0	25		mg/L	50	7/18/2022 09:11 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712C**	QC Batch: **R163862**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	7/13/2022 11:43 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718B**	QC Batch: **R164036**			PrepDate:			Analyst: **RAB**
Sulfate	510	3.0	25		mg/L	50	7/19/2022 04:48 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712C**	QC Batch: **R163862**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/13/2022 09:12 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 1:32:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718B**	QC Batch: **R164036**			PrepDate:			Analyst: **RAB**
Sulfate	960	6.1	50		mg/L	100	7/19/2022 05:36 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712C**	QC Batch: **R163862**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/13/2022 10:19 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	MB-R164035_SO4	SampType:	MBLK	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164035		
Client ID:	PBW	Batch ID:	R164035	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4730575		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Sulfate	ND	0.50											

Sample ID	LCS-R164035_SO4	SampType:	LCS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164035		
Client ID:	LCSW	Batch ID:	R164035	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4730576		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Sulfate	4.003	0.50	4.000	0	100	90	110						

Sample ID	N051585-001BMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164035		
Client ID:	ZZZZZZ	Batch ID:	R164035	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4730578		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Sulfate	283.296	10	80.00	199.3	105	80	120						

Sample ID	N051585-001BMSD	SampType:	MSD	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164035		
Client ID:	ZZZZZZ	Batch ID:	R164035	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4730579		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Sulfate	283.230	10	80.00	199.3	105	80	120	283.3	0.0233	20			

Sample ID	N051580-001BDUP	SampType:	DUP	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164035		
Client ID:	ZZZZZZ	Batch ID:	R164035	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4730581		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Sulfate	281.510	25						283.8	0.805	20			

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	N051580-001BMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164035
Client ID:	ZZZZZZ	Batch ID:	R164035	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4730582

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	479.655	25	200.0	283.8	97.9	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	LCS-R164036_SO4	SampType:	LCS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164036	
Client ID:	LCSW	Batch ID:	R164036	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4732105	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Sulfate	3.946	0.50	4.000	0	98.6	90	110					

Sample ID	MB-R164036_SO4	SampType:	MBLK	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164036	
Client ID:	PBW	Batch ID:	R164036	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4732106	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Sulfate	ND	0.50										

Sample ID	N051677-007BMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164036	
Client ID:	ZZZZZZ	Batch ID:	R164036	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4732110	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Sulfate	22.103	1.0	8.000	14.14	99.6	80	120					

Sample ID	N051677-007BMSD	SampType:	MSD	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164036	
Client ID:	ZZZZZZ	Batch ID:	R164036	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4732111	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Sulfate	22.172	1.0	8.000	14.14	100	80	120	22.10	0.315	20		

Sample ID	N051615-001BDUP	SampType:	DUP	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164036	
Client ID:	ZZZZZZ	Batch ID:	R164036	TestNo:	EPA 300.0			Analysis Date:	7/19/2022	SeqNo:	4732113	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Sulfate	715.300	50						720.8	0.763	20		

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	N051615-001BMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164036
Client ID:	ZZZZZZ	Batch ID:	R164036	TestNo:	EPA 300.0			Analysis Date:	7/19/2022	SeqNo:	4732114

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	1124.740	50	400.0	720.8	101	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	LCS-R164142_SO4	SampType:	LCS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164142
Client ID:	LCSW	Batch ID:	R164142	TestNo:	EPA 300.0			Analysis Date:	7/19/2022	SeqNo:	4735310

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	3.972	0.50	4.000	0	99.3	90	110				

Sample ID	MB-R164142_SO4	SampType:	MBLK	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164142
Client ID:	PBW	Batch ID:	R164142	TestNo:	EPA 300.0			Analysis Date:	7/19/2022	SeqNo:	4735311

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.50									

Sample ID	N051635-004BMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164142
Client ID:	ZZZZZZ	Batch ID:	R164142	TestNo:	EPA 300.0			Analysis Date:	7/20/2022	SeqNo:	4735317

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	700.935	25	200.0	485.6	108	80	120				

Sample ID	N051635-004BMSD	SampType:	MSD	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164142
Client ID:	ZZZZZZ	Batch ID:	R164142	TestNo:	EPA 300.0			Analysis Date:	7/20/2022	SeqNo:	4735318

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	691.695	25	200.0	485.6	103	80	120	700.9	1.33	20	

Sample ID	N051635-005BDUP	SampType:	DUP	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164142
Client ID:	ZZZZZZ	Batch ID:	R164142	TestNo:	EPA 300.0			Analysis Date:	7/20/2022	SeqNo:	4735320

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	489.280	25						487.9	0.281	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	LCS-R163861_NO3	SampType:	LCS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163861
Client ID:	LCSW	Batch ID:	R163861	TestNo:	EPA 300.0			Analysis Date:	7/12/2022	SeqNo:	4719454

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.225	0.050	1.250	0	98.0	90	110				

Sample ID	MB-R163861_NO3	SampType:	MBLK	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163861
Client ID:	PBW	Batch ID:	R163861	TestNo:	EPA 300.0			Analysis Date:	7/12/2022	SeqNo:	4719455

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID	N051569-014BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163861
Client ID:	ZZZZZZ	Batch ID:	R163861	TestNo:	EPA 300.0			Analysis Date:	7/12/2022	SeqNo:	4719461

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	19.932	0.50	12.50	7.443	99.9	80	120				

Sample ID	N051569-014BMSD	SampType:	MSD	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163861
Client ID:	ZZZZZZ	Batch ID:	R163861	TestNo:	EPA 300.0			Analysis Date:	7/12/2022	SeqNo:	4719462

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	19.864	0.50	12.50	7.443	99.4	80	120	19.93	0.342	20	

Sample ID	N051580-001BDUP	SampType:	DUP	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163861
Client ID:	ZZZZZZ	Batch ID:	R163861	TestNo:	EPA 300.0			Analysis Date:	7/13/2022	SeqNo:	4719466

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	2.440	0.25						2.456	0.694	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	N051580-002BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163861
Client ID:	ZZZZZZ	Batch ID:	R163861	TestNo:	EPA 300.0			Analysis Date:	7/13/2022	SeqNo:	4719468

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.020	0.50	12.50	0.1910	94.6	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	MB-R163862_NO3	SampType:	MBLK	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163862
Client ID:	PBW	Batch ID:	R163862	TestNo:	EPA 300.0			Analysis Date:	7/13/2022	SeqNo:	4719486

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	0.018	0.050									

Sample ID	LCS-R163862_NO3	SampType:	LCS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163862
Client ID:	LCSW	Batch ID:	R163862	TestNo:	EPA 300.0			Analysis Date:	7/13/2022	SeqNo:	4719487

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.203	0.050	1.250	0	96.2	90	110				

Sample ID	N051585-007BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163862
Client ID:	ZZZZZZ	Batch ID:	R163862	TestNo:	EPA 300.0			Analysis Date:	7/13/2022	SeqNo:	4719490

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.010	0.50	12.50	0.1890	94.6	80	120				

Sample ID	N051585-007BMSD	SampType:	MSD	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163862
Client ID:	ZZZZZZ	Batch ID:	R163862	TestNo:	EPA 300.0			Analysis Date:	7/13/2022	SeqNo:	4719491

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.137	0.50	12.50	0.1890	95.6	80	120	12.01	1.05	20	

Sample ID	N051585-012BDUP	SampType:	DUP	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163862
Client ID:	ZZZZZZ	Batch ID:	R163862	TestNo:	EPA 300.0			Analysis Date:	7/13/2022	SeqNo:	4719494

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.25						0	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	N051585-012BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163862
Client ID:	ZZZZZZ	Batch ID:	R163862	TestNo:	EPA 300.0			Analysis Date:	7/13/2022	SeqNo:	4719495

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.058	0.25	6.250	0	96.9	80	120				

Sample ID	N051585-001BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163862
Client ID:	ZZZZZZ	Batch ID:	R163862	TestNo:	EPA 300.0			Analysis Date:	7/13/2022	SeqNo:	4719513

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.169	0.50	12.50	0.2180	95.6	80	120				

Sample ID	N051585-001BMSD	SampType:	MSD	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163862
Client ID:	ZZZZZZ	Batch ID:	R163862	TestNo:	EPA 300.0			Analysis Date:	7/13/2022	SeqNo:	4719514

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.216	0.50	12.50	0.2180	96.0	80	120	12.17	0.385	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-050-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 8:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220714A**	QC Batch: **R163951**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.68	5.0		mg/L	5	7/14/2022 11:31 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-043-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 12:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220713A**	QC Batch: **R163913**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/13/2022 11:04 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-098-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 1:22:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220713A**	QC Batch: **R163913**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/13/2022 12:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-046-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 8:44:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220726A**	QC Batch: **R164330**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	7.0	0.68	5.0		mg/L	5	7/26/2022 07:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-112-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 9:27:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220713A**	QC Batch: **R163913**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/13/2022 01:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-168-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220713A**	QC Batch: **R163913**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/13/2022 01:24 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-908-Q322
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220713A**	QC Batch: **R163913**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/13/2022 01:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-198-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:11:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220713A**	QC Batch: **R163913**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/13/2022 01:55 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-040-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 9:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220713A**	QC Batch: **R163913**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	2.2	0.14	1.0		mg/L	1	7/13/2022 02:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:13:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220713A**	QC Batch: **R163913**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/13/2022 02:26 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-060-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 12:55:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220713A**	QC Batch: **R163913**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/13/2022 02:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-070-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:03:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220713A**	QC Batch: **R163913**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/13/2022 02:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220713A**	QC Batch: **R163913**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/13/2022 03:13 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 1:32:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220713A**	QC Batch: **R163913**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/13/2022 04:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID **MB-R163913**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163913**
Client ID: **PBW**	Batch ID: **R163913**	TestNo: **SM 5310C**		Analysis Date: **7/13/2022**	SeqNo: **4720404**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID **LCS-R163913**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163913**
Client ID: **LCSW**	Batch ID: **R163913**	TestNo: **SM 5310C**		Analysis Date: **7/13/2022**	SeqNo: **4720405**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.066	1.0	5.000	0	101	85	115				

Sample ID **N051569-015CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163913**
Client ID: **ZZZZZZ**	Batch ID: **R163913**	TestNo: **SM 5310C**		Analysis Date: **7/13/2022**	SeqNo: **4720410**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	24.269	5.0	25.00	0	97.1	75	125				

Sample ID **N051569-015CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163913**
Client ID: **ZZZZZZ**	Batch ID: **R163913**	TestNo: **SM 5310C**		Analysis Date: **7/13/2022**	SeqNo: **4720411**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	24.286	5.0	25.00	0	97.1	75	125	24.27	0.0700	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID	MB-R163951	SampType:	MBLK	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	163951
Client ID:	PBW	Batch ID:	R163951	TestNo:	SM 5310C			Analysis Date:	7/14/2022	SeqNo:	4722045

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID	LCS-R163951	SampType:	LCS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	163951
Client ID:	LCSW	Batch ID:	R163951	TestNo:	SM 5310C			Analysis Date:	7/14/2022	SeqNo:	4722046

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	4.926	1.0	5.000	0	98.5	85	115				

Sample ID	N051585-001DMS	SampType:	MS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	163951
Client ID:	ZZZZZZ	Batch ID:	R163951	TestNo:	SM 5310C			Analysis Date:	7/14/2022	SeqNo:	4722052

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	26.929	5.0	25.00	1.370	102	75	125				

Sample ID	N051585-001DMSD	SampType:	MSD	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	163951
Client ID:	ZZZZZZ	Batch ID:	R163951	TestNo:	SM 5310C			Analysis Date:	7/14/2022	SeqNo:	4722053

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	26.991	5.0	25.00	1.370	102	75	125	26.93	0.230	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID **MB-R164330**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164330**
Client ID: **PBW**	Batch ID: **R164330**	TestNo: **SM 5310C**		Analysis Date: **7/26/2022**	SeqNo: **4749997**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID **LCS-R164330**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164330**
Client ID: **LCSW**	Batch ID: **R164330**	TestNo: **SM 5310C**		Analysis Date: **7/26/2022**	SeqNo: **4749998**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.206	1.0	5.000	0	104	85	115				

Sample ID **N051794-001CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164330**
Client ID: **ZZZZZZ**	Batch ID: **R164330**	TestNo: **SM 5310C**		Analysis Date: **7/26/2022**	SeqNo: **4750000**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	4.623	1.0	5.000	0.4723	83.0	75	125				

Sample ID **N051794-001CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164330**
Client ID: **ZZZZZZ**	Batch ID: **R164330**	TestNo: **SM 5310C**		Analysis Date: **7/26/2022**	SeqNo: **4750003**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	4.594	1.0	5.000	0.4723	82.4	75	125	4.623	0.623	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-050-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 8:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**			PrepDate:	**7/14/2022**		Analyst: **DJ**
Iron	34	13	20		µg/L	1	7/16/2022 02:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-043-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 12:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**				PrepDate:	**7/14/2022**	Analyst: **DJ**
Iron	160	13	20		µg/L	1	7/16/2022 03:17 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-098-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 1:22:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**			PrepDate:	**7/14/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/16/2022 03:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-046-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 8:44:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**				PrepDate:	**7/14/2022**	Analyst: **DJ**
Iron	7300	13	20		µg/L	1	7/16/2022 03:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-112-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 9:27:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**				PrepDate:	**7/14/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/16/2022 03:34 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-168-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**			PrepDate:	**7/14/2022**		Analyst: **DJ**
Iron	54	13	20		µg/L	1	7/16/2022 03:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-908-Q322
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**			PrepDate:	**7/14/2022**		Analyst: **DJ**
Iron	33	13	20		µg/L	1	7/16/2022 03:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-198-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:11:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**			PrepDate:	**7/14/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/16/2022 03:58 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-040-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 9:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**				PrepDate:	**7/14/2022**	Analyst: **DJ**
Iron	290	13	20		µg/L	1	7/16/2022 04:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:13:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**			PrepDate:	**7/14/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/16/2022 04:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-060-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 12:55:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**			PrepDate:	**7/14/2022**		Analyst: **DJ**
Iron	36	13	20		µg/L	1	7/16/2022 04:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-070-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:03:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**				PrepDate:	**7/14/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/16/2022 04:14 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**			PrepDate:	**7/14/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/16/2022 04:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 1:32:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**			PrepDate:	**7/14/2022**		Analyst: **DJ**
Iron	25	13	20		µg/L	1	7/16/2022 04:25 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	MB-93748	SampType:	MBLK	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	7/14/2022	RunNo:	163995
Client ID:	PBW	Batch ID:	93748	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4724349

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID	N051585-001CMS	SampType:	MS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	7/14/2022	RunNo:	163995
Client ID:	ZZZZZZ	Batch ID:	93748	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4724356

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	112.986	20	100.0	34.39	78.6	75	125				

Sample ID	N051585-001CMSD	SampType:	MSD	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	7/14/2022	RunNo:	163995
Client ID:	ZZZZZZ	Batch ID:	93748	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4724357

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	96.093	20	100.0	34.39	61.7	75	125	113.0	16.2	20	S

Sample ID	LCS-93748	SampType:	LCS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	7/14/2022	RunNo:	163995
Client ID:	LCSW	Batch ID:	93748	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4724823

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	85.434	20	100.0	0	85.4	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID **N051585-001C-PS**	SampType: **PS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date:					RunNo: **163995**	
Client ID: **ZZZZZZ**	Batch ID: **93748**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/16/2022**					SeqNo: **4724355**	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	102.041	20	100.0	34.39	67.7	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-050-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 8:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Arsenic	2.2	0.050	0.10		µg/L	1	7/15/2022 07:15 AM
Barium	22	0.083	1.0		µg/L	1	7/16/2022 06:46 AM
Manganese	500	0.13	2.5		µg/L	5	7/15/2022 07:39 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-043-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 12:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Arsenic	3.1	0.050	0.10		µg/L	1	7/15/2022 08:02 AM
Barium	77	0.083	1.0		µg/L	1	7/16/2022 07:33 AM
Manganese	140	0.026	0.50		µg/L	1	7/15/2022 08:02 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-098-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 1:22:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/15/2022 08:08 AM
Barium	67	0.083	1.0		µg/L	1	7/16/2022 07:39 AM
Manganese	220	0.13	2.5		µg/L	5	7/15/2022 11:52 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051585-005

Client Sample ID: MW-82-046-0722
Collection Date: 7/12/2022 8:44:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:		**7/13/2022**	Analyst: **DJ**
Arsenic	24	0.050	0.10		µg/L	1	7/15/2022 08:14 AM
Barium	73	0.083	1.0		µg/L	1	7/16/2022 07:45 AM
Manganese	360	0.13	2.5		µg/L	5	7/15/2022 11:58 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-112-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 9:27:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/15/2022 08:20 AM
Barium	57	0.083	1.0		µg/L	1	7/16/2022 07:51 AM
Manganese	140	0.026	0.50		µg/L	1	7/15/2022 08:20 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-168-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:		**7/13/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/15/2022 08:26 AM
Barium	41	0.083	1.0		µg/L	1	7/16/2022 07:57 AM
Manganese	43	0.026	0.50		µg/L	1	7/15/2022 08:26 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-908-Q322
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/15/2022 09:02 AM
Barium	41	0.083	1.0		µg/L	1	7/16/2022 08:21 AM
Manganese	45	0.026	0.50		µg/L	1	7/15/2022 09:02 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-198-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:11:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:		**7/13/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/15/2022 09:08 AM
Barium	46	0.083	1.0		µg/L	1	7/16/2022 08:27 AM
Manganese	100	0.026	0.50		µg/L	1	7/15/2022 09:08 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-040-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 9:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:		**7/13/2022**	Analyst: **DJ**
Arsenic	14	0.050	0.10		µg/L	1	7/15/2022 09:14 AM
Barium	69	0.083	1.0		µg/L	1	7/16/2022 08:33 AM
Manganese	110	0.026	0.50		µg/L	1	7/15/2022 09:14 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:13:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Arsenic	1.6	0.050	0.10		µg/L	1	7/15/2022 09:20 AM
Barium	38	0.083	1.0		µg/L	1	7/16/2022 08:38 AM
Manganese	210	0.13	2.5		µg/L	5	7/15/2022 12:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-060-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 12:55:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Arsenic	2.1	0.050	0.10		µg/L	1	7/15/2022 09:26 AM
Barium	24	0.083	1.0		µg/L	1	7/16/2022 08:44 AM
Manganese	130	0.026	0.50		µg/L	1	7/15/2022 09:26 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-070-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:03:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220720C**	QC Batch: **93751**			PrepDate:		**7/13/2022**	Analyst: **DJ**
Arsenic	0.71	0.050	0.10		µg/L	1	7/20/2022 04:31 PM
Barium	50	0.083	1.0		µg/L	1	7/16/2022 08:50 AM
Manganese	15	0.026	0.50		µg/L	1	7/15/2022 09:32 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E**	QC Batch: **93772**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/16/2022 01:36 AM
Barium	24	0.083	1.0		µg/L	1	7/16/2022 01:36 AM
Manganese	4.8	0.026	0.50		µg/L	1	7/16/2022 01:36 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 1:32:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E**	QC Batch: **93772**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/16/2022 02:48 AM
Barium	29	0.083	1.0		µg/L	1	7/16/2022 02:48 AM
Manganese	8.4	0.026	0.50		µg/L	1	7/16/2022 02:48 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	MB-93751	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	163938
Client ID:	PBW	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/15/2022	SeqNo:	4724025

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Manganese	ND	0.50									

Sample ID	LCS-93751	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	163938
Client ID:	LCSW	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/15/2022	SeqNo:	4724026

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.177	0.10	10.00	0	91.8	85	115				
Manganese	102.233	0.50	100.0	0	102	85	115				

Sample ID	N051585-001CMS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	163938
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/15/2022	SeqNo:	4724042

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.270	0.10	10.00	2.174	101	75	125				

Sample ID	N051585-001CMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	163938
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/15/2022	SeqNo:	4724043

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.007	0.10	10.00	2.174	98.3	75	125	12.27	2.17	20	

Sample ID	N051585-001CMS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	163938
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/15/2022	SeqNo:	4724077

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	551.450	2.5	100.0	503.7	47.8	75	125				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N051585-001CMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	163938
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/15/2022	SeqNo:	4724078

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	548.074	2.5	100.0	503.7	44.4	75	125	551.4	0.614	20	S

Sample ID	MB-93751	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	164015
Client ID:	PBW	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727218

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	ND	1.0									

Sample ID	LCS-93751	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	164015
Client ID:	LCSW	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727219

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	10.019	1.0	10.00	0	100	85	115				

Sample ID	N051585-001CMS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	164015
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727235

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	30.736	1.0	10.00	22.41	83.3	75	125				

Sample ID	N051585-001CMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	164015
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727236

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	30.097	1.0	10.00	22.41	76.9	75	125	30.74	2.10	20	

Qualifiers:

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- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	MB-93772	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164015
Client ID:	PBW	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727180

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID	LCS-93772	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164015
Client ID:	LCSW	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727181

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.193	0.10	10.00	0	91.9	85	115				
Barium	9.863	1.0	10.00	0	98.6	85	115				
Manganese	100.071	0.50	100.0	0	100	85	115				

Sample ID	N051585-015C-MS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164015
Client ID:	ZZZZZZ	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727189

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	8.678	0.10	10.00	0	86.8	75	125				
Barium	34.295	1.0	10.00	24.49	98.0	75	125				
Manganese	96.551	0.50	100.0	4.777	91.8	75	125				

Sample ID	N051585-015C-MSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164015
Client ID:	ZZZZZZ	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727191

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	8.623	0.10	10.00	0	86.2	75	125	8.678	0.632	20	
Barium	33.444	1.0	10.00	24.49	89.5	75	125	34.29	2.51	20	
Manganese	95.077	0.50	100.0	4.777	90.3	75	125	96.55	1.54	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N051585-001C-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	163938
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/15/2022	SeqNo:	4724041

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.029	0.10	10.00	2.174	98.6	80	120				

Sample ID	N051585-001C-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	163938
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/15/2022	SeqNo:	4724076

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	615.078	2.5	100.0	503.7	111	80	120				

Sample ID	N051585-001C-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	164015
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727234

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	30.947	1.0	10.00	22.41	85.4	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N051585-015C-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	164015
Client ID:	ZZZZZZ	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727187

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	8.583	0.10	10.00	0	85.8	80	120				
Barium	34.337	1.0	10.00	24.49	98.5	80	120				
Manganese	96.369	0.50	100.0	4.777	91.6	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

N051585

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

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Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement	QA/QC	Sample Receipt Condition
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD	RTNE	Y N
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker	RWQCB ✓	1. Chilled X
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Labspec	CalTrans	2. Headspace
Submitted By: Riggie Tep			Others ✓	LEVEL III	3. Container Intact X
Title: Field Tech	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	Specify: RWQCB	LEVEL IV	4. Seal Present
Signature: Date: 7/12/22	Sampled By: Riggie Tep		Global ID:	Regulatory	5. IR number 3
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for			Specify State:	6. Method of Cooling: ICE
Project Name: PG&E Topock - PCM	Signature: Date: 7/12/22	Matrix: Ground X Sediment; Potable Soil; NPDES Other Solid; Surface			Sample Temp: 1.1 °C / 1.4 °C
Project Number: 30121866.3Q22GW					Courier: ASSET; Tracking No.:

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N051585-03	MW-81-043-0722	7/12/2022	12:54		X	X	X			X			E	6	P	BNS	
2	-04	MW-81-098-0722	7/12/2022	13:22		X	X	X			X			E	6	P	BNS	
3	-05	MW-82-046-0722	7/12/2022	8:44		X	X	X			X			E	6	P	BNS	
4	-06	MW-82-112-0722	7/12/2022	9:27		X	X	X			X			E	6	P	BNS	
5	-07	MW-82-168-0722	7/12/2022	10:14		X	X	X			X			E	6	P	BNS	
6	-08	MW-908-Q322	7/12/2022	10:24		X	X	X			X			E	6	P	BNS	
7	-09	MW-82-198-0722	7/12/2022	11:11		X	X	X			X			E	6	P	BNS	
8	-10	EB-703-Q322	7/12/2022	13:30		X								E	1	P	BNS	
9	-11	MW-39-040-0722	7/12/2022	9:22		X	X	X			X			E	6	P	BNS	
10	-12	MW-39-050-0722 1113	7/12/2022	~~11:13~~	~~1305~~	X	X	X			X			E	6	P	BNS	
11	-13	MW-39-060-0722 1255	7/12/2022	~~12:55~~	~~1115~~	X	X	X			X			E	6	P	BNS	
12	-14	MW-39-070-0722	7/12/2022	10:03		X	X	X			X			E	6	P	BNS	
13	-15	MW-39-080-0722	7/12/2022	11:53		X	X	X			X			E	6	P	BNS	
14	-16	MW-39-100-0722	7/12/2022	13:32		X	X	X			X			E	6	P	BNS	

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Riggie Tep	7/12/22 1540	MBOWMAN	7/12/22 @1540
Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
REL/REC: MBOWMAN			7/12/22@1757
Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [X] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
   Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
6. Trip Blanks and Equipment Blanks are billable sample.
8. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy

Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	7/12/2022	Workorder:	N051585
Rep sample Temp (Deg C):	1.1/1.4	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For:

Checklist Completed By: MBC YRJ 7/13/2022

For:

Reviewed By: MBC 7/22/2022

ASSET Laboratories

WORK ORDER Summary

22-Jul-22

WorkOrder: N051585

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/12/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051585-001A	MW-30-050-0722	7/12/2022 8:22:00 AM	7/26/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☑	☐	WW
N051585-001B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
N051585-001C			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			7/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☑	☐	WW
			7/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☑	☐	WW
N051585-001D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☑	☐	VW
N051585-002A	EB-704-Q322	7/12/2022 1:40:00 PM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-003A	MW-81-043-0722	7/12/2022 12:54:00 PM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-003B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051585-003C			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051585-003D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051585-004A	MW-81-098-0722	7/12/2022 1:22:00 PM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-004B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051585-004C			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

22-Jul-22

WorkOrder: N051585

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/12/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051585-004C	MW-81-098-0722	7/12/2022 1:22:00 PM	7/26/2022	Groundwater	EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051585-004D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051585-005A	MW-82-046-0722	7/12/2022 8:44:00 AM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-005B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051585-005C			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051585-005D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051585-006A	MW-82-112-0722	7/12/2022 9:27:00 AM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-006B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051585-006C			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051585-006D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051585-007A	MW-82-168-0722	7/12/2022 10:14:00 AM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-007B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

22-Jul-22

WorkOrder: N051585

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/12/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051585-007C	MW-82-168-0722	7/12/2022 10:14:00 AM	7/26/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051585-007D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051585-008A	MW-908-Q322	7/12/2022 10:24:00 AM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-008B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051585-008C			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051585-008D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051585-009A	MW-82-198-0722	7/12/2022 11:11:00 AM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-009B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051585-009C			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051585-009D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051585-010A	EB-703-Q322	7/12/2022 1:30:00 PM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

22-Jul-22

WorkOrder: N051585

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/12/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051585-011A	MW-39-040-0722	7/12/2022 9:22:00 AM	7/26/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-011B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051585-011C			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051585-011D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051585-012A	MW-39-050-0722	7/12/2022 11:13:00 AM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-012B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051585-012C			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051585-012D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051585-013A	MW-39-060-0722	7/12/2022 12:55:00 PM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-013B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051585-013C			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

22-Jul-22

WorkOrder: N051585

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/12/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051585-013C	MW-39-060-0722	7/12/2022 12:55:00 PM	7/26/2022	Groundwater	EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051585-013D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051585-014A	MW-39-070-0722	7/12/2022 10:03:00 AM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-014B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051585-014C			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051585-014D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051585-015A	MW-39-080-0722	7/12/2022 11:53:00 AM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-015B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051585-015C			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051585-015D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051585-016A	MW-39-100-0722	7/12/2022 1:32:00 PM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-016B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051585-016C			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

22-Jul-22

WorkOrder: N051585

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/12/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051585-016C	MW-39-100-0722	7/12/2022 1:32:00 PM	7/26/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051585-016D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051585-017A	FOLDER	7/26/2022	7/26/2022		Folder	Folder	☐	☐	☐	LAB
			7/26/2022		Folder	Level IV Report	☐	☐	☐	LAB
			7/26/2022		Folder	Folder	☐	☐	☐	LAB

July 27, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N051608

RE: PG&E Topock - RCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on July 13, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Because the results for total dissolved chromium (37 ug/L) and hexavalent chromium (0 ug/L) for sample N051608-001 (MW-67-185-0722) are discrepant, sample re-analysis and Matrix Spike protocol were performed and result confirmed initial analysis.

Dilution was necessary due to matrix. Samples are colored.

Analytical Comments for EPA 300.0:

Dilution was necessary due to matrix. Sample is colored.

Analytical Comments for EPA 6020_Dissolved:

Because the results for total dissolved chromium (37 ug/L) and hexavalent chromium (0 ug/L) for sample N051608-001 (MW-67-185-0722) are discrepant, sample from both the total dissolved chromium and hexavalent chromium containers were redigested and analyzed for total dissolved chromium. The results from the redigested samples were 43 and 30 ug/L, respectively. Since these data confirmed the original result for total dissolved chromium, the original result is reported.

Dilution was necessary due to matrix. Samples are colored.

ASSET Laboratories

Date: *27-Jul-22*

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab Order: N051608
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N051608-001A	MW-67-185-0722	Groundwater	7/13/2022 11:55:00 AM	7/13/2022	7/27/2022
N051608-001B	MW-67-185-0722	Groundwater	7/13/2022 11:55:00 AM	7/13/2022	7/27/2022
N051608-001C	MW-67-185-0722	Groundwater	7/13/2022 11:55:00 AM	7/13/2022	7/27/2022
N051608-002A	MW-68-180-0722	Groundwater	7/13/2022 12:52:00 PM	7/13/2022	7/27/2022
N051608-002B	MW-68-180-0722	Groundwater	7/13/2022 12:52:00 PM	7/13/2022	7/27/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-67-185-0722
Lab Order:	N051608	**Collection Date:**	7/13/2022 11:55:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051608-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A** QC Batch: **R163973**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	10	80		µg/L	400	7/15/2022 10:40 AM
DISSOLVED METALS BY ICP-MS							
		EPA 3010A			**EPA 6020**		
RunID: **NV00922-ICP8_220715F** QC Batch: **93772**				PrepDate:	**7/15/2022**		Analyst: **DJ**
Chromium	37	0.18	5.0		µg/L	5	7/16/2022 03:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-68-180-0722
Lab Order:	N051608	**Collection Date:**	7/13/2022 12:52:00 PM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051608-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A**	QC Batch: **R163973**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	5000	13	100		µg/L	500	7/15/2022 10:59 AM
DISSOLVED METALS BY ICP-MS							
		EPA 3010A		**EPA 6020**			
RunID: **NV00922-ICP8_220717B**	QC Batch: **93772**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Chromium	4900	1.8	50		µg/L	50	7/18/2022 02:23 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051608
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	LCS-R163973	SampType:	LCS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	LCSW	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723141

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.961	0.20	5.000	0	99.2	90	110				

Sample ID	MB-R163973	SampType:	MBLK	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	PBW	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723142

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID	N051608-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723144

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	423.400	80	400.0	0	106	90	110				

Sample ID	N051608-002ADUP	SampType:	DUP	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723146

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4947.250	100						4974	0.543	20	

Sample ID	N051608-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723147

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	7486.500	100	2500	4974	100	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051608
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051617-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723151

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	646.045	10	250.0	390.0	102	90	110				

Sample ID	N051617-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723153

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	637.595	10	250.0	391.8	98.3	90	110				

Sample ID	N051648-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723155

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.436	0.20	1.000	0.4452	99.1	90	110				

Sample ID	N051648-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723157

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.531	0.20	1.000	1.532	99.9	90	110				

Sample ID	N051648-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723159

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.506	0.20	1.000	0.4480	106	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051608
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **N051648-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723163**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.524	0.20	1.000	1.468	106	90	110				

Sample ID **N051648-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723165**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.975	0.20	1.000	1.942	103	90	110				

Sample ID **N051648-001AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723166**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.515	0.20	1.000	0.4452	107	90	110	1.436	5.30	20	

Sample ID **N051615-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723177**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.044	0.20	1.000	0	104	90	110				

Sample ID **N051615-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723179**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.025	0.20	1.000	0	102	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051608
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051634-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723180

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1801.640	40	1000	749.4	105	90	110				

Sample ID	N051634-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723184

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	215.744	4.0	100.0	115.5	100	90	110				

Sample ID	N051634-004AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723185

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2069.380	40	1000	1037	103	90	110				

Sample ID	N051634-005AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723186

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.034	0.20	1.000	0	103	90	110				

Sample ID	N051634-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723188

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4781.050	100	2500	2240	102	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051608
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051615-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723189

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1022.160	20	500.0	486.8	107	90	110				

Sample ID	N051615-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723190

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	209.200	4.0	100.0	102.5	107	90	110				

Sample ID	N051615-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723191

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1048.670	20	500.0	517.4	106	90	110				

Sample ID	N051615-006AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723195

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.490	1.0	5.000	0	110	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051608
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020DIS_CrPGE_TPK

Sample ID	MB-93772	SampType:	MBLK	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164016
Client ID:	PBW	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727664

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									

Sample ID	LCS-93772	SampType:	LCS	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164016
Client ID:	LCSW	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727665

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.717	1.0	10.00	0	97.2	85	115				

Sample ID	N051585-015C-MS	SampType:	MS	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164016
Client ID:	ZZZZZZ	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727673

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	21.420	1.0	10.00	11.86	95.6	75	125				

Sample ID	N051585-015C-MSD	SampType:	MSD	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164016
Client ID:	ZZZZZZ	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727675

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	21.049	1.0	10.00	11.86	91.8	75	125	21.42	1.75	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-67-185-0722
Lab Order:	N051608	**Collection Date:**	7/13/2022 11:55:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051608-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B**	QC Batch: **R163932**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	3.8	20		mg/L	400	7/15/2022 03:42 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051608
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	LCS-R163932_NO3	SampType:	LCS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163932
Client ID:	LCSW	Batch ID:	R163932	TestNo:	EPA 300.0			Analysis Date:	7/14/2022	SeqNo:	4722261

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.219	0.050	1.250	0	97.5	90	110				

Sample ID	MB-R163932_NO3	SampType:	MBLK	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163932
Client ID:	PBW	Batch ID:	R163932	TestNo:	EPA 300.0			Analysis Date:	7/14/2022	SeqNo:	4722262

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID	N051615-002BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163932
Client ID:	ZZZZZZ	Batch ID:	R163932	TestNo:	EPA 300.0			Analysis Date:	7/14/2022	SeqNo:	4722271

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	14.750	0.50	12.50	2.773	95.8	80	120				

Sample ID	N051615-002BMSD	SampType:	MSD	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163932
Client ID:	ZZZZZZ	Batch ID:	R163932	TestNo:	EPA 300.0			Analysis Date:	7/14/2022	SeqNo:	4722272

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	14.978	0.50	12.50	2.773	97.6	80	120	14.75	1.53	20	

Sample ID	N051609-001BDUP	SampType:	DUP	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163932
Client ID:	ZZZZZZ	Batch ID:	R163932	TestNo:	EPA 300.0			Analysis Date:	7/14/2022	SeqNo:	4722275

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	0.505	0.50						0.4900	3.02	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051608
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	N051609-001BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163932
Client ID:	ZZZZZZ	Batch ID:	R163932	TestNo:	EPA 300.0			Analysis Date:	7/14/2022	SeqNo:	4722276

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.388	0.50	12.50	0.4900	95.2	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-67-185-0722
Lab Order:	N051608	**Collection Date:**	7/13/2022 11:55:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051608-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E**	QC Batch: **93772**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Manganese	1100	0.66	12		µg/L	25	7/16/2022 03:23 AM
Molybdenum	34	0.60	2.5		µg/L	5	7/16/2022 03:00 AM
Selenium	94	0.22	2.5		µg/L	5	7/21/2022 02:18 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-68-180-0722
Lab Order:	N051608	**Collection Date:**	7/13/2022 12:52:00 PM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051608-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E** QC Batch: **93772**				PrepDate:	**7/15/2022**		Analyst: **DJ**
Molybdenum	45	0.60	2.5		µg/L	5	7/16/2022 03:35 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051608
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	MB-93772	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164015
Client ID:	PBW	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727180

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	ND	0.50									
Molybdenum	ND	0.50									

Sample ID	LCS-93772	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164015
Client ID:	LCSW	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727181

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	100.071	0.50	100.0	0	100	85	115				
Molybdenum	10.240	0.50	10.00	0	102	85	115				

Sample ID	N051585-015C-MS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164015
Client ID:	ZZZZZZ	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727189

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	96.551	0.50	100.0	4.777	91.8	75	125				
Molybdenum	26.819	0.50	10.00	15.39	114	75	125				

Sample ID	N051585-015C-MSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164015
Client ID:	ZZZZZZ	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727191

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	95.077	0.50	100.0	4.777	90.3	75	125	96.55	1.54	20	
Molybdenum	26.674	0.50	10.00	15.39	113	75	125	26.82	0.544	20	

Sample ID	MB-93772	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164171
Client ID:	PBW	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/21/2022	SeqNo:	4736008

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051608
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	MB-93772	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164171
Client ID:	PBW	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/21/2022	SeqNo:	4736008

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	ND	0.50									

Sample ID	LCS-93772	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164171
Client ID:	LCSW	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/21/2022	SeqNo:	4736009

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	9.072	0.50	10.00	0	90.7	85	115				

Sample ID	N051585-015C-MS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164171
Client ID:	ZZZZZZ	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/21/2022	SeqNo:	4736013

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	9.280	0.50	10.00	0.09425	91.9	75	125				

Sample ID	N051585-015C-MSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164171
Client ID:	ZZZZZZ	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/21/2022	SeqNo:	4736014

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	9.531	0.50	10.00	0.09425	94.4	75	125	9.280	2.66	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

N051608

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement	QA/QC	Sample Receipt Condition	Y N
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	Excel EDD	RTNE	1. Chilled	X
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com daniel.moore@critigen.com	Address:	Geotracker	RWQCB ✓	2. Headspace	
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	Labspec	CalTrans	3. Container Intact	X
Submitted By: Riggie Top		Phone: 949-727-1400, ext 200 Fax:	Others ✓	LEVEL III	4. Seal Present	
Title: Field Tech	Phone: 916-786-3302 Fax:		Specify: RWQCB	LEVEL IV	5. IR number 3	
Signature: Date: 7/13/22	Sampled By: Riggie Top		Global ID:	Regulatory	6. Method of Cooling: ICE	
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for			Specify State:	Sample Temp: 29°C	
Project Name: PG&E Topock - RCM	Signature: Date: 7/13/22	Matrix: Ground X, Sediment; Potable, Soil; NPDES, Other Solid; Surface			Courier: ASSET	
Project Number: 30121866.3Q22GW					Tracking No.:	

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Manganese, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Selenium (500mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N051608-01	MW-67-185-0722	7/13/2022	11:55		X	X	X	X	X	X	E	3	P	BNS	
2	-02	MW-68-180-0722	7/13/2022	12:52		X			X	X		2 E		P	BNS	
3																
4																
5																
7																
8																
9																
10																
11																
12																
13																
14																

Relinquished by (Signature and Printed Name):	Date/Time:	Received by (Signature and Printed Name):	Date/Time:
Riggie Top	7/13/22 1557		7/13/22 @1557
MBCARTIN REL/REC: MBCARTIN		MBCARTIN	7/13/22 @1850

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B	(NH4)2SO4/NH4OH		M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	7/13/2022	Workorder:	N051608
Rep sample Temp (Deg C):	2.9	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For:

Checklist Completed By: MBC YRJ 7/15/2022

For:

Reviewed By: MBC 7/16/2022

ASSET Laboratories

WORK ORDER Summary

16-Jul-22

WorkOrder: N051608

Client ID: ARCUS02

Project: PG&E Topock - RCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/13/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051608-001A	MW-67-185-0722	7/13/2022 11:55:00 AM	7/27/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051608-001B			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051608-001C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051608-002A	MW-68-180-0722	7/13/2022 12:52:00 PM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051608-002B			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051608-003A	FOLDER	7/27/2022	7/27/2022		Folder	Folder	☐	☐	☐	LAB
			7/27/2022		Folder	Level IV Report	☐	☐	☐	LAB
			7/27/2022		Folder	Folder	☐	☐	☐	LAB

July 18, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N051609

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on July 13, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N051609

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 300:

Dilution was necessary for sample N051609-001B due to precipitation upon addition of eluent.

Analytical Comments for EPA 6010B:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Iron in QC samples N051609-001C-MS and N051609-001C-MSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Arsenic in QC samples N051609-002C-MS and N051609-002C-MSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for SM 5310C:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria in QC samples N051585-001DMS and N051585-001DMSD at 1x dilution possibly due to matrix interference. QC samples were diluted and recovery passed criteria. Thus sample reference N051585-001 and MS/MSD were reported at 5x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N051609
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N051609-001A	MW-31-060-0722	Groundwater	7/13/2022 12:40:00 PM	7/13/2022	7/18/2022
N051609-001B	MW-31-060-0722	Groundwater	7/13/2022 12:40:00 PM	7/13/2022	7/18/2022
N051609-001C	MW-31-060-0722	Groundwater	7/13/2022 12:40:00 PM	7/13/2022	7/18/2022
N051609-001D	MW-31-060-0722	Groundwater	7/13/2022 12:40:00 PM	7/13/2022	7/18/2022
N051609-002A	MW-31-135-0722	Groundwater	7/13/2022 1:32:00 PM	7/13/2022	7/18/2022
N051609-002B	MW-31-135-0722	Groundwater	7/13/2022 1:32:00 PM	7/13/2022	7/18/2022
N051609-002C	MW-31-135-0722	Groundwater	7/13/2022 1:32:00 PM	7/13/2022	7/18/2022
N051609-002D	MW-31-135-0722	Groundwater	7/13/2022 1:32:00 PM	7/13/2022	7/18/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-060-0722
Lab Order:	N051609	**Collection Date:**	7/13/2022 12:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051609-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	190	1.3	10		µg/L	50	7/14/2022 01:17 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051609-002

Client Sample ID: MW-31-135-0722
Collection Date: 7/13/2022 1:32:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	23	0.13	1.0		µg/L	5	7/14/2022 01:36 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R163961**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163961**
Client ID: **PBW**	Batch ID: **R163961**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722387**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R163961**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163961**
Client ID: **LCSW**	Batch ID: **R163961**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722388**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.176	0.20	5.000	0	104	90	110				

Sample ID: **N051585-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163961**
Client ID: **ZZZZZZ**	Batch ID: **R163961**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722390**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.040	0.20	1.000	0	104	90	110				

Sample ID: **N051585-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163961**
Client ID: **ZZZZZZ**	Batch ID: **R163961**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722392**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	11.629	0.20	5.000	6.426	104	90	110				

Sample ID: **N051585-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163961**
Client ID: **ZZZZZZ**	Batch ID: **R163961**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722394**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.078	1.0	5.000	0	102	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N051585-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163961**
Client ID: **ZZZZZZ** Batch ID: **R163961** TestNo: **EPA 218.6** Analysis Date: **7/14/2022** SeqNo: **4722398**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.078	0.20	1.000	0	108	90	110				

Sample ID: **N051585-007AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163961**
Client ID: **ZZZZZZ** Batch ID: **R163961** TestNo: **EPA 218.6** Analysis Date: **7/14/2022** SeqNo: **4722400**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.364	0.20	1.000	0.2778	109	90	110				

Sample ID: **N051585-011AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163961**
Client ID: **ZZZZZZ** Batch ID: **R163961** TestNo: **EPA 218.6** Analysis Date: **7/14/2022** SeqNo: **4722402**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.102	0.20	1.000	0.05030	105	90	110				

Sample ID: **N051585-012AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163961**
Client ID: **ZZZZZZ** Batch ID: **R163961** TestNo: **EPA 218.6** Analysis Date: **7/14/2022** SeqNo: **4722406**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.092	0.20	1.000	0	109	90	110				

Sample ID: **N051609-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163961**
Client ID: **ZZZZZZ** Batch ID: **R163961** TestNo: **EPA 218.6** Analysis Date: **7/14/2022** SeqNo: **4722408**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	450.275	10	250.0	192.3	103	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N051609-002AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163961**
Client ID: **ZZZZZZ** Batch ID: **R163961** TestNo: **EPA 218.6** Analysis Date: **7/14/2022** SeqNo: **4722410**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	48.862	1.0	25.00	22.90	104	90	110				

Sample ID: **N051585-016AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163961**
Client ID: **ZZZZZZ** Batch ID: **R163961** TestNo: **EPA 218.6** Analysis Date: **7/14/2022** SeqNo: **4722412**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	346.638	4.0	100.0	240.2	106	90	110				

Sample ID: **N051585-013AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163961**
Client ID: **ZZZZZZ** Batch ID: **R163961** TestNo: **EPA 218.6** Analysis Date: **7/14/2022** SeqNo: **4722414**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.070	0.20	1.000	0	107	90	110				

Sample ID: **N051585-014AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163961**
Client ID: **ZZZZZZ** Batch ID: **R163961** TestNo: **EPA 218.6** Analysis Date: **7/14/2022** SeqNo: **4722418**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.027	0.20	1.000	0	103	90	110				

Sample ID: **N051585-016AMSD** SampType: **MSD** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163961**
Client ID: **ZZZZZZ** Batch ID: **R163961** TestNo: **EPA 218.6** Analysis Date: **7/14/2022** SeqNo: **4722419**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	342.342	4.0	100.0	240.2	102	90	110	346.6	1.25	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N051609-001ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163961**
Client ID: **ZZZZZZ**	Batch ID: **R163961**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722420**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	189.770	10						192.3	1.32	20	

Sample ID: **N051585-009AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163961**
Client ID: **ZZZZZZ**	Batch ID: **R163961**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722422**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	8.210	1.0	5.000	3.120	102	90	110				

Sample ID: **N051585-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163961**
Client ID: **ZZZZZZ**	Batch ID: **R163961**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722424**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	6.065	1.0	5.000	1.253	96.2	90	110				

Sample ID: **N051585-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163961**
Client ID: **ZZZZZZ**	Batch ID: **R163961**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722428**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.049	0.20	1.000	0	105	90	110				

Sample ID: **N051585-010AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163961**
Client ID: **ZZZZZZ**	Batch ID: **R163961**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722430**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.050	0.20	1.000	0	105	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N051585-008AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163961**
Client ID: **ZZZZZZ**	Batch ID: **R163961**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722432**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.335	1.0	5.000	0	107	90	110				

Sample ID: **N051585-015AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163961**
Client ID: **ZZZZZZ**	Batch ID: **R163961**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722436**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	38.852	1.0	25.00	12.77	104	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051609-001

Client Sample ID: MW-31-060-0722
Collection Date: 7/13/2022 12:40:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B** QC Batch: **R163932**				PrepDate:			Analyst: **RAB**
Sulfate	560	6.1	50		mg/L	100	7/15/2022 03:58 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B** QC Batch: **R163932**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/14/2022 10:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051609-002

Client Sample ID: MW-31-135-0722
Collection Date: 7/13/2022 1:32:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B** QC Batch: **R163932**				PrepDate:			Analyst: **RAB**
Sulfate	670	6.1	50		mg/L	100	7/15/2022 05:06 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B** QC Batch: **R163932**				PrepDate:			Analyst: **RAB**
Nitrate as N	1.1	0.095	0.50		mg/L	10	7/15/2022 12:03 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **LCS-R163932_SO4**	SampType: **LCS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **163932**
Client ID: **LCSW**	Batch ID: **R163932**	TestNo: **EPA 300.0**		Analysis Date: **7/14/2022**	SeqNo: **4722301**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	4.009	0.50	4.000	0	100	90	110				

Sample ID: **MB-R163932_SO4**	SampType: **MBLK**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **163932**
Client ID: **PBW**	Batch ID: **R163932**	TestNo: **EPA 300.0**		Analysis Date: **7/14/2022**	SeqNo: **4722302**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.50									

Sample ID: **N051609-001BDUP**	SampType: **DUP**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **163932**
Client ID: **ZZZZZZ**	Batch ID: **R163932**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722310**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	563.450	50						557.9	0.997	20	

Sample ID: **N051609-001BMS**	SampType: **MS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **163932**
Client ID: **ZZZZZZ**	Batch ID: **R163932**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722311**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	947.440	50	400.0	557.9	97.4	80	120				

Sample ID: **N051609-001BMSD**	SampType: **MSD**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **163932**
Client ID: **ZZZZZZ**	Batch ID: **R163932**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722312**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	956.520	50	400.0	557.9	99.7	80	120	947.4	0.954	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **LCS-R163932_NO3** SampType: **LCS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **163932**
Client ID: **LCSW** Batch ID: **R163932** TestNo: **EPA 300.0** Analysis Date: **7/14/2022** SeqNo: **4722261**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.219	0.050	1.250	0	97.5	90	110				

Sample ID: **MB-R163932_NO3** SampType: **MBLK** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **163932**
Client ID: **PBW** Batch ID: **R163932** TestNo: **EPA 300.0** Analysis Date: **7/14/2022** SeqNo: **4722262**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **N051615-002BMS** SampType: **MS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **163932**
Client ID: **ZZZZZZ** Batch ID: **R163932** TestNo: **EPA 300.0** Analysis Date: **7/14/2022** SeqNo: **4722271**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	14.750	0.50	12.50	2.773	95.8	80	120				

Sample ID: **N051615-002BMSD** SampType: **MSD** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **163932**
Client ID: **ZZZZZZ** Batch ID: **R163932** TestNo: **EPA 300.0** Analysis Date: **7/14/2022** SeqNo: **4722272**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	14.978	0.50	12.50	2.773	97.6	80	120	14.75	1.53	20	

Sample ID: **N051609-001BDUP** SampType: **DUP** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **163932**
Client ID: **ZZZZZZ** Batch ID: **R163932** TestNo: **EPA 300.0** Analysis Date: **7/14/2022** SeqNo: **4722275**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	0.505	0.50						0.4900	3.02	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **N051609-001BMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163932**
Client ID: **ZZZZZZ**	Batch ID: **R163932**	TestNo: **EPA 300.0**		Analysis Date: **7/14/2022**	SeqNo: **4722276**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.388	0.50	12.50	0.4900	95.2	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-060-0722
Lab Order:	N051609	**Collection Date:**	7/13/2022 12:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051609-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220714A**	QC Batch: **R163951**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/14/2022 11:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-135-0722
Lab Order:	N051609	**Collection Date:**	7/13/2022 1:32:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051609-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220714A**	QC Batch: **R163951**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/14/2022 11:15 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R163951**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163951**
Client ID: **PBW**	Batch ID: **R163951**	TestNo: **SM 5310C**		Analysis Date: **7/14/2022**	SeqNo: **4722045**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R163951**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163951**
Client ID: **LCSW**	Batch ID: **R163951**	TestNo: **SM 5310C**		Analysis Date: **7/14/2022**	SeqNo: **4722046**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	4.926	1.0	5.000	0	98.5	85	115				

Sample ID: **N051585-001DMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163951**
Client ID: **ZZZZZZ**	Batch ID: **R163951**	TestNo: **SM 5310C**		Analysis Date: **7/14/2022**	SeqNo: **4722052**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	26.929	5.0	25.00	1.370	102	75	125				

Sample ID: **N051585-001DMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163951**
Client ID: **ZZZZZZ**	Batch ID: **R163951**	TestNo: **SM 5310C**		Analysis Date: **7/14/2022**	SeqNo: **4722053**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	26.991	5.0	25.00	1.370	102	75	125	26.93	0.230	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051609-001

Client Sample ID: MW-31-060-0722
Collection Date: 7/13/2022 12:40:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220716A**	QC Batch: **93764**			PrepDate:	**7/14/2022**		Analyst: **DJ**
Iron	43	13	20		µg/L	1	7/16/2022 08:23 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051609-002

Client Sample ID: MW-31-135-0722
Collection Date: 7/13/2022 1:32:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220716A**	QC Batch: **93764**			PrepDate:	**7/14/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/16/2022 08:10 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-93764**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **7/14/2022**	RunNo: **163995**
Client ID: **PBW**	Batch ID: **93764**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4724270**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-93764**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **7/14/2022**	RunNo: **163995**
Client ID: **LCSW**	Batch ID: **93764**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4724271**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	92.734	20	100.0	0	92.7	85	115				

Sample ID: **N051609-001C-MS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **7/14/2022**	RunNo: **163995**
Client ID: **ZZZZZZ**	Batch ID: **93764**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4724275**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	96.607	20	100.0	42.87	53.7	75	125				S

Sample ID: **N051609-001C-MSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **7/14/2022**	RunNo: **163995**
Client ID: **ZZZZZZ**	Batch ID: **93764**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4724276**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	91.025	20	100.0	42.87	48.2	75	125	96.61	5.95	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **N051606-001C-PS** SampType: **PS** TestCode: **6010_WDPGE** Units: **µg/L** Prep Date: RunNo: **163995**
Client ID: **ZZZZZZ** Batch ID: **93764** TestNo: **EPA 6010B** **EPA 3010A** Analysis Date: **7/16/2022** SeqNo: **4724274**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	94.630	20	100.0	42.87	51.8	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051609-001

Client Sample ID: MW-31-060-0722
Collection Date: 7/13/2022 12:40:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220714A**	QC Batch: **93765**			PrepDate:		**7/14/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/14/2022 05:10 PM
Barium	67	0.083	1.0		µg/L	1	7/14/2022 05:10 PM
Manganese	120	0.026	0.50		µg/L	1	7/14/2022 05:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051609-002

Client Sample ID: MW-31-135-0722
Collection Date: 7/13/2022 1:32:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220714A**	QC Batch: **93765**			PrepDate:		**7/14/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/14/2022 05:22 PM
Barium	44	0.083	1.0		µg/L	1	7/14/2022 05:22 PM
Manganese	13	0.026	0.50		µg/L	1	7/14/2022 05:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-93765**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/14/2022**	RunNo: **163938**
Client ID: **PBW**	Batch ID: **93765**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/14/2022**	SeqNo: **4721303**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID: **LCS-93765**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/14/2022**	RunNo: **163938**
Client ID: **LCSW**	Batch ID: **93765**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/14/2022**	SeqNo: **4721304**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.589	0.10	10.00	0	95.9	85	115				
Barium	9.664	1.0	10.00	0	96.6	85	115				
Manganese	97.682	0.50	100.0	0	97.7	85	115				

Sample ID: **N051609-002C-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/14/2022**	RunNo: **163938**
Client ID: **ZZZZZZ**	Batch ID: **93765**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/14/2022**	SeqNo: **4721313**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	6.108	0.10	10.00	0	61.1	75	125				S
Barium	53.823	1.0	10.00	43.67	102	75	125				
Manganese	95.857	0.50	100.0	13.06	82.8	75	125				

Sample ID: **N051609-002C-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/14/2022**	RunNo: **163938**
Client ID: **ZZZZZZ**	Batch ID: **93765**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/14/2022**	SeqNo: **4721314**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	6.833	0.10	10.00	0	68.3	75	125	6.108	11.2	20	S
Barium	52.393	1.0	10.00	43.67	87.2	75	125	53.82	2.69	20	
Manganese	96.005	0.50	100.0	13.06	82.9	75	125	95.86	0.155	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N051609-002C-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **163938**
Client ID: **ZZZZZZ** Batch ID: **93765** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **7/14/2022** SeqNo: **4721310**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	6.626	0.10	10.00	0	66.3	80	120				S
Barium	52.993	1.0	10.00	43.67	93.2	80	120				
Manganese	97.173	0.50	100.0	13.06	84.1	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

N051609

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement		QA/QC		Sample Receipt Condition	Y	N
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD		RTNE		1. Chilled	X	
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker		RWQCB	✓	2. Headspace		
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Labspec		CalTrans		3. Container Intact	X	
Submitted By: Riggie Tip			Others	✓	LEVEL III		4. Seal Present		
Title: Field Tech	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	Specify: RWQCB		LEVEL IV		5. IR number 3		
Signature: Date: 7/13/22	Sampled By: Riggie Tip		Global ID:		Regulatory		6. Method of Cooling: ICE		
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for				Specify State:		Sample Temp: 3.1°C / 2.9°C		
Project Name: PG&E Topock - PCM	Signature: Date: 7/13/22	Matrix: Ground X, Sediment; Potable, Soil; NPDES, Other Solid; Surface					Courier: ASSET		
Project Number: 30121866.3Q22GW							Tracking No.:		

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N051609-01	MW-31-060-0722	7/13/2022	12:40		X	X	X			X			C	6	P	BNS	
2	-02	MW-31-135-0722	7/13/2022	13:32		X	X	X			X			C	6	P	BNS	
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		

Relinquished by (Signature and Printed Name):	Date/Time:	Received by (Signature and Printed Name):	Date/Time:
Riggie Tip	7/13/22 1557		7/13/22 @1557
Relinquished by (Signature and Printed Name):	Date/Time:	Received by (Signature and Printed Name):	Date/Time:
REL/REC: MBCARTIN			7/13/22 @18 50
Relinquished by (Signature and Printed Name):	Date/Time:	Received by (Signature and Printed Name):	Date/Time:

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [X] C = 2 Workdays
- [ ] D = 3 Workdays
- [ ] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	7/13/2022	Workorder:	N051609
Rep sample Temp (Deg C):	3.1/2.9	IR Gun ID:	3
Temp Blank:	☑ Yes ☐ No		
Carrier name:	ASSET		
Last 4 digits of Tracking No.:	NA	Packing Material Used:	None
Cooling process:	☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None		

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: For: MBC YRJ 7/14/2022

Reviewed By: For: MBC 7/15/2022

ASSET Laboratories

WORK ORDER Summary

16-Jul-22

WorkOrder: N051609

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/13/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051609-001A	MW-31-060-0722	7/13/2022 12:40:00 PM	7/15/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051609-001B			7/15/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/15/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051609-001C			7/15/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/15/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/15/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/15/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051609-001D			7/15/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051609-002A	MW-31-135-0722	7/13/2022 1:32:00 PM	7/15/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051609-002B			7/15/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/15/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051609-002C			7/15/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/15/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/15/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/15/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051609-002D			7/15/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051609-003A	FOLDER	7/15/2022	7/15/2022		Folder	Folder	☐	☐	☐	LAB
			7/15/2022		Folder	Level IV Report	☐	☐	☐	LAB
			7/15/2022		Folder	Folder	☐	☐	☐	LAB

July 27, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N051615

RE: PG&E Topock - PCM, 30121866.3Q22GW

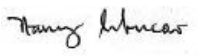
Attention: Dan Bush

Enclosed are the results for sample(s) received on July 13, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,



Nancy Sibucao
Laboratory Director

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CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N051615

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Dilution was necessary for sample N051615-006 due to matrix interference. Sample was analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Sample was reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for SM 5310C:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria in QC samples N051611-002DMS and N051611-002DMSD at several dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N051611-002D and MS/MSD were reported at 20x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N051615
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N051615-001A	TW-02D-0722	Groundwater	7/13/2022 8:52:00 AM	7/13/2022	7/27/2022
N051615-001B	TW-02D-0722	Groundwater	7/13/2022 8:52:00 AM	7/13/2022	7/27/2022
N051615-001C	TW-02D-0722	Groundwater	7/13/2022 8:52:00 AM	7/13/2022	7/27/2022
N051615-001D	TW-02D-0722	Groundwater	7/13/2022 8:52:00 AM	7/13/2022	7/27/2022
N051615-002A	TW-02S-0722	Groundwater	7/13/2022 8:19:00 AM	7/13/2022	7/27/2022
N051615-002B	TW-02S-0722	Groundwater	7/13/2022 8:19:00 AM	7/13/2022	7/27/2022
N051615-002C	TW-02S-0722	Groundwater	7/13/2022 8:19:00 AM	7/13/2022	7/27/2022
N051615-002D	TW-02S-0722	Groundwater	7/13/2022 8:19:00 AM	7/13/2022	7/27/2022
N051615-003A	TW-03D-0722	Groundwater	7/13/2022 9:24:00 AM	7/13/2022	7/27/2022
N051615-003B	TW-03D-0722	Groundwater	7/13/2022 9:24:00 AM	7/13/2022	7/27/2022
N051615-003C	TW-03D-0722	Groundwater	7/13/2022 9:24:00 AM	7/13/2022	7/27/2022
N051615-003D	TW-03D-0722	Groundwater	7/13/2022 9:24:00 AM	7/13/2022	7/27/2022
N051615-004A	MW-21-0722	Groundwater	7/13/2022 10:10:00 AM	7/13/2022	7/27/2022
N051615-004B	MW-21-0722	Groundwater	7/13/2022 10:10:00 AM	7/13/2022	7/27/2022
N051615-004C	MW-21-0722	Groundwater	7/13/2022 10:10:00 AM	7/13/2022	7/27/2022
N051615-004D	MW-21-0722	Groundwater	7/13/2022 10:10:00 AM	7/13/2022	7/27/2022
N051615-005A	MW-21-EB-0722	Groundwater	7/13/2022 9:44:00 AM	7/13/2022	7/27/2022
N051615-006A	MW-71-035-0722	Groundwater	7/13/2022 10:46:00 AM	7/13/2022	7/27/2022
N051615-006B	MW-71-035-0722	Groundwater	7/13/2022 10:46:00 AM	7/13/2022	7/27/2022
N051615-006C	MW-71-035-0722	Groundwater	7/13/2022 10:46:00 AM	7/13/2022	7/27/2022
N051615-006D	MW-71-035-0722	Groundwater	7/13/2022 10:46:00 AM	7/13/2022	7/27/2022
N051615-007A	EB-705-Q322	Groundwater	7/13/2022 1:02:00 PM	7/13/2022	7/27/2022
N051615-008A	MW-26-0722	Groundwater	7/13/2022 2:29:00 PM	7/13/2022	7/27/2022
N051615-008B	MW-26-0722	Groundwater	7/13/2022 2:29:00 PM	7/13/2022	7/27/2022
N051615-008C	MW-26-0722	Groundwater	7/13/2022 2:29:00 PM	7/13/2022	7/27/2022
N051615-008D	MW-26-0722	Groundwater	7/13/2022 2:29:00 PM	7/13/2022	7/27/2022
N051615-009A	MW-51-0722	Groundwater	7/13/2022 2:26:00 PM	7/13/2022	7/27/2022
N051615-009B	MW-51-0722	Groundwater	7/13/2022 2:26:00 PM	7/13/2022	7/27/2022
N051615-009C	MW-51-0722	Groundwater	7/13/2022 2:26:00 PM	7/13/2022	7/27/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N051615
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N051615-009D	MW-51-0722	Groundwater	7/13/2022 2:26:00 PM	7/13/2022	7/27/2022
N051615-010A	MW-20-070-0722	Groundwater	7/13/2022 9:17:00 AM	7/13/2022	7/27/2022
N051615-010B	MW-20-070-0722	Groundwater	7/13/2022 9:17:00 AM	7/13/2022	7/27/2022
N051615-010C	MW-20-070-0722	Groundwater	7/13/2022 9:17:00 AM	7/13/2022	7/27/2022
N051615-010D	MW-20-070-0722	Groundwater	7/13/2022 9:17:00 AM	7/13/2022	7/27/2022
N051615-011A	MW-20-100-0722	Groundwater	7/13/2022 11:05:00 AM	7/13/2022	7/27/2022
N051615-011B	MW-20-100-0722	Groundwater	7/13/2022 11:05:00 AM	7/13/2022	7/27/2022
N051615-011C	MW-20-100-0722	Groundwater	7/13/2022 11:05:00 AM	7/13/2022	7/27/2022
N051615-011D	MW-20-100-0722	Groundwater	7/13/2022 11:05:00 AM	7/13/2022	7/27/2022
N051615-012A	MW-904-Q322	Groundwater	7/13/2022 11:15:00 AM	7/13/2022	7/27/2022
N051615-012B	MW-904-Q322	Groundwater	7/13/2022 11:15:00 AM	7/13/2022	7/27/2022
N051615-012C	MW-904-Q322	Groundwater	7/13/2022 11:15:00 AM	7/13/2022	7/27/2022
N051615-012D	MW-904-Q322	Groundwater	7/13/2022 11:15:00 AM	7/13/2022	7/27/2022
N051615-013A	MW-20-130-0722	Groundwater	7/13/2022 10:18:00 AM	7/13/2022	7/27/2022
N051615-013B	MW-20-130-0722	Groundwater	7/13/2022 10:18:00 AM	7/13/2022	7/27/2022
N051615-013C	MW-20-130-0722	Groundwater	7/13/2022 10:18:00 AM	7/13/2022	7/27/2022
N051615-013D	MW-20-130-0722	Groundwater	7/13/2022 10:18:00 AM	7/13/2022	7/27/2022
N051615-014A	EB-706-Q322	Groundwater	7/13/2022 2:45:00 PM	7/13/2022	7/27/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02D-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 8:52:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A**	QC Batch: **R163973**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	490	2.5	20		µg/L	100	7/15/2022 03:33 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02S-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 8:19:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A**	QC Batch: **R163973**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	100	0.50	4.0		µg/L	20	7/15/2022 03:43 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-03D-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A**	QC Batch: **R163973**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	520	2.5	20		µg/L	100	7/15/2022 03:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A**	QC Batch: **R163973**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/15/2022 04:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-EB-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 9:44:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A**	QC Batch: **R163973**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/15/2022 04:21 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-71-035-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:46:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A**	QC Batch: **R163973**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	7/15/2022 07:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-705-Q322
Lab Order:	N051615	**Collection Date:**	7/13/2022 1:02:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220718A**	QC Batch: **R164029**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/18/2022 12:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-26-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 2:29:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220718A**	QC Batch: **R164029**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	110	0.50	4.0		µg/L	20	7/18/2022 10:22 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-51-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 2:26:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220718A**	QC Batch: **R164029**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	490	2.5	20		µg/L	100	7/18/2022 10:34 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-070-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 9:17:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220718A**	QC Batch: **R164029**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	1200	5.0	40		µg/L	200	7/18/2022 11:49 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-100-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 11:05:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220718A**	QC Batch: **R164029**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	920	5.0	40		µg/L	200	7/18/2022 10:43 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-904-Q322
Lab Order:	N051615	**Collection Date:**	7/13/2022 11:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220718A**	QC Batch: **R164029**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	930	5.0	40		µg/L	200	7/18/2022 10:53 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-130-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:18:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220718A**	QC Batch: **R164029**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	1800	13	100		µg/L	500	7/18/2022 11:02 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-706-Q322
Lab Order:	N051615	**Collection Date:**	7/13/2022 2:45:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220718A**	QC Batch: **R164029**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/18/2022 01:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **LCS-R163973**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **LCSW**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723141**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.961	0.20	5.000	0	99.2	90	110				

Sample ID **MB-R163973**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **PBW**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723142**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID **N051608-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723144**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	423.400	80	400.0	0	106	90	110				

Sample ID **N051608-002ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723146**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4947.250	100						4974	0.543	20	

Sample ID **N051608-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723147**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	7486.500	100	2500	4974	100	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **N051617-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723151**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	646.045	10	250.0	390.0	102	90	110				

Sample ID **N051617-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723153**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	637.595	10	250.0	391.8	98.3	90	110				

Sample ID **N051648-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723155**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.436	0.20	1.000	0.4452	99.1	90	110				

Sample ID **N051648-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723157**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.531	0.20	1.000	1.532	99.9	90	110				

Sample ID **N051648-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723159**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.506	0.20	1.000	0.4480	106	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **N051648-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723163**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.524	0.20	1.000	1.468	106	90	110				

Sample ID **N051648-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723165**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.975	0.20	1.000	1.942	103	90	110				

Sample ID **N051648-001AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723166**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.515	0.20	1.000	0.4452	107	90	110	1.436	5.30	20	

Sample ID **N051615-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723177**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.044	0.20	1.000	0	104	90	110				

Sample ID **N051615-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723179**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.025	0.20	1.000	0	102	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051634-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723180

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1801.640	40	1000	749.4	105	90	110				

Sample ID	N051634-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723184

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	215.744	4.0	100.0	115.5	100	90	110				

Sample ID	N051634-004AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723185

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2069.380	40	1000	1037	103	90	110				

Sample ID	N051634-005AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723186

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.034	0.20	1.000	0	103	90	110				

Sample ID	N051634-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723188

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4781.050	100	2500	2240	102	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051615-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723189

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1022.160	20	500.0	486.8	107	90	110				

Sample ID	N051615-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723190

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	209.200	4.0	100.0	102.5	107	90	110				

Sample ID	N051615-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723191

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1048.670	20	500.0	517.4	106	90	110				

Sample ID	N051615-006AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723195

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.490	1.0	5.000	0	110	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	MB-R164029	SampType:	MBLK	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164029		
Client ID:	PBW	Batch ID:	R164029	TestNo:	EPA 218.6			Analysis Date:	7/18/2022	SeqNo:	4728640		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	ND	0.20											

Sample ID	LCS-R164029	SampType:	LCS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164029		
Client ID:	LCSW	Batch ID:	R164029	TestNo:	EPA 218.6			Analysis Date:	7/18/2022	SeqNo:	4728641		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	5.267	0.20	5.000	0	105	90	110						

Sample ID	N051615-008AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164029		
Client ID:	ZZZZZZ	Batch ID:	R164029	TestNo:	EPA 218.6			Analysis Date:	7/18/2022	SeqNo:	4728647		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	209.708	4.0	100.0	108.0	102	90	110						

Sample ID	N051615-009AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164029		
Client ID:	ZZZZZZ	Batch ID:	R164029	TestNo:	EPA 218.6			Analysis Date:	7/18/2022	SeqNo:	4728648		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	1007.280	20	500.0	492.6	103	90	110						

Sample ID	N051615-010AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164029		
Client ID:	ZZZZZZ	Batch ID:	R164029	TestNo:	EPA 218.6			Analysis Date:	7/18/2022	SeqNo:	4728652		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	2228.660	40	1000	1181	105	90	110						

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **N051615-010AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164029**
Client ID: **ZZZZZZ**	Batch ID: **R164029**	TestNo: **EPA 218.6**		Analysis Date: **7/18/2022**	SeqNo: **4728653**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2230.440	40	1000	1181	105	90	110	2229	0.0798	20	

Sample ID **N051615-011AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164029**
Client ID: **ZZZZZZ**	Batch ID: **R164029**	TestNo: **EPA 218.6**		Analysis Date: **7/18/2022**	SeqNo: **4728654**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1990.960	40	1000	922.6	107	90	110				

Sample ID **N051615-012AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164029**
Client ID: **ZZZZZZ**	Batch ID: **R164029**	TestNo: **EPA 218.6**		Analysis Date: **7/18/2022**	SeqNo: **4728655**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1974.640	40	1000	933.8	104	90	110				

Sample ID **N051615-011ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164029**
Client ID: **ZZZZZZ**	Batch ID: **R164029**	TestNo: **EPA 218.6**		Analysis Date: **7/18/2022**	SeqNo: **4728656**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	961.320	40						922.6	4.11	20	

Sample ID **N051615-013AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164029**
Client ID: **ZZZZZZ**	Batch ID: **R164029**	TestNo: **EPA 218.6**		Analysis Date: **7/18/2022**	SeqNo: **4728657**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4436.350	100	2500	1782	106	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051615-007AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164029
Client ID:	ZZZZZZ	Batch ID:	R164029	TestNo:	EPA 218.6			Analysis Date:	7/18/2022	SeqNo:	4728659

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.017	0.20	1.000	0	102	90	110				

Sample ID	N051615-014AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164029
Client ID:	ZZZZZZ	Batch ID:	R164029	TestNo:	EPA 218.6			Analysis Date:	7/18/2022	SeqNo:	4728663

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.042	0.20	1.000	0	104	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051615-001

Client Sample ID: TW-02D-0722
Collection Date: 7/13/2022 8:52:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718B**	QC Batch: **R164036**			PrepDate:			Analyst: **RAB**
Sulfate	720	6.1	50		mg/L	100	7/18/2022 11:54 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B**	QC Batch: **R163932**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.89	0.095	0.50		mg/L	10	7/15/2022 12:37 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051615-002

Client Sample ID: TW-02S-0722
Collection Date: 7/13/2022 8:19:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718B**	QC Batch: **R164036**			PrepDate:			Analyst: **RAB**
Sulfate	180	1.2	10		mg/L	20	7/19/2022 01:32 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B**	QC Batch: **R163932**			PrepDate:			Analyst: **RAB**
Nitrate as N	2.8	0.095	0.50		mg/L	10	7/14/2022 09:49 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-03D-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
EPA 300.0							
RunID: **NV00922-IC8_220718B** QC Batch: **R164036** PrepDate: Analyst: **RAB**							
Sulfate	750	6.1	50		mg/L	100	7/19/2022 02:21 AM
ANIONS BY ION CHROMATOGRAPHY							
EPA 300.0							
RunID: **NV00922-IC8_220714B** QC Batch: **R163932** PrepDate: Analyst: **RAB**							
Nitrate as N	0.95	0.095	0.50		mg/L	10	7/15/2022 12:54 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718B**	QC Batch: **R164036**			PrepDate:			Analyst: **RAB**
Sulfate	1800	12	100		mg/L	200	7/19/2022 02:37 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B**	QC Batch: **R163932**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/15/2022 01:10 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-71-035-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:46:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718B**	QC Batch: **R164036**			PrepDate:			Analyst: **RAB**
Sulfate	1300	12	100		mg/L	200	7/19/2022 02:53 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B**	QC Batch: **R163932**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/15/2022 01:27 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-26-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 2:29:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718B**	QC Batch: **R164036**			PrepDate:			Analyst: **RAB**
Sulfate	540	6.1	50		mg/L	100	7/19/2022 03:10 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B**	QC Batch: **R163932**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/15/2022 01:44 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-51-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 2:26:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718B**	QC Batch: **R164036**			PrepDate:			Analyst: **RAB**
Sulfate	540	6.1	50		mg/L	100	7/19/2022 03:26 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B**	QC Batch: **R163932**			PrepDate:			Analyst: **RAB**
Nitrate as N	1.4	0.095	0.50		mg/L	10	7/15/2022 02:01 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051615-010

Client Sample ID: MW-20-070-0722
Collection Date: 7/13/2022 9:17:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718B** QC Batch: **R164036**				PrepDate:			Analyst: **RAB**
Sulfate	530	3.0	25		mg/L	50	7/19/2022 03:42 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B** QC Batch: **R163932**				PrepDate:			Analyst: **RAB**
Nitrate as N	28	0.19	1.0		mg/L	20	7/15/2022 12:20 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-100-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 11:05:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718B**	QC Batch: **R164036**			PrepDate:			Analyst: **RAB**
Sulfate	880	6.1	50		mg/L	100	7/19/2022 03:59 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B**	QC Batch: **R163932**			PrepDate:			Analyst: **RAB**
Nitrate as N	5.3	0.095	0.50		mg/L	10	7/15/2022 02:51 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-904-Q322
Lab Order:	N051615	**Collection Date:**	7/13/2022 11:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718B**	QC Batch: **R164036**			PrepDate:			Analyst: **RAB**
Sulfate	890	6.1	50		mg/L	100	7/19/2022 04:15 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B**	QC Batch: **R163932**			PrepDate:			Analyst: **RAB**
Nitrate as N	5.3	0.095	0.50		mg/L	10	7/15/2022 03:08 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-130-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:18:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718B**	QC Batch: **R164036**			PrepDate:			Analyst: **RAB**
Sulfate	1100	6.1	50		mg/L	100	7/19/2022 04:31 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B**	QC Batch: **R163932**			PrepDate:			Analyst: **RAB**
Nitrate as N	5.4	0.095	0.50		mg/L	10	7/15/2022 03:25 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	LCS-R164036_SO4	SampType:	LCS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164036	
Client ID:	LCSW	Batch ID:	R164036	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4732105	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Sulfate	3.946	0.50	4.000	0	98.6	90	110					

Sample ID	MB-R164036_SO4	SampType:	MBLK	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164036	
Client ID:	PBW	Batch ID:	R164036	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4732106	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Sulfate	ND	0.50										

Sample ID	N051677-007BMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164036	
Client ID:	ZZZZZZ	Batch ID:	R164036	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4732110	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Sulfate	22.103	1.0	8.000	14.14	99.6	80	120					

Sample ID	N051677-007BMSD	SampType:	MSD	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164036	
Client ID:	ZZZZZZ	Batch ID:	R164036	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4732111	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Sulfate	22.172	1.0	8.000	14.14	100	80	120	22.10	0.315	20		

Sample ID	N051615-001BDUP	SampType:	DUP	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164036	
Client ID:	ZZZZZZ	Batch ID:	R164036	TestNo:	EPA 300.0			Analysis Date:	7/19/2022	SeqNo:	4732113	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Sulfate	715.300	50						720.8	0.763	20		

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	N051615-001BMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164036
Client ID:	ZZZZZZ	Batch ID:	R164036	TestNo:	EPA 300.0			Analysis Date:	7/19/2022	SeqNo:	4732114

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	1124.740	50	400.0	720.8	101	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	LCS-R163932_NO3	SampType:	LCS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163932
Client ID:	LCSW	Batch ID:	R163932	TestNo:	EPA 300.0			Analysis Date:	7/14/2022	SeqNo:	4722261

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.219	0.050	1.250	0	97.5	90	110				

Sample ID	MB-R163932_NO3	SampType:	MBLK	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163932
Client ID:	PBW	Batch ID:	R163932	TestNo:	EPA 300.0			Analysis Date:	7/14/2022	SeqNo:	4722262

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID	N051615-002BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163932
Client ID:	ZZZZZZ	Batch ID:	R163932	TestNo:	EPA 300.0			Analysis Date:	7/14/2022	SeqNo:	4722271

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	14.750	0.50	12.50	2.773	95.8	80	120				

Sample ID	N051615-002BMSD	SampType:	MSD	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163932
Client ID:	ZZZZZZ	Batch ID:	R163932	TestNo:	EPA 300.0			Analysis Date:	7/14/2022	SeqNo:	4722272

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	14.978	0.50	12.50	2.773	97.6	80	120	14.75	1.53	20	

Sample ID	N051609-001BDUP	SampType:	DUP	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163932
Client ID:	ZZZZZZ	Batch ID:	R163932	TestNo:	EPA 300.0			Analysis Date:	7/14/2022	SeqNo:	4722275

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	0.505	0.50						0.4900	3.02	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	N051609-001BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163932
Client ID:	ZZZZZZ	Batch ID:	R163932	TestNo:	EPA 300.0			Analysis Date:	7/14/2022	SeqNo:	4722276

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.388	0.50	12.50	0.4900	95.2	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02D-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 8:52:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220714B**	QC Batch: **R163952**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/14/2022 11:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02S-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 8:19:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220714B**	QC Batch: **R163952**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/15/2022 12:08 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-03D-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220714B**	QC Batch: **R163952**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/15/2022 12:23 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220714B**	QC Batch: **R163952**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/14/2022 11:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-71-035-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:46:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220714B**	QC Batch: **R163952**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/15/2022 12:39 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-26-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 2:29:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220714B**	QC Batch: **R163952**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/15/2022 01:41 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-51-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 2:26:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220715A**	QC Batch: **R163991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/15/2022 02:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-070-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 9:17:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220715A**	QC Batch: **R163991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/15/2022 03:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-100-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 11:05:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220715A**	QC Batch: **R163991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/15/2022 07:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-904-Q322
Lab Order:	N051615	**Collection Date:**	7/13/2022 11:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220715A**	QC Batch: **R163991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/15/2022 08:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-130-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:18:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220715A**	QC Batch: **R163991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/15/2022 04:41 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID **LCS-R163952**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163952**
Client ID: **LCSW**	Batch ID: **R163952**	TestNo: **SM 5310C**		Analysis Date: **7/14/2022**	SeqNo: **4722144**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.026	1.0	5.000	0	101	85	115				

Sample ID **MB-R163952**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163952**
Client ID: **PBW**	Batch ID: **R163952**	TestNo: **SM 5310C**		Analysis Date: **7/14/2022**	SeqNo: **4722145**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID **N051612-005CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163952**
Client ID: **ZZZZZZ**	Batch ID: **R163952**	TestNo: **SM 5310C**		Analysis Date: **7/14/2022**	SeqNo: **4722147**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.162	1.0	5.000	0.1765	99.7	75	125				

Sample ID **N051612-005CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163952**
Client ID: **ZZZZZZ**	Batch ID: **R163952**	TestNo: **SM 5310C**		Analysis Date: **7/14/2022**	SeqNo: **4722155**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.233	1.0	5.000	0.1765	101	75	125	5.162	1.35	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID **MB-R163991**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163991**
Client ID: **PBW**	Batch ID: **R163991**	TestNo: **SM 5310C**		Analysis Date: **7/15/2022**	SeqNo: **4723543**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID **LCS-R163991**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163991**
Client ID: **LCSW**	Batch ID: **R163991**	TestNo: **SM 5310C**		Analysis Date: **7/15/2022**	SeqNo: **4723544**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.040	1.0	5.000	0	101	85	115				

Sample ID **N051611-002DMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163991**
Client ID: **ZZZZZZ**	Batch ID: **R163991**	TestNo: **SM 5310C**		Analysis Date: **7/15/2022**	SeqNo: **4723563**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	95.274	20	100.0	8.114	87.2	75	125				

Sample ID **N051611-002DMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163991**
Client ID: **ZZZZZZ**	Batch ID: **R163991**	TestNo: **SM 5310C**		Analysis Date: **7/15/2022**	SeqNo: **4723564**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	95.604	20	100.0	8.114	87.5	75	125	95.27	0.346	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02D-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 8:52:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220717A**	QC Batch: **93769**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Iron	20	13	20		µg/L	1	7/17/2022 03:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02S-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 8:19:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220717A**	QC Batch: **93769**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/17/2022 04:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-03D-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220717A**	QC Batch: **93769**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/17/2022 04:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220717A**	QC Batch: **93769**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Iron	2500	13	20		µg/L	1	7/17/2022 04:16 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-71-035-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:46:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220717A**	QC Batch: **93769**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Iron	36	13	20		µg/L	1	7/17/2022 04:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-26-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 2:29:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220717A**	QC Batch: **93769**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Iron	76	13	20		µg/L	1	7/17/2022 04:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-51-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 2:26:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220717A**	QC Batch: **93769**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Iron	30	13	20		µg/L	1	7/17/2022 04:33 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-070-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 9:17:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220717A**	QC Batch: **93769**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Iron	35	13	20		µg/L	1	7/17/2022 04:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-100-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 11:05:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220717A**	QC Batch: **93769**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Iron	21	13	20		µg/L	1	7/17/2022 04:52 PM

Qualifiers:				
	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-904-Q322
Lab Order:	N051615	**Collection Date:**	7/13/2022 11:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220717A**	QC Batch: **93769**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Iron	23	13	20		µg/L	1	7/17/2022 04:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-130-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:18:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220717A**	QC Batch: **93769**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Iron	290	13	20		µg/L	1	7/17/2022 05:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	MB-93769	SampType:	MBLK	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164010
Client ID:	PBW	Batch ID:	93769	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	7/17/2022	SeqNo:	4726514

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID	LCS-93769	SampType:	LCS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164010
Client ID:	LCSW	Batch ID:	93769	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	7/17/2022	SeqNo:	4726515

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	91.238	20	100.0	0	91.2	85	115				

Sample ID	N051615-001C-MS	SampType:	MS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164010
Client ID:	ZZZZZZ	Batch ID:	93769	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	7/17/2022	SeqNo:	4726523

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	102.466	20	100.0	20.18	82.3	75	125				

Sample ID	N051615-001C-MSD	SampType:	MSD	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164010
Client ID:	ZZZZZZ	Batch ID:	93769	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	7/17/2022	SeqNo:	4726524

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	102.348	20	100.0	20.18	82.2	75	125	102.5	0.116	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051615-001

Client Sample ID: TW-02D-0722
Collection Date: 7/13/2022 8:52:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E**	QC Batch: **93772**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/16/2022 03:47 AM
Barium	26	0.083	1.0		µg/L	1	7/16/2022 03:47 AM
Manganese	54	0.026	0.50		µg/L	1	7/16/2022 03:47 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02S-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 8:19:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220720C**	QC Batch: **93772**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	0.52	0.050	0.10		µg/L	1	7/20/2022 04:37 PM
Barium	66	0.083	1.0		µg/L	1	7/16/2022 03:53 AM
Manganese	ND	0.026	0.50		µg/L	1	7/16/2022 03:53 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-03D-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E**	QC Batch: **93772**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/16/2022 03:59 AM
Barium	32	0.083	1.0		µg/L	1	7/16/2022 03:59 AM
Manganese	48	0.026	0.50		µg/L	1	7/16/2022 03:59 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E**	QC Batch: **93772**			PrepDate:	**7/15/2022**	Analyst: **DJ**	
Arsenic	3.3	0.050	0.10		µg/L	1	7/16/2022 04:05 AM
Barium	29	0.083	1.0		µg/L	1	7/16/2022 04:05 AM
Manganese	280	0.13	2.5		µg/L	5	7/18/2022 02:59 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-71-035-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:46:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E**	QC Batch: **93772**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/16/2022 04:11 AM
Barium	49	0.083	1.0		µg/L	1	7/16/2022 04:11 AM
Manganese	700	0.13	2.5		µg/L	5	7/18/2022 03:05 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-26-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 2:29:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E**	QC Batch: **93772**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/16/2022 04:46 AM
Barium	79	0.083	1.0		µg/L	1	7/16/2022 04:46 AM
Manganese	110	0.026	0.50		µg/L	1	7/16/2022 04:46 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-51-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 2:26:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220720C**	QC Batch: **93772**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/20/2022 04:55 PM
Barium	40	0.083	1.0		µg/L	1	7/20/2022 04:55 PM
Manganese	14	0.026	0.50		µg/L	1	7/20/2022 04:55 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-070-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 9:17:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220720C**	QC Batch: **93772**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	0.60	0.050	0.10		µg/L	1	7/20/2022 05:01 PM
Barium	41	0.083	1.0		µg/L	1	7/16/2022 04:52 AM
Manganese	3.5	0.026	0.50		µg/L	1	7/16/2022 04:52 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-100-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 11:05:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E**	QC Batch: **93772**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/16/2022 04:58 AM
Barium	74	0.083	1.0		µg/L	1	7/16/2022 04:58 AM
Manganese	ND	0.026	0.50		µg/L	1	7/16/2022 04:58 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-904-Q322
Lab Order:	N051615	**Collection Date:**	7/13/2022 11:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E**	QC Batch: **93772**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/16/2022 05:04 AM
Barium	79	0.083	1.0		µg/L	1	7/16/2022 05:04 AM
Manganese	ND	0.026	0.50		µg/L	1	7/16/2022 05:04 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-130-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:18:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E**	QC Batch: **93772**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/16/2022 05:10 AM
Barium	26	0.083	1.0		µg/L	1	7/16/2022 05:10 AM
Manganese	2.7	0.026	0.50		µg/L	1	7/16/2022 05:10 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID **MB-93772**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164015**
Client ID: **PBW**	Batch ID: **93772**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4727180**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID **LCS-93772**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164015**
Client ID: **LCSW**	Batch ID: **93772**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4727181**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.193	0.10	10.00	0	91.9	85	115				
Barium	9.863	1.0	10.00	0	98.6	85	115				
Manganese	100.071	0.50	100.0	0	100	85	115				

Sample ID **N051585-015C-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164015**
Client ID: **ZZZZZZ**	Batch ID: **93772**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4727189**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	8.678	0.10	10.00	0	86.8	75	125				
Barium	34.295	1.0	10.00	24.49	98.0	75	125				
Manganese	96.551	0.50	100.0	4.777	91.8	75	125				

Sample ID **N051585-015C-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164015**
Client ID: **ZZZZZZ**	Batch ID: **93772**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4727191**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	8.623	0.10	10.00	0	86.2	75	125	8.678	0.632	20	
Barium	33.444	1.0	10.00	24.49	89.5	75	125	34.29	2.51	20	
Manganese	95.077	0.50	100.0	4.777	90.3	75	125	96.55	1.54	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

N051615

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

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P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
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CHAIN OF CUSTODY RECORD

Page 1 of 1

| | | |

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Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	7/13/2022	Workorder:	N051615
Rep sample Temp (Deg C):	2.1/2.9	IR Gun ID:	3
Temp Blank:	☑ Yes ☐ No		
Carrier name:	ASSET		
Last 4 digits of Tracking No.:	NA	Packing Material Used:	None
Cooling process:	☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None		

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For:

Checklist Completed By: MBC YRJ 7/15/2022

for

Reviewed By: MBC 7/20/22

ASSET Laboratories

WORK ORDER Summary

14-Jul-22

WorkOrder: N051615

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/13/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051615-001A	TW-02D-0722	7/13/2022 8:52:00 AM	7/27/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-001B			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051615-001C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051615-001D			7/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051615-002A	TW-02S-0722	7/13/2022 8:19:00 AM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-002B			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051615-002C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051615-002D			7/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051615-003A	TW-03D-0722	7/13/2022 9:24:00 AM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-003B			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051615-003C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

14-Jul-22

WorkOrder: N051615

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/13/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051615-003C	TW-03D-0722	7/13/2022 9:24:00 AM	7/27/2022	Groundwater	EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051615-003D			7/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051615-004A	MW-21-0722	7/13/2022 10:10:00 AM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-004B			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051615-004C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051615-004D			7/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051615-005A	MW-21-EB-0722	7/13/2022 9:44:00 AM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-006A	MW-71-035-0722	7/13/2022 10:46:00 AM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-006B			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051615-006C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051615-006D			7/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051615-007A	EB-705-Q322	7/13/2022 1:02:00 PM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-008A	MW-26-0722	7/13/2022 2:29:00 PM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-008B			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

14-Jul-22

WorkOrder: N051615

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/13/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051615-008B	MW-26-0722	7/13/2022 2:29:00 PM	7/27/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051615-008C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051615-008D			7/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051615-009A	MW-51-0722	7/13/2022 2:26:00 PM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-009B			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051615-009C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051615-009D			7/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051615-010A	MW-20-070-0722	7/13/2022 9:17:00 AM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-010B			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051615-010C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051615-010D			7/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

14-Jul-22

WorkOrder: N051615

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/13/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051615-011A	MW-20-100-0722	7/13/2022 11:05:00 AM	7/27/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-011B			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051615-011C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051615-011D			7/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051615-012A	MW-904-Q322	7/13/2022 11:15:00 AM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-012B			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051615-012C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051615-012D			7/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051615-013A	MW-20-130-0722	7/13/2022 10:18:00 AM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-013B			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051615-013C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

14-Jul-22

WorkOrder: N051615

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/13/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051615-013C	MW-20-130-0722	7/13/2022 10:18:00 AM	7/27/2022	Groundwater	EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051615-013D			7/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051615-014A	EB-706-Q322	7/13/2022 2:45:00 PM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-015A	FOLDER	7/27/2022	7/27/2022		Folder	Folder	☐	☐	☐	LAB
			7/27/2022		Folder	Level IV Report	☐	☐	☐	LAB
			7/27/2022		Folder	Folder	☐	☐	☐	LAB

July 29, 2022

Brian Prowd
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N051617

RE: PG&E Topock - OMM TCS PWTF, 30106892

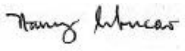
Attention: Brian Prowd

Enclosed are the results for sample(s) received on July 13, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,



Nancy Sibucao
Laboratory Director

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CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 6020_Total:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Chromium in QC samples N051617-001C-MS and N051617-001C-MSD since the analyte concentration in the sample is disproportionate to the spike level. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - OMM TCS PWTF, 30106892
Lab Order: N051617
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N051617-001A	Backwash Pre-filter-070722	Water	7/7/2022 8:00:00 AM	7/13/2022	7/29/2022
N051617-001B	Backwash Pre-filter-070722	Water	7/7/2022 8:00:00 AM	7/13/2022	7/29/2022
N051617-001C	Backwash Pre-filter-070722	Water	7/7/2022 8:00:00 AM	7/13/2022	7/29/2022
N051617-002A	Backwash Post-filter-070722	Water	7/7/2022 8:15:00 AM	7/13/2022	7/29/2022
N051617-002B	Backwash Post-filter-070722	Water	7/7/2022 8:15:00 AM	7/13/2022	7/29/2022
N051617-002C	Backwash Post-filter-070722	Water	7/7/2022 8:15:00 AM	7/13/2022	7/29/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Pre-filter-070722
Lab Order:	N051617	**Collection Date:**	7/7/2022 8:00:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N051617-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A**	QC Batch: **R163973**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	390	1.3	10		µg/L	50	7/15/2022 11:46 AM
TOTAL METALS BY ICPMS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220717C**	QC Batch: **93804**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Chromium	350	0.18	5.0		µg/L	5	7/17/2022 10:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Post-filter-070722
Lab Order:	N051617	**Collection Date:**	7/7/2022 8:15:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N051617-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A**	QC Batch: **R163973**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	390	1.3	10		µg/L	50	7/15/2022 12:05 PM
TOTAL METALS BY ICPMS							
		EPA 3010A			**EPA 6020**		
RunID: **NV00922-ICP8_220717C**	QC Batch: **93804**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Chromium	360	0.18	5.0		µg/L	5	7/17/2022 11:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051617
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **LCS-R163973**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **LCSW**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723141**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.961	0.20	5.000	0	99.2	90	110				

Sample ID **MB-R163973**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **PBW**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723142**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID **N051608-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723144**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	423.400	80	400.0	0	106	90	110				

Sample ID **N051608-002ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723146**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4947.250	100						4974	0.543	20	

Sample ID **N051608-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723147**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	7486.500	100	2500	4974	100	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051617
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **N051617-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723151**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	646.045	10	250.0	390.0	102	90	110				

Sample ID **N051617-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723153**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	637.595	10	250.0	391.8	98.3	90	110				

Sample ID **N051648-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723155**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.436	0.20	1.000	0.4452	99.1	90	110				

Sample ID **N051648-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723157**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.531	0.20	1.000	1.532	99.9	90	110				

Sample ID **N051648-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723159**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.506	0.20	1.000	0.4480	106	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051617
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **N051648-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723163**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.524	0.20	1.000	1.468	106	90	110				

Sample ID **N051648-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723165**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.975	0.20	1.000	1.942	103	90	110				

Sample ID **N051648-001AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723166**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.515	0.20	1.000	0.4452	107	90	110	1.436	5.30	20	

Sample ID **N051615-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723177**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.044	0.20	1.000	0	104	90	110				

Sample ID **N051615-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723179**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.025	0.20	1.000	0	102	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051617
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **N051634-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723180**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1801.640	40	1000	749.4	105	90	110				

Sample ID **N051634-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723184**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	215.744	4.0	100.0	115.5	100	90	110				

Sample ID **N051634-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723185**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2069.380	40	1000	1037	103	90	110				

Sample ID **N051634-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723186**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.034	0.20	1.000	0	103	90	110				

Sample ID **N051634-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723188**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4781.050	100	2500	2240	102	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051617
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051615-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723189

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1022.160	20	500.0	486.8	107	90	110				

Sample ID	N051615-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723190

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	209.200	4.0	100.0	102.5	107	90	110				

Sample ID	N051615-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723191

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1048.670	20	500.0	517.4	106	90	110				

Sample ID	N051615-006AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723195

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.490	1.0	5.000	0	110	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051617
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_W_CRPGE_TPK

Sample ID	MB-93804	SampType:	MBLK	TestCode:	6020_W_CRP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164057
Client ID:	PBW	Batch ID:	93804	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/17/2022	SeqNo:	4730964

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									

Sample ID	LCS-93804	SampType:	LCS	TestCode:	6020_W_CRP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164057
Client ID:	LCSW	Batch ID:	93804	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/17/2022	SeqNo:	4730965

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	8.954	1.0	10.00	0	89.5	85	115				

Sample ID	N051617-001C-MS	SampType:	MS	TestCode:	6020_W_CRP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164057
Client ID:	ZZZZZZ	Batch ID:	93804	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/17/2022	SeqNo:	4730969

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	400.514	5.0	10.00	351.3	492	75	125				S

Sample ID	N051617-001C-MSD	SampType:	MSD	TestCode:	6020_W_CRP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164057
Client ID:	ZZZZZZ	Batch ID:	93804	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/17/2022	SeqNo:	4730970

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	408.951	5.0	10.00	351.3	577	75	125	400.5	2.08	20	S

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051617
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_W_CRPGE_TPK

Sample ID	**N051617-001C-PS**	SampType: **PS**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date:	RunNo: **164057**
Client ID:	**ZZZZZZ**	Batch ID: **93804**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/17/2022**	SeqNo: **4730968**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	377.088	5.0	50.00	351.3	51.6	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Pre-filter-070722
Lab Order:	N051617	**Collection Date:**	7/7/2022 8:00:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N051617-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220717A**	QC Batch: **93769**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Iron	20	13	20		µg/L	1	7/17/2022 05:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Post-filter-070722
Lab Order:	N051617	**Collection Date:**	7/7/2022 8:15:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N051617-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220717A**	QC Batch: **93769**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Iron	23	13	20		µg/L	1	7/17/2022 05:49 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051617
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	MB-93769	SampType:	MBLK	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164010
Client ID:	PBW	Batch ID:	93769	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	7/17/2022	SeqNo:	4726514

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID	LCS-93769	SampType:	LCS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164010
Client ID:	LCSW	Batch ID:	93769	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	7/17/2022	SeqNo:	4726515

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	91.238	20	100.0	0	91.2	85	115				

Sample ID	N051615-001C-MS	SampType:	MS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164010
Client ID:	ZZZZZZ	Batch ID:	93769	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	7/17/2022	SeqNo:	4726523

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	102.466	20	100.0	20.18	82.3	75	125				

Sample ID	N051615-001C-MSD	SampType:	MSD	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164010
Client ID:	ZZZZZZ	Batch ID:	93769	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	7/17/2022	SeqNo:	4726524

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	102.348	20	100.0	20.18	82.2	75	125	102.5	0.116	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Pre-filter-070722
Lab Order:	N051617	**Collection Date:**	7/7/2022 8:00:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N051617-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E**	QC Batch: **93772**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Manganese	2.0	0.026	0.50		µg/L	1	7/16/2022 05:16 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Post-filter-070722
Lab Order:	N051617	**Collection Date:**	7/7/2022 8:15:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N051617-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E**	QC Batch: **93772**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Manganese	1.9	0.026	0.50		µg/L	1	7/16/2022 05:22 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051617
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID **MB-93772**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164015**
Client ID: **PBW**	Batch ID: **93772**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4727180**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	ND	0.50									

Sample ID **LCS-93772**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164015**
Client ID: **LCSW**	Batch ID: **93772**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4727181**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	100.071	0.50	100.0	0	100	85	115				

Sample ID **N051585-015C-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164015**
Client ID: **ZZZZZZ**	Batch ID: **93772**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4727189**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	96.551	0.50	100.0	4.777	91.8	75	125				

Sample ID **N051585-015C-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164015**
Client ID: **ZZZZZZ**	Batch ID: **93772**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4727191**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	95.077	0.50	100.0	4.777	90.3	75	125	96.55	1.54	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

N051617

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Brian Prowd	Bill to: Marty Bloes	EDD Requirement		QA/QC		Sample Receipt Condition
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD		RTNE		Y N
Address: Roseville, CA 95678	Email: brian.prowd@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker		RWQCB	✓	1. Chilled X
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com	Labspec		CalTrans		2. Headspace
Submitted By: C.M. Goldman		P.O.# SWA-ASSET-C9817-051	Others	✓	LEVEL III		3. Container Intact X
Title: O.M. OPERATOR	Phone: 916-786-3302 Fax:	Phone: 949-727-1400. ext 200 Fax:	Specify: RWQCB		LEVEL IV		4. Seal Present
Signature: Date: 7.7.22	Sampled By: K.A. M.G.		Global ID:		Regulatory		5. IR number 3
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may				Specify State:		6. Method of Cooling: ICE
Project Name: PG&E Topock - OMM TCS PWTF	Signature: Date: 7-7-22						Sample Temp: 2.1°C
Project Number: 30106892							Courier: ASSET Tracking No.:

Matrix: Ground; Sediment; Potable; Soil; NPDES; Other Solid; Surface; Water (X)

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH, Filtered (250 mL poly)	Dissolved metals Iron, Manganese (SW6020) FF; HNO3; Filtered (500mL poly)	Total chromium (SW6020) No filter; HNO3 (500mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N051617-01	Backwash Pre-filter-070722	7/7/22	800 AM		X	X	X	E	3	PV	BNS	
2	-02	Backwash Post-filter-070722	7/7/22	815 AM		X	X	X	E	3	PV	BNS	
3													
4													
5													
7													
8													
9													
10													
11													
12													
13													
14													

Relinquished by (Signature and Printed Name): Date/Time: 7.13.22

Relinquished by (Signature and Printed Name): Date/Time: 7.13.22 427

Relinquished by (Signature and Printed Name): REL/REC: MBOARTIN Date/Time:

Relinquished by (Signature and Printed Name): Date/Time: 7/13/22 @ 1027

Relinquished by (Signature and Printed Name): MBOARTIN Date/Time: 7/13/22 @ 1850

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs =200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Turns are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of reports needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On: 7/13/2022 Workorder: N051617

Rep sample Temp (Deg C): 2.1 IR Gun ID: 3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For:

Checklist Completed By: MBC YRJ 7/15/2022

For:

Reviewed By: MBC 7/17/2022

ASSET Laboratories

WORK ORDER Summary

14-Jul-22

WorkOrder: N051617

Client ID: ARCUS02

Project: PG&E Topock - OMM TCS PWTF, 30106892 **QC Level:** Level IV **Date Received:** 7/13/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051617-001A	Backwash Pre-filter-070722	7/7/2022 8:00:00 AM	7/27/2022	Water	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051617-001B			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051617-001C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6020	TOTAL METALS BY ICPMS	☐	☐	☐	WW
N051617-002A	Backwash Post-filter-070722	7/7/2022 8:15:00 AM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051617-002B			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051617-002C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6020	TOTAL METALS BY ICPMS	☐	☐	☐	WW
N051617-003A	FOLDER	7/27/2022	7/27/2022		Folder	Folder	☐	☐	☐	LAB
			7/27/2022		Folder	Level IV Report	☐	☐	☐	LAB
			7/27/2022		Folder	Folder	☐	☐	☐	LAB

July 19, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N051634

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on July 14, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N051634

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for SM 5310C:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria in QC samples N051611-002DMS and N051611-002DMSD at several dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N051611-002D and MS/MSD were reported at 20x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N051634
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N051634-001A	MW-80-057-0722	Groundwater	7/14/2022 9:09:00 AM	7/14/2022	7/18/2022
N051634-001B	MW-80-057-0722	Groundwater	7/14/2022 9:09:00 AM	7/14/2022	7/18/2022
N051634-001C	MW-80-057-0722	Groundwater	7/14/2022 9:09:00 AM	7/14/2022	7/18/2022
N051634-001D	MW-80-057-0722	Groundwater	7/14/2022 9:09:00 AM	7/14/2022	7/18/2022
N051634-002A	MW-80-082-0722	Groundwater	7/14/2022 8:31:00 AM	7/14/2022	7/18/2022
N051634-002B	MW-80-082-0722	Groundwater	7/14/2022 8:31:00 AM	7/14/2022	7/18/2022
N051634-002C	MW-80-082-0722	Groundwater	7/14/2022 8:31:00 AM	7/14/2022	7/18/2022
N051634-002D	MW-80-082-0722	Groundwater	7/14/2022 8:31:00 AM	7/14/2022	7/18/2022
N051634-003A	MW-79-058-0722	Groundwater	7/14/2022 11:05:00 AM	7/14/2022	7/18/2022
N051634-003B	MW-79-058-0722	Groundwater	7/14/2022 11:05:00 AM	7/14/2022	7/18/2022
N051634-003C	MW-79-058-0722	Groundwater	7/14/2022 11:05:00 AM	7/14/2022	7/18/2022
N051634-003D	MW-79-058-0722	Groundwater	7/14/2022 11:05:00 AM	7/14/2022	7/18/2022
N051634-004A	MW-79-102-0722	Groundwater	7/14/2022 10:24:00 AM	7/14/2022	7/18/2022
N051634-004B	MW-79-102-0722	Groundwater	7/14/2022 10:24:00 AM	7/14/2022	7/18/2022
N051634-004C	MW-79-102-0722	Groundwater	7/14/2022 10:24:00 AM	7/14/2022	7/18/2022
N051634-004D	MW-79-102-0722	Groundwater	7/14/2022 10:24:00 AM	7/14/2022	7/18/2022
N051634-005A	EB-708-Q322	Groundwater	7/14/2022 12:27:00 PM	7/14/2022	7/18/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-057-0722
Lab Order:	N051634	**Collection Date:**	7/14/2022 9:09:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051634-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A**	QC Batch: **R163973**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	750	5.0	40		µg/L	200	7/15/2022 02:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051634-002

Client Sample ID: MW-80-082-0722
Collection Date: 7/14/2022 8:31:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A**	QC Batch: **R163973**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	120	0.50	4.0		µg/L	20	7/15/2022 05:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-058-0722
Lab Order:	N051634	**Collection Date:**	7/14/2022 11:05:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051634-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A**	QC Batch: **R163973**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	2200	13	100		µg/L	500	7/15/2022 06:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-102-0722
Lab Order:	N051634	**Collection Date:**	7/14/2022 10:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051634-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A**	QC Batch: **R163973**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	1000	5.0	40		µg/L	200	7/15/2022 02:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-708-Q322
Lab Order:	N051634	**Collection Date:**	7/14/2022 12:27:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051634-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
EPA 218.6							
RunID: **NV00922-IC7_220715A** QC Batch: **R163973** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/15/2022 03:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **LCS-R163973**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **LCSW**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723141**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.961	0.20	5.000	0	99.2	90	110				

Sample ID: **MB-R163973**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **PBW**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723142**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **N051608-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723144**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	423.400	80	400.0	0	106	90	110				

Sample ID: **N051608-002ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723146**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4947.250	100						4974	0.543	20	

Sample ID: **N051608-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723147**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	7486.500	100	2500	4974	100	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N051617-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723151**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	646.045	10	250.0	390.0	102	90	110				

Sample ID: **N051617-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723153**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	637.595	10	250.0	391.8	98.3	90	110				

Sample ID: **N051648-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723155**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.436	0.20	1.000	0.4452	99.1	90	110				

Sample ID: **N051648-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723157**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.531	0.20	1.000	1.532	99.9	90	110				

Sample ID: **N051648-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723159**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.506	0.20	1.000	0.4480	106	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N051648-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163973**
Client ID: **ZZZZZZ** Batch ID: **R163973** TestNo: **EPA 218.6** Analysis Date: **7/15/2022** SeqNo: **4723163**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.524	0.20	1.000	1.468	106	90	110				

Sample ID: **N051648-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163973**
Client ID: **ZZZZZZ** Batch ID: **R163973** TestNo: **EPA 218.6** Analysis Date: **7/15/2022** SeqNo: **4723165**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.975	0.20	1.000	1.942	103	90	110				

Sample ID: **N051648-001AMSD** SampType: **MSD** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163973**
Client ID: **ZZZZZZ** Batch ID: **R163973** TestNo: **EPA 218.6** Analysis Date: **7/15/2022** SeqNo: **4723166**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.515	0.20	1.000	0.4452	107	90	110	1.436	5.30	20	

Sample ID: **N051615-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163973**
Client ID: **ZZZZZZ** Batch ID: **R163973** TestNo: **EPA 218.6** Analysis Date: **7/15/2022** SeqNo: **4723177**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.044	0.20	1.000	0	104	90	110				

Sample ID: **N051615-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163973**
Client ID: **ZZZZZZ** Batch ID: **R163973** TestNo: **EPA 218.6** Analysis Date: **7/15/2022** SeqNo: **4723179**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.025	0.20	1.000	0	102	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N051634-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163973**
Client ID: **ZZZZZZ** Batch ID: **R163973** TestNo: **EPA 218.6** Analysis Date: **7/15/2022** SeqNo: **4723180**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1801.640	40	1000	749.4	105	90	110				

Sample ID: **N051634-002AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163973**
Client ID: **ZZZZZZ** Batch ID: **R163973** TestNo: **EPA 218.6** Analysis Date: **7/15/2022** SeqNo: **4723184**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	215.744	4.0	100.0	115.5	100	90	110				

Sample ID: **N051634-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163973**
Client ID: **ZZZZZZ** Batch ID: **R163973** TestNo: **EPA 218.6** Analysis Date: **7/15/2022** SeqNo: **4723185**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2069.380	40	1000	1037	103	90	110				

Sample ID: **N051634-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163973**
Client ID: **ZZZZZZ** Batch ID: **R163973** TestNo: **EPA 218.6** Analysis Date: **7/15/2022** SeqNo: **4723186**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.034	0.20	1.000	0	103	90	110				

Sample ID: **N051634-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163973**
Client ID: **ZZZZZZ** Batch ID: **R163973** TestNo: **EPA 218.6** Analysis Date: **7/15/2022** SeqNo: **4723188**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4781.050	100	2500	2240	102	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N051615-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723189**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1022.160	20	500.0	486.8	107	90	110				

Sample ID: **N051615-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723190**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	209.200	4.0	100.0	102.5	107	90	110				

Sample ID: **N051615-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723191**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1048.670	20	500.0	517.4	106	90	110				

Sample ID: **N051615-006AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723195**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.490	1.0	5.000	0	110	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051634-001

Client Sample ID: MW-80-057-0722
Collection Date: 7/14/2022 9:09:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220715B** QC Batch: **R163968**			PrepDate:				Analyst: **RAB**
Sulfate	490	3.0	25		mg/L	50	7/16/2022 05:45 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220715A** QC Batch: **R163967**			PrepDate:				Analyst: **RAB**
Nitrate as N	8.2	0.095	0.50		mg/L	10	7/15/2022 05:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051634-002

Client Sample ID: MW-80-082-0722
Collection Date: 7/14/2022 8:31:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
EPA 300.0							
RunID: **NV00922-IC8_220715B** QC Batch: **R163968** PrepDate: Analyst: **RAB**							
Sulfate	550	3.0	25		mg/L	50	7/16/2022 06:01 AM
ANIONS BY ION CHROMATOGRAPHY							
EPA 300.0							
RunID: **NV00922-IC8_220715A** QC Batch: **R163967** PrepDate: Analyst: **RAB**							
Nitrate as N	0.59	0.095	0.50		mg/L	10	7/15/2022 05:25 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051634-003

Client Sample ID: MW-79-058-0722
Collection Date: 7/14/2022 11:05:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220715B** QC Batch: **R163968**			PrepDate:				Analyst: **RAB**
Sulfate	440	3.0	25		mg/L	50	7/16/2022 06:18 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220715A** QC Batch: **R163967**			PrepDate:				Analyst: **RAB**
Nitrate as N	7.1	0.095	0.50		mg/L	10	7/15/2022 05:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051634-004

Client Sample ID: MW-79-102-0722
Collection Date: 7/14/2022 10:24:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220715B** QC Batch: **R163968**			PrepDate:				Analyst: **RAB**
Sulfate	610	3.0	25		mg/L	50	7/16/2022 06:35 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220715A** QC Batch: **R163967**			PrepDate:				Analyst: **RAB**
Nitrate as N	2.2	0.095	0.50		mg/L	10	7/15/2022 05:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **LCS-R163968_SO4**	SampType: **LCS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **163968**
Client ID: **LCSW**	Batch ID: **R163968**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722922**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	3.982	0.50	4.000	0	99.6	90	110				

Sample ID: **MB-R163968_SO4**	SampType: **MBLK**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **163968**
Client ID: **PBW**	Batch ID: **R163968**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722923**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.50									

Sample ID: **N051634-001BMS**	SampType: **MS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **163968**
Client ID: **ZZZZZZ**	Batch ID: **R163968**	TestNo: **EPA 300.0**		Analysis Date: **7/16/2022**	SeqNo: **4722934**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	695.435	25	200.0	491.4	102	80	120				

Sample ID: **N051634-001BMSD**	SampType: **MSD**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **163968**
Client ID: **ZZZZZZ**	Batch ID: **R163968**	TestNo: **EPA 300.0**		Analysis Date: **7/16/2022**	SeqNo: **4722935**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	696.840	25	200.0	491.4	103	80	120	695.4	0.202	20	

Sample ID: **N051634-003BDUP**	SampType: **DUP**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **163968**
Client ID: **ZZZZZZ**	Batch ID: **R163968**	TestNo: **EPA 300.0**		Analysis Date: **7/16/2022**	SeqNo: **4722936**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	435.075	25						436.0	0.202	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R163967_NO3**	SampType: **MBLK**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163967**
Client ID: **PBW**	Batch ID: **R163967**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722853**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R163967_NO3**	SampType: **LCS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163967**
Client ID: **LCSW**	Batch ID: **R163967**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722854**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.232	0.050	1.250	0	98.6	90	110				

Sample ID: **N051650-004BMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163967**
Client ID: **ZZZZZZ**	Batch ID: **R163967**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722877**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	3.493	0.10	2.500	0.9728	101	80	120				

Sample ID: **N051650-004BMSD**	SampType: **MSD**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163967**
Client ID: **ZZZZZZ**	Batch ID: **R163967**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722878**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	3.467	0.10	2.500	0.9728	99.8	80	120	3.493	0.753	20	

Sample ID: **N051651-001BDUP**	SampType: **DUP**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163967**
Client ID: **ZZZZZZ**	Batch ID: **R163967**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722879**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	13.180	0.50						13.21	0.212	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **LCS-R163968_NO3**	SampType: **LCS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163968**
Client ID: **LCSW**	Batch ID: **R163968**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722888**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.217	0.050	1.250	0	97.4	90	110				

Sample ID: **MB-R163968_NO3**	SampType: **MBLK**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163968**
Client ID: **PBW**	Batch ID: **R163968**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722889**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **N051651-004BMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163968**
Client ID: **ZZZZZZ**	Batch ID: **R163968**	TestNo: **EPA 300.0**		Analysis Date: **7/16/2022**	SeqNo: **4722910**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	9.291	0.25	6.250	3.062	99.7	80	120				

Sample ID: **N051651-004BMSD**	SampType: **MSD**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163968**
Client ID: **ZZZZZZ**	Batch ID: **R163968**	TestNo: **EPA 300.0**		Analysis Date: **7/16/2022**	SeqNo: **4722911**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	9.379	0.25	6.250	3.062	101	80	120	9.291	0.937	20	

Sample ID: **N051652-013BDUP**	SampType: **DUP**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163968**
Client ID: **ZZZZZZ**	Batch ID: **R163968**	TestNo: **EPA 300.0**		Analysis Date: **7/16/2022**	SeqNo: **4722912**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.776	0.50						6.596	2.69	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **N051652-013BMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163968**
Client ID: **ZZZZZZ**	Batch ID: **R163968**	TestNo: **EPA 300.0**		Analysis Date: **7/16/2022**	SeqNo: **4722913**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	19.243	0.50	12.50	6.596	101	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-057-0722
Lab Order:	N051634	**Collection Date:**	7/14/2022 9:09:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051634-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220715A**	QC Batch: **R163991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/15/2022 04:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-082-0722
Lab Order:	N051634	**Collection Date:**	7/14/2022 8:31:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051634-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220715A**	QC Batch: **R163991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/15/2022 05:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-058-0722
Lab Order:	N051634	**Collection Date:**	7/14/2022 11:05:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051634-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220715A**	QC Batch: **R163991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/15/2022 05:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-102-0722
Lab Order:	N051634	**Collection Date:**	7/14/2022 10:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051634-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220715A**	QC Batch: **R163991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/15/2022 05:43 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R163991**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163991**
Client ID: **PBW**	Batch ID: **R163991**	TestNo: **SM 5310C**		Analysis Date: **7/15/2022**	SeqNo: **4723543**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R163991**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163991**
Client ID: **LCSW**	Batch ID: **R163991**	TestNo: **SM 5310C**		Analysis Date: **7/15/2022**	SeqNo: **4723544**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.040	1.0	5.000	0	101	85	115				

Sample ID: **N051611-002DMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163991**
Client ID: **ZZZZZZ**	Batch ID: **R163991**	TestNo: **SM 5310C**		Analysis Date: **7/15/2022**	SeqNo: **4723563**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	95.274	20	100.0	8.114	87.2	75	125				

Sample ID: **N051611-002DMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163991**
Client ID: **ZZZZZZ**	Batch ID: **R163991**	TestNo: **SM 5310C**		Analysis Date: **7/15/2022**	SeqNo: **4723564**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	95.604	20	100.0	8.114	87.5	75	125	95.27	0.346	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-057-0722
Lab Order:	N051634	**Collection Date:**	7/14/2022 9:09:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051634-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/17/2022 10:16 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051634-002

Client Sample ID: MW-80-082-0722
Collection Date: 7/14/2022 8:31:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/17/2022 10:21 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051634-003

Client Sample ID: MW-79-058-0722
Collection Date: 7/14/2022 11:05:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/17/2022 10:54 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-102-0722
Lab Order:	N051634	**Collection Date:**	7/14/2022 10:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051634-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/17/2022 11:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-93805**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164010**
Client ID: **PBW**	Batch ID: **93805**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/17/2022**	SeqNo: **4726451**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-93805**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164010**
Client ID: **LCSW**	Batch ID: **93805**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/17/2022**	SeqNo: **4726452**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	99.924	20	100.0	0	99.9	85	115				

Sample ID: **N051634-002C-MS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164010**
Client ID: **ZZZZZZ**	Batch ID: **93805**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/17/2022**	SeqNo: **4726457**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	136.505	20	100.0	17.50	119	75	125				

Sample ID: **N051634-002C-MSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164010**
Client ID: **ZZZZZZ**	Batch ID: **93805**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/17/2022**	SeqNo: **4726458**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	126.620	20	100.0	17.50	109	75	125	136.5	7.51	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051634-001

Client Sample ID: MW-80-057-0722
Collection Date: 7/14/2022 9:09:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP7_220716A**	QC Batch: **93803**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	1.9	0.050	0.10		µg/L	1	7/16/2022 12:09 PM
Barium	65	0.083	1.0		µg/L	1	7/16/2022 12:09 PM
Manganese	7.0	0.026	0.50		µg/L	1	7/16/2022 12:09 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051634-002

Client Sample ID: MW-80-082-0722
Collection Date: 7/14/2022 8:31:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP7_220716A**	QC Batch: **93803**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	5.5	0.050	0.10		µg/L	1	7/16/2022 01:20 PM
Barium	39	0.083	1.0		µg/L	1	7/16/2022 01:20 PM
Manganese	9.0	0.026	0.50		µg/L	1	7/16/2022 01:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051634-003

Client Sample ID: MW-79-058-0722
Collection Date: 7/14/2022 11:05:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220717A**	QC Batch: **93803**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/17/2022 11:44 PM
Barium	140	0.083	1.0		µg/L	1	7/16/2022 01:32 PM
Manganese	ND	0.026	0.50		µg/L	1	7/16/2022 01:32 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051634-004

Client Sample ID: MW-79-102-0722
Collection Date: 7/14/2022 10:24:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP7_220716A**	QC Batch: **93803**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	4.1	0.050	0.10		µg/L	1	7/16/2022 01:44 PM
Barium	40	0.083	1.0		µg/L	1	7/16/2022 01:44 PM
Manganese	1.9	0.026	0.50		µg/L	1	7/16/2022 01:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-93803**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164038**
Client ID: **PBW**	Batch ID: **93803**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4729143**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID: **LCS-93803**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164038**
Client ID: **LCSW**	Batch ID: **93803**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4729144**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.573	0.10	10.00	0	95.7	85	115				
Barium	9.589	1.0	10.00	0	95.9	85	115				
Manganese	93.845	0.50	100.0	0	93.8	85	115				

Sample ID: **N051634-001C-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164038**
Client ID: **ZZZZZZ**	Batch ID: **93803**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4729150**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.104	0.10	10.00	1.868	102	75	125				
Barium	76.310	1.0	10.00	65.28	110	75	125				
Manganese	89.997	0.50	100.0	6.988	83.0	75	125				

Sample ID: **N051634-001C-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164038**
Client ID: **ZZZZZZ**	Batch ID: **93803**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4729154**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	11.865	0.10	10.00	1.868	100	75	125	12.10	2.00	20	
Barium	75.873	1.0	10.00	65.28	106	75	125	76.31	0.574	20	
Manganese	91.534	0.50	100.0	6.988	84.5	75	125	90.00	1.69	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ASSET LABORATORIES

ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

Page 1 of 1

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement	QA/QC	Sample Receipt Condition	Y N
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD	RTNE	1. Chilled	X
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker	RWQCB ✓	2. Headspace	
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Labspec	CalTrans	3. Container Intact	X
Submitted By: Reggie Tep			Others ✓	LEVEL III	4. Seal Present	X
Title: Field Tech	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	Specify: RWQCB	LEVEL IV	5. IR number	3
Signature: Date: 7/14/22	Sampled By: Reggie Tep		Global ID:	Regulatory	6. Method of Cooling: ICE	
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for			Specify State:	Sample Temp: 2.3°C / 2.5°C	
Project Name: PG&E Topock - PCM	Signature: Date: 7/14/22	Matrix: Ground X Sediment; Potable Soil; NPDES Other Solid; Surface			Courier: ASSET	
Project Number: 30121866.3Q22GW					Tracking No.:	

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N051634-01	MW-80-057-0722	7/14/2022	9:09		X	X	X			X			C	6	P	BNS	
2	-02	MW-80-082-0722	7/14/2022	8:31		X	X	X			X			C	6	P	BNS	
3	-03	MW-79-058-0722	7/14/2022	11:05		X	X	X			X			C	6	P	BNS	
4	-04	MW-79-102-0722	7/14/2022	10:24		X	X	X			X			C	6	P	BNS	
5	-05	EB-708-Q322	7/14/2022	12:27		X								E	1	P	BNS	
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Reggie Tep	7/14/22 1533	MACARTHUR	7/14/22 @1533
MACARTHUR	7/14/22 1715	Giselle Pamela Flores	7/14/22 1715

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [X] C = 2 Workdays
- [ ] D = 3 Workdays
- [ ] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs =200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy

Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On: 7/14/2022 Workorder: N051634

Rep sample Temp (Deg C): 2.3/2.5 IR Gun ID: 3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For:

Checklist Completed By: GGJ YRJ 7/15/2022

For:

Reviewed By: MBC 7/17/2022

ASSET Laboratories

WORK ORDER Summary

17-Jul-22

WorkOrder: N051634

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/14/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051634-001A	MW-80-057-0722	7/14/2022 9:09:00 AM	7/18/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051634-001B			7/18/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/18/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051634-001C			7/18/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/18/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/18/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/18/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051634-001D			7/18/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051634-002A	MW-80-082-0722	7/14/2022 8:31:00 AM	7/18/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051634-002B			7/18/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/18/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051634-002C			7/18/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/18/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/18/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/18/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051634-002D			7/18/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051634-003A	MW-79-058-0722	7/14/2022 11:05:00 AM	7/18/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051634-003B			7/18/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/18/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051634-003C			7/18/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/18/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/18/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

17-Jul-22

WorkOrder: N051634

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/14/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051634-003C	MW-79-058-0722	7/14/2022 11:05:00 AM	7/18/2022	Groundwater	EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051634-003D			7/18/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051634-004A	MW-79-102-0722	7/14/2022 10:24:00 AM	7/18/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051634-004B			7/18/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/18/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051634-004C			7/18/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/18/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/18/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/18/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051634-004D			7/18/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051634-005A	EB-708-Q322	7/14/2022 12:27:00 PM	7/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051634-006A	FOLDER	7/18/2022	7/18/2022		Folder	Folder	☐	☐	☐	
			7/18/2022		Folder	Level IV Report	☐	☐	☐	
			7/18/2022		Folder	Folder	☐	☐	☐	

July 28, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N051635

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on July 14, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Dilution was necessary for sample N051635-003 due to matrix interference. Sample was analyzed at lower dilution however matrix spike recovery and retention time criteria were not met indicating possible matrix interference. Sample was reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for EPA 6020_Dissolved:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for some analytes in QC samples N051727-002D-MS and N051727-002D-MSD since the analyte concentration in the sample is disproportionate to the spike level. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for SM 5310C:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria in QC samples N051651-004DMS and N051651-004DMSD at lower dilution possibly due to matrix interference. QC samples were diluted and recovery passed criteria. Thus sample reference N051651-004 and MS/MSD were reported at 5x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N051635
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N051635-001A	MW-44-115-0722	Groundwater	7/14/2022 10:24:00 AM	7/14/2022	7/28/2022
N051635-001B	MW-44-115-0722	Groundwater	7/14/2022 10:24:00 AM	7/14/2022	7/28/2022
N051635-001C	MW-44-115-0722	Groundwater	7/14/2022 10:24:00 AM	7/14/2022	7/28/2022
N051635-001D	MW-44-115-0722	Groundwater	7/14/2022 10:24:00 AM	7/14/2022	7/28/2022
N051635-002A	MW-906-Q322	Groundwater	7/14/2022 10:34:00 AM	7/14/2022	7/28/2022
N051635-002B	MW-906-Q322	Groundwater	7/14/2022 10:34:00 AM	7/14/2022	7/28/2022
N051635-002C	MW-906-Q322	Groundwater	7/14/2022 10:34:00 AM	7/14/2022	7/28/2022
N051635-002D	MW-906-Q322	Groundwater	7/14/2022 10:34:00 AM	7/14/2022	7/28/2022
N051635-003A	MW-44-125-0722	Groundwater	7/14/2022 10:02:00 AM	7/14/2022	7/28/2022
N051635-003B	MW-44-125-0722	Groundwater	7/14/2022 10:02:00 AM	7/14/2022	7/28/2022
N051635-003C	MW-44-125-0722	Groundwater	7/14/2022 10:02:00 AM	7/14/2022	7/28/2022
N051635-003D	MW-44-125-0722	Groundwater	7/14/2022 10:02:00 AM	7/14/2022	7/28/2022
N051635-004A	MW-45-095a-0722	Groundwater	7/14/2022 8:33:00 AM	7/14/2022	7/28/2022
N051635-004B	MW-45-095a-0722	Groundwater	7/14/2022 8:33:00 AM	7/14/2022	7/28/2022
N051635-004C	MW-45-095a-0722	Groundwater	7/14/2022 8:33:00 AM	7/14/2022	7/28/2022
N051635-004D	MW-45-095a-0722	Groundwater	7/14/2022 8:33:00 AM	7/14/2022	7/28/2022
N051635-005A	MW-34-080-0722	Groundwater	7/14/2022 8:04:00 AM	7/14/2022	7/28/2022
N051635-005B	MW-34-080-0722	Groundwater	7/14/2022 8:04:00 AM	7/14/2022	7/28/2022
N051635-005C	MW-34-080-0722	Groundwater	7/14/2022 8:04:00 AM	7/14/2022	7/28/2022
N051635-005D	MW-34-080-0722	Groundwater	7/14/2022 8:04:00 AM	7/14/2022	7/28/2022
N051635-006A	MW-36-090-0722	Groundwater	7/14/2022 9:05:00 AM	7/14/2022	7/28/2022
N051635-006B	MW-36-090-0722	Groundwater	7/14/2022 9:05:00 AM	7/14/2022	7/28/2022
N051635-006C	MW-36-090-0722	Groundwater	7/14/2022 9:05:00 AM	7/14/2022	7/28/2022
N051635-006D	MW-36-090-0722	Groundwater	7/14/2022 9:05:00 AM	7/14/2022	7/28/2022
N051635-007A	MW-36-100-0722	Groundwater	7/14/2022 9:24:00 AM	7/14/2022	7/28/2022
N051635-007B	MW-36-100-0722	Groundwater	7/14/2022 9:24:00 AM	7/14/2022	7/28/2022
N051635-007C	MW-36-100-0722	Groundwater	7/14/2022 9:24:00 AM	7/14/2022	7/28/2022
N051635-007D	MW-36-100-0722	Groundwater	7/14/2022 9:24:00 AM	7/14/2022	7/28/2022
N051635-008A	MW-905-Q322	Groundwater	7/14/2022 9:34:00 AM	7/14/2022	7/28/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N051635
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N051635-008B	MW-905-Q322	Groundwater	7/14/2022 9:34:00 AM	7/14/2022	7/28/2022
N051635-008C	MW-905-Q322	Groundwater	7/14/2022 9:34:00 AM	7/14/2022	7/28/2022
N051635-008D	MW-905-Q322	Groundwater	7/14/2022 9:34:00 AM	7/14/2022	7/28/2022
N051635-009A	EB-707-Q322	Groundwater	7/14/2022 12:05:00 PM	7/14/2022	7/28/2022
N051635-010A	MW-78-070-0722	Groundwater	7/14/2022 11:58:00 AM	7/14/2022	7/28/2022
N051635-010B	MW-78-070-0722	Groundwater	7/14/2022 11:58:00 AM	7/14/2022	7/28/2022
N051635-010C	MW-78-070-0722	Groundwater	7/14/2022 11:58:00 AM	7/14/2022	7/28/2022
N051635-010D	MW-78-070-0722	Groundwater	7/14/2022 11:58:00 AM	7/14/2022	7/28/2022
N051635-011A	MW-78-142-0722	Groundwater	7/14/2022 12:07:00 PM	7/14/2022	7/28/2022
N051635-011B	MW-78-142-0722	Groundwater	7/14/2022 12:07:00 PM	7/14/2022	7/28/2022
N051635-011C	MW-78-142-0722	Groundwater	7/14/2022 12:07:00 PM	7/14/2022	7/28/2022
N051635-011D	MW-78-142-0722	Groundwater	7/14/2022 12:07:00 PM	7/14/2022	7/28/2022
N051635-012A	MW-907-Q322	Groundwater	7/14/2022 12:17:00 PM	7/14/2022	7/28/2022
N051635-012B	MW-907-Q322	Groundwater	7/14/2022 12:17:00 PM	7/14/2022	7/28/2022
N051635-012C	MW-907-Q322	Groundwater	7/14/2022 12:17:00 PM	7/14/2022	7/28/2022
N051635-012D	MW-907-Q322	Groundwater	7/14/2022 12:17:00 PM	7/14/2022	7/28/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-115-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 10:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
EPA 218.6							
RunID: **NV00922-IC7_220726A** QC Batch: **R164319** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/26/2022 03:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-906-Q322
Lab Order:	N051635	**Collection Date:**	7/14/2022 10:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220726A**	QC Batch: **R164319**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/26/2022 03:19 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-125-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 10:02:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220726A**	QC Batch: **R164319**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	7/26/2022 09:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-45-095a-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 8:33:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220726A**	QC Batch: **R164319**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/26/2022 03:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-080-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 8:04:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220726A**	QC Batch: **R164319**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/26/2022 05:32 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-090-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 9:05:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220726A**	QC Batch: **R164319**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/26/2022 05:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-100-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220726A**	QC Batch: **R164319**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/26/2022 06:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-905-Q322
Lab Order:	N051635	**Collection Date:**	7/14/2022 9:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
EPA 218.6							
RunID: **NV00922-IC7_220726A** QC Batch: **R164319** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/26/2022 07:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-707-Q322
Lab Order:	N051635	**Collection Date:**	7/14/2022 12:05:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220726A**	QC Batch: **R164319**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/26/2022 07:24 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-070-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 11:58:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220726A**	QC Batch: **R164319**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	190	0.50	4.0		µg/L	20	7/26/2022 08:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-142-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 12:07:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220726A**	QC Batch: **R164319**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	4900	25	200		µg/L	1000	7/26/2022 05:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-907-Q322
Lab Order:	N051635	**Collection Date:**	7/14/2022 12:17:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220726A**	QC Batch: **R164319**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	4800	25	200		µg/L	1000	7/26/2022 07:43 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R164319**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **PBW**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750722**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R164319**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **LCSW**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750723**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.921	0.20	5.000	0	98.4	90	110				

Sample ID: **N051635-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750725**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.080	0.20	1.000	0	108	90	110				

Sample ID: **N051635-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750727**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.025	0.20	1.000	0	102	90	110				

Sample ID: **N051635-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750729**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.956	0.20	1.000	0	95.6	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N051635-011AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750733**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	9950.800	200	5000	4899	101	90	110				

Sample ID: **N051635-011AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750734**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	10076.000	200	5000	4899	104	90	110	9951	1.25	20	

Sample ID: **N051635-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750736**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.034	0.20	1.000	0	103	90	110				

Sample ID: **N051635-006AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750738**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.088	0.20	1.000	0	109	90	110				

Sample ID: **N051635-007AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750742**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.006	0.20	1.000	0	101	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N051635-008AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750744**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.045	0.20	1.000	0	104	90	110				

Sample ID: **N051635-009AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750746**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.032	0.20	1.000	0	103	90	110				

Sample ID: **N051635-012AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750748**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	9807.500	200	5000	4782	101	90	110				

Sample ID: **N051635-010ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750752**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	186.258	4.0						187.8	0.814	20	

Sample ID: **N051635-010AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750753**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	289.504	4.0	100.0	187.8	102	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N051635-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750755**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.981	1.0	5.000	0	99.6	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-001

Client Sample ID: MW-44-115-0722
Collection Date: 7/14/2022 10:24:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220719B**	QC Batch: **R164142**			PrepDate:			Analyst: **RAB**
Sulfate	1000	6.1	50		mg/L	100	7/20/2022 03:37 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714C**	QC Batch: **R163959**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/15/2022 07:03 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-002

Client Sample ID: MW-906-Q322
Collection Date: 7/14/2022 10:34:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220719B** QC Batch: **R164142**				PrepDate:			Analyst: **RAB**
Sulfate	1000	6.1	50		mg/L	100	7/20/2022 03:54 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714C** QC Batch: **R163959**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/15/2022 07:20 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-003

Client Sample ID: MW-44-125-0722
Collection Date: 7/14/2022 10:02:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220719B** QC Batch: **R164142**				PrepDate:			Analyst: **RAB**
Sulfate	1100	6.1	50		mg/L	100	7/20/2022 04:10 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714C** QC Batch: **R163959**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/15/2022 07:37 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-45-095a-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 8:33:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220719B** QC Batch: **R164142**				PrepDate:			Analyst: **RAB**
Sulfate	490	3.0	25		mg/L	50	7/20/2022 01:27 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714C** QC Batch: **R163959**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/15/2022 07:54 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-005

Client Sample ID: MW-34-080-0722
Collection Date: 7/14/2022 8:04:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220719B** QC Batch: **R164142**				PrepDate:			Analyst: **RAB**
Sulfate	490	3.0	25		mg/L	50	7/20/2022 02:48 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714C** QC Batch: **R163959**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/15/2022 08:10 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-006

Client Sample ID: MW-36-090-0722
Collection Date: 7/14/2022 9:05:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220719B** QC Batch: **R164142**				PrepDate:			Analyst: **RAB**
Sulfate	280	3.0	25		mg/L	50	7/20/2022 04:26 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714C** QC Batch: **R163959**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/15/2022 08:27 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-007

Client Sample ID: MW-36-100-0722
Collection Date: 7/14/2022 9:24:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220719B** QC Batch: **R164142**				PrepDate:			Analyst: **RAB**
Sulfate	430	3.0	25		mg/L	50	7/20/2022 04:43 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714C** QC Batch: **R163959**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/15/2022 08:44 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-008

Client Sample ID: MW-905-Q322
Collection Date: 7/14/2022 9:34:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220725A** QC Batch: **R164273**				PrepDate:			Analyst: **RAB**
Sulfate	430	3.0	25		mg/L	50	7/25/2022 12:31 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714C** QC Batch: **R163959**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/15/2022 09:34 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-010

Client Sample ID: MW-78-070-0722
Collection Date: 7/14/2022 11:58:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220725A** QC Batch: **R164273**				PrepDate:			Analyst: **RAB**
Sulfate	500	3.0	25		mg/L	50	7/25/2022 01:18 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714C** QC Batch: **R163959**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/15/2022 09:51 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-011

Client Sample ID: MW-78-142-0722
Collection Date: 7/14/2022 12:07:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220725A** QC Batch: **R164273**				PrepDate:			Analyst: **RAB**
Sulfate	850	6.1	50		mg/L	100	7/25/2022 01:34 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714C** QC Batch: **R163959**				PrepDate:			Analyst: **RAB**
Nitrate as N	8.2	0.095	0.50		mg/L	10	7/15/2022 10:08 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-012

Client Sample ID: MW-907-Q322
Collection Date: 7/14/2022 12:17:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220725A** QC Batch: **R164273**				PrepDate:			Analyst: **RAB**
Sulfate	830	6.1	50		mg/L	100	7/25/2022 01:50 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714C** QC Batch: **R163959**				PrepDate:			Analyst: **RAB**
Nitrate as N	8.1	0.095	0.50		mg/L	10	7/15/2022 10:25 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **LCS-R164142_SO4**	SampType: **LCS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164142**
Client ID: **LCSW**	Batch ID: **R164142**	TestNo: **EPA 300.0**		Analysis Date: **7/19/2022**	SeqNo: **4735310**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	3.972	0.50	4.000	0	99.3	90	110				

Sample ID: **MB-R164142_SO4**	SampType: **MBLK**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164142**
Client ID: **PBW**	Batch ID: **R164142**	TestNo: **EPA 300.0**		Analysis Date: **7/19/2022**	SeqNo: **4735311**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.50									

Sample ID: **N051635-004BMS**	SampType: **MS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164142**
Client ID: **ZZZZZZ**	Batch ID: **R164142**	TestNo: **EPA 300.0**		Analysis Date: **7/20/2022**	SeqNo: **4735317**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	700.935	25	200.0	485.6	108	80	120				

Sample ID: **N051635-004BMSD**	SampType: **MSD**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164142**
Client ID: **ZZZZZZ**	Batch ID: **R164142**	TestNo: **EPA 300.0**		Analysis Date: **7/20/2022**	SeqNo: **4735318**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	691.695	25	200.0	485.6	103	80	120	700.9	1.33	20	

Sample ID: **N051635-005BDUP**	SampType: **DUP**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164142**
Client ID: **ZZZZZZ**	Batch ID: **R164142**	TestNo: **EPA 300.0**		Analysis Date: **7/20/2022**	SeqNo: **4735320**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	489.280	25						487.9	0.281	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **MB-R164273_SO4**	SampType: **MBLK**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164273**
Client ID: **PBW**	Batch ID: **R164273**	TestNo: **EPA 300.0**		Analysis Date: **7/25/2022**	SeqNo: **4747312**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.50									

Sample ID: **LCS-R164273_SO4**	SampType: **LCS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164273**
Client ID: **LCSW**	Batch ID: **R164273**	TestNo: **EPA 300.0**		Analysis Date: **7/25/2022**	SeqNo: **4747313**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	3.949	0.50	4.000	0	98.7	90	110				

Sample ID: **N051635-008BMS**	SampType: **MS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164273**
Client ID: **ZZZZZZ**	Batch ID: **R164273**	TestNo: **EPA 300.0**		Analysis Date: **7/25/2022**	SeqNo: **4747315**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	640.050	25	200.0	433.7	103	80	120				

Sample ID: **N051635-008BMSD**	SampType: **MSD**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164273**
Client ID: **ZZZZZZ**	Batch ID: **R164273**	TestNo: **EPA 300.0**		Analysis Date: **7/25/2022**	SeqNo: **4747316**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	638.740	25	200.0	433.7	102	80	120	640.0	0.205	20	

Sample ID: **N051715-001FMS**	SampType: **MS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164273**
Client ID: **ZZZZZZ**	Batch ID: **R164273**	TestNo: **EPA 300.0**		Analysis Date: **7/25/2022**	SeqNo: **4747324**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	335.055	25	200.0	147.1	94.0	80	120				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **N051715-001FMSD**	SampType: **MSD**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164273**
Client ID: **ZZZZZZ**	Batch ID: **R164273**	TestNo: **EPA 300.0**		Analysis Date: **7/25/2022**	SeqNo: **4747325**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	332.620	25	200.0	147.1	92.8	80	120	335.1	0.729	20	

Sample ID: **N051716-001EDUP**	SampType: **DUP**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164273**
Client ID: **ZZZZZZ**	Batch ID: **R164273**	TestNo: **EPA 300.0**		Analysis Date: **7/25/2022**	SeqNo: **4747326**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	144.880	25						143.0	1.30	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R163959_NO3**	SampType: **MBLK**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163959**
Client ID: **PBW**	Batch ID: **R163959**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722322**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R163959_NO3**	SampType: **LCS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163959**
Client ID: **LCSW**	Batch ID: **R163959**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722323**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.220	0.050	1.250	0	97.6	90	110				

Sample ID: **N051635-007BMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163959**
Client ID: **ZZZZZZ**	Batch ID: **R163959**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722337**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.843	0.50	12.50	0	94.7	80	120				

Sample ID: **N051635-007BMSD**	SampType: **MSD**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163959**
Client ID: **ZZZZZZ**	Batch ID: **R163959**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722338**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.818	0.50	12.50	0	94.5	80	120	11.84	0.211	20	

Sample ID: **N051635-004BDUP**	SampType: **DUP**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163959**
Client ID: **ZZZZZZ**	Batch ID: **R163959**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722339**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.50						0	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **N051635-004BMS** SampType: **MS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **163959**
Client ID: **ZZZZZZ** Batch ID: **R163959** TestNo: **EPA 300.0** Analysis Date: **7/15/2022** SeqNo: **4722340**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.769	0.50	12.50	0	94.2	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-115-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 10:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220716A**	QC Batch: **R163997**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/16/2022 12:36 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-906-Q322
Lab Order:	N051635	**Collection Date:**	7/14/2022 10:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220716A**	QC Batch: **R163997**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/16/2022 12:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-125-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 10:02:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220716A**	QC Batch: **R163997**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/16/2022 01:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-45-095a-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 8:33:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220716A**	QC Batch: **R163997**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/16/2022 01:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-080-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 8:04:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220716A**	QC Batch: **R163997**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/16/2022 01:38 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-090-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 9:05:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220716A**	QC Batch: **R163997**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/16/2022 01:54 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-100-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220716A**	QC Batch: **R163997**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/16/2022 02:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-905-Q322
Lab Order:	N051635	**Collection Date:**	7/14/2022 9:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220716A**	QC Batch: **R163997**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/16/2022 02:25 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-070-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 11:58:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220716A**	QC Batch: **R163997**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/16/2022 02:41 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-142-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 12:07:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220716A**	QC Batch: **R163997**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/16/2022 03:43 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-907-Q322
Lab Order:	N051635	**Collection Date:**	7/14/2022 12:17:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220716A**	QC Batch: **R163997**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/16/2022 03:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R163997**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163997**
Client ID: **PBW**	Batch ID: **R163997**	TestNo: **SM 5310C**		Analysis Date: **7/16/2022**	SeqNo: **4725296**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R163997**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163997**
Client ID: **LCSW**	Batch ID: **R163997**	TestNo: **SM 5310C**		Analysis Date: **7/16/2022**	SeqNo: **4725297**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	4.988	1.0	5.000	0	99.8	85	115				

Sample ID: **N051651-004DMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163997**
Client ID: **ZZZZZZ**	Batch ID: **R163997**	TestNo: **SM 5310C**		Analysis Date: **7/16/2022**	SeqNo: **4725304**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	25.492	5.0	25.00	1.231	97.0	75	125				

Sample ID: **N051651-004DMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163997**
Client ID: **ZZZZZZ**	Batch ID: **R163997**	TestNo: **SM 5310C**		Analysis Date: **7/16/2022**	SeqNo: **4725305**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	25.240	5.0	25.00	1.231	96.0	75	125	25.49	0.995	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-115-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 10:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/17/2022 11:06 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-002

Client Sample ID: MW-906-Q322
Collection Date: 7/14/2022 10:34:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/17/2022 11:11 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-125-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 10:02:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Iron	420	13	20		µg/L	1	7/17/2022 11:17 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-45-095a-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 8:33:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/17/2022 11:23 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-080-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 8:04:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Iron	990	13	20		µg/L	1	7/17/2022 11:28 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-006

Client Sample ID: MW-36-090-0722
Collection Date: 7/14/2022 9:05:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220717A** QC Batch: **93805**				PrepDate:		**7/15/2022**	Analyst: **DJ**
Iron	39	13	20		µg/L	1	7/17/2022 11:34 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-007

Client Sample ID: MW-36-100-0722
Collection Date: 7/14/2022 9:24:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Iron	430	13	20		µg/L	1	7/17/2022 11:39 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-905-Q322
Lab Order:	N051635	**Collection Date:**	7/14/2022 9:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Iron	380	13	20		µg/L	1	7/17/2022 11:45 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-070-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 11:58:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/17/2022 11:58 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-011

Client Sample ID: MW-78-142-0722
Collection Date: 7/14/2022 12:07:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/17/2022 12:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-012

Client Sample ID: MW-907-Q322
Collection Date: 7/14/2022 12:17:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/17/2022 12:09 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-93805**	SampType: **MBLK**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164010**
Client ID: **PBW**	Batch ID: **93805**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/17/2022**	SeqNo: **4726451**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-93805**	SampType: **LCS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164010**
Client ID: **LCSW**	Batch ID: **93805**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/17/2022**	SeqNo: **4726452**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	99.924	20	100.0	0	99.9	85	115				

Sample ID: **N051634-002C-MS**	SampType: **MS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164010**
Client ID: **ZZZZZZ**	Batch ID: **93805**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/17/2022**	SeqNo: **4726457**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	136.505	20	100.0	17.50	119	75	125				

Sample ID: **N051634-002C-MSD**	SampType: **MSD**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164010**
Client ID: **ZZZZZZ**	Batch ID: **93805**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/17/2022**	SeqNo: **4726458**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	126.620	20	100.0	17.50	109	75	125	136.5	7.51	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-001

Client Sample ID: MW-44-115-0722
Collection Date: 7/14/2022 10:24:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP7_220716A**	QC Batch: **93803**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Arsenic	4.7	0.050	0.10		µg/L	1	7/16/2022 01:56 PM
Barium	19	0.083	1.0		µg/L	1	7/16/2022 01:56 PM
Manganese	54	0.026	0.50		µg/L	1	7/16/2022 01:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-002

Client Sample ID: MW-906-Q322
Collection Date: 7/14/2022 10:34:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220723C**	QC Batch: **93876**			PrepDate:		**7/20/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/23/2022 09:03 AM
Barium	20	0.083	1.0		µg/L	1	7/23/2022 09:03 AM
Manganese	58	0.026	0.50		µg/L	1	7/23/2022 09:03 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-125-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 10:02:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP7_220716A**	QC Batch: **93803**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Arsenic	5.4	0.050	0.10		µg/L	1	7/16/2022 02:32 PM
Barium	45	0.083	1.0		µg/L	1	7/16/2022 02:32 PM
Manganese	510	0.13	2.5		µg/L	5	7/16/2022 02:38 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-004

Client Sample ID: MW-45-095a-0722
Collection Date: 7/14/2022 8:33:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP7_220716A**	QC Batch: **93803**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	1.9	0.050	0.10		µg/L	1	7/16/2022 02:44 PM
Barium	23	0.083	1.0		µg/L	1	7/16/2022 02:44 PM
Manganese	120	0.026	0.50		µg/L	1	7/16/2022 02:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-005

Client Sample ID: MW-34-080-0722
Collection Date: 7/14/2022 8:04:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP7_220716A**	QC Batch: **93803**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	1.7	0.050	0.10		µg/L	1	7/16/2022 02:56 PM
Barium	35	0.083	1.0		µg/L	1	7/16/2022 02:56 PM
Manganese	130	0.026	0.50		µg/L	1	7/16/2022 02:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-006

Client Sample ID: MW-36-090-0722
Collection Date: 7/14/2022 9:05:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP7_220716A**	QC Batch: **93803**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	3.3	0.050	0.10		µg/L	1	7/16/2022 03:08 PM
Barium	37	0.083	1.0		µg/L	1	7/16/2022 03:08 PM
Manganese	150	0.026	0.50		µg/L	1	7/16/2022 03:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-007

Client Sample ID: MW-36-100-0722
Collection Date: 7/14/2022 9:24:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP7_220716A**	QC Batch: **93803**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	4.1	0.050	0.10		µg/L	1	7/16/2022 03:20 PM
Barium	59	0.083	1.0		µg/L	1	7/16/2022 03:20 PM
Manganese	480	0.13	2.5		µg/L	5	7/16/2022 03:26 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-008

Client Sample ID: MW-905-Q322
Collection Date: 7/14/2022 9:34:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP7_220716A**	QC Batch: **93803**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	3.5	0.050	0.10		µg/L	1	7/16/2022 03:44 PM
Barium	54	0.083	1.0		µg/L	1	7/16/2022 03:44 PM
Manganese	460	0.13	2.5		µg/L	5	7/16/2022 03:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-010

Client Sample ID: MW-78-070-0722
Collection Date: 7/14/2022 11:58:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP7_220716A**	QC Batch: **93803**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	0.91	0.050	0.10		µg/L	1	7/16/2022 03:56 PM
Barium	160	0.083	1.0		µg/L	1	7/16/2022 03:56 PM
Manganese	170	0.026	0.50		µg/L	1	7/16/2022 03:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-011

Client Sample ID: MW-78-142-0722
Collection Date: 7/14/2022 12:07:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP7_220716A**	QC Batch: **93803**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	4.5	0.050	0.10		µg/L	1	7/16/2022 04:08 PM
Barium	26	0.083	1.0		µg/L	1	7/16/2022 04:08 PM
Manganese	1.7	0.026	0.50		µg/L	1	7/16/2022 04:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-012

Client Sample ID: MW-907-Q322
Collection Date: 7/14/2022 12:17:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP7_220716A** QC Batch: **93803**				PrepDate:	**7/15/2022**		Analyst: **DJ**
Arsenic	4.4	0.050	0.10		µg/L	1	7/16/2022 04:20 PM
Barium	26	0.083	1.0		µg/L	1	7/16/2022 04:20 PM
Manganese	2.7	0.026	0.50		µg/L	1	7/16/2022 04:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-93803** SampType: **MBLK** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **7/15/2022** RunNo: **164038**
Client ID: **PBW** Batch ID: **93803** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **7/16/2022** SeqNo: **4729143**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID: **LCS-93803** SampType: **LCS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **7/15/2022** RunNo: **164038**
Client ID: **LCSW** Batch ID: **93803** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **7/16/2022** SeqNo: **4729144**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.573	0.10	10.00	0	95.7	85	115				
Barium	9.589	1.0	10.00	0	95.9	85	115				
Manganese	93.845	0.50	100.0	0	93.8	85	115				

Sample ID: **N051634-001C-MS** SampType: **MS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **7/15/2022** RunNo: **164038**
Client ID: **ZZZZZZ** Batch ID: **93803** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **7/16/2022** SeqNo: **4729150**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.104	0.10	10.00	1.868	102	75	125				
Barium	76.310	1.0	10.00	65.28	110	75	125				
Manganese	89.997	0.50	100.0	6.988	83.0	75	125				

Sample ID: **N051634-001C-MSD** SampType: **MSD** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **7/15/2022** RunNo: **164038**
Client ID: **ZZZZZZ** Batch ID: **93803** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **7/16/2022** SeqNo: **4729154**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	11.865	0.10	10.00	1.868	100	75	125	12.10	2.00	20	
Barium	75.873	1.0	10.00	65.28	106	75	125	76.31	0.574	20	
Manganese	91.534	0.50	100.0	6.988	84.5	75	125	90.00	1.69	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-93876** SampType: **MBLK** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **7/20/2022** RunNo: **164238**
Client ID: **PBW** Batch ID: **93876** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **7/23/2022** SeqNo: **4744190**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID: **LCS-93876** SampType: **LCS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **7/20/2022** RunNo: **164238**
Client ID: **LCSW** Batch ID: **93876** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **7/23/2022** SeqNo: **4744191**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.659	0.10	10.00	0	96.6	85	115				
Barium	9.123	1.0	10.00	0	91.2	85	115				
Manganese	94.133	0.50	100.0	0	94.1	85	115				

Sample ID: **N051727-002D-MS** SampType: **MS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **7/20/2022** RunNo: **164238**
Client ID: **ZZZZZZ** Batch ID: **93876** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **7/23/2022** SeqNo: **4744197**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.501	0.10	10.00	3.799	97.0	75	125				
Barium	115.246	1.0	10.00	108.1	71.1	75	125				S

Sample ID: **N051727-002D-MSD** SampType: **MSD** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **7/20/2022** RunNo: **164238**
Client ID: **ZZZZZZ** Batch ID: **93876** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **7/23/2022** SeqNo: **4744198**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.490	0.10	10.00	3.799	96.9	75	125	13.50	0.0886	20	
Barium	125.453	1.0	10.00	108.1	173	75	125	115.2	8.48	20	S

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N051727-002D-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/20/2022**	RunNo: **164367**
Client ID: **ZZZZZZ**	Batch ID: **93876**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/24/2022**	SeqNo: **4751781**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	441.900	2.5	100.0	312.2	130	75	125				S

Sample ID: **N051727-002D-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/20/2022**	RunNo: **164367**
Client ID: **ZZZZZZ**	Batch ID: **93876**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/24/2022**	SeqNo: **4751782**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	442.374	2.5	100.0	312.2	130	75	125	441.9	0.107	20	S

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N051634-001C-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164038**
Client ID: **ZZZZZZ** Batch ID: **93803** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **7/16/2022** SeqNo: **4729148**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	11.924	0.10	10.00	1.868	101	80	120				
Barium	76.215	1.0	10.00	65.28	109	80	120				
Manganese	89.847	0.50	100.0	6.988	82.9	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N051727-002D-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **164238**
Client ID: **ZZZZZZ**	Batch ID: **93876**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/23/2022**	SeqNo: **4744196**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.455	0.10	10.00	3.799	96.6	80	120				
Barium	120.718	1.0	10.00	108.1	126	80	120				S

Sample ID: **N051727-002D-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **164367**
Client ID: **ZZZZZZ**	Batch ID: **93876**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/24/2022**	SeqNo: **4751780**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	454.969	2.5	100.0	312.2	143	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement		QA/QC		Sample Receipt Condition
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD		RTNE		Y N
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker		RWQCB	✓	1. Chilled Y
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Labspec		CalTrans		2. Headspace
Submitted By: Reggie Top			Others	✓	LEVEL III		3. Container Intact X
Title: Field Tech	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	Specify: RWQCB		LEVEL IV		4. Seal Present X
Signature: Date: 7/14/22	Sampled By: Reggie Top		Global ID:		Regulatory		5. IR number 3
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for				Specify State:		6. Method of Cooling: ICE
Project Name: PG&E Topock - PCM	Signature:	Date: 7/14/22					Sample Temp: 2.3°C/2.5°C
Project Number: 30121866.3Q22GW							Courier: ASSET
							Tracking No.:

Matrix: Ground X | Sediment | Potable | Soil | NPDES | Other Solid | Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N051635-01	MW-44-115-0722	7/14/2022	10:24		X	X	X			X			E	6	P	BNS	
2	-02	MW-906-Q322	7/14/2022	10:34		X	X	X			X			E	6	P	BNS	
3	-03	MW-44-125-0722	7/14/2022	10:02		X	X	X			X			E	6	P	BNS	
4	-04	MW-45-095a-0722	7/14/2022	8:33		X	X	X			X			E	6	P	BNS	
5	-05	MW-34-080-0722	7/14/2022	8:04		X	X	X			X			E	6	P	BNS	
6	-06	MW-36-090-0722	7/14/2022	9:05		X	X	X			X			E	6	P	BNS	
7	-07	MW-36-100-0722	7/14/2022	9:24		X	X	X			X			E	6	P	BNS	
8	-08	MW-905-Q322	7/14/2022	9:34		X	X	X			X			E	6	P	BNS	
9	-09	EB-707-Q322	7/14/2022	12:05		X								E	1	P	BNS	
10	-10	MW-78-070-0722	7/14/2022	11:58		X	X	X			X			E	6	P	BNS	
11	-11	MW-78-142-0722	7/14/2022	12:07		X	X	X			X			E	6	P	BNS	
12	-12	MW-907-Q322	7/14/2022	12:17		X	X	X			X			E	6	P	BNS	
13																		
14																		

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Reggie Top	7/14/22 1533	MB CARTON	7/14/22 @1533
Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
MB CARTON	7/14/22 1715	Gisella Ramirez-Flores	7/14/22 1715
Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [X] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	7/14/2022	Workorder:	N051635
Rep sample Temp (Deg C):	2.3/2.5	IR Gun ID:	3
Temp Blank:	☑ Yes ☐ No		
Carrier name:	ASSET		
Last 4 digits of Tracking No.:	NA	Packing Material Used:	None
Cooling process:	☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None		

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For:

Checklist Completed By: GGJ YRJ 7/15/2022

for MBC 7/21/2022

Reviewed By:

ASSET Laboratories

WORK ORDER Summary

15-Jul-22

WorkOrder: N051635

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/14/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051635-001A	MW-44-115-0722	7/14/2022 10:24:00 AM	7/28/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW-CA
N051635-001B			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051635-001C			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051635-001D			7/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051635-002A	MW-906-Q322	7/14/2022 10:34:00 AM	7/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW-CA
N051635-002B			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051635-002C			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☑	WW
			7/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051635-002D			7/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051635-003A	MW-44-125-0722	7/14/2022 10:02:00 AM	7/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW-CA
N051635-003B			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051635-003C			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

15-Jul-22

WorkOrder: N051635

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/14/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051635-003C	MW-44-125-0722	7/14/2022 10:02:00 AM	7/28/2022	Groundwater	EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051635-003D			7/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051635-004A	MW-45-095a-0722	7/14/2022 8:33:00 AM	7/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW-CA
N051635-004B			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051635-004C			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051635-004D			7/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051635-005A	MW-34-080-0722	7/14/2022 8:04:00 AM	7/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW-CA
N051635-005B			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051635-005C			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051635-005D			7/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051635-006A	MW-36-090-0722	7/14/2022 9:05:00 AM	7/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW-CA
N051635-006B			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051635-006C			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

15-Jul-22

WorkOrder: N051635

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/14/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051635-006C	MW-36-090-0722	7/14/2022 9:05:00 AM	7/28/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051635-006D			7/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051635-007A	MW-36-100-0722	7/14/2022 9:24:00 AM	7/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW-CA
N051635-007B			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051635-007C			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051635-007D			7/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051635-008A	MW-905-Q322	7/14/2022 9:34:00 AM	7/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW-CA
N051635-008B			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051635-008C			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051635-008D			7/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051635-009A	EB-707-Q322	7/14/2022 12:05:00 PM	7/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW-CA
N051635-010A	MW-78-070-0722	7/14/2022 11:58:00 AM	7/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW-CA

ASSET Laboratories

WORK ORDER Summary

15-Jul-22

WorkOrder: N051635

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/14/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051635-010B	MW-78-070-0722	7/14/2022 11:58:00 AM	7/28/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051635-010C			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051635-010D			7/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051635-011A	MW-78-142-0722	7/14/2022 12:07:00 PM	7/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW-CA
N051635-011B			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051635-011C			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051635-011D			7/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051635-012A	MW-907-Q322	7/14/2022 12:17:00 PM	7/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW-CA
N051635-012B			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051635-012C			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

15-Jul-22

WorkOrder: N051635

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/14/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051635-012D	MW-907-Q322	7/14/2022 12:17:00 PM	7/28/2022	Groundwater	SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051635-013A	FOLDER	7/28/2022	7/28/2022		Folder	Folder	☐	☐	☐	LAB
			7/28/2022		Folder	Level IV Report	☐	☐	☐	LAB
			7/28/2022		Folder	Folder	☐	☐	☐	LAB

August 30, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052034

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 08, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Subcontracted Analyses:

Ammonia was subcontracted to BC Labs- Bakersfield,CA.

Analytical Comments for EPA 218.6:

Dilution was necessary for some samples due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for EPA 6010B_Dissolved:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Iron in QC samples N052034-009CMS and N052034-009CMSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020_Dissolved:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for some analytes in QC samples N052034-009CMS, N052034-009CMSD and N052058-010CMS possibly due to matrix interference. Post Spike (PS) passed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for SM 5310C:

Matrix Spike (MS) is outside recovery criteria in QC sample N052034-009DMS at lower dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N052034-009 and MS/MSD were reported at 50x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052034
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052034-001A	MW-76-039-Q322	Groundwater	8/8/2022 12:17:00 PM	8/8/2022	8/30/2022
N052034-001B	MW-76-039-Q322	Groundwater	8/8/2022 12:17:00 PM	8/8/2022	8/30/2022
N052034-001C	MW-76-039-Q322	Groundwater	8/8/2022 12:17:00 PM	8/8/2022	8/30/2022
N052034-001D	MW-76-039-Q322	Groundwater	8/8/2022 12:17:00 PM	8/8/2022	8/30/2022
N052034-001E	MW-76-039-Q322	Groundwater	8/8/2022 12:17:00 PM	8/8/2022	8/30/2022
N052034-002A	MW-76-156-Q322	Groundwater	8/8/2022 1:05:00 PM	8/8/2022	8/30/2022
N052034-002B	MW-76-156-Q322	Groundwater	8/8/2022 1:05:00 PM	8/8/2022	8/30/2022
N052034-002C	MW-76-156-Q322	Groundwater	8/8/2022 1:05:00 PM	8/8/2022	8/30/2022
N052034-002D	MW-76-156-Q322	Groundwater	8/8/2022 1:05:00 PM	8/8/2022	8/30/2022
N052034-002E	MW-76-156-Q322	Groundwater	8/8/2022 1:05:00 PM	8/8/2022	8/30/2022
N052034-003A	MW-76-181-Q322	Groundwater	8/8/2022 1:49:00 PM	8/8/2022	8/30/2022
N052034-003B	MW-76-181-Q322	Groundwater	8/8/2022 1:49:00 PM	8/8/2022	8/30/2022
N052034-003C	MW-76-181-Q322	Groundwater	8/8/2022 1:49:00 PM	8/8/2022	8/30/2022
N052034-003D	MW-76-181-Q322	Groundwater	8/8/2022 1:49:00 PM	8/8/2022	8/30/2022
N052034-003E	MW-76-181-Q322	Groundwater	8/8/2022 1:49:00 PM	8/8/2022	8/30/2022
N052034-004A	MW-76-218-Q322	Groundwater	8/8/2022 2:40:00 PM	8/8/2022	8/30/2022
N052034-004B	MW-76-218-Q322	Groundwater	8/8/2022 2:40:00 PM	8/8/2022	8/30/2022
N052034-004C	MW-76-218-Q322	Groundwater	8/8/2022 2:40:00 PM	8/8/2022	8/30/2022
N052034-004D	MW-76-218-Q322	Groundwater	8/8/2022 2:40:00 PM	8/8/2022	8/30/2022
N052034-004E	MW-76-218-Q322	Groundwater	8/8/2022 2:40:00 PM	8/8/2022	8/30/2022
N052034-005A	EB-709-Q322	Groundwater	8/8/2022 2:50:00 PM	8/8/2022	8/30/2022
N052034-006A	MW-77-046-Q322	Groundwater	8/8/2022 12:24:00 PM	8/8/2022	8/30/2022
N052034-006B	MW-77-046-Q322	Groundwater	8/8/2022 12:24:00 PM	8/8/2022	8/30/2022
N052034-006C	MW-77-046-Q322	Groundwater	8/8/2022 12:24:00 PM	8/8/2022	8/30/2022
N052034-006D	MW-77-046-Q322	Groundwater	8/8/2022 12:24:00 PM	8/8/2022	8/30/2022
N052034-007A	MW-77-102-Q322	Groundwater	8/8/2022 12:59:00 PM	8/8/2022	8/30/2022
N052034-007B	MW-77-102-Q322	Groundwater	8/8/2022 12:59:00 PM	8/8/2022	8/30/2022
N052034-007C	MW-77-102-Q322	Groundwater	8/8/2022 12:59:00 PM	8/8/2022	8/30/2022
N052034-007D	MW-77-102-Q322	Groundwater	8/8/2022 12:59:00 PM	8/8/2022	8/30/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052034
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052034-008A	MW-77-158-Q322	Groundwater	8/8/2022 1:33:00 PM	8/8/2022	8/30/2022
N052034-008B	MW-77-158-Q322	Groundwater	8/8/2022 1:33:00 PM	8/8/2022	8/30/2022
N052034-008C	MW-77-158-Q322	Groundwater	8/8/2022 1:33:00 PM	8/8/2022	8/30/2022
N052034-008D	MW-77-158-Q322	Groundwater	8/8/2022 1:33:00 PM	8/8/2022	8/30/2022
N052034-009A	MW-77-187-Q322	Groundwater	8/8/2022 2:11:00 PM	8/8/2022	8/30/2022
N052034-009B	MW-77-187-Q322	Groundwater	8/8/2022 2:11:00 PM	8/8/2022	8/30/2022
N052034-009C	MW-77-187-Q322	Groundwater	8/8/2022 2:11:00 PM	8/8/2022	8/30/2022
N052034-009D	MW-77-187-Q322	Groundwater	8/8/2022 2:11:00 PM	8/8/2022	8/30/2022
N052034-010A	EB-710-Q322	Groundwater	8/8/2022 3:30:00 PM	8/8/2022	8/30/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 12:17:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220809A**	QC Batch: **R164730**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	140	0.50	4.0		µg/L	20	8/9/2022 05:53 PM
DISSOLVED METALS BY ICP-MS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220813B**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Chromium	130	0.035	1.0		µg/L	1	8/13/2022 03:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 1:05:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220809A**	QC Batch: **R164730**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	8.9	0.13	1.0		µg/L	5	8/9/2022 06:40 PM
DISSOLVED METALS BY ICP-MS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220813B**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Chromium	8.5	0.035	1.0		µg/L	1	8/13/2022 03:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-181-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 1:49:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220809A**	QC Batch: **R164730**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	1300	5.0	40		µg/L	200	8/9/2022 10:03 PM
DISSOLVED METALS BY ICP-MS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220815B**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Chromium	1200	0.88	25		µg/L	25	8/15/2022 05:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-218-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 2:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
EPA 218.6							
RunID: **NV00922-IC7_220809A** QC Batch: **R164730** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	2.3	0.13	1.0		µg/L	5	8/10/2022 12:15 AM
DISSOLVED METALS BY ICP-MS							
EPA 3010A **EPA 6020**							
RunID: **NV00922-ICP8_220813B** QC Batch: **94191** PrepDate: **8/11/2022** Analyst: **DJ**							
Chromium	2.3	0.035	1.0		µg/L	1	8/13/2022 04:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-709-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 2:50:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220809A**	QC Batch: **R164730**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/9/2022 10:32 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 12:24:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220809A**	QC Batch: **R164730**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/9/2022 08:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 12:59:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220809A**	QC Batch: **R164730**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/9/2022 08:19 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 1:33:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220809A**	QC Batch: **R164730**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/9/2022 11:34 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 2:11:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220809A**	QC Batch: **R164730**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	8.8	0.13	1.0		µg/L	5	8/9/2022 05:41 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-710-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 3:30:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220809A**	QC Batch: **R164730**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/9/2022 10:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	**LCS-R164730**	SampType:	**LCS**	TestCode:	**218.6_WPGE**	Units:	**µg/L**	Prep Date:		RunNo:	**164730**
Client ID:	**LCSW**	Batch ID:	**R164730**	TestNo:	**EPA 218.6**			Analysis Date:	**8/9/2022**	SeqNo:	**4771886**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.161	0.20	5.000	0	103	90	110				

Sample ID	**MB-R164730**	SampType:	**MBLK**	TestCode:	**218.6_WPGE**	Units:	**µg/L**	Prep Date:		RunNo:	**164730**
Client ID:	**PBW**	Batch ID:	**R164730**	TestNo:	**EPA 218.6**			Analysis Date:	**8/9/2022**	SeqNo:	**4771887**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID	**N052034-001ADUP**	SampType:	**DUP**	TestCode:	**218.6_WPGE**	Units:	**µg/L**	Prep Date:		RunNo:	**164730**
Client ID:	**ZZZZZZ**	Batch ID:	**R164730**	TestNo:	**EPA 218.6**			Analysis Date:	**8/9/2022**	SeqNo:	**4771890**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	137.874	4.0						136.9	0.680	20	

Sample ID	**N052034-001AMS**	SampType:	**MS**	TestCode:	**218.6_WPGE**	Units:	**µg/L**	Prep Date:		RunNo:	**164730**
Client ID:	**ZZZZZZ**	Batch ID:	**R164730**	TestNo:	**EPA 218.6**			Analysis Date:	**8/9/2022**	SeqNo:	**4771891**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	241.826	4.0	100.0	136.9	105	90	110				

Sample ID	**N052034-006AMS**	SampType:	**MS**	TestCode:	**218.6_WPGE**	Units:	**µg/L**	Prep Date:		RunNo:	**164730**
Client ID:	**ZZZZZZ**	Batch ID:	**R164730**	TestNo:	**EPA 218.6**			Analysis Date:	**8/9/2022**	SeqNo:	**4771897**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.033	0.20	1.000	0	103	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052034-007AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164730
Client ID:	ZZZZZZ	Batch ID:	R164730	TestNo:	EPA 218.6			Analysis Date:	8/9/2022	SeqNo:	4771899

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.003	0.20	1.000	0	100	90	110				

Sample ID	N052034-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164730
Client ID:	ZZZZZZ	Batch ID:	R164730	TestNo:	EPA 218.6			Analysis Date:	8/9/2022	SeqNo:	4771900

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	14.300	1.0	5.000	8.904	108	90	110				

Sample ID	N052034-009AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164730
Client ID:	ZZZZZZ	Batch ID:	R164730	TestNo:	EPA 218.6			Analysis Date:	8/9/2022	SeqNo:	4771903

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	13.793	1.0	5.000	8.819	99.5	90	110				

Sample ID	N052034-009AMSD	SampType:	MSD	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164730
Client ID:	ZZZZZZ	Batch ID:	R164730	TestNo:	EPA 218.6			Analysis Date:	8/9/2022	SeqNo:	4771904

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	13.651	1.0	5.000	8.819	96.6	90	110	13.79	1.03	20	

Sample ID	N052034-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164730
Client ID:	ZZZZZZ	Batch ID:	R164730	TestNo:	EPA 218.6			Analysis Date:	8/9/2022	SeqNo:	4771906

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2282.380	40	1000	1261	102	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052034-005AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164730
Client ID:	ZZZZZZ	Batch ID:	R164730	TestNo:	EPA 218.6			Analysis Date:	8/9/2022	SeqNo:	4771908

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.044	0.20	1.000	0	104	90	110				

Sample ID	N052034-010AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164730
Client ID:	ZZZZZZ	Batch ID:	R164730	TestNo:	EPA 218.6			Analysis Date:	8/9/2022	SeqNo:	4771910

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.030	0.20	1.000	0	103	90	110				

Sample ID	N052034-008AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164730
Client ID:	ZZZZZZ	Batch ID:	R164730	TestNo:	EPA 218.6			Analysis Date:	8/9/2022	SeqNo:	4771914

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.140	1.0	5.000	0	103	90	110				

Sample ID	N052034-004AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164730
Client ID:	ZZZZZZ	Batch ID:	R164730	TestNo:	EPA 218.6			Analysis Date:	8/10/2022	SeqNo:	4771916

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	7.399	1.0	5.000	2.303	102	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020DIS_CrPGE_TPK

Sample ID	MB-94191	SampType:	MBLK	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164825
Client ID:	PBW	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778690

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									

Sample ID	LCS-94191	SampType:	LCS	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164825
Client ID:	LCSW	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778691

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.518	1.0	10.00	0	95.2	85	115				

Sample ID	N052034-009CMS	SampType:	MS	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164825
Client ID:	ZZZZZZ	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778715

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	18.034	1.0	10.00	8.786	92.5	75	125				

Sample ID	N052034-009CMSD	SampType:	MSD	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164825
Client ID:	ZZZZZZ	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778717

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	17.484	1.0	10.00	8.786	87.0	75	125	18.03	3.10	20	

Sample ID	N052058-010CMS	SampType:	MS	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164825
Client ID:	ZZZZZZ	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778748

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.667	1.0	10.00	0.3644	93.0	75	125				

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020DIS_CrPGE_TPK

Sample ID **N052058-010CMSD**	SampType: **MSD**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164825**				
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778750**				

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.827	1.0	10.00	0.3644	94.6	75	125	9.667	1.64	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 12:17:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A** QC Batch: **R164670**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/8/2022 07:12 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A** QC Batch: **R164670**				PrepDate:			Analyst: **RAB**
Sulfate	230	1.2	10		mg/L	20	8/8/2022 11:56 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A** QC Batch: **R164670**				PrepDate:			Analyst: **RAB**
Nitrate as N	2.8	0.095	0.50		mg/L	10	8/8/2022 07:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 1:05:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A** QC Batch: **R164670**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/8/2022 07:59 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A** QC Batch: **R164670**				PrepDate:			Analyst: **RAB**
Sulfate	710	6.1	50		mg/L	100	8/9/2022 12:28 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A** QC Batch: **R164670**				PrepDate:			Analyst: **RAB**
Nitrate as N	1.9	0.095	0.50		mg/L	10	8/8/2022 07:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052034-003

Client Sample ID: MW-76-181-Q322
Collection Date: 8/8/2022 1:49:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY				**EPA 300.0**			
RunID: **NV00922-IC8_220808A** QC Batch: **R164670**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/8/2022 09:18 PM
ANIONS BY ION CHROMATOGRAPHY				**EPA 300.0**			
RunID: **NV00922-IC8_220808A** QC Batch: **R164670**				PrepDate:			Analyst: **RAB**
Sulfate	780	6.1	50		mg/L	100	8/9/2022 01:15 AM
ANIONS BY ION CHROMATOGRAPHY				**EPA 300.0**			
RunID: **NV00922-IC8_220808A** QC Batch: **R164670**				PrepDate:			Analyst: **RAB**
Nitrate as N	1.6	0.095	0.50		mg/L	10	8/8/2022 09:18 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052034-004

Client Sample ID: MW-76-218-Q322
Collection Date: 8/8/2022 2:40:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY				**EPA 300.0**			
RunID: **NV00922-IC8_220808A** QC Batch: **R164670**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/8/2022 10:06 PM
ANIONS BY ION CHROMATOGRAPHY				**EPA 300.0**			
RunID: **NV00922-IC8_220808A** QC Batch: **R164670**				PrepDate:			Analyst: **RAB**
Sulfate	640	6.1	50		mg/L	100	8/9/2022 01:31 AM
ANIONS BY ION CHROMATOGRAPHY				**EPA 300.0**			
RunID: **NV00922-IC8_220808A** QC Batch: **R164670**				PrepDate:			Analyst: **RAB**
Nitrate as N	0.55	0.095	0.50		mg/L	10	8/8/2022 10:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 12:24:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A**	QC Batch: **R164670**			PrepDate:			Analyst: **RAB**
Sulfate	920	3.0	25		mg/L	50	8/9/2022 01:47 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A**	QC Batch: **R164670**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/8/2022 10:21 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052034-007

Client Sample ID: MW-77-102-Q322
Collection Date: 8/8/2022 12:59:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A**	QC Batch: **R164670**			PrepDate:			Analyst: **RAB**
Sulfate	560	6.1	50		mg/L	100	8/9/2022 02:03 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A**	QC Batch: **R164670**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.61	0.095	0.50		mg/L	10	8/8/2022 10:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 1:33:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A**	QC Batch: **R164670**			PrepDate:			Analyst: **RAB**
Sulfate	660	3.0	25		mg/L	50	8/9/2022 02:19 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A**	QC Batch: **R164670**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/8/2022 10:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 2:11:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A**	QC Batch: **R164670**			PrepDate:			Analyst: **RAB**
Sulfate	860	6.1	50		mg/L	100	8/8/2022 11:09 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A**	QC Batch: **R164670**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.95	0.095	0.50		mg/L	10	8/8/2022 08:31 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_NO2PGE

Sample ID	MB-R164670_NO2	SampType:	MBLK	TestCode:	300_W_NO2P	Units:	mg/L	Prep Date:		RunNo:	164670
Client ID:	PBW	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768348

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	ND	0.50									

Sample ID	LCS-R164670_NO2	SampType:	LCS	TestCode:	300_W_NO2P	Units:	mg/L	Prep Date:		RunNo:	164670
Client ID:	LCSW	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768349

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	1.197	0.50	1.250	0	95.7	90	110				

Sample ID	N052034-001BMS	SampType:	MS	TestCode:	300_W_NO2P	Units:	mg/L	Prep Date:		RunNo:	164670
Client ID:	ZZZZZZ	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768353

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	13.869	5.0	12.50	0	111	80	120				

Sample ID	N052034-001BMSD	SampType:	MSD	TestCode:	300_W_NO2P	Units:	mg/L	Prep Date:		RunNo:	164670
Client ID:	ZZZZZZ	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768354

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	14.298	5.0	12.50	0	114	80	120	13.87	3.05	20	

Sample ID	N052034-002BDUP	SampType:	DUP	TestCode:	300_W_NO2P	Units:	mg/L	Prep Date:		RunNo:	164670
Client ID:	ZZZZZZ	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768356

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	ND	5.0						0	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	MB-R164670_SO4	SampType:	MBLK	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164670		
Client ID:	PBW	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768398		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Sulfate	0.222	0.50											

Sample ID	LCS-R164670_SO4	SampType:	LCS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164670		
Client ID:	LCSW	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768399		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Sulfate	3.836	0.50	4.000	0	95.9	90	110						

Sample ID	N052034-009BMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164670		
Client ID:	ZZZZZZ	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768405		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Sulfate	1239.630	50	400.0	861.4	94.6	80	120						

Sample ID	N052034-009BMSD	SampType:	MSD	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164670		
Client ID:	ZZZZZZ	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768406		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Sulfate	1237.600	50	400.0	861.4	94.0	80	120	1240	0.164	20			

Sample ID	N052034-001BDUP	SampType:	DUP	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164670		
Client ID:	ZZZZZZ	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4768408		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Sulfate	227.538	10						228.9	0.614	20			

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	N051991-001BMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164670
Client ID:	ZZZZZZ	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4768418

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	116.115	5.0	40.00	77.68	96.1	80	120				

Sample ID	N051991-001BMSD	SampType:	MSD	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164670
Client ID:	ZZZZZZ	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4768419

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	117.364	5.0	40.00	77.68	99.2	80	120	116.1	1.07	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	MB-R164670_NO3	SampType:	MBLK	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	164670
Client ID:	PBW	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768371

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID	LCS-R164670_NO3	SampType:	LCS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	164670
Client ID:	LCSW	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768372

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.229	0.050	1.250	0	98.3	90	110				

Sample ID	N052034-002BDUP	SampType:	DUP	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	164670
Client ID:	ZZZZZZ	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768377

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.903	0.50						1.878	1.32	20	

Sample ID	N052034-009BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	164670
Client ID:	ZZZZZZ	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768379

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.718	0.50	12.50	0.9470	94.2	80	120				

Sample ID	N052034-009BMSD	SampType:	MSD	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	164670
Client ID:	ZZZZZZ	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768380

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.961	0.50	12.50	0.9470	96.1	80	120	12.72	1.89	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 12:17:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220809A**	QC Batch: **R164698**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/9/2022 07:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 1:05:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220809A**	QC Batch: **R164698**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 12:43 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-181-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 1:49:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220809A**	QC Batch: **R164698**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 12:58 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-218-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 2:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220809A**	QC Batch: **R164698**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 01:14 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 12:24:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220810A**	QC Batch: **R164722**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 07:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 12:59:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220810A**	QC Batch: **R164722**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 08:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 1:33:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220810A**	QC Batch: **R164722**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 07:17 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 2:11:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	6.8	50		mg/L	50	8/11/2022 05:55 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID **MB-R164698**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164698**
Client ID: **PBW**	Batch ID: **R164698**	TestNo: **SM 5310C**		Analysis Date: **8/9/2022**	SeqNo: **4770182**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID **LCS-R164698**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164698**
Client ID: **LCSW**	Batch ID: **R164698**	TestNo: **SM 5310C**		Analysis Date: **8/9/2022**	SeqNo: **4770183**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.004	1.0	5.000	0	100	85	115				

Sample ID **N051991-001CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164698**
Client ID: **ZZZZZZ**	Batch ID: **R164698**	TestNo: **SM 5310C**		Analysis Date: **8/9/2022**	SeqNo: **4770185**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.408	1.0	5.000	0.3415	101	75	125				

Sample ID **N051991-001CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164698**
Client ID: **ZZZZZZ**	Batch ID: **R164698**	TestNo: **SM 5310C**		Analysis Date: **8/9/2022**	SeqNo: **4770186**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.528	1.0	5.000	0.3415	104	75	125	5.408	2.21	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID	MB-R164722	SampType:	MBLK	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164722
Client ID:	PBW	Batch ID:	R164722	TestNo:	SM 5310C			Analysis Date:	8/10/2022	SeqNo:	4772638

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID	LCS-R164722	SampType:	LCS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164722
Client ID:	LCSW	Batch ID:	R164722	TestNo:	SM 5310C			Analysis Date:	8/10/2022	SeqNo:	4772639

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	4.987	1.0	5.000	0	99.7	85	115				

Sample ID	N051991-002CMS	SampType:	MS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164722
Client ID:	ZZZZZZ	Batch ID:	R164722	TestNo:	SM 5310C			Analysis Date:	8/10/2022	SeqNo:	4772641

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.807	1.0	5.000	1.022	95.7	75	125				

Sample ID	N051991-002CMSD	SampType:	MSD	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164722
Client ID:	ZZZZZZ	Batch ID:	R164722	TestNo:	SM 5310C			Analysis Date:	8/10/2022	SeqNo:	4772642

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	6.059	1.0	5.000	1.022	101	75	125	5.807	4.25	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID	MB-R164745	SampType:	MBLK	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164745
Client ID:	PBW	Batch ID:	R164745	TestNo:	SM 5310C			Analysis Date:	8/11/2022	SeqNo:	4775942

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID	LCS-R164745	SampType:	LCS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164745
Client ID:	LCSW	Batch ID:	R164745	TestNo:	SM 5310C			Analysis Date:	8/11/2022	SeqNo:	4775943

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.097	1.0	5.000	0	102	85	115				

Sample ID	N052034-009DMS	SampType:	MS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164745
Client ID:	ZZZZZZ	Batch ID:	R164745	TestNo:	SM 5310C			Analysis Date:	8/11/2022	SeqNo:	4775956

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	230.280	50	250.0	0	92.1	75	125				

Sample ID	N052034-009DMSD	SampType:	MSD	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164745
Client ID:	ZZZZZZ	Batch ID:	R164745	TestNo:	SM 5310C			Analysis Date:	8/11/2022	SeqNo:	4775957

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	233.585	50	250.0	0	93.4	75	125	230.3	1.42	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 12:17:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 02:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 1:05:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	27	13	20		µg/L	1	8/13/2022 02:09 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-181-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 1:49:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 02:14 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-218-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 2:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 02:19 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 12:24:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	27	13	20		µg/L	1	8/13/2022 02:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 12:59:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	400	13	20		µg/L	1	8/13/2022 02:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 1:33:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 02:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 2:11:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	61	13	20		µg/L	1	8/13/2022 02:47 PM

Qualifiers:				
	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	MB-94189	SampType:	MBLK	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	PBW	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777827

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID	LCS-94189	SampType:	LCS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	LCSW	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777828

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	107.402	20	100.0	0	107	85	115				

Sample ID	N052034-009CMS	SampType:	MS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	ZZZZZZ	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777841

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	109.068	20	100.0	61.13	47.9	75	125				S

Sample ID	N052034-009CMSD	SampType:	MSD	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	ZZZZZZ	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777842

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	103.353	20	100.0	61.13	42.2	75	125	109.1	5.38	20	S

Sample ID	N052058-010CMS	SampType:	MS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	ZZZZZZ	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777856

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	90.072	20	100.0	0	90.1	75	125				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	N052058-010CMSD	SampType:	MSD	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	ZZZZZZ	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777857

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	94.804	20	100.0	0	94.8	75	125	90.07	5.12	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	N052034-009C-PS	SampType:	PS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:		RunNo:	164812
Client ID:	ZZZZZZ	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777840

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	105.392	20	100.0	61.13	44.3	80	120				S

Sample ID	N052058-010C-PS	SampType:	PS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:		RunNo:	164812
Client ID:	ZZZZZZ	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777855

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	94.354	20	100.0	0	94.4	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052034-001

Client Sample ID: MW-76-039-Q322
Collection Date: 8/8/2022 12:17:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 03:44 PM
Barium	53	0.083	1.0		µg/L	1	8/13/2022 03:44 PM
Manganese	ND	0.026	0.50		µg/L	1	8/13/2022 03:44 PM
Molybdenum	23	0.12	0.50		µg/L	1	8/13/2022 03:44 PM
Selenium	3.7	0.044	0.50		µg/L	1	8/13/2022 03:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052034-002

Client Sample ID: MW-76-156-Q322
Collection Date: 8/8/2022 1:05:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 03:56 PM
Barium	44	0.083	1.0		µg/L	1	8/13/2022 03:56 PM
Manganese	130	0.026	0.50		µg/L	1	8/13/2022 03:56 PM
Molybdenum	27	0.12	0.50		µg/L	1	8/13/2022 03:56 PM
Selenium	0.93	0.044	0.50		µg/L	1	8/15/2022 05:14 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052034-003

Client Sample ID: MW-76-181-Q322
Collection Date: 8/8/2022 1:49:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 04:08 PM
Barium	54	0.083	1.0		µg/L	1	8/13/2022 04:08 PM
Manganese	9.6	0.026	0.50		µg/L	1	8/13/2022 04:08 PM
Molybdenum	30	0.12	0.50		µg/L	1	8/13/2022 04:08 PM
Selenium	1.2	0.044	0.50		µg/L	1	8/13/2022 04:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052034-004

Client Sample ID: MW-76-218-Q322
Collection Date: 8/8/2022 2:40:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 04:20 PM
Barium	73	0.083	1.0		µg/L	1	8/13/2022 04:20 PM
Manganese	350	0.13	2.5		µg/L	5	8/13/2022 04:44 PM
Molybdenum	33	0.12	0.50		µg/L	1	8/13/2022 04:20 PM
Selenium	0.74	0.044	0.50		µg/L	1	8/13/2022 04:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 12:24:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220829C**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Arsenic	2.3	0.050	0.10		µg/L	1	8/29/2022 01:52 PM
Barium	97	0.083	1.0		µg/L	1	8/13/2022 04:50 PM
Manganese	800	0.13	2.5		µg/L	5	8/13/2022 04:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 12:59:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 05:02 PM
Barium	42	0.083	1.0		µg/L	1	8/13/2022 05:02 PM
Manganese	53	0.026	0.50		µg/L	1	8/13/2022 05:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052034-008

Client Sample ID: MW-77-158-Q322
Collection Date: 8/8/2022 1:33:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 05:14 PM
Barium	46	0.083	1.0		µg/L	1	8/13/2022 05:14 PM
Manganese	64	0.026	0.50		µg/L	1	8/13/2022 05:14 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052034-009

Client Sample ID: MW-77-187-Q322
Collection Date: 8/8/2022 2:11:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220817B**	QC Batch: **94191**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/17/2022 06:27 PM
Barium	30	0.083	1.0		µg/L	1	8/13/2022 05:26 PM
Manganese	28	0.026	0.50		µg/L	1	8/13/2022 05:26 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID **MB-94191**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **PBW**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778847**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	ND	1.0									
Manganese	ND	0.50									
Molybdenum	ND	0.50									
Selenium	ND	0.50									

Sample ID **LCS-94191**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **LCSW**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778848**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.500	0.10	10.00	0	95.0	85	115				
Barium	9.348	1.0	10.00	0	93.5	85	115				
Manganese	94.570	0.50	100.0	0	94.6	85	115				
Molybdenum	9.339	0.50	10.00	0	93.4	85	115				
Selenium	8.934	0.50	10.00	0	89.3	85	115				

Sample ID **N052034-009CMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778872**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	38.488	1.0	10.00	30.16	83.3	75	125				
Manganese	114.915	0.50	100.0	27.82	87.1	75	125				
Molybdenum	157.700	0.50	10.00	147.1	106	75	125				

Sample ID **N052034-009CMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778874**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	37.579	1.0	10.00	30.16	74.2	75	125	38.49	2.39	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID **N052034-009CMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778874**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	112.223	0.50	100.0	27.82	84.4	75	125	114.9	2.37	20	
Molybdenum	153.687	0.50	10.00	147.1	66.2	75	125	157.7	2.58	20	S

Sample ID **N052058-010CMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778905**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.497	0.10	10.00	1.189	93.1	75	125				
Barium	43.883	1.0	10.00	35.47	84.1	75	125				
Molybdenum	14.259	0.50	10.00	4.272	99.9	75	125				
Selenium	8.682	0.50	10.00	0.06231	86.2	75	125				

Sample ID **N052058-010CMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778906**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	331.656	2.5	100.0	187.6	144	75	125				S

Sample ID **N052058-010CMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778907**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.421	0.10	10.00	1.189	92.3	75	125	10.50	0.723	20	
Barium	44.134	1.0	10.00	35.47	86.6	75	125	43.88	0.571	20	
Molybdenum	14.110	0.50	10.00	4.272	98.4	75	125	14.26	1.05	20	
Selenium	8.489	0.50	10.00	0.06231	84.3	75	125	8.682	2.26	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N052058-010CMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164826
Client ID:	ZZZZZZ	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778908

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	300.843	2.5	100.0	187.6	113	75	125	331.7	9.74	20	

Sample ID	MB-94191	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164874
Client ID:	PBW	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/15/2022	SeqNo:	4781827

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									

Sample ID	N052034-009CMS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164907
Client ID:	ZZZZZZ	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/17/2022	SeqNo:	4784566

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.289	0.10	10.00	0	123	75	125				
Selenium	10.317	0.50	10.00	1.039	92.8	75	125				

Sample ID	N052034-009CMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164907
Client ID:	ZZZZZZ	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/17/2022	SeqNo:	4784567

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	11.930	0.10	10.00	0	119	75	125	12.29	2.96	20	
Selenium	10.139	0.50	10.00	1.039	91.0	75	125	10.32	1.74	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID **N052034-009C-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164826**
Client ID: **ZZZZZZ** Batch ID: **94191** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/13/2022** SeqNo: **4778870**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	38.211	1.0	10.00	30.16	80.5	80	120				
Manganese	114.072	0.50	100.0	27.82	86.2	80	120				
Molybdenum	155.134	0.50	10.00	147.1	80.6	80	120				

Sample ID **N052058-010C-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164826**
Client ID: **ZZZZZZ** Batch ID: **94191** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/13/2022** SeqNo: **4778901**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.593	0.10	10.00	1.189	94.0	80	120				
Barium	44.040	1.0	10.00	35.47	85.7	80	120				
Molybdenum	14.257	0.50	10.00	4.272	99.9	80	120				
Selenium	8.412	0.50	10.00	0.06231	83.5	80	120				

Sample ID **N052058-010C-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164826**
Client ID: **ZZZZZZ** Batch ID: **94191** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/13/2022** SeqNo: **4778904**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	306.426	2.5	100.0	187.6	119	80	120				

Sample ID **N052034-009C-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164907**
Client ID: **ZZZZZZ** Batch ID: **94191** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/17/2022** SeqNo: **4784565**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	11.782	0.10	10.00	0	118	80	120				
Selenium	10.642	0.50	10.00	1.039	96.0	80	120				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

ASSET LABORATORIES

ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

Page 1 of 1

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement	QA/QC	Sample Receipt Condition
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD	RTNE	Y N
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker	RWQCB ✓	1. Chilled ✓
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Labspec	CalTrans	2. Headspace
Submitted By: Riggie Tap		Phone: 949-727-1400, ext 200 Fax:	Others ✓	LEVEL III	3. Container Intact ✓
Title: Field Tech	Phone: 916-786-3302 Fax:		Specify: RWQCB	LEVEL IV	4. Seal Present ✓
Signature: Date: 8/8/22	Sampled By: Riggie Tap		Global ID:	Regulatory	5. IR number 3
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of the sample. I am aware that tampering with or intentionally misleading the sample location, date or time of collection is considered fraud and may be grounds for			Specify State:	6. Method of Cooling: Ice
Project Name: PG&E Topock - PCM	Signature:	Date: 8/8/22			Sample Temp: 2.4°C
Project Number: 30121866.3Q22GW					Courier: Asset
					Tracking No.:

Matrix: Ground X | Sediment; Potable | Soil; NPDES | Other Solid; Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrite, Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter, HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052034-01	MW-76-039-0822	8/8/2022	12:17		X	X	X	X	X	X		X		E	7	P	BNS	
2	-02	MW-76-156-0822	8/8/2022	13:05		X	X	X	X	X	X		X		E	7	P	BNS	
3	-03	MW-76-181-0822	8/8/2022	13:49		X	X	X	X	X	X		X		E	7	P	BNS	
4	-04	MW-76-218-0822	8/8/2022	14:40		X	X	X	X	X	X		X		E	7	P	BNS	
5	-05	EB-709-Q322	8/8/2022	14:50		X									E	1	P	BNS	
6	-06	MW-77-046-0822	8/8/2022	12:24		X		X			X			X	E	6	P	BNS	
7	-07	MW-77-102-0822	8/8/2022	12:59		X		X			X			X	E	6	P	BNS	
8	-08	MW-77-158-0822	8/8/2022	13:33		X		X			X			X	E	6	P	BNS	
9	-09	MW-77-187-0822	8/8/2022	14:11		X		X			X			X	E	9	P	BNS	MS/MSD
10	-10	EB-710-Q322	8/8/2022	15:30		X									E	1	P	BNS	
11																			
12																			
13																			
14																			

Relinquished by (Signature and Printed Name): Riggie Tap	Date/Time: 8/8/22 1550	Received by (Signature and Printed Name):	Date/Time: 8/8/22 1550
Relinquished by (Signature and Printed Name):	Date/Time: 8/8/22 1756	Received by (Signature and Printed Name): Joandra Rodriguez	Date/Time: 8/8/22 1756
Relinquished by (Signature and Printed Name):	Date/Time:	Received by (Signature and Printed Name):	Date/Time:

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B	(NH4)2SO4/NH4OH		M=Metal	M=Metal	C=Can

White=Laboratory Copy

Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/8/2022	Workorder:	N052034
Rep sample Temp (Deg C):	2.1	IR Gun ID:	3
Temp Blank:	☑ Yes ☐ No		
Carrier name:	ASSET		
Last 4 digits of Tracking No.:	NA	Packing Material Used:	None
Cooling process:	☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None		

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☐	No ☑	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☑	No ☐	NA ☐
Was Client notified?	Yes ☑	No ☐	NA ☐

Comments: See Correspondence.

For:

Checklist Completed By: YR EFanegF 8/9/2022

Reviewed By: for: MBC 8/11/2022

Subject: RE: PG&E Topock - PCM, 30121866.3Q22GW (ASSET Labs No. N052034)
From: "Madsen, Laura" <Laura.Madsen@arcadis.com>
Date: 8/9/2022, 1:03 PM
To: Yoandra Rodriguez <yoandra@assetlaboratories.com>
CC: "maryann.balilu@assetlaboratoriesph.com" <maryann.balilu@assetlaboratoriesph.com>, Tina Rice <Tina.Rice@critigen.com>

Hi Yoandra,
The labels are correct and the Sample IDs should be “Q322”. Today’s samples will have the same error. I’ll get the COCs changed for tomorrow, sorry about that.

Thanks!
Laura

From: Yoandra Rodriguez <yoandra@assetlaboratories.com>
Sent: Tuesday, August 9, 2022 3:02 PM
To: Madsen, Laura <Laura.Madsen@arcadis.com>
Cc: maryann.balilu@assetlaboratoriesph.com; Tina Rice <Tina.Rice@critigen.com>
Subject: PG&E Topock - PCM, 30121866.3Q22GW (ASSET Labs No. N052034)

Hi Laura,

Please, kindly confirm if sample IDs should be "0822" per COC or "Q322" per labels.

EB samples are correct.

--
Thanks,

Yoandra Rodriguez
Project Manager

Nevada: 3151 W. Post Road, Las Vegas, NV 89118 | P: 702.307.2659 | F: 702.307.2691
California: 11110 Artesia Blvd., Ste. B, Cerritos, CA 90703 | P: 562.219.7435 | F: 562.219.7436

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ASSET Laboratories

WORK ORDER Summary

09-Aug-22

WorkOrder: N052034

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/8/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052034-001A	MW-76-039-Q322	8/8/2022 12:17:00 PM	8/22/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052034-001B			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052034-001C			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052034-001D			8/22/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052034-001E			8/22/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052034-002A	MW-76-156-Q322	8/8/2022 1:05:00 PM	8/22/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052034-002B			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052034-002C			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052034-002D			8/22/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

09-Aug-22

WorkOrder: N052034

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/8/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052034-002E	MW-76-156-Q322	8/8/2022 1:05:00 PM	8/22/2022	Groundwater	SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052034-003A	MW-76-181-Q322	8/8/2022 1:49:00 PM	8/22/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052034-003B			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052034-003C			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052034-003D			8/22/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052034-003E			8/22/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052034-004A	MW-76-218-Q322	8/8/2022 2:40:00 PM	8/22/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052034-004B			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052034-004C			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

09-Aug-22

WorkOrder: N052034

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/8/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052034-004D	MW-76-218-Q322	8/8/2022 2:40:00 PM	8/22/2022	Groundwater	SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052034-004E			8/22/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052034-005A	EB-709-Q322	8/8/2022 2:50:00 PM	8/22/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052034-006A	MW-77-046-Q322	8/8/2022 12:24:00 PM	8/22/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052034-006B			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052034-006C			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052034-006D			8/22/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052034-007A	MW-77-102-Q322	8/8/2022 12:59:00 PM	8/22/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052034-007B			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052034-007C			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052034-007D			8/22/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052034-008A	MW-77-158-Q322	8/8/2022 1:33:00 PM	8/22/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052034-008B			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

09-Aug-22

WorkOrder: N052034

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/8/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052034-008C	MW-77-158-Q322	8/8/2022 1:33:00 PM	8/22/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052034-008D			8/22/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052034-009A	MW-77-187-Q322	8/8/2022 2:11:00 PM	8/22/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☑	☐	WW
N052034-009B			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
N052034-009C			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			8/22/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☑	☐	WW
			8/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☑	☐	WW
N052034-009D			8/22/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☑	☐	VW
N052034-010A	EB-710-Q322	8/8/2022 3:30:00 PM	8/22/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052034-011A	FOLDER	8/22/2022	8/22/2022		Folder	Folder	☐	☐	☐	LAB
			8/22/2022		Folder	Level IV Report	☐	☐	☐	LAB
			8/22/2022		Folder	Folder	☐	☐	☐	LAB

ASSET Laboratories
3151-3153 W Post Rd., Las Vegas, NV 89118
www.atl-labs.com
TEL: 7023072659 *FAX: 7023072691*

CHAIN-OF-CUSTODY RECORD

QC Level: Level IV

Subcontractor:
BC Labs
4100 Atlas Court
Bakersfield, CA 93308

TEL: (661) 327-4911
FAX: (661) 327-1918
Acct #:

Field Sampler: Riggie Tep

10-Aug-22

Sample ID	Matrix	Date Collected	Bottle Type	Ammonia ~~SM4500-NH3D~~	Requested Tests	
N052034-001E / MW-76-039-Q322	Groundwater	8/8/2022 12:17:00 PM	16OZP	1		
N052034-002E / MW-76-156-Q322	Groundwater	8/8/2022 1:05:00 PM	16OZP	1		
N052034-003E / MW-76-181-Q322	Groundwater	8/8/2022 1:49:00 PM	16OZP	1		
N052034-004E / MW-76-218-Q322	Groundwater	8/8/2022 2:40:00 PM	16OZP	1		

General Comments: PLEASE EMAIL SAMPLE RECEIPT ACKNOWLEDGEMENT TO THE PM. ALWAYS CC: sonny.lorenzo@assetlaboratories.com

Please use PO#:N52034A Please email Invoices and Account Receivable Statements to elvira@assetlaboratories.com. For questions, call Marlon at (702)-307-2659. Please e-mail results to reports.lv@assetlaboratories.com by: Standard TAT.

Please analyze for Ammonia. EDD requirement Labspec7 edata.

GSO #: 557512000

		Date/Time			Date/Time
Relinquished by:	YLJ	8/10/2022 1630	**Received by:**		
Relinquished by:			**Received by:**		

August 30, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052058

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 09, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Subcontracted Analyses:

Ammonia was subcontracted to BC Labs- Bakersfield,CA.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for EPA 6010B_Dissolved:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Iron in QC samples N052034-009CMS, N052034-009CMSD and N052065-001BMSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020_Dissolved:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for some analytes in QC samples N052034-009CMS, N052034-009CMSD, N052058-010CMS, N052065-001BMS and N052065-001BMSD possibly due to matrix interference. Post Spike (PS) passed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for SM 5310C:

Matrix Spike (MS) is outside recovery criteria in QC sample N052034-009DMS at lower dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N052034-009 and MS/MSD were reported at 50x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Matrix Spike (MS) is outside recovery criteria in QC sample N052282-007CMS at lower dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N052282-007 and MS/MSD were reported at 50x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052058
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052058-001A	TW-02D-Q322	Groundwater	8/9/2022 8:35:00 AM	8/9/2022	8/30/2022
N052058-001B	TW-02D-Q322	Groundwater	8/9/2022 8:35:00 AM	8/9/2022	8/30/2022
N052058-001C	TW-02D-Q322	Groundwater	8/9/2022 8:35:00 AM	8/9/2022	8/30/2022
N052058-001D	TW-02D-Q322	Groundwater	8/9/2022 8:35:00 AM	8/9/2022	8/30/2022
N052058-001E	TW-02D-Q322	Groundwater	8/9/2022 8:35:00 AM	8/9/2022	8/30/2022
N052058-002A	TW-02S-Q322	Groundwater	8/9/2022 8:04:00 AM	8/9/2022	8/30/2022
N052058-002B	TW-02S-Q322	Groundwater	8/9/2022 8:04:00 AM	8/9/2022	8/30/2022
N052058-002C	TW-02S-Q322	Groundwater	8/9/2022 8:04:00 AM	8/9/2022	8/30/2022
N052058-002D	TW-02S-Q322	Groundwater	8/9/2022 8:04:00 AM	8/9/2022	8/30/2022
N052058-002E	TW-02S-Q322	Groundwater	8/9/2022 8:04:00 AM	8/9/2022	8/30/2022
N052058-003A	TW-03D-Q322	Groundwater	8/9/2022 9:06:00 AM	8/9/2022	8/30/2022
N052058-003B	TW-03D-Q322	Groundwater	8/9/2022 9:06:00 AM	8/9/2022	8/30/2022
N052058-003C	TW-03D-Q322	Groundwater	8/9/2022 9:06:00 AM	8/9/2022	8/30/2022
N052058-003D	TW-03D-Q322	Groundwater	8/9/2022 9:06:00 AM	8/9/2022	8/30/2022
N052058-003E	TW-03D-Q322	Groundwater	8/9/2022 9:06:00 AM	8/9/2022	8/30/2022
N052058-004A	MW-20-070-Q322	Groundwater	8/9/2022 10:10:00 AM	8/9/2022	8/30/2022
N052058-004B	MW-20-070-Q322	Groundwater	8/9/2022 10:10:00 AM	8/9/2022	8/30/2022
N052058-004C	MW-20-070-Q322	Groundwater	8/9/2022 10:10:00 AM	8/9/2022	8/30/2022
N052058-004D	MW-20-070-Q322	Groundwater	8/9/2022 10:10:00 AM	8/9/2022	8/30/2022
N052058-004E	MW-20-070-Q322	Groundwater	8/9/2022 10:10:00 AM	8/9/2022	8/30/2022
N052058-005A	MW-910-Q322	Groundwater	8/9/2022 10:20:00 AM	8/9/2022	8/30/2022
N052058-005B	MW-910-Q322	Groundwater	8/9/2022 10:20:00 AM	8/9/2022	8/30/2022
N052058-005C	MW-910-Q322	Groundwater	8/9/2022 10:20:00 AM	8/9/2022	8/30/2022
N052058-005D	MW-910-Q322	Groundwater	8/9/2022 10:20:00 AM	8/9/2022	8/30/2022
N052058-005E	MW-910-Q322	Groundwater	8/9/2022 10:20:00 AM	8/9/2022	8/30/2022
N052058-006A	MW-20-100-Q322	Groundwater	8/9/2022 11:44:00 AM	8/9/2022	8/30/2022
N052058-006B	MW-20-100-Q322	Groundwater	8/9/2022 11:44:00 AM	8/9/2022	8/30/2022
N052058-006C	MW-20-100-Q322	Groundwater	8/9/2022 11:44:00 AM	8/9/2022	8/30/2022
N052058-006D	MW-20-100-Q322	Groundwater	8/9/2022 11:44:00 AM	8/9/2022	8/30/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052058
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052058-006E	MW-20-100-Q322	Groundwater	8/9/2022 11:44:00 AM	8/9/2022	8/30/2022
N052058-007A	MW-20-130-Q322	Groundwater	8/9/2022 10:55:00 AM	8/9/2022	8/30/2022
N052058-007B	MW-20-130-Q322	Groundwater	8/9/2022 10:55:00 AM	8/9/2022	8/30/2022
N052058-007C	MW-20-130-Q322	Groundwater	8/9/2022 10:55:00 AM	8/9/2022	8/30/2022
N052058-007D	MW-20-130-Q322	Groundwater	8/9/2022 10:55:00 AM	8/9/2022	8/30/2022
N052058-007E	MW-20-130-Q322	Groundwater	8/9/2022 10:55:00 AM	8/9/2022	8/30/2022
N052058-008A	EB-711-Q322	Groundwater	8/9/2022 12:00:00 PM	8/9/2022	8/30/2022
N052058-009A	MW-39-040-Q322	Groundwater	8/9/2022 8:13:00 AM	8/9/2022	8/30/2022
N052058-009B	MW-39-040-Q322	Groundwater	8/9/2022 8:13:00 AM	8/9/2022	8/30/2022
N052058-009C	MW-39-040-Q322	Groundwater	8/9/2022 8:13:00 AM	8/9/2022	8/30/2022
N052058-009D	MW-39-040-Q322	Groundwater	8/9/2022 8:13:00 AM	8/9/2022	8/30/2022
N052058-010A	MW-39-050-Q322	Groundwater	8/9/2022 9:38:00 AM	8/9/2022	8/30/2022
N052058-010B	MW-39-050-Q322	Groundwater	8/9/2022 9:38:00 AM	8/9/2022	8/30/2022
N052058-010C	MW-39-050-Q322	Groundwater	8/9/2022 9:38:00 AM	8/9/2022	8/30/2022
N052058-010D	MW-39-050-Q322	Groundwater	8/9/2022 9:38:00 AM	8/9/2022	8/30/2022
N052058-011A	MW-39-060-Q322	Groundwater	8/9/2022 11:00:00 AM	8/9/2022	8/30/2022
N052058-011B	MW-39-060-Q322	Groundwater	8/9/2022 11:00:00 AM	8/9/2022	8/30/2022
N052058-011C	MW-39-060-Q322	Groundwater	8/9/2022 11:00:00 AM	8/9/2022	8/30/2022
N052058-011D	MW-39-060-Q322	Groundwater	8/9/2022 11:00:00 AM	8/9/2022	8/30/2022
N052058-012A	MW-39-070-Q322	Groundwater	8/9/2022 8:54:00 AM	8/9/2022	8/30/2022
N052058-012B	MW-39-070-Q322	Groundwater	8/9/2022 8:54:00 AM	8/9/2022	8/30/2022
N052058-012C	MW-39-070-Q322	Groundwater	8/9/2022 8:54:00 AM	8/9/2022	8/30/2022
N052058-012D	MW-39-070-Q322	Groundwater	8/9/2022 8:54:00 AM	8/9/2022	8/30/2022
N052058-013A	MW-915-Q322	Groundwater	8/9/2022 9:04:00 AM	8/9/2022	8/30/2022
N052058-013B	MW-915-Q322	Groundwater	8/9/2022 9:04:00 AM	8/9/2022	8/30/2022
N052058-013C	MW-915-Q322	Groundwater	8/9/2022 9:04:00 AM	8/9/2022	8/30/2022
N052058-013D	MW-915-Q322	Groundwater	8/9/2022 9:04:00 AM	8/9/2022	8/30/2022
N052058-014A	MW-39-080-Q322	Groundwater	8/9/2022 10:20:00 AM	8/9/2022	8/30/2022
N052058-014B	MW-39-080-Q322	Groundwater	8/9/2022 10:20:00 AM	8/9/2022	8/30/2022
N052058-014C	MW-39-080-Q322	Groundwater	8/9/2022 10:20:00 AM	8/9/2022	8/30/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052058
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052058-014D	MW-39-080-Q322	Groundwater	8/9/2022 10:20:00 AM	8/9/2022	8/30/2022
N052058-015A	MW-39-100-Q322	Groundwater	8/9/2022 11:53:00 AM	8/9/2022	8/30/2022
N052058-015B	MW-39-100-Q322	Groundwater	8/9/2022 11:53:00 AM	8/9/2022	8/30/2022
N052058-015C	MW-39-100-Q322	Groundwater	8/9/2022 11:53:00 AM	8/9/2022	8/30/2022
N052058-015D	MW-39-100-Q322	Groundwater	8/9/2022 11:53:00 AM	8/9/2022	8/30/2022
N052058-016A	EB-712-Q322	Groundwater	8/9/2022 12:10:00 PM	8/9/2022	8/30/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02D-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 8:35:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	200	1.3	10		µg/L	50	8/10/2022 09:24 PM
DISSOLVED METALS BY ICP-MS							
		EPA 3010A	**EPA 6020**				
RunID: **NV00922-ICP8_220813B**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Chromium	210	0.18	5.0		µg/L	5	8/13/2022 06:43 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02S-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 8:04:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	130	0.50	4.0		µg/L	20	8/10/2022 05:01 PM
DISSOLVED METALS BY ICP-MS							
		EPA 3010A			**EPA 6020**		
RunID: **NV00922-ICP8_220813B**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Chromium	130	0.035	1.0		µg/L	1	8/13/2022 07:18 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-03D-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 9:06:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	160	1.3	10		µg/L	50	8/10/2022 09:43 PM
DISSOLVED METALS BY ICP-MS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220813B**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Chromium	150	0.035	1.0		µg/L	1	8/13/2022 07:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-070-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	700	2.5	20		µg/L	100	8/10/2022 05:20 PM
DISSOLVED METALS BY ICP-MS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220813B**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Chromium	720	0.18	5.0		µg/L	5	8/13/2022 07:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-910-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A** QC Batch: **R164784**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	690	2.5	20		µg/L	100	8/10/2022 11:08 PM
DISSOLVED METALS BY ICP-MS							
			EPA 3010A		**EPA 6020**		
RunID: **NV00922-ICP8_220813B** QC Batch: **94191**				PrepDate:	**8/11/2022**		Analyst: **DJ**
Chromium	680	0.18	5.0		µg/L	5	8/13/2022 08:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-100-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 11:44:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	1600	5.0	40		µg/L	200	8/10/2022 05:29 PM
DISSOLVED METALS BY ICP-MS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220815B**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Chromium	1700	0.88	25		µg/L	25	8/15/2022 06:31 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-130-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:55:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	1800	5.0	40		µg/L	200	8/10/2022 05:39 PM
DISSOLVED METALS BY ICP-MS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220815B**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Chromium	1700	0.88	25		µg/L	25	8/15/2022 06:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-711-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 12:00:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/10/2022 08:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-040-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 8:13:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/10/2022 06:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 9:38:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/10/2022 04:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-060-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 11:00:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/10/2022 07:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-070-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 8:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/10/2022 07:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-915-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 9:04:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/10/2022 08:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	0.53	0.025	0.20		µg/L	1	8/10/2022 11:36 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 11:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	79	0.25	2.0		µg/L	10	8/11/2022 12:14 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-712-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 12:10:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/10/2022 09:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	MB-R164784	SampType:	MBLK	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164784
Client ID:	PBW	Batch ID:	R164784	TestNo:	EPA 218.6			Analysis Date:	8/10/2022	SeqNo:	4776220

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID	LCS-R164784	SampType:	LCS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164784
Client ID:	LCSW	Batch ID:	R164784	TestNo:	EPA 218.6			Analysis Date:	8/10/2022	SeqNo:	4776221

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.207	0.20	5.000	0	104	90	110				

Sample ID	N052058-010AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164784
Client ID:	ZZZZZZ	Batch ID:	R164784	TestNo:	EPA 218.6			Analysis Date:	8/10/2022	SeqNo:	4776230

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.032	0.20	1.000	0	103	90	110				

Sample ID	N052058-010AMSD	SampType:	MSD	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164784
Client ID:	ZZZZZZ	Batch ID:	R164784	TestNo:	EPA 218.6			Analysis Date:	8/10/2022	SeqNo:	4776231

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.041	0.20	1.000	0	104	90	110	1.032	0.945	20	

Sample ID	N052058-009AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164784
Client ID:	ZZZZZZ	Batch ID:	R164784	TestNo:	EPA 218.6			Analysis Date:	8/10/2022	SeqNo:	4776233

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.064	0.20	1.000	0	106	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052058-011AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164784
Client ID:	ZZZZZZ	Batch ID:	R164784	TestNo:	EPA 218.6			Analysis Date:	8/10/2022	SeqNo:	4776235

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.036	0.20	1.000	0	104	90	110				

Sample ID	N052058-012AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164784
Client ID:	ZZZZZZ	Batch ID:	R164784	TestNo:	EPA 218.6			Analysis Date:	8/10/2022	SeqNo:	4776237

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.030	0.20	1.000	0	103	90	110				

Sample ID	N052058-013AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164784
Client ID:	ZZZZZZ	Batch ID:	R164784	TestNo:	EPA 218.6			Analysis Date:	8/10/2022	SeqNo:	4776241

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.053	0.20	1.000	0	105	90	110				

Sample ID	N052058-008AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164784
Client ID:	ZZZZZZ	Batch ID:	R164784	TestNo:	EPA 218.6			Analysis Date:	8/10/2022	SeqNo:	4776243

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.013	0.20	1.000	0	101	90	110				

Sample ID	N052058-016AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164784
Client ID:	ZZZZZZ	Batch ID:	R164784	TestNo:	EPA 218.6			Analysis Date:	8/10/2022	SeqNo:	4776245

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.035	0.20	1.000	0	104	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **N052058-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164784**
Client ID: **ZZZZZZ** Batch ID: **R164784** TestNo: **EPA 218.6** Analysis Date: **8/10/2022** SeqNo: **4776247**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	455.705	10	250.0	197.6	103	90	110				

Sample ID **N052058-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164784**
Client ID: **ZZZZZZ** Batch ID: **R164784** TestNo: **EPA 218.6** Analysis Date: **8/10/2022** SeqNo: **4776249**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	424.500	10	250.0	163.3	104	90	110				

Sample ID **N052058-002AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164784**
Client ID: **ZZZZZZ** Batch ID: **R164784** TestNo: **EPA 218.6** Analysis Date: **8/10/2022** SeqNo: **4776252**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	239.034	4.0	100.0	132.7	106	90	110				

Sample ID **N052058-006ADUP** SampType: **DUP** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164784**
Client ID: **ZZZZZZ** Batch ID: **R164784** TestNo: **EPA 218.6** Analysis Date: **8/10/2022** SeqNo: **4776253**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1612.460	40						1628	0.990	20	

Sample ID **N052058-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164784**
Client ID: **ZZZZZZ** Batch ID: **R164784** TestNo: **EPA 218.6** Analysis Date: **8/10/2022** SeqNo: **4776254**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2634.620	40	1000	1628	101	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **N052058-007AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164784**
Client ID: **ZZZZZZ**	Batch ID: **R164784**	TestNo: **EPA 218.6**		Analysis Date: **8/10/2022**	SeqNo: **4776255**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2796.740	40	1000	1775	102	90	110				

Sample ID **N052058-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164784**
Client ID: **ZZZZZZ**	Batch ID: **R164784**	TestNo: **EPA 218.6**		Analysis Date: **8/10/2022**	SeqNo: **4776256**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1200.030	20	500.0	696.2	101	90	110				

Sample ID **N052058-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164784**
Client ID: **ZZZZZZ**	Batch ID: **R164784**	TestNo: **EPA 218.6**		Analysis Date: **8/10/2022**	SeqNo: **4776258**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1201.260	20	500.0	688.1	103	90	110				

Sample ID **N052058-014AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164784**
Client ID: **ZZZZZZ**	Batch ID: **R164784**	TestNo: **EPA 218.6**		Analysis Date: **8/10/2022**	SeqNo: **4776260**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.560	0.20	1.000	0.5273	103	90	110				

Sample ID **N052058-015AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164784**
Client ID: **ZZZZZZ**	Batch ID: **R164784**	TestNo: **EPA 218.6**		Analysis Date: **8/11/2022**	SeqNo: **4776264**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	128.684	2.0	50.00	78.55	100	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020DIS_CrPGE_TPK

Sample ID	MB-94191	SampType:	MBLK	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164825
Client ID:	PBW	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778690

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									

Sample ID	LCS-94191	SampType:	LCS	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164825
Client ID:	LCSW	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778691

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.518	1.0	10.00	0	95.2	85	115				

Sample ID	N052034-009CMS	SampType:	MS	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164825
Client ID:	ZZZZZZ	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778715

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	18.034	1.0	10.00	8.786	92.5	75	125				

Sample ID	N052034-009CMSD	SampType:	MSD	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164825
Client ID:	ZZZZZZ	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778717

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	17.484	1.0	10.00	8.786	87.0	75	125	18.03	3.10	20	

Sample ID	N052058-010CMS	SampType:	MS	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164825
Client ID:	ZZZZZZ	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778748

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.667	1.0	10.00	0.3644	93.0	75	125				

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020DIS_CrPGE_TPK

Sample ID **N052058-010CMSD**	SampType: **MSD**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164825**				
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778750**				

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.827	1.0	10.00	0.3644	94.6	75	125	9.667	1.64	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-001

Client Sample ID: TW-02D-Q322
Collection Date: 8/9/2022 8:35:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/9/2022 11:41 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Sulfate	650	6.1	50		mg/L	100	8/10/2022 04:57 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrate as N	1.5	0.095	0.50		mg/L	10	8/9/2022 11:41 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-002

Client Sample ID: TW-02S-Q322
Collection Date: 8/9/2022 8:04:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/9/2022 09:35 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Sulfate	170	1.2	10		mg/L	20	8/10/2022 05:13 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrate as N	3.0	0.095	0.50		mg/L	10	8/9/2022 09:35 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-003

Client Sample ID: TW-03D-Q322
Collection Date: 8/9/2022 9:06:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/9/2022 11:10 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Sulfate	660	6.1	50		mg/L	100	8/10/2022 05:29 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrate as N	1.6	0.095	0.50		mg/L	10	8/9/2022 11:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-004

Client Sample ID: MW-20-070-Q322
Collection Date: 8/9/2022 10:10:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/9/2022 11:57 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Sulfate	690	3.0	25		mg/L	50	8/10/2022 05:45 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrate as N	40	0.19	1.0		mg/L	20	8/10/2022 01:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-005

Client Sample ID: MW-910-Q322
Collection Date: 8/9/2022 10:20:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/10/2022 12:45 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Sulfate	690	3.0	25		mg/L	50	8/10/2022 06:01 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrate as N	39	0.19	1.0		mg/L	20	8/10/2022 01:16 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-006

Client Sample ID: MW-20-100-Q322
Collection Date: 8/9/2022 11:44:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY				**EPA 300.0**			
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/10/2022 01:32 AM
ANIONS BY ION CHROMATOGRAPHY				**EPA 300.0**			
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Sulfate	650	6.1	50		mg/L	100	8/10/2022 06:16 AM
ANIONS BY ION CHROMATOGRAPHY				**EPA 300.0**			
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrate as N	8.2	0.095	0.50		mg/L	10	8/10/2022 01:32 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-007

Client Sample ID: MW-20-130-Q322
Collection Date: 8/9/2022 10:55:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/10/2022 01:48 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Sulfate	1100	6.1	50		mg/L	100	8/10/2022 07:04 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrate as N	5.3	0.095	0.50		mg/L	10	8/10/2022 01:48 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-009

Client Sample ID: MW-39-040-Q322
Collection Date: 8/9/2022 8:13:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Sulfate	120	1.2	10		mg/L	20	8/10/2022 07:20 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/10/2022 02:04 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 9:38:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Sulfate	180	1.2	10		mg/L	20	8/10/2022 04:10 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/9/2022 10:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-060-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 11:00:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Sulfate	200	1.2	10		mg/L	20	8/10/2022 07:35 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/10/2022 02:19 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-012

Client Sample ID: MW-39-070-Q322
Collection Date: 8/9/2022 8:54:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Sulfate	240	3.0	25		mg/L	50	8/10/2022 07:51 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/10/2022 02:35 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-013

Client Sample ID: MW-915-Q322
Collection Date: 8/9/2022 9:04:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Sulfate	240	3.0	25		mg/L	50	8/10/2022 08:07 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/10/2022 02:51 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-014

Client Sample ID: MW-39-080-Q322
Collection Date: 8/9/2022 10:20:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Sulfate	350	3.0	25		mg/L	50	8/10/2022 08:23 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/10/2022 03:07 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 11:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Sulfate	750	6.1	50		mg/L	100	8/10/2022 08:39 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/10/2022 03:54 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_NO2PGE

Sample ID	MB-R164706_NO2	SampType:	MBLK	TestCode:	300_W_NO2P	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	PBW	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770520

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	ND	0.50									

Sample ID	LCS-R164706_NO2	SampType:	LCS	TestCode:	300_W_NO2P	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	LCSW	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770521

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	1.216	0.50	1.250	0	97.3	90	110				

Sample ID	N052058-002BMS	SampType:	MS	TestCode:	300_W_NO2P	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	ZZZZZZ	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770525

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	14.683	5.0	12.50	0	117	80	120				

Sample ID	N052058-002BMSD	SampType:	MSD	TestCode:	300_W_NO2P	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	ZZZZZZ	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770526

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	13.502	5.0	12.50	0	108	80	120	14.68	8.38	20	

Sample ID	N052058-003BDUP	SampType:	DUP	TestCode:	300_W_NO2P	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	ZZZZZZ	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770528

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	ND	5.0						0	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	MB-R164706_SO4	SampType:	MBLK	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	PBW	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770661

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.50									

Sample ID	LCS-R164706_SO4	SampType:	LCS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	LCSW	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770662

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	3.881	0.50	4.000	0	97.0	90	110				

Sample ID	N051991-002BMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	ZZZZZZ	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770664

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	160.822	5.0	40.00	121.0	99.7	80	120				

Sample ID	N051991-002BMSD	SampType:	MSD	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	ZZZZZZ	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770665

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	157.889	5.0	40.00	121.0	92.3	80	120	160.8	1.84	20	

Sample ID	N051991-004BDUP	SampType:	DUP	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	ZZZZZZ	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770669

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	69.374	5.0						69.68	0.436	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	N052058-010BMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	ZZZZZZ	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/10/2022	SeqNo:	4770678

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	256.798	10	80.00	183.4	91.7	80	120				

Sample ID	N052058-010BMSD	SampType:	MSD	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	ZZZZZZ	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/10/2022	SeqNo:	4770679

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	258.162	10	80.00	183.4	93.4	80	120	256.8	0.530	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	MB-R164706_NO3	SampType:	MBLK	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	PBW	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770546

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	0.024	0.050									

Sample ID	LCS-R164706_NO3	SampType:	LCS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	LCSW	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770547

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.237	0.050	1.250	0	99.0	90	110				

Sample ID	N052058-002BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	ZZZZZZ	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770551

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	15.481	0.50	12.50	3.029	99.6	80	120				

Sample ID	N052058-002BMSD	SampType:	MSD	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	ZZZZZZ	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770552

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	14.324	0.50	12.50	3.029	90.4	80	120	15.48	7.76	20	

Sample ID	N052058-010BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	ZZZZZZ	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770554

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.105	0.25	6.250	0.08750	96.3	80	120				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID **N052058-010BMSD**	SampType: **MSD**	TestCode: **300WLLNO3**	Units: **mg/L**	Prep Date:	RunNo: **164706**
Client ID: **ZZZZZZ**	Batch ID: **R164706**	TestNo: **EPA 300.0**		Analysis Date: **8/9/2022**	SeqNo: **4770555**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.209	0.25	6.250	0.08750	97.9	80	120	6.105	1.69	20	

Sample ID **N052058-003BDUP**	SampType: **DUP**	TestCode: **300WLLNO3**	Units: **mg/L**	Prep Date:	RunNo: **164706**
Client ID: **ZZZZZZ**	Batch ID: **R164706**	TestNo: **EPA 300.0**		Analysis Date: **8/9/2022**	SeqNo: **4770557**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.619	0.50						1.595	1.49	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02D-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 8:35:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220810A**	QC Batch: **R164722**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 08:19 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02S-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 8:04:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220810A**	QC Batch: **R164722**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 08:35 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-03D-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 9:06:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220810A**	QC Batch: **R164722**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 08:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-070-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220810A**	QC Batch: **R164722**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 09:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-910-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220810A**	QC Batch: **R164722**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 09:21 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-100-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 11:44:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220810A**	QC Batch: **R164722**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 09:37 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-130-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:55:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220810A**	QC Batch: **R164722**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 09:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-040-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 8:13:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220810A**	QC Batch: **R164722**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	2.7	0.14	1.0		mg/L	1	8/10/2022 10:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 9:38:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 12:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-060-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 11:00:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220810A**	QC Batch: **R164722**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 10:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-070-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 8:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/25/2022 10:41 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-915-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 9:04:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/25/2022 10:25 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 03:49 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 11:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 04:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID **MB-R164722**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164722**
Client ID: **PBW**	Batch ID: **R164722**	TestNo: **SM 5310C**		Analysis Date: **8/10/2022**	SeqNo: **4772638**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID **LCS-R164722**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164722**
Client ID: **LCSW**	Batch ID: **R164722**	TestNo: **SM 5310C**		Analysis Date: **8/10/2022**	SeqNo: **4772639**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	4.987	1.0	5.000	0	99.7	85	115				

Sample ID **N051991-002CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164722**
Client ID: **ZZZZZZ**	Batch ID: **R164722**	TestNo: **SM 5310C**		Analysis Date: **8/10/2022**	SeqNo: **4772641**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.807	1.0	5.000	1.022	95.7	75	125				

Sample ID **N051991-002CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164722**
Client ID: **ZZZZZZ**	Batch ID: **R164722**	TestNo: **SM 5310C**		Analysis Date: **8/10/2022**	SeqNo: **4772642**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	6.059	1.0	5.000	1.022	101	75	125	5.807	4.25	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID	MB-R164745	SampType:	MBLK	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164745
Client ID:	PBW	Batch ID:	R164745	TestNo:	SM 5310C			Analysis Date:	8/11/2022	SeqNo:	4775942

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID	LCS-R164745	SampType:	LCS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164745
Client ID:	LCSW	Batch ID:	R164745	TestNo:	SM 5310C			Analysis Date:	8/11/2022	SeqNo:	4775943

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.097	1.0	5.000	0	102	85	115				

Sample ID	N052034-009DMS	SampType:	MS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164745
Client ID:	ZZZZZZ	Batch ID:	R164745	TestNo:	SM 5310C			Analysis Date:	8/11/2022	SeqNo:	4775956

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	230.280	50	250.0	0	92.1	75	125				

Sample ID	N052034-009DMSD	SampType:	MSD	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164745
Client ID:	ZZZZZZ	Batch ID:	R164745	TestNo:	SM 5310C			Analysis Date:	8/11/2022	SeqNo:	4775957

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	233.585	50	250.0	0	93.4	75	125	230.3	1.42	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID	MB-R164829	SampType:	MBLK	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164829
Client ID:	PBW	Batch ID:	R164829	TestNo:	SM 5310C			Analysis Date:	8/12/2022	SeqNo:	4779023

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID	LCS-R164829	SampType:	LCS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164829
Client ID:	LCSW	Batch ID:	R164829	TestNo:	SM 5310C			Analysis Date:	8/12/2022	SeqNo:	4779024

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.050	1.0	5.000	0	101	85	115				

Sample ID	N052058-010DMS	SampType:	MS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164829
Client ID:	ZZZZZZ	Batch ID:	R164829	TestNo:	SM 5310C			Analysis Date:	8/12/2022	SeqNo:	4779026

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.246	1.0	5.000	0.8311	88.3	75	125				

Sample ID	N052058-010DMSD	SampType:	MSD	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164829
Client ID:	ZZZZZZ	Batch ID:	R164829	TestNo:	SM 5310C			Analysis Date:	8/12/2022	SeqNo:	4779029

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.153	1.0	5.000	0.8311	86.4	75	125	5.246	1.78	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID	MB-R165151	SampType:	MBLK	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	165151
Client ID:	PBW	Batch ID:	R165151	TestNo:	SM 5310C			Analysis Date:	8/25/2022	SeqNo:	4800089

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID	LCS-R165151	SampType:	LCS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	165151
Client ID:	LCSW	Batch ID:	R165151	TestNo:	SM 5310C			Analysis Date:	8/25/2022	SeqNo:	4800090

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.184	1.0	5.000	0	104	85	115				

Sample ID	N052282-007CMS	SampType:	MS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	165151
Client ID:	ZZZZZZ	Batch ID:	R165151	TestNo:	SM 5310C			Analysis Date:	8/25/2022	SeqNo:	4800109

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	232.730	50	250.0	0	93.1	75	125				

Sample ID	N052282-007CMSD	SampType:	MSD	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	165151
Client ID:	ZZZZZZ	Batch ID:	R165151	TestNo:	SM 5310C			Analysis Date:	8/25/2022	SeqNo:	4800110

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	234.140	50	250.0	0	93.7	75	125	232.7	0.604	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- Calculations are based on raw values

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02D-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 8:35:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 03:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-002

Client Sample ID: TW-02S-Q322
Collection Date: 8/9/2022 8:04:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 03:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-03D-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 9:06:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 03:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-070-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 03:25 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-910-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 03:39 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-100-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 11:44:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 03:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-130-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:55:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 03:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-040-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 8:13:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	240	13	20		µg/L	1	8/13/2022 03:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 9:38:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 03:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-060-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 11:00:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	270	13	20		µg/L	1	8/13/2022 04:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-070-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 8:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	25	13	20		µg/L	1	8/13/2022 04:50 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-915-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 9:04:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 04:55 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 05:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 11:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 05:13 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	MB-94189	SampType:	MBLK	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	PBW	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777827

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID	LCS-94189	SampType:	LCS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	LCSW	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777828

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	107.402	20	100.0	0	107	85	115				

Sample ID	N052034-009CMS	SampType:	MS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	ZZZZZZ	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777841

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	109.068	20	100.0	61.13	47.9	75	125				S

Sample ID	N052034-009CMSD	SampType:	MSD	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	ZZZZZZ	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777842

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	103.353	20	100.0	61.13	42.2	75	125	109.1	5.38	20	S

Sample ID	N052058-010CMS	SampType:	MS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	ZZZZZZ	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777856

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	90.072	20	100.0	0	90.1	75	125				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	N052058-010CMSD	SampType:	MSD	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	ZZZZZZ	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777857

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	94.804	20	100.0	0	94.8	75	125	90.07	5.12	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	MB-94190	SampType:	MBLK	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	PBW	Batch ID:	94190	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777865

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID	LCS-94190	SampType:	LCS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	LCSW	Batch ID:	94190	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777866

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	101.283	20	100.0	0	101	85	115				

Sample ID	N052065-001BMS	SampType:	MS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	ZZZZZZ	Batch ID:	94190	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777874

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	179.636	20	100.0	89.60	90.0	75	125				

Sample ID	N052065-001BMSD	SampType:	MSD	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	ZZZZZZ	Batch ID:	94190	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777875

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	154.307	20	100.0	89.60	64.7	75	125	179.6	15.2	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	**N052034-009C-PS**	SampType: **PS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date:	RunNo: **164812**
Client ID:	**ZZZZZZ**	Batch ID: **94189**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4777840**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	105.392	20	100.0	61.13	44.3	80	120				S

Sample ID	**N052058-010C-PS**	SampType: **PS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date:	RunNo: **164812**
Client ID:	**ZZZZZZ**	Batch ID: **94189**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4777855**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	94.354	20	100.0	0	94.4	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	N052065-001B-PS	SampType:	PS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:		RunNo:	164812
Client ID:	ZZZZZZ	Batch ID:	94190	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777873

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	165.970	20	100.0	89.60	76.4	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-001

Client Sample ID: TW-02D-Q322
Collection Date: 8/9/2022 8:35:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 06:37 PM
Barium	24	0.083	1.0		µg/L	1	8/13/2022 06:37 PM
Manganese	39	0.026	0.50		µg/L	1	8/13/2022 06:37 PM
Molybdenum	32	0.12	0.50		µg/L	1	8/13/2022 06:37 PM
Selenium	0.84	0.044	0.50		µg/L	1	8/17/2022 03:18 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-002

Client Sample ID: TW-02S-Q322
Collection Date: 8/9/2022 8:04:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818A**	QC Batch: **94191**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/18/2022 03:38 PM
Barium	77	0.083	1.0		µg/L	1	8/13/2022 07:18 PM
Manganese	1.5	0.026	0.50		µg/L	1	8/13/2022 07:18 PM
Molybdenum	8.0	0.12	0.50		µg/L	1	8/13/2022 07:18 PM
Selenium	2.2	0.044	0.50		µg/L	1	8/13/2022 07:18 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-003

Client Sample ID: TW-03D-Q322
Collection Date: 8/9/2022 9:06:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 07:30 PM
Barium	45	0.083	1.0		µg/L	1	8/13/2022 07:30 PM
Manganese	55	0.026	0.50		µg/L	1	8/13/2022 07:30 PM
Molybdenum	32	0.12	0.50		µg/L	1	8/13/2022 07:30 PM
Selenium	0.94	0.044	0.50		µg/L	1	8/13/2022 07:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-004

Client Sample ID: MW-20-070-Q322
Collection Date: 8/9/2022 10:10:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 07:42 PM
Barium	53	0.083	1.0		µg/L	1	8/13/2022 07:42 PM
Manganese	ND	0.026	0.50		µg/L	1	8/13/2022 07:42 PM
Molybdenum	19	0.12	0.50		µg/L	1	8/13/2022 07:42 PM
Selenium	43	0.044	0.50		µg/L	1	8/13/2022 07:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-910-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 07:54 PM
Barium	50	0.083	1.0		µg/L	1	8/13/2022 07:54 PM
Manganese	ND	0.026	0.50		µg/L	1	8/13/2022 07:54 PM
Molybdenum	18	0.12	0.50		µg/L	1	8/13/2022 07:54 PM
Selenium	41	0.044	0.50		µg/L	1	8/13/2022 07:54 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-006

Client Sample ID: MW-20-100-Q322
Collection Date: 8/9/2022 11:44:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 08:06 PM
Barium	56	0.083	1.0		µg/L	1	8/13/2022 08:06 PM
Manganese	ND	0.026	0.50		µg/L	1	8/13/2022 08:06 PM
Molybdenum	1.7	0.12	0.50		µg/L	1	8/13/2022 08:06 PM
Selenium	15	0.044	0.50		µg/L	1	8/13/2022 08:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-007

Client Sample ID: MW-20-130-Q322
Collection Date: 8/9/2022 10:55:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 08:35 PM
Barium	24	0.083	1.0		µg/L	1	8/13/2022 08:35 PM
Manganese	2.3	0.026	0.50		µg/L	1	8/13/2022 08:35 PM
Molybdenum	6.9	0.12	0.50		µg/L	1	8/13/2022 08:35 PM
Selenium	18	0.044	0.50		µg/L	1	8/13/2022 08:35 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-040-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 8:13:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Arsenic	13	0.050	0.10		µg/L	1	8/13/2022 08:47 PM
Barium	59	0.083	1.0		µg/L	1	8/13/2022 08:47 PM
Manganese	93	0.026	0.50		µg/L	1	8/13/2022 08:47 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 9:38:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Arsenic	1.2	0.050	0.10		µg/L	1	8/13/2022 08:59 PM
Barium	35	0.083	1.0		µg/L	1	8/13/2022 08:59 PM
Manganese	190	0.13	2.5		µg/L	5	8/13/2022 09:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-011

Client Sample ID: MW-39-060-Q322
Collection Date: 8/9/2022 11:00:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	1.6	0.050	0.10		µg/L	1	8/13/2022 10:10 PM
Barium	36	0.083	1.0		µg/L	1	8/13/2022 10:10 PM
Manganese	190	0.13	2.5		µg/L	5	8/13/2022 10:16 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-070-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 8:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Arsenic	1.2	0.050	0.10		µg/L	1	8/13/2022 10:22 PM
Barium	22	0.083	1.0		µg/L	1	8/13/2022 10:22 PM
Manganese	10	0.026	0.50		µg/L	1	8/13/2022 10:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-915-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 9:04:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Arsenic	1.2	0.050	0.10		µg/L	1	8/13/2022 11:03 PM
Barium	24	0.083	1.0		µg/L	1	8/13/2022 11:03 PM
Manganese	12	0.026	0.50		µg/L	1	8/13/2022 11:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220813C**	QC Batch: **94192**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 11:27 PM
Barium	20	0.083	1.0		µg/L	1	8/13/2022 11:27 PM
Manganese	6.5	0.026	0.50		µg/L	1	8/13/2022 11:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 11:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220813C**	QC Batch: **94192**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 11:39 PM
Barium	26	0.083	1.0		µg/L	1	8/13/2022 11:39 PM
Manganese	8.5	0.026	0.50		µg/L	1	8/13/2022 11:39 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID **MB-94191**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **PBW**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778847**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	ND	1.0									
Manganese	ND	0.50									
Molybdenum	ND	0.50									
Selenium	ND	0.50									

Sample ID **LCS-94191**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **LCSW**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778848**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.500	0.10	10.00	0	95.0	85	115				
Barium	9.348	1.0	10.00	0	93.5	85	115				
Manganese	94.570	0.50	100.0	0	94.6	85	115				
Molybdenum	9.339	0.50	10.00	0	93.4	85	115				
Selenium	8.934	0.50	10.00	0	89.3	85	115				

Sample ID **N052034-009CMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778872**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	38.488	1.0	10.00	30.16	83.3	75	125				
Manganese	114.915	0.50	100.0	27.82	87.1	75	125				
Molybdenum	157.700	0.50	10.00	147.1	106	75	125				

Sample ID **N052034-009CMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778874**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	37.579	1.0	10.00	30.16	74.2	75	125	38.49	2.39	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID **N052034-009CMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778874**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	112.223	0.50	100.0	27.82	84.4	75	125	114.9	2.37	20	
Molybdenum	153.687	0.50	10.00	147.1	66.2	75	125	157.7	2.58	20	S

Sample ID **N052058-010CMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778905**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.497	0.10	10.00	1.189	93.1	75	125				
Barium	43.883	1.0	10.00	35.47	84.1	75	125				
Molybdenum	14.259	0.50	10.00	4.272	99.9	75	125				
Selenium	8.682	0.50	10.00	0.06231	86.2	75	125				

Sample ID **N052058-010CMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778906**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	331.656	2.5	100.0	187.6	144	75	125				S

Sample ID **N052058-010CMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778907**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.421	0.10	10.00	1.189	92.3	75	125	10.50	0.723	20	
Barium	44.134	1.0	10.00	35.47	86.6	75	125	43.88	0.571	20	
Molybdenum	14.110	0.50	10.00	4.272	98.4	75	125	14.26	1.05	20	
Selenium	8.489	0.50	10.00	0.06231	84.3	75	125	8.682	2.26	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N052058-010CMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164826
Client ID:	ZZZZZZ	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778908

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	300.843	2.5	100.0	187.6	113	75	125	331.7	9.74	20	

Sample ID	MB-94191	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164874
Client ID:	PBW	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/15/2022	SeqNo:	4781827

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									

Sample ID	N052034-009CMS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164907
Client ID:	ZZZZZZ	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/17/2022	SeqNo:	4784566

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.289	0.10	10.00	0	123	75	125				
Selenium	10.317	0.50	10.00	1.039	92.8	75	125				

Sample ID	N052034-009CMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164907
Client ID:	ZZZZZZ	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/17/2022	SeqNo:	4784567

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	11.930	0.10	10.00	0	119	75	125	12.29	2.96	20	
Selenium	10.139	0.50	10.00	1.039	91.0	75	125	10.32	1.74	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	MB-94192	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164826
Client ID:	PBW	Batch ID:	94192	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778919

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									
Molybdenum	ND	0.50									
Selenium	ND	0.50									

Sample ID	LCS-94192	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164826
Client ID:	LCSW	Batch ID:	94192	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778920

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.178	0.10	10.00	0	91.8	85	115				
Barium	9.094	1.0	10.00	0	90.9	85	115				
Manganese	95.878	0.50	100.0	0	95.9	85	115				
Molybdenum	9.351	0.50	10.00	0	93.5	85	115				
Selenium	9.296	0.50	10.00	0	93.0	85	115				

Sample ID	N052065-001BMS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164826
Client ID:	ZZZZZZ	Batch ID:	94192	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/14/2022	SeqNo:	4778932

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	118.595	1.0	10.00	112.4	61.8	75	125				S
Manganese	132.010	0.50	100.0	45.30	86.7	75	125				
Molybdenum	30.494	0.50	10.00	21.07	94.2	75	125				

Sample ID	N052065-001BMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164826
Client ID:	ZZZZZZ	Batch ID:	94192	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/14/2022	SeqNo:	4778934

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	124.039	1.0	10.00	112.4	116	75	125	118.6	4.49	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N052065-001BMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164826
Client ID:	ZZZZZZ	Batch ID:	94192	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/14/2022	SeqNo:	4778934

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	134.142	0.50	100.0	45.30	88.8	75	125	132.0	1.60	20	
Molybdenum	32.120	0.50	10.00	21.07	111	75	125	30.49	5.20	20	

Sample ID	N052065-001BMS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164874
Client ID:	ZZZZZZ	Batch ID:	94192	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/15/2022	SeqNo:	4781834

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	9.639	0.50	10.00	1.196	84.4	75	125				

Sample ID	N052065-001BMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164874
Client ID:	ZZZZZZ	Batch ID:	94192	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/15/2022	SeqNo:	4781835

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	8.626	0.50	10.00	1.196	74.3	75	125	9.639	11.1	20	S

Sample ID	N052065-001BMS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164826
Client ID:	ZZZZZZ	Batch ID:	94192	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/14/2022	SeqNo:	4804460

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.351	0.10	10.00	1.206	91.4	75	125				

Sample ID	N052065-001BMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164826
Client ID:	ZZZZZZ	Batch ID:	94192	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/14/2022	SeqNo:	4804461

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.542	0.10	10.00	1.206	93.4	75	125	10.35	1.83	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID **N052034-009C-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164826**
Client ID: **ZZZZZZ** Batch ID: **94191** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/13/2022** SeqNo: **4778870**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	38.211	1.0	10.00	30.16	80.5	80	120				
Manganese	114.072	0.50	100.0	27.82	86.2	80	120				
Molybdenum	155.134	0.50	10.00	147.1	80.6	80	120				

Sample ID **N052058-010C-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164826**
Client ID: **ZZZZZZ** Batch ID: **94191** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/13/2022** SeqNo: **4778901**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.593	0.10	10.00	1.189	94.0	80	120				
Barium	44.040	1.0	10.00	35.47	85.7	80	120				
Molybdenum	14.257	0.50	10.00	4.272	99.9	80	120				
Selenium	8.412	0.50	10.00	0.06231	83.5	80	120				

Sample ID **N052058-010C-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164826**
Client ID: **ZZZZZZ** Batch ID: **94191** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/13/2022** SeqNo: **4778904**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	306.426	2.5	100.0	187.6	119	80	120				

Sample ID **N052034-009C-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164907**
Client ID: **ZZZZZZ** Batch ID: **94191** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/17/2022** SeqNo: **4784565**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	11.782	0.10	10.00	0	118	80	120				
Selenium	10.642	0.50	10.00	1.039	96.0	80	120				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N052065-001B-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	164826
Client ID:	ZZZZZZ	Batch ID:	94192	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/14/2022	SeqNo:	4778930

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	121.265	1.0	10.00	112.4	88.6	80	120				
Manganese	132.686	0.50	100.0	45.30	87.4	80	120				
Molybdenum	31.062	0.50	10.00	21.07	99.9	80	120				

Sample ID	N052065-001B-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	164874
Client ID:	ZZZZZZ	Batch ID:	94192	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/15/2022	SeqNo:	4781833

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	9.249	0.50	10.00	1.196	80.5	80	120				

Sample ID	N052065-001B-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	164826
Client ID:	ZZZZZZ	Batch ID:	94192	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/14/2022	SeqNo:	4804459

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.511	0.10	10.00	1.206	93.0	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement		QA/QC		Sample Receipt Condition
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD		RTNE		Y N
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker		RWQCB	✓	1. Chilled ✓
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Labspec		CalTrans		2. Headspace
Submitted By: Riggie Tap	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	Others	✓	LEVEL III		3. Container Intact ✓
Title: Field Tech			Specify: RWQCB		LEVEL IV		4. Seal Present ✓
Signature: Date: 8/9/22	Sampled By: Riggie Tap		Global ID:		Regulatory		5. IR number 3
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for				Specify State:		6. Method of Cooling: ICE
Project Name: PG&E Topock - PCM	Signature: Date: 8/9/22						Sample Temp: 2.6C / 3.6C
Project Number: 30121866.3Q22GW							Courier: ASSET
							Tracking No.:

Matrix: Ground X | Sediment | Potable | Soil | NPDES | Other Solid | Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrite, Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052058-01	TW-02D-Q322	8/9/2022	8:35		X	X	X	X	X	X		X		E	7	P	BNS	
2	-02	TW-02S-Q322	8/9/2022	8:04		X	X	X	X	X	X		X		E	7	P	BNS	
3	-03	TW-03D-Q322	8/9/2022	9:06		X	X	X	X	X	X		X		E	7	P	BNS	
4	-04	MW-20-070-Q322	8/9/2022	10:10		X	X	X	X	X	X		X		E	7	P	BNS	
5	-05	MW-910-Q322	8/9/2022	10:20		X	X	X	X	X	X		X		E	7	P	BNS	
6	-06	MW-20-100-Q322	8/9/2022	11:44		X	X	X	X	X	X		X		E	7	P	BNS	
7	-07	MW-20-130-Q322	8/9/2022	10:55		X	X	X	X	X	X		X		E	7	P	BNS	
8	-08	EB-711-Q322	8/9/2022	12:00		X									E	1	P	BNS	
9	-09	MW-39-040-Q322	8/9/2022	8:13		X		X			X			X	E	6	P	BNS	
10	-10	MW-39-050-Q322	8/9/2022	9:38		X		X			X			X	E	9	P	BNS	MS/MSD
11	-11	MW-39-060-Q322	8/9/2022	11:00		X		X			X			X	E	6	P	BNS	
12	-12	MW-39-070-Q322	8/9/2022	8:54		X		X			X			X	E	6	P	BNS	
13	-13	MW-915-Q322	8/9/2022	9:04		X		X			X			X	E	6	P	BNS	
14																			

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Riggie Tap	8/9/22 1645	Dante Ortiz Dante Ortiz	8/9/22 16:45
Dante Ortiz Dante Ortiz	8/9/22 20:09	Dante Ortiz Dante Ortiz	8/9/22 20:09

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [X] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable samples.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:

H=HCL	N=HNO_3	S=H_2SO_4	C=4°C
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$	
Others/Specify:	B	(NH4)2SO4/NH4OH	

Container Type:

T=Tube	V=VOA	P=Pint
J=Jar	B=Tedlar	G=Glass
M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

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www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement	QA/QC	Sample Receipt Condition	Y N
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD	RTNE	1. Chilled	✓
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com daniel.moore@critigen.com	Address:	Geotracker	RWQCB ✓	2. Headspace	
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Labspec	CalTrans	3. Container Intact	✓
Submitted By:		Phone: 949-727-1400, ext 200 Fax:	Others ✓	LEVEL III	4. Seal Present	✓
Title: Field Tech	Phone: 916-786-3302 Fax:		Specify: RWQCB	LEVEL IV	5. IR number	3
Signature: Date: 8/9/22	Sampled By: Maggie Top		Global ID:	Regulatory	6. Method of Cooling: ICE	
I hereby authorize ASSET Labs to perform the tests indicated below.	*I attest to the validity and authenticity of this sample, I am aware that tampering with or intentionally misslabeling the sample location, date or time of collection is considered fraud and may be grounds for*			Specify State:	Sample Temp: 2.6c / 3.6c	
Project Name: PG&E Topock - PCM	Signature: Date: 8/9/22				Courier: ASSET	
Project Number: 30121866.3Q22GW					Tracking No.:	

Matrix: Ground X | Sediment | Potable | Soil | NPDES | Other Solid | Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrite, Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052058-14	MW-39-080-Q322	8/9/2022	10:20		X		X			X			X	E	6	P	BNS	
2	-15	MW-39-100-Q322	8/9/2022	11:53		X		X			X			X	E	6	P	BNS	
3	-16	EB-712-Q322	8/9/2022	12:10		X									E	1	P	BNS	
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Maggie Top	8/9/22 1645	Dante Ortiz	Aug 9, 22 16:45
Dante Ortiz	8/9/22 20:09	Dante Ortiz	8/9/22 20:09

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- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [X] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

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1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 6-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample
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7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B	(NH4)2SO4/NH4OH		M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/9/2022	Workorder:	N052058
Rep sample Temp (Deg C):	2.6/3.6	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: EF *EFanegF* 8/10/2022

Reviewed By: for: MBC 8/17/2022

ASSET Laboratories

WORK ORDER Summary

10-Aug-22

WorkOrder: N052058

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/9/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052058-001A	TW-02D-Q322	8/9/2022 8:35:00 AM	8/23/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-001B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052058-001C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052058-001D			8/23/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052058-001E			8/23/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052058-002A	TW-02S-Q322	8/9/2022 8:04:00 AM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-002B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052058-002C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052058-002D			8/23/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

10-Aug-22

WorkOrder: N052058

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/9/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052058-002E	TW-02S-Q322	8/9/2022 8:04:00 AM	8/23/2022	Groundwater	SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052058-003A	TW-03D-Q322	8/9/2022 9:06:00 AM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-003B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052058-003C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052058-003D			8/23/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052058-003E			8/23/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052058-004A	MW-20-070-Q322	8/9/2022 10:10:00 AM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-004B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052058-004C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

10-Aug-22

WorkOrder: N052058

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/9/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052058-004D	MW-20-070-Q322	8/9/2022 10:10:00 AM	8/23/2022	Groundwater	SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052058-004E			8/23/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052058-005A	MW-910-Q322	8/9/2022 10:20:00 AM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-005B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052058-005C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052058-005D			8/23/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052058-005E			8/23/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052058-006A	MW-20-100-Q322	8/9/2022 11:44:00 AM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-006B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052058-006C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

10-Aug-22

WorkOrder: N052058

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/9/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052058-006C	MW-20-100-Q322	8/9/2022 11:44:00 AM	8/23/2022	Groundwater	EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052058-006D			8/23/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052058-006E			8/23/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052058-007A	MW-20-130-Q322	8/9/2022 10:55:00 AM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-007B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052058-007C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052058-007D			8/23/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052058-007E			8/23/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052058-008A	EB-711-Q322	8/9/2022 12:00:00 PM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-009A	MW-39-040-Q322	8/9/2022 8:13:00 AM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-009B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052058-009C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

10-Aug-22

WorkOrder: N052058

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/9/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052058-009C	MW-39-040-Q322	8/9/2022 8:13:00 AM	8/23/2022	Groundwater	EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052058-009D			8/23/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052058-010A	MW-39-050-Q322	8/9/2022 9:38:00 AM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☑	☐	WW
N052058-010B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
N052058-010C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☑	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☑	☐	WW
N052058-010D			8/23/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☑	☐	VW
N052058-011A	MW-39-060-Q322	8/9/2022 11:00:00 AM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-011B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052058-011C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052058-011D			8/23/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052058-012A	MW-39-070-Q322	8/9/2022 8:54:00 AM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-012B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052058-012C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

10-Aug-22

WorkOrder: N052058

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/9/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052058-012C	MW-39-070-Q322	8/9/2022 8:54:00 AM	8/23/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052058-012D			8/23/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052058-013A	MW-915-Q322	8/9/2022 9:04:00 AM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-013B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052058-013C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052058-013D			8/23/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052058-014A	MW-39-080-Q322	8/9/2022 10:20:00 AM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-014B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052058-014C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052058-014D			8/23/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052058-015A	MW-39-100-Q322	8/9/2022 11:53:00 AM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-015B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

10-Aug-22

WorkOrder: N052058

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/9/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052058-015B	MW-39-100-Q322	8/9/2022 11:53:00 AM	8/23/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052058-015C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052058-015D			8/23/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052058-016A	EB-712-Q322	8/9/2022 12:10:00 PM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-017A	FOLDER	8/23/2022	8/23/2022		Folder	Folder	☐	☐	☐	LAB
			8/23/2022		Folder	Level IV Report	☐	☐	☐	LAB
			8/23/2022		Folder	Folder	☐	☐	☐	LAB

ASSET Laboratories
3151-3153 W Post Rd., Las Vegas, NV 89118
www.atl-labs.com
TEL: 7023072659 *FAX: 7023072691*

CHAIN-OF-CUSTODY RECORD

QC Level: Level IV

Subcontractor:

BC Labs
4100 Atlas Court
Bakersfield, CA 93308

TEL: (661) 327-4911
FAX: (661) 327-1918
Acct #:

Field Sampler: Riggie Tep

10-Aug-22

				Ammonia		
				Requested Tests		
Sample ID	**Matrix**	**Date Collected**	**Bottle Type**	~~**SM4500-NH3D**~~		
N052058-001E / TW-02D-Q322	Groundwater	8/9/2022 8:35:00 AM	16OZP	1		
N052058-002E / TW-02S-Q322	Groundwater	8/9/2022 8:04:00 AM	16OZP	1		
N052058-003E / TW-03D-Q322	Groundwater	8/9/2022 9:06:00 AM	16OZP	1		
N052058-004E / MW-20-070-Q322	Groundwater	8/9/2022 10:10:00 AM	16OZP	1		
N052058-005E / MW-910-Q322	Groundwater	8/9/2022 10:20:00 AM	16OZP	1		
N052058-006E / MW-20-100-Q322	Groundwater	8/9/2022 11:44:00 AM	16OZP	1		
N052058-007E / MW-20-130-Q322	Groundwater	8/9/2022 10:55:00 AM	16OZP	1		

General Comments: PLEASE EMAIL SAMPLE RECEIPT ACKNOWLEDGEMENT TO THE PM. ALWAYS CC: sonny.lorenzo@assetlaboratories.com

Please use PO#:N52058A Please email Invoices and Account Receivable Statements to elvira@assetlaboratories.com. For questions, call Marlon at (702)-307-2659. Please e-mail results to reports.lv@assetlaboratories.com by: Standard TAT.

Please analyze for Ammonia. EDD requirement Labspec7 edata.

GSO #: 557512000

	Date/Time		**Date/Time**
Relinquished by: YRJ	8/10/2022	**Received by:**	
Relinquished by:		**Received by:**	

August 29, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052065

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 10, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052065

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Subcontracted Analyses:

Ammonia and Nitrate/Nitrite as N were subcontracted to BC Labs - Bakersfield, CA.

Analytical Comments for EPA 218.6:

Dilution was necessary for some samples due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Nitrite in QC samples N052065-008BMS and N052065-008BMSD possibly due to matrix interference. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for SM 5310C:

Matrix Spike (MS) is outside recovery criteria in QC sample N052034-009DMS at lower dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N052034-009 and MS/MSD were reported at 50x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Matrix Spike (MS) is outside recovery criteria in QC sample N052065-001CMS at lower dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N052065-001 and MS/MSD were reported at 10x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytiacal Comments for EPA 6010B:

Matrix Spike Duplicate (MSD) is outside recovery criteria for Iron in QC sample N052065-001BMSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020:

Matrix Spike (MS) is outside recovery criteria for Barium and Selenium in QC samples N052065-001BMS and N052065-001BMSD possibly due to matrix interference. Post Spike passed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052065
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052065-001A	MW-81-043-Q322	Groundwater	8/10/2022 10:11:00 AM	8/10/2022	8/29/2022
N052065-001B	MW-81-043-Q322	Groundwater	8/10/2022 10:11:00 AM	8/10/2022	8/29/2022
N052065-001C	MW-81-043-Q322	Groundwater	8/10/2022 10:11:00 AM	8/10/2022	8/29/2022
N052065-001D	MW-81-043-Q322	Groundwater	8/10/2022 10:11:00 AM	8/10/2022	8/29/2022
N052065-002A	MW-81-098-Q322	Groundwater	8/10/2022 10:38:00 AM	8/10/2022	8/29/2022
N052065-002B	MW-81-098-Q322	Groundwater	8/10/2022 10:38:00 AM	8/10/2022	8/29/2022
N052065-002C	MW-81-098-Q322	Groundwater	8/10/2022 10:38:00 AM	8/10/2022	8/29/2022
N052065-002D	MW-81-098-Q322	Groundwater	8/10/2022 10:38:00 AM	8/10/2022	8/29/2022
N052065-003A	MW-82-046-Q322	Groundwater	8/10/2022 8:29:00 AM	8/10/2022	8/29/2022
N052065-003B	MW-82-046-Q322	Groundwater	8/10/2022 8:29:00 AM	8/10/2022	8/29/2022
N052065-003C	MW-82-046-Q322	Groundwater	8/10/2022 8:29:00 AM	8/10/2022	8/29/2022
N052065-003D	MW-82-046-Q322	Groundwater	8/10/2022 8:29:00 AM	8/10/2022	8/29/2022
N052065-004A	MW-82-112-Q322	Groundwater	8/10/2022 9:02:00 AM	8/10/2022	8/29/2022
N052065-004B	MW-82-112-Q322	Groundwater	8/10/2022 9:02:00 AM	8/10/2022	8/29/2022
N052065-004C	MW-82-112-Q322	Groundwater	8/10/2022 9:02:00 AM	8/10/2022	8/29/2022
N052065-004D	MW-82-112-Q322	Groundwater	8/10/2022 9:02:00 AM	8/10/2022	8/29/2022
N052065-005A	MW-82-168-Q322	Groundwater	8/10/2022 11:49:00 AM	8/10/2022	8/29/2022
N052065-005B	MW-82-168-Q322	Groundwater	8/10/2022 11:49:00 AM	8/10/2022	8/29/2022
N052065-005C	MW-82-168-Q322	Groundwater	8/10/2022 11:49:00 AM	8/10/2022	8/29/2022
N052065-005D	MW-82-168-Q322	Groundwater	8/10/2022 11:49:00 AM	8/10/2022	8/29/2022
N052065-006A	MW-82-198-Q322	Groundwater	8/10/2022 12:28:00 PM	8/10/2022	8/29/2022
N052065-006B	MW-82-198-Q322	Groundwater	8/10/2022 12:28:00 PM	8/10/2022	8/29/2022
N052065-006C	MW-82-198-Q322	Groundwater	8/10/2022 12:28:00 PM	8/10/2022	8/29/2022
N052065-006D	MW-82-198-Q322	Groundwater	8/10/2022 12:28:00 PM	8/10/2022	8/29/2022
N052065-007A	EB-713-Q322	Groundwater	8/10/2022 1:00:00 PM	8/10/2022	8/29/2022
N052065-008A	MW-31-060-Q322	Groundwater	8/10/2022 12:40:00 PM	8/10/2022	8/29/2022
N052065-008B	MW-31-060-Q322	Groundwater	8/10/2022 12:40:00 PM	8/10/2022	8/29/2022
N052065-008C	MW-31-060-Q322	Groundwater	8/10/2022 12:40:00 PM	8/10/2022	8/29/2022
N052065-008D	MW-31-060-Q322	Groundwater	8/10/2022 12:40:00 PM	8/10/2022	8/29/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052065
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052065-008E	MW-31-060-Q322	Groundwater	8/10/2022 12:40:00 PM	8/10/2022	8/29/2022
N052065-009A	MW-31-135-Q322	Groundwater	8/10/2022 1:40:00 PM	8/10/2022	8/29/2022
N052065-009B	MW-31-135-Q322	Groundwater	8/10/2022 1:40:00 PM	8/10/2022	8/29/2022
N052065-009C	MW-31-135-Q322	Groundwater	8/10/2022 1:40:00 PM	8/10/2022	8/29/2022
N052065-009D	MW-31-135-Q322	Groundwater	8/10/2022 1:40:00 PM	8/10/2022	8/29/2022
N052065-009E	MW-31-135-Q322	Groundwater	8/10/2022 1:40:00 PM	8/10/2022	8/29/2022
N052065-010A	MW-30-050-Q322	Groundwater	8/10/2022 8:29:00 AM	8/10/2022	8/29/2022
N052065-010B	MW-30-050-Q322	Groundwater	8/10/2022 8:29:00 AM	8/10/2022	8/29/2022
N052065-010C	MW-30-050-Q322	Groundwater	8/10/2022 8:29:00 AM	8/10/2022	8/29/2022
N052065-010D	MW-30-050-Q322	Groundwater	8/10/2022 8:29:00 AM	8/10/2022	8/29/2022
N052065-011A	MW-911-Q322	Groundwater	8/10/2022 8:39:00 AM	8/10/2022	8/29/2022
N052065-011B	MW-911-Q322	Groundwater	8/10/2022 8:39:00 AM	8/10/2022	8/29/2022
N052065-011C	MW-911-Q322	Groundwater	8/10/2022 8:39:00 AM	8/10/2022	8/29/2022
N052065-011D	MW-911-Q322	Groundwater	8/10/2022 8:39:00 AM	8/10/2022	8/29/2022
N052065-012A	MW-36-070-Q322	Groundwater	8/10/2022 9:20:00 AM	8/10/2022	8/29/2022
N052065-012B	MW-36-070-Q322	Groundwater	8/10/2022 9:20:00 AM	8/10/2022	8/29/2022
N052065-012C	MW-36-070-Q322	Groundwater	8/10/2022 9:20:00 AM	8/10/2022	8/29/2022
N052065-012D	MW-36-070-Q322	Groundwater	8/10/2022 9:20:00 AM	8/10/2022	8/29/2022
N052065-013A	MW-914-Q322	Groundwater	8/10/2022 9:30:00 AM	8/10/2022	8/29/2022
N052065-013B	MW-914-Q322	Groundwater	8/10/2022 9:30:00 AM	8/10/2022	8/29/2022
N052065-013C	MW-914-Q322	Groundwater	8/10/2022 9:30:00 AM	8/10/2022	8/29/2022
N052065-013D	MW-914-Q322	Groundwater	8/10/2022 9:30:00 AM	8/10/2022	8/29/2022
N052065-014A	MW-36-090-Q322	Groundwater	8/10/2022 10:21:00 AM	8/10/2022	8/29/2022
N052065-014B	MW-36-090-Q322	Groundwater	8/10/2022 10:21:00 AM	8/10/2022	8/29/2022
N052065-014C	MW-36-090-Q322	Groundwater	8/10/2022 10:21:00 AM	8/10/2022	8/29/2022
N052065-014D	MW-36-090-Q322	Groundwater	8/10/2022 10:21:00 AM	8/10/2022	8/29/2022
N052065-015A	MW-36-100-Q322	Groundwater	8/10/2022 11:13:00 AM	8/10/2022	8/29/2022
N052065-015B	MW-36-100-Q322	Groundwater	8/10/2022 11:13:00 AM	8/10/2022	8/29/2022
N052065-015C	MW-36-100-Q322	Groundwater	8/10/2022 11:13:00 AM	8/10/2022	8/29/2022
N052065-015D	MW-36-100-Q322	Groundwater	8/10/2022 11:13:00 AM	8/10/2022	8/29/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052065
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052065-015E	MW-36-100-Q322	Groundwater	8/10/2022 11:13:00 AM	8/10/2022	8/29/2022
N052065-016A	EB-714-Q322	Groundwater	8/10/2022 2:15:00 PM	8/10/2022	8/29/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-043-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 10:11:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	3.0	0.025	0.20		µg/L	1	8/11/2022 11:09 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-098-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 10:38:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	0.55	0.025	0.20		µg/L	1	8/11/2022 11:39 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-046-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 8:29:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/11/2022 01:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-112-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 9:02:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/11/2022 12:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-168-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 11:49:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/11/2022 01:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-198-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 12:28:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/11/2022 06:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-713-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 1:00:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/11/2022 05:24 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-008

Client Sample ID: MW-31-060-Q322
Collection Date: 8/10/2022 12:40:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A** QC Batch: **R164787**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/11/2022 06:40 PM
DISSOLVED METALS BY ICP-MS							
			EPA 3010A				**EPA 6020**
RunID: **NV00922-ICP8_220813B** QC Batch: **94192**				PrepDate:		**8/11/2022**	Analyst: **DJ**
Chromium	ND	0.035	1.0		µg/L	1	8/14/2022 02:48 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-009

Client Sample ID: MW-31-135-Q322
Collection Date: 8/10/2022 1:40:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A** QC Batch: **R164787**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	25	0.13	1.0		µg/L	5	8/11/2022 11:30 AM
DISSOLVED METALS BY ICP-MS							
		EPA 3010A		**EPA 6020**			
RunID: **NV00922-ICP8_220813B** QC Batch: **94192**				PrepDate:	**8/11/2022**		Analyst: **DJ**
Chromium	25	0.035	1.0		µg/L	1	8/14/2022 03:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-050-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 8:29:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/11/2022 02:58 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-911-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 8:39:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/11/2022 07:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-070-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 9:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/11/2022 03:36 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-914-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 9:30:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/11/2022 07:17 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-090-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 10:21:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/11/2022 04:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-100-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 11:13:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	3.5	0.025	0.20		µg/L	1	8/11/2022 05:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-714-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 2:15:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/11/2022 05:43 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R164787**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164787**
Client ID: **PBW**	Batch ID: **R164787**	TestNo: **EPA 218.6**		Analysis Date: **8/11/2022**	SeqNo: **4776330**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R164787**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164787**
Client ID: **LCSW**	Batch ID: **R164787**	TestNo: **EPA 218.6**		Analysis Date: **8/11/2022**	SeqNo: **4776331**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.039	0.20	5.000	0	101	90	110				

Sample ID: **N052065-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164787**
Client ID: **ZZZZZZ**	Batch ID: **R164787**	TestNo: **EPA 218.6**		Analysis Date: **8/11/2022**	SeqNo: **4776335**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.638	0.20	1.000	0.5457	109	90	110				

Sample ID: **N052065-001AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164787**
Client ID: **ZZZZZZ**	Batch ID: **R164787**	TestNo: **EPA 218.6**		Analysis Date: **8/11/2022**	SeqNo: **4776337**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.046	0.20	1.000	2.999	105	90	110	4.083	0.903	20	

Sample ID: **N052065-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164787**
Client ID: **ZZZZZZ**	Batch ID: **R164787**	TestNo: **EPA 218.6**		Analysis Date: **8/11/2022**	SeqNo: **4776341**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.090	0.20	1.000	0	109	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052065-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776343**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.025	0.20	1.000	0	103	90	110				

Sample ID: **N052065-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776345**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.235	1.0	5.000	0	105	90	110				

Sample ID: **N052065-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776346**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.083	0.20	1.000	2.999	108	90	110				

Sample ID: **N052065-009ADUP** SampType: **DUP** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776347**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	24.511	1.0						24.70	0.762	20	

Sample ID: **N052065-009AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776348**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	50.276	1.0	25.00	24.70	102	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052065-011AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776352**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.040	0.20	1.000	0	104	90	110				

Sample ID: **N052065-012AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776354**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.024	0.20	1.000	0	102	90	110				

Sample ID: **N052065-013AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776355**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.052	0.20	1.000	0	105	90	110				

Sample ID: **N052065-014AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776359**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.053	0.20	1.000	0	105	90	110				

Sample ID: **N052065-015AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776361**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.551	0.20	1.000	3.506	105	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052065-007AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776363**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.998	0.20	1.000	0	99.8	90	110				

Sample ID: **N052065-016AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776365**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.000	0.20	1.000	0	100	90	110				

Sample ID: **N052065-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776367**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.062	1.0	5.000	0	101	90	110				

Sample ID: **N052065-008AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776371**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.931	1.0	5.000	0	98.6	90	110				

Sample ID: **N052065-010AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776372**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.055	0.20	1.000	0	106	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020DIS_CrPGE_TPK

Sample ID: **MB-94192**	SampType: **MBLK**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164825**
Client ID: **PBW**	Batch ID: **94192**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778762**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									

Sample ID: **LCS-94192**	SampType: **LCS**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164825**
Client ID: **LCSW**	Batch ID: **94192**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778763**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.746	1.0	10.00	0	97.5	85	115				

Sample ID: **N052065-001BMS**	SampType: **MS**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164825**
Client ID: **ZZZZZZ**	Batch ID: **94192**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/14/2022**	SeqNo: **4778775**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	12.581	1.0	10.00	3.544	90.4	75	125				

Sample ID: **N052065-001BMSD**	SampType: **MSD**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164825**
Client ID: **ZZZZZZ**	Batch ID: **94192**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/14/2022**	SeqNo: **4778777**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	12.856	1.0	10.00	3.544	93.1	75	125	12.58	2.16	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-001

Client Sample ID: MW-81-043-Q322
Collection Date: 8/10/2022 10:11:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Sulfate	460	3.0	25		mg/L	50	8/11/2022 05:13 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/11/2022 11:14 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-002

Client Sample ID: MW-81-098-Q322
Collection Date: 8/10/2022 10:38:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Sulfate	580	6.1	50		mg/L	100	8/11/2022 07:49 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/11/2022 01:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-003

Client Sample ID: MW-82-046-Q322
Collection Date: 8/10/2022 8:29:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Sulfate	1600	12	100		mg/L	200	8/11/2022 08:05 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/11/2022 02:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-004

Client Sample ID: MW-82-112-Q322
Collection Date: 8/10/2022 9:02:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Sulfate	630	6.1	50		mg/L	100	8/11/2022 08:52 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrate as N	0.61	0.095	0.50		mg/L	10	8/11/2022 02:24 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-005

Client Sample ID: MW-82-168-Q322
Collection Date: 8/10/2022 11:49:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
EPA 300.0							
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Sulfate	520	3.0	25		mg/L	50	8/11/2022 09:08 PM
ANIONS BY ION CHROMATOGRAPHY							
EPA 300.0							
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/11/2022 02:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-006

Client Sample ID: MW-82-198-Q322
Collection Date: 8/10/2022 12:28:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY				**EPA 300.0**			
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Sulfate	1000	6.1	50		mg/L	100	8/11/2022 09:24 PM
ANIONS BY ION CHROMATOGRAPHY				**EPA 300.0**			
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrate as N	0.76	0.095	0.50		mg/L	10	8/11/2022 02:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-008

Client Sample ID: MW-31-060-Q322
Collection Date: 8/10/2022 12:40:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/11/2022 10:43 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Sulfate	540	6.1	50		mg/L	100	8/11/2022 07:33 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/11/2022 10:43 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-009

Client Sample ID: MW-31-135-Q322
Collection Date: 8/10/2022 1:40:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/11/2022 10:59 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Sulfate	690	6.1	50		mg/L	100	8/11/2022 06:46 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrate as N	1.5	0.095	0.50		mg/L	10	8/11/2022 10:59 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-010

Client Sample ID: MW-30-050-Q322
Collection Date: 8/10/2022 8:29:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Sulfate	200	1.2	10		mg/L	20	8/11/2022 09:40 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/11/2022 03:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-011

Client Sample ID: MW-911-Q322
Collection Date: 8/10/2022 8:39:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Sulfate	190	1.2	10		mg/L	20	8/11/2022 09:55 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/11/2022 03:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-070-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 9:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A**	QC Batch: **R164763**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/11/2022 01:21 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-914-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 9:30:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A**	QC Batch: **R164763**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/11/2022 01:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-014

Client Sample ID: MW-36-090-Q322
Collection Date: 8/10/2022 10:21:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Sulfate	230	1.2	10		mg/L	20	8/11/2022 10:11 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/11/2022 03:43 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-015

Client Sample ID: MW-36-100-Q322
Collection Date: 8/10/2022 11:13:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Sulfate	240	1.2	10		mg/L	20	8/11/2022 10:27 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/11/2022 04:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_NO2PGE

Sample ID: **MB-R164763_NO2**	SampType: **MBLK**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164763**
Client ID: **PBW**	Batch ID: **R164763**	TestNo: **EPA 300.0**		Analysis Date: **8/11/2022**	SeqNo: **4775981**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	ND	0.50									

Sample ID: **LCS-R164763_NO2**	SampType: **LCS**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164763**
Client ID: **LCSW**	Batch ID: **R164763**	TestNo: **EPA 300.0**		Analysis Date: **8/11/2022**	SeqNo: **4775982**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	1.270	0.50	1.250	0	102	90	110				

Sample ID: **N052065-008BMS**	SampType: **MS**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164763**
Client ID: **ZZZZZZ**	Batch ID: **R164763**	TestNo: **EPA 300.0**		Analysis Date: **8/11/2022**	SeqNo: **4775985**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	20.628	5.0	12.50	0	165	80	120				S

Sample ID: **N052065-008BMSD**	SampType: **MSD**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164763**
Client ID: **ZZZZZZ**	Batch ID: **R164763**	TestNo: **EPA 300.0**		Analysis Date: **8/11/2022**	SeqNo: **4775986**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	19.122	5.0	12.50	0	153	80	120	20.63	7.58	20	S

Sample ID: **N052065-009BDUP**	SampType: **DUP**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164763**
Client ID: **ZZZZZZ**	Batch ID: **R164763**	TestNo: **EPA 300.0**		Analysis Date: **8/11/2022**	SeqNo: **4775987**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	ND	5.0						0	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **MB-R164763_SO4**	SampType: **MBLK**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164763**
Client ID: **PBW**	Batch ID: **R164763**	TestNo: **EPA 300.0**		Analysis Date: **8/11/2022**	SeqNo: **4776031**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.50									

Sample ID: **LCS-R164763_SO4**	SampType: **LCS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164763**
Client ID: **LCSW**	Batch ID: **R164763**	TestNo: **EPA 300.0**		Analysis Date: **8/11/2022**	SeqNo: **4776032**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	3.913	0.50	4.000	0	97.8	90	110				

Sample ID: **N052065-001DMS**	SampType: **MS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164763**
Client ID: **ZZZZZZ**	Batch ID: **R164763**	TestNo: **EPA 300.0**		Analysis Date: **8/11/2022**	SeqNo: **4776038**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	680.010	25	200.0	457.9	111	80	120				

Sample ID: **N052065-001DMSD**	SampType: **MSD**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164763**
Client ID: **ZZZZZZ**	Batch ID: **R164763**	TestNo: **EPA 300.0**		Analysis Date: **8/11/2022**	SeqNo: **4776039**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	666.175	25	200.0	457.9	104	80	120	680.0	2.06	20	

Sample ID: **N052065-009BDUP**	SampType: **DUP**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164763**
Client ID: **ZZZZZZ**	Batch ID: **R164763**	TestNo: **EPA 300.0**		Analysis Date: **8/11/2022**	SeqNo: **4776041**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	691.110	50						690.1	0.152	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **N052065-009BMS** SampType: **MS** TestCode: **300_W_SO4P** Units: **mg/L** Prep Date: RunNo: **164763**
Client ID: **ZZZZZZ** Batch ID: **R164763** TestNo: **EPA 300.0** Analysis Date: **8/11/2022** SeqNo: **4776042**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	1087.160	50	400.0	690.1	99.3	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R164763_NO3** SampType: **MBLK** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **164763**
Client ID: **PBW** Batch ID: **R164763** TestNo: **EPA 300.0** Analysis Date: **8/11/2022** SeqNo: **4776000**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R164763_NO3** SampType: **LCS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **164763**
Client ID: **LCSW** Batch ID: **R164763** TestNo: **EPA 300.0** Analysis Date: **8/11/2022** SeqNo: **4776001**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.247	0.050	1.250	0	99.8	90	110				

Sample ID: **N052065-009BDUP** SampType: **DUP** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **164763**
Client ID: **ZZZZZZ** Batch ID: **R164763** TestNo: **EPA 300.0** Analysis Date: **8/11/2022** SeqNo: **4776005**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.473	0.50						1.475	0.136	20	

Sample ID: **N052065-001DMS** SampType: **MS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **164763**
Client ID: **ZZZZZZ** Batch ID: **R164763** TestNo: **EPA 300.0** Analysis Date: **8/11/2022** SeqNo: **4776006**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	13.334	0.50	12.50	0.4930	103	80	120				

Sample ID: **N052065-001DMSD** SampType: **MSD** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **164763**
Client ID: **ZZZZZZ** Batch ID: **R164763** TestNo: **EPA 300.0** Analysis Date: **8/11/2022** SeqNo: **4776007**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.932	0.50	12.50	0.4930	99.5	80	120	13.33	3.06	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-043-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 10:11:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220818A**	QC Batch: **R164969**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	1.4	10		mg/L	10	8/18/2022 12:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-098-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 10:38:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 06:41 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-046-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 8:29:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	2.2	0.14	1.0		mg/L	1	8/11/2022 06:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-112-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 9:02:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 07:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-168-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 11:49:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 07:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-198-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 12:28:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 07:43 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-060-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 12:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 07:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-135-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 1:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 08:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-050-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 8:29:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 09:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-911-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 8:39:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 09:16 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-070-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 9:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 09:31 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-914-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 9:30:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 09:47 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-090-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 10:21:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 10:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-100-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 11:13:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 10:18 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R164745**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164745**
Client ID: **PBW**	Batch ID: **R164745**	TestNo: **SM 5310C**		Analysis Date: **8/11/2022**	SeqNo: **4775942**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R164745**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164745**
Client ID: **LCSW**	Batch ID: **R164745**	TestNo: **SM 5310C**		Analysis Date: **8/11/2022**	SeqNo: **4775943**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.097	1.0	5.000	0	102	85	115				

Sample ID: **N052034-009DMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164745**
Client ID: **ZZZZZZ**	Batch ID: **R164745**	TestNo: **SM 5310C**		Analysis Date: **8/11/2022**	SeqNo: **4775956**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	230.280	50	250.0	0	92.1	75	125				

Sample ID: **N052034-009DMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164745**
Client ID: **ZZZZZZ**	Batch ID: **R164745**	TestNo: **SM 5310C**		Analysis Date: **8/11/2022**	SeqNo: **4775957**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	233.585	50	250.0	0	93.4	75	125	230.3	1.42	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R164969**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164969**
Client ID: **PBW**	Batch ID: **R164969**	TestNo: **SM 5310C**		Analysis Date: **8/18/2022**	SeqNo: **4787509**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R164969**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164969**
Client ID: **LCSW**	Batch ID: **R164969**	TestNo: **SM 5310C**		Analysis Date: **8/18/2022**	SeqNo: **4787510**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.014	1.0	5.000	0	100	85	115				

Sample ID: **N052065-001CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164969**
Client ID: **ZZZZZZ**	Batch ID: **R164969**	TestNo: **SM 5310C**		Analysis Date: **8/18/2022**	SeqNo: **4787516**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	37.836	10	50.00	0	75.7	75	125				

Sample ID: **N052065-001CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164969**
Client ID: **ZZZZZZ**	Batch ID: **R164969**	TestNo: **SM 5310C**		Analysis Date: **8/18/2022**	SeqNo: **4787521**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	37.826	10	50.00	0	75.7	75	125	37.84	0.0264	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-001

Client Sample ID: MW-81-043-Q322
Collection Date: 8/10/2022 10:11:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	90	13	20		µg/L	1	8/13/2022 05:18 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-098-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 10:38:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 05:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-046-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 8:29:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	6000	13	20		µg/L	1	8/13/2022 05:55 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-112-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 9:02:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 06:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-005

Client Sample ID: MW-82-168-Q322
Collection Date: 8/10/2022 11:49:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Iron	24	13	20		µg/L	1	8/13/2022 06:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-198-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 12:28:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A		**EPA 6010B**				
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	25	13	20		µg/L	1	8/13/2022 06:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-060-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 12:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	260	13	20		µg/L	1	8/13/2022 06:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-135-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 1:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 06:19 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-050-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 8:29:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	52	13	20		µg/L	1	8/13/2022 06:33 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-911-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 8:39:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	47	13	20		µg/L	1	8/13/2022 06:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-070-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 9:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	33	13	20		µg/L	1	8/13/2022 06:41 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-914-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 9:30:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	29	13	20		µg/L	1	8/13/2022 06:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-090-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 10:21:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	37	13	20		µg/L	1	8/13/2022 06:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-015

Client Sample ID: MW-36-100-Q322
Collection Date: 8/10/2022 11:13:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 06:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94190**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164812**
Client ID: **PBW**	Batch ID: **94190**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4777865**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-94190**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164812**
Client ID: **LCSW**	Batch ID: **94190**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4777866**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	101.283	20	100.0	0	101	85	115				

Sample ID: **N052065-001BMS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164812**
Client ID: **ZZZZZZ**	Batch ID: **94190**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4777874**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	179.636	20	100.0	89.60	90.0	75	125				

Sample ID: **N052065-001BMSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164812**
Client ID: **ZZZZZZ**	Batch ID: **94190**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4777875**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	154.307	20	100.0	89.60	64.7	75	125	179.6	15.2	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **N052065-001B-PS** SampType: **PS** TestCode: **6010_WDPGE** Units: **µg/L** Prep Date: RunNo: **164812**
Client ID: **ZZZZZZ** Batch ID: **94190** TestNo: **EPA 6010B** **EPA 3010A** Analysis Date: **8/13/2022** SeqNo: **4777873**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	165.970	20	100.0	89.60	76.4	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-001

Client Sample ID: MW-81-043-Q322
Collection Date: 8/10/2022 10:11:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220817B**	QC Batch: **94192**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	1.2	0.050	0.10		µg/L	1	8/17/2022 07:03 PM
Barium	110	0.083	1.0		µg/L	1	8/13/2022 11:50 PM
Manganese	45	0.026	0.50		µg/L	1	8/13/2022 11:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-002

Client Sample ID: MW-81-098-Q322
Collection Date: 8/10/2022 10:38:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94192**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/14/2022 01:02 AM
Barium	59	0.083	1.0		µg/L	1	8/14/2022 01:02 AM
Manganese	160	0.026	0.50		µg/L	1	8/14/2022 01:02 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-046-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 8:29:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220813C** QC Batch: **94192**				PrepDate:	**8/11/2022**		Analyst: **DJ**
Arsenic	25	0.050	0.10		µg/L	1	8/14/2022 01:31 AM
Barium	52	0.083	1.0		µg/L	1	8/14/2022 01:31 AM
Manganese	310	0.13	2.5		µg/L	5	8/14/2022 01:37 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-112-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 9:02:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94192**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/14/2022 01:43 AM
Barium	36	0.083	1.0		µg/L	1	8/14/2022 01:43 AM
Manganese	61	0.026	0.50		µg/L	1	8/14/2022 01:43 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-168-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 11:49:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220813C**	QC Batch: **94192**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/14/2022 01:55 AM
Barium	38	0.083	1.0		µg/L	1	8/14/2022 01:55 AM
Manganese	41	0.026	0.50		µg/L	1	8/14/2022 01:55 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-006

Client Sample ID: MW-82-198-Q322
Collection Date: 8/10/2022 12:28:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94192**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/14/2022 02:07 AM
Barium	39	0.083	1.0		µg/L	1	8/14/2022 02:07 AM
Manganese	150	0.026	0.50		µg/L	1	8/14/2022 02:07 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-008

Client Sample ID: MW-31-060-Q322
Collection Date: 8/10/2022 12:40:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220813C**	QC Batch: **94192**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/14/2022 02:48 AM
Barium	76	0.083	1.0		µg/L	1	8/14/2022 02:48 AM
Manganese	850	0.13	2.5		µg/L	5	8/14/2022 02:54 AM
Molybdenum	7.6	0.12	0.50		µg/L	1	8/14/2022 02:48 AM
Selenium	ND	0.044	0.50		µg/L	1	8/14/2022 02:48 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-009

Client Sample ID: MW-31-135-Q322
Collection Date: 8/10/2022 1:40:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94192**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/14/2022 03:00 AM
Barium	40	0.083	1.0		µg/L	1	8/14/2022 03:00 AM
Manganese	2.1	0.026	0.50		µg/L	1	8/14/2022 03:00 AM
Molybdenum	28	0.12	0.50		µg/L	1	8/14/2022 03:00 AM
Selenium	0.92	0.044	0.50		µg/L	1	8/14/2022 03:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-010

Client Sample ID: MW-30-050-Q322
Collection Date: 8/10/2022 8:29:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94192**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	2.5	0.050	0.10		µg/L	1	8/14/2022 03:12 AM
Barium	18	0.083	1.0		µg/L	1	8/14/2022 03:12 AM
Manganese	360	0.13	2.5		µg/L	5	8/14/2022 03:18 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-011

Client Sample ID: MW-911-Q322
Collection Date: 8/10/2022 8:39:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94192**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	8/14/2022 03:24 AM
Barium	18	0.083	1.0		µg/L	1	8/14/2022 03:24 AM
Manganese	370	0.13	2.5		µg/L	5	8/14/2022 03:30 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-012

Client Sample ID: MW-36-070-Q322
Collection Date: 8/10/2022 9:20:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94192**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	1.9	0.050	0.10		µg/L	1	8/14/2022 03:36 AM
Barium	36	0.083	1.0		µg/L	1	8/14/2022 03:36 AM
Manganese	280	0.13	2.5		µg/L	5	8/14/2022 03:59 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-914-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 9:30:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220813C**	QC Batch: **94192**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Arsenic	2.2	0.050	0.10		µg/L	1	8/14/2022 04:05 AM
Barium	36	0.083	1.0		µg/L	1	8/14/2022 04:05 AM
Manganese	290	0.13	2.5		µg/L	5	8/14/2022 04:11 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-014

Client Sample ID: MW-36-090-Q322
Collection Date: 8/10/2022 10:21:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220813C** QC Batch: **94192**				PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	1.2	0.050	0.10		µg/L	1	8/14/2022 04:17 AM
Barium	33	0.083	1.0		µg/L	1	8/14/2022 04:17 AM
Manganese	160	0.026	0.50		µg/L	1	8/14/2022 04:17 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-015

Client Sample ID: MW-36-100-Q322
Collection Date: 8/10/2022 11:13:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C** QC Batch: **94192**				PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	13	0.050	0.10		µg/L	1	8/14/2022 04:29 AM
Barium	33	0.083	1.0		µg/L	1	8/14/2022 04:29 AM
Manganese	9.8	0.026	0.50		µg/L	1	8/14/2022 04:29 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94192**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **PBW**	Batch ID: **94192**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778919**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									
Molybdenum	ND	0.50									
Selenium	ND	0.50									

Sample ID: **LCS-94192**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **LCSW**	Batch ID: **94192**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778920**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.178	0.10	10.00	0	91.8	85	115				
Barium	9.094	1.0	10.00	0	90.9	85	115				
Manganese	95.878	0.50	100.0	0	95.9	85	115				
Molybdenum	9.351	0.50	10.00	0	93.5	85	115				
Selenium	9.296	0.50	10.00	0	93.0	85	115				

Sample ID: **N052065-001BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94192**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/14/2022**	SeqNo: **4778932**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	118.595	1.0	10.00	112.4	61.8	75	125				S
Manganese	132.010	0.50	100.0	45.30	86.7	75	125				
Molybdenum	30.494	0.50	10.00	21.07	94.2	75	125				

Sample ID: **N052065-001BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94192**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/14/2022**	SeqNo: **4778934**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052065-001BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94192**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/14/2022**	SeqNo: **4778934**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	124.039	1.0	10.00	112.4	116	75	125	118.6	4.49	20	
Manganese	134.142	0.50	100.0	45.30	88.8	75	125	132.0	1.60	20	
Molybdenum	32.120	0.50	10.00	21.07	111	75	125	30.49	5.20	20	

Sample ID: **N052065-001BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164874**
Client ID: **ZZZZZZ**	Batch ID: **94192**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/15/2022**	SeqNo: **4781834**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	9.639	0.50	10.00	1.196	84.4	75	125				

Sample ID: **N052065-001BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164874**
Client ID: **ZZZZZZ**	Batch ID: **94192**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/15/2022**	SeqNo: **4781835**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	8.626	0.50	10.00	1.196	74.3	75	125	9.639	11.1	20	S

Sample ID: **N052065-001BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94192**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/14/2022**	SeqNo: **4804460**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.351	0.10	10.00	1.206	91.4	75	125				

Sample ID: **N052065-001BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94192**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/14/2022**	SeqNo: **4804461**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.542	0.10	10.00	1.206	93.4	75	125	10.35	1.83	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052065-001B-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164826**
Client ID: **ZZZZZZ** Batch ID: **94192** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/14/2022** SeqNo: **4778930**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	121.265	1.0	10.00	112.4	88.6	80	120				
Manganese	132.686	0.50	100.0	45.30	87.4	80	120				
Molybdenum	31.062	0.50	10.00	21.07	99.9	80	120				

Sample ID: **N052065-001B-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164874**
Client ID: **ZZZZZZ** Batch ID: **94192** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/15/2022** SeqNo: **4781833**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	9.249	0.50	10.00	1.196	80.5	80	120				

Sample ID: **N052065-001B-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164826**
Client ID: **ZZZZZZ** Batch ID: **94192** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/14/2022** SeqNo: **4804459**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.511	0.10	10.00	1.206	93.0	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

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CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement		QA/QC		Sample Receipt Condition: Y N
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD		RTNE		1. Chilled ✓
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker		RWQCB	✓	2. Headspace
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Labspec		CalTrans		3. Container Intact ✓
Submitted By: Riggie Tap		Phone: 949-727-1400, ext 200 Fax:	Others	✓	LEVEL III		4. Seal Present
Title: Field Tech	Phone: 916-786-3302 Fax:		Specify: RWQCB		LEVEL IV		5. IR number 3
Signature: Date: 8/10/22	Sampled By: Riggie Tap		Global ID:		Regulatory		6. Method of Cooling: ICE
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for				Specify State:		Sample Temp: 2.6°C, 1.8°C
Project Name: PG&E Topock - PCM	Signature: Date: 8/10/22						Courier: Asset
Project Number: 30121866.3Q22GW							Tracking No.:

Matrix: Ground X | Sediment | Potable | Soil | NPDES | Other Solid | Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrite, Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Nitrate (EPA 300.0) (1 L poly)			Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052065-01	MW-81-043-Q322	8/10/2022	10:11		X		X			X			X	X			E	9	P	BNS	MS/MSD
2	-02	MW-81-098-Q322	8/10/2022	10:38		X		X			X			X	X			E	6	P	BNS	
3	-03	MW-82-046-Q322	8/10/2022	8:29		X		X			X			X	X			E	6	P	BNS	
4	-04	MW-82-112-Q322	8/10/2022	9:02		X		X			X			X	X			E	6	P	BNS	
5	-05	MW-82-168-Q322	8/10/2022	11:49		X		X			X			X	X			E	6	P	BNS	
6	-06	MW-82-198-Q322	8/10/2022	12:28		X		X			X			X	X			E	6	P	BNS	
7	-07	EB-713-Q322	8/10/2022	13:00		X												E	1	P	BNS	
8	-08	MW-31-060-Q322	8/10/2022	12:40		X	X	X	X	X	X		X					E	7	P	BNS	
9	-09	MW-31-135-Q322	8/10/2022	13:40		X	X	X	X	X	X		X					E	7	P	BNS	
10	-10	MW-30-050-Q322	8/10/2022	8:29		X		X			X			X	X			E	6	P	BNS	
11	-11	MW-911-Q322	8/10/2022	8:39		X		X			X			X	X			E	6	P	BNS	
12	-12	MW-36-070-Q322	8/10/2022	9:20		X		X			X				X			E	6	P	BNS	
13	-13	MW-914-Q322	8/10/2022	9:30		X		X			X				X			E	6	P	BNS	
14																						

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Riggie Tap	8/10/22 1450	Dante Ortiz	8/10/22 14:50
Dante Ortiz	8/10/22 18:05	Dante Ortiz	8/10/22 18:05

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
   Less than 24 Hrs. =200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

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Page 1 of 1

| | | |

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/10/2022	Workorder:	N052065
Rep sample Temp (Deg C):	2.6/1.8	IR Gun ID:	3
Temp Blank:	☑ Yes ☐ No		
Carrier name:	ASSET		
Last 4 digits of Tracking No.:	NA	Packing Material Used:	None
Cooling process:	☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None		

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☐	No ☑	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☑	No ☐	NA ☐
Was Client notified?	Yes ☑	No ☐	NA ☐

Comments: See Correspondence.

For:

Checklist Completed By: EF YRJ 8/11/2022

for:

Reviewed By: MBC 8/17/2022

Mary Ann Balilu

From: Madsen, Laura <Laura.Madsen@arcadis.com>
Sent: Friday, August 12, 2022 6:33 AM
To: Yoandra Rodriguez
Cc: maryann.balilu@assetlaboratoriesph.com; rustico.aquino@assetlaboratoriesph.com; eilen@assetlaboratories.com
Subject: RE: PG&E Topock - PCM, 30121866.3Q22GW (ASSET Labs No. N052065)

Hi,

For Sample 15 (MW-36-100-Q322) that is correct, we need nitrate by 300, nitrate/nitrite as nitrogen by SM4500. No ammonia needed for this sample.

Thanks,

Laura

Laura Madsen PG

Project Geologist

Arcadis U.S., Inc.
M +1 303 653 5749

From: Yoandra Rodriguez <yoandra@assetlaboratories.com>
Sent: Thursday, August 11, 2022 6:21 PM
To: Madsen, Laura <Laura.Madsen@arcadis.com>
Cc: maryann.balilu@assetlaboratoriesph.com; rustico.aquino@assetlaboratoriesph.com; eilen@assetlaboratories.com
Subject: Re: PG&E Topock - PCM, 30121866.3Q22GW (ASSET Labs No. N052065)

Noted Laura,

What about sample 15 (MW-36-100-Q322)? Nitrate/Nitrite by 4500 and Nitrate by 300? No Ammonia?

On 8/11/2022 4:08 PM, Madsen, Laura wrote:

> Hi Yoandra,
>
> We are needing Nitrate, Nitrite, sulfate, and Ammonia for MW-31-060 and MW-31-135, plus the metals and TOC
>
> Thanks,

Laura

Laura Madsen PG

Project Geologist

Arcadis U.S., Inc.
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From: Yoandra Rodriguez <yoandra@assetlaboratories.com> <mailto:yoandra@assetlaboratories.com>
Sent: Thursday, August 11, 2022 5:27 PM
To: Madsen, Laura <Laura.Madsen@arcadis.com> <mailto:Laura.Madsen@arcadis.com>
Cc: maryann.balilu@assetlaboratoriesph.com <mailto:maryann.balilu@assetlaboratoriesph.com> ; rustico.aquino@assetlaboratoriesph.com <mailto:rustico.aquino@assetlaboratoriesph.com> ; eilen@assetlaboratories.com <mailto:eilen@assetlaboratories.com>
Subject: Re: PG&E Topock - PCM, 30121866.3Q22GW (ASSET Labs No. N052065)

Thanks Laura!

Another question please, just for confirmation. The request for Ammonia and Nitrate/Nitrite is correct?

I'm asking because the bottles are labelled Nitrate/Nitrite.

Thanks,

On 8/11/2022 2:58 PM, Madsen, Laura wrote:

Hello,

Sample 9: Collection time is 13:40 is correct

- Sample 14: Collection time is 10:21 is correct

Thanks!

Laura Madsen PG

Project Geologist

Arcadis U.S., Inc.
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From: Yoandra Rodriguez <yoandra@assetlaboratories.com> <mailto:yoandra@assetlaboratories.com>

Sent: Thursday, August 11, 2022 4:52 PM
To: Madsen, Laura <Laura.Madsen@arcadis.com> <mailto:Laura.Madsen@arcadis.com>
Cc: maryann.balilu@assetlaboratoriesph.com <mailto:maryann.balilu@assetlaboratoriesph.com> ; rustico.aquino@assetlaboratoriesph.com <mailto:rustico.aquino@assetlaboratoriesph.com> ; eilen@assetlaboratories.com <mailto:eilen@assetlaboratories.com>
Subject: PG&E Topock - PCM, 30121866.3Q22GW (ASSET Labs No. N052065)

Hi Laura,

Please, advise on the following discrepancies for the attached COC:

- Sample 9: Collection time is 13:40 on COC and 12:40 on labels

- Sample 14: Collection time is 10:20 on COC and 10:21 on labels

--
Thanks,

Yoandra Rodriguez
Project Manager

Nevada: 3151 W. Post Road, Las Vegas, NV 89118 | P: 702.307.2659 | F: 702.307.2691
California: 11110 Artesia Blvd., Ste. B, Cerritos, CA 90703 | P: 562.219.7435 | F: 562.219.7436

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--
Thanks,

Yoandra Rodriguez
Project Manager

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California: 11110 Artesia Blvd., Ste. B, Cerritos, CA 90703 | P: 562.219.7435 | F: 562.219.7436

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ASSET Laboratories

WORK ORDER Summary

11-Aug-22

WorkOrder: N052065

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/10/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052065-001A	MW-81-043-Q322	8/10/2022 10:11:00 AM	8/24/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☑	☐	WW
N052065-001B			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			8/24/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☑	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☑	☐	WW
N052065-001C			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☑	☐	VW
N052065-001D			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
N052065-002A	MW-81-098-Q322	8/10/2022 10:38:00 AM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052065-002B			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052065-002C			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052065-002D			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052065-003A	MW-82-046-Q322	8/10/2022 8:29:00 AM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052065-003B			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052065-003C			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

11-Aug-22

WorkOrder: N052065

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/10/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052065-003D	MW-82-046-Q322	8/10/2022 8:29:00 AM	8/24/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052065-004A	MW-82-112-Q322	8/10/2022 9:02:00 AM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052065-004B			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052065-004C			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052065-004D			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052065-005A	MW-82-168-Q322	8/10/2022 11:49:00 AM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052065-005B			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052065-005C			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052065-005D			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052065-006A	MW-82-198-Q322	8/10/2022 12:28:00 PM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052065-006B			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

11-Aug-22

WorkOrder: N052065

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/10/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052065-006B	MW-82-198-Q322	8/10/2022 12:28:00 PM	8/24/2022	Groundwater	EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052065-006C			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052065-006D			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052065-007A	EB-713-Q322	8/10/2022 1:00:00 PM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052065-008A	MW-31-060-Q322	8/10/2022 12:40:00 PM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052065-008B			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052065-008C			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052065-008D			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052065-008E			8/24/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052065-009A	MW-31-135-Q322	8/10/2022 1:40:00 PM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052065-009B			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052065-009C			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

11-Aug-22

WorkOrder: N052065

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/10/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052065-009C	MW-31-135-Q322	8/10/2022 1:40:00 PM	8/24/2022	Groundwater	EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052065-009D			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052065-009E			8/24/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052065-010A	MW-30-050-Q322	8/10/2022 8:29:00 AM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052065-010B			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052065-010C			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052065-010D			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052065-011A	MW-911-Q322	8/10/2022 8:39:00 AM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052065-011B			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052065-011C			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052065-011D			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052065-012A	MW-36-070-Q322	8/10/2022 9:20:00 AM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

11-Aug-22

WorkOrder: N052065

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/10/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052065-012B	MW-36-070-Q322	8/10/2022 9:20:00 AM	8/24/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052065-012C			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052065-012D			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052065-013A	MW-914-Q322	8/10/2022 9:30:00 AM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052065-013B			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052065-013C			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052065-013D			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052065-014A	MW-36-090-Q322	8/10/2022 10:21:00 AM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052065-014B			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052065-014C			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052065-014D			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052065-015A	MW-36-100-Q322	8/10/2022 11:13:00 AM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

11-Aug-22

WorkOrder: N052065

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/10/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052065-015B	MW-36-100-Q322	8/10/2022 11:13:00 AM	8/24/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052065-015C			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052065-015D			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052065-015E			8/24/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052065-016A	EB-714-Q322	8/10/2022 2:15:00 PM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052065-017A	FOLDER	8/24/2022	8/24/2022		Folder	Folder	☐	☐	☐	LAB
			8/24/2022		Folder	Level IV Report	☐	☐	☐	LAB
			8/24/2022		Folder	Folder	☐	☐	☐	LAB

ASSET Laboratories
3151-3153 W Post Rd., Las Vegas, NV 89118
www.atl-labs.com
TEL: 7023072659 *FAX: 7023072691*

CHAIN-OF-CUSTODY RECORD

QC Level: Level IV

Subcontractor:

BC Labs
4100 Atlas Court
Bakersfield, CA 93308

TEL: (661) 327-4911
FAX: (661) 327-1918
Acct #:

Field Sampler: Riggie Tep

11-Aug-22

				Requested Tests		
				Ammonia		
Sample ID	**Matrix**	**Date Collected**	**Bottle Type**	**SM4500-NH3D**	~~**SM4500-NO3F**~~ Nitrate/Nitrite	
N052065-008E / MW-31-060-Q322	Groundwater	8/10/2022 12:40:00 PM	8OZP	1		
N052065-009E / MW-31-135-Q322	Groundwater	8/10/2022 1:40:00 PM	8OZP	1		
N052065-015E / MW-36-100-Q322	Groundwater	8/10/2022 11:13:00 AM	8OZP		1	

General Comments: PLEASE EMAIL SAMPLE RECEIPT ACKNOWLEDGEMENT TO THE PM. ALWAYS CC: sonny.lorenzo@assetlaboratories.com

Please use PO#:N52065A Please email Invoices and Account Receivable Statements to elvira@assetlaboratories.com. For questions, call Marlon at (702)-307-2659. Please e-mail results to reports.lv@assetlaboratories.com by: Standard TAT.

EDD requirement Labspec7 edata.

GSO #: 557526493

		Date/Time			Date/Time
Relinquished by:	YRJ	8/11/2022 1630	**Received by:**		
Relinquished by:			**Received by:**		

August 29, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052083

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 11, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Subcontracted Analyses:

Ammonia and Nitrate/Nitrite as N were subcontracted to BC Labs - Bakersfield, CA.

Analytical Comments for EPA 218.6:

Dilution was necessary for some samples due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Nitrite in QC samples N052083-013DMS and N052083-013DMSD possibly due to matrix interference. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Arsenic and Molybdenum in QC samples N052083-005B-MS and N052083-005B-MSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052083
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052083-001A	MW-96-045-Q322	Groundwater	8/11/2022 11:01:00 AM	8/11/2022	8/29/2022
N052083-002A	MW-96-217-Q322	Groundwater	8/11/2022 11:36:00 AM	8/11/2022	8/29/2022
N052083-003A	MW-34-080-Q322	Groundwater	8/11/2022 8:14:00 AM	8/11/2022	8/29/2022
N052083-003B	MW-34-080-Q322	Groundwater	8/11/2022 8:14:00 AM	8/11/2022	8/29/2022
N052083-003C	MW-34-080-Q322	Groundwater	8/11/2022 8:14:00 AM	8/11/2022	8/29/2022
N052083-003D	MW-34-080-Q322	Groundwater	8/11/2022 8:14:00 AM	8/11/2022	8/29/2022
N052083-004A	MW-34-080-EB-Q322	Groundwater	8/11/2022 7:50:00 AM	8/11/2022	8/29/2022
N052083-005A	MW-44-115-Q322	Groundwater	8/11/2022 9:52:00 AM	8/11/2022	8/29/2022
N052083-005B	MW-44-115-Q322	Groundwater	8/11/2022 9:52:00 AM	8/11/2022	8/29/2022
N052083-005C	MW-44-115-Q322	Groundwater	8/11/2022 9:52:00 AM	8/11/2022	8/29/2022
N052083-005D	MW-44-115-Q322	Groundwater	8/11/2022 9:52:00 AM	8/11/2022	8/29/2022
N052083-006A	MW-916-Q322	Groundwater	8/11/2022 10:02:00 AM	8/11/2022	8/29/2022
N052083-006B	MW-916-Q322	Groundwater	8/11/2022 10:02:00 AM	8/11/2022	8/29/2022
N052083-006C	MW-916-Q322	Groundwater	8/11/2022 10:02:00 AM	8/11/2022	8/29/2022
N052083-006D	MW-916-Q322	Groundwater	8/11/2022 10:02:00 AM	8/11/2022	8/29/2022
N052083-007A	MW-44-125-Q322	Groundwater	8/11/2022 9:22:00 AM	8/11/2022	8/29/2022
N052083-007B	MW-44-125-Q322	Groundwater	8/11/2022 9:22:00 AM	8/11/2022	8/29/2022
N052083-007C	MW-44-125-Q322	Groundwater	8/11/2022 9:22:00 AM	8/11/2022	8/29/2022
N052083-007D	MW-44-125-Q322	Groundwater	8/11/2022 9:22:00 AM	8/11/2022	8/29/2022
N052083-007E	MW-44-125-Q322	Groundwater	8/11/2022 9:22:00 AM	8/11/2022	8/29/2022
N052083-008A	MW-44-125-EB-Q322	Groundwater	8/11/2022 9:00:00 AM	8/11/2022	8/29/2022
N052083-009A	MW-45-095a-Q322	Groundwater	8/11/2022 8:43:00 AM	8/11/2022	8/29/2022
N052083-009B	MW-45-095a-Q322	Groundwater	8/11/2022 8:43:00 AM	8/11/2022	8/29/2022
N052083-009C	MW-45-095a-Q322	Groundwater	8/11/2022 8:43:00 AM	8/11/2022	8/29/2022
N052083-009D	MW-45-095a-Q322	Groundwater	8/11/2022 8:43:00 AM	8/11/2022	8/29/2022
N052083-010A	EB-715-Q322	Groundwater	8/11/2022 12:00:00 PM	8/11/2022	8/29/2022
N052083-011A	MW-78-070-Q322	Groundwater	8/11/2022 11:56:00 AM	8/11/2022	8/29/2022
N052083-011B	MW-78-070-Q322	Groundwater	8/11/2022 11:56:00 AM	8/11/2022	8/29/2022
N052083-011C	MW-78-070-Q322	Groundwater	8/11/2022 11:56:00 AM	8/11/2022	8/29/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052083
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052083-011D	MW-78-070-Q322	Groundwater	8/11/2022 11:56:00 AM	8/11/2022	8/29/2022
N052083-011E	MW-78-070-Q322	Groundwater	8/11/2022 11:56:00 AM	8/11/2022	8/29/2022
N052083-012A	MW-78-142-Q322	Groundwater	8/11/2022 12:34:00 PM	8/11/2022	8/29/2022
N052083-012B	MW-78-142-Q322	Groundwater	8/11/2022 12:34:00 PM	8/11/2022	8/29/2022
N052083-012C	MW-78-142-Q322	Groundwater	8/11/2022 12:34:00 PM	8/11/2022	8/29/2022
N052083-012D	MW-78-142-Q322	Groundwater	8/11/2022 12:34:00 PM	8/11/2022	8/29/2022
N052083-012E	MW-78-142-Q322	Groundwater	8/11/2022 12:34:00 PM	8/11/2022	8/29/2022
N052083-013A	MW-79-058-Q322	Groundwater	8/11/2022 9:57:00 AM	8/11/2022	8/29/2022
N052083-013B	MW-79-058-Q322	Groundwater	8/11/2022 9:57:00 AM	8/11/2022	8/29/2022
N052083-013C	MW-79-058-Q322	Groundwater	8/11/2022 9:57:00 AM	8/11/2022	8/29/2022
N052083-013D	MW-79-058-Q322	Groundwater	8/11/2022 9:57:00 AM	8/11/2022	8/29/2022
N052083-013E	MW-79-058-Q322	Groundwater	8/11/2022 9:57:00 AM	8/11/2022	8/29/2022
N052083-014A	MW-79-102-Q322	Groundwater	8/11/2022 10:43:00 AM	8/11/2022	8/29/2022
N052083-014B	MW-79-102-Q322	Groundwater	8/11/2022 10:43:00 AM	8/11/2022	8/29/2022
N052083-014C	MW-79-102-Q322	Groundwater	8/11/2022 10:43:00 AM	8/11/2022	8/29/2022
N052083-014D	MW-79-102-Q322	Groundwater	8/11/2022 10:43:00 AM	8/11/2022	8/29/2022
N052083-014E	MW-79-102-Q322	Groundwater	8/11/2022 10:43:00 AM	8/11/2022	8/29/2022
N052083-015A	MW-80-057-Q322	Groundwater	8/11/2022 8:55:00 AM	8/11/2022	8/29/2022
N052083-015B	MW-80-057-Q322	Groundwater	8/11/2022 8:55:00 AM	8/11/2022	8/29/2022
N052083-015C	MW-80-057-Q322	Groundwater	8/11/2022 8:55:00 AM	8/11/2022	8/29/2022
N052083-015D	MW-80-057-Q322	Groundwater	8/11/2022 8:55:00 AM	8/11/2022	8/29/2022
N052083-015E	MW-80-057-Q322	Groundwater	8/11/2022 8:55:00 AM	8/11/2022	8/29/2022
N052083-016A	MW-80-082-Q322	Groundwater	8/11/2022 8:06:00 AM	8/11/2022	8/29/2022
N052083-016B	MW-80-082-Q322	Groundwater	8/11/2022 8:06:00 AM	8/11/2022	8/29/2022
N052083-016C	MW-80-082-Q322	Groundwater	8/11/2022 8:06:00 AM	8/11/2022	8/29/2022
N052083-016D	MW-80-082-Q322	Groundwater	8/11/2022 8:06:00 AM	8/11/2022	8/29/2022
N052083-016E	MW-80-082-Q322	Groundwater	8/11/2022 8:06:00 AM	8/11/2022	8/29/2022
N052083-017A	EB-716-Q322	Groundwater	8/11/2022 1:20:00 PM	8/11/2022	8/29/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-96-045-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 11:01:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220815A**	QC Batch: **R164863**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/15/2022 03:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-96-217-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 11:36:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220812A**	QC Batch: **R164834**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/12/2022 06:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-080-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 8:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
EPA 218.6							
RunID: **NV00922-IC7_220812A** QC Batch: **R164834** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/12/2022 11:56 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-080-EB-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 7:50:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220812A**	QC Batch: **R164834**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/12/2022 12:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-115-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 9:52:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220815A**	QC Batch: **R164863**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/15/2022 03:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-916-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 10:02:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
EPA 218.6							
RunID: **NV00922-IC7_220812A** QC Batch: **R164834** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/12/2022 01:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-125-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 9:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220815A**	QC Batch: **R164863**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/15/2022 02:49 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-125-EB-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 9:00:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220812A**	QC Batch: **R164834**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/12/2022 05:34 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-45-095a-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 8:43:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220812A**	QC Batch: **R164834**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/12/2022 05:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-010

Client Sample ID: EB-715-Q322
Collection Date: 8/11/2022 12:00:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220812A**	QC Batch: **R164834**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/12/2022 05:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-011

Client Sample ID: MW-78-070-Q322
Collection Date: 8/11/2022 11:56:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220815A** QC Batch: **R164863**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	1200	5.0	40		µg/L	200	8/15/2022 01:43 PM
DISSOLVED METALS BY ICP-MS							
			EPA 3010A		**EPA 6020**		
RunID: **NV00922-ICP8_220816D** QC Batch: **94230**				PrepDate:	**8/13/2022**		Analyst: **DJ**
Chromium	1300	0.88	25		µg/L	25	8/16/2022 06:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-012

Client Sample ID: MW-78-142-Q322
Collection Date: 8/11/2022 12:34:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220812A** QC Batch: **R164834**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	5300	25	200		µg/L	1000	8/12/2022 01:31 PM
DISSOLVED METALS BY ICP-MS							
			EPA 3010A		**EPA 6020**		
RunID: **NV00922-ICP8_220816D** QC Batch: **94230**				PrepDate:	**8/13/2022**		Analyst: **DJ**
Chromium	6100	4.4	120		µg/L	125	8/16/2022 07:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-013

Client Sample ID: MW-79-058-Q322
Collection Date: 8/11/2022 9:57:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220812A** QC Batch: **R164834**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	2100	5.0	40		µg/L	200	8/12/2022 03:05 PM
DISSOLVED METALS BY ICP-MS							
			EPA 3010A		**EPA 6020**		
RunID: **NV00922-ICP8_220816D** QC Batch: **94230**				PrepDate:	**8/13/2022**		Analyst: **DJ**
Chromium	2100	0.88	25		µg/L	25	8/16/2022 06:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-014

Client Sample ID: MW-79-102-Q322
Collection Date: 8/11/2022 10:43:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220812A** QC Batch: **R164834**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	2000	5.0	40		µg/L	200	8/12/2022 01:59 PM
DISSOLVED METALS BY ICP-MS							
			EPA 3010A		**EPA 6020**		
RunID: **NV00922-ICP8_220816D** QC Batch: **94230**				PrepDate:	**8/13/2022**		Analyst: **DJ**
Chromium	2200	0.88	25		µg/L	25	8/16/2022 07:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-015

Client Sample ID: MW-80-057-Q322
Collection Date: 8/11/2022 8:55:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220812A** QC Batch: **R164834**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	650	5.0	40		µg/L	200	8/12/2022 03:24 PM
DISSOLVED METALS BY ICP-MS							
			EPA 3010A		**EPA 6020**		
RunID: **NV00922-ICP8_220816D** QC Batch: **94230**				PrepDate:	**8/13/2022**		Analyst: **DJ**
Chromium	690	0.18	5.0		µg/L	5	8/16/2022 07:21 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-016

Client Sample ID: MW-80-082-Q322
Collection Date: 8/11/2022 8:06:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220812A** QC Batch: **R164834**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	200	0.50	4.0		µg/L	20	8/12/2022 03:43 PM
DISSOLVED METALS BY ICP-MS							
			EPA 3010A		**EPA 6020**		
RunID: **NV00922-ICP8_220816D** QC Batch: **94230**				PrepDate:	**8/13/2022**		Analyst: **DJ**
Chromium	240	0.18	5.0		µg/L	5	8/16/2022 07:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-716-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 1:20:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220812A**	QC Batch: **R164834**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/12/2022 06:31 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R164834**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164834**
Client ID: **PBW**	Batch ID: **R164834**	TestNo: **EPA 218.6**		Analysis Date: **8/12/2022**	SeqNo: **4779246**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R164834**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164834**
Client ID: **LCSW**	Batch ID: **R164834**	TestNo: **EPA 218.6**		Analysis Date: **8/12/2022**	SeqNo: **4779247**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.787	0.20	5.000	0	95.7	90	110				

Sample ID: **N052083-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164834**
Client ID: **ZZZZZZ**	Batch ID: **R164834**	TestNo: **EPA 218.6**		Analysis Date: **8/12/2022**	SeqNo: **4779249**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.004	0.20	1.000	0	100	90	110				

Sample ID: **N052083-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164834**
Client ID: **ZZZZZZ**	Batch ID: **R164834**	TestNo: **EPA 218.6**		Analysis Date: **8/12/2022**	SeqNo: **4779251**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.964	0.20	1.000	0	96.4	90	110				

Sample ID: **N052083-006AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164834**
Client ID: **ZZZZZZ**	Batch ID: **R164834**	TestNo: **EPA 218.6**		Analysis Date: **8/12/2022**	SeqNo: **4779255**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.014	0.20	1.000	0	101	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052083-012AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164834**
Client ID: **ZZZZZZ** Batch ID: **R164834** TestNo: **EPA 218.6** Analysis Date: **8/12/2022** SeqNo: **4779257**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	9929.400	200	5000	5258	93.4	90	110				

Sample ID: **N052083-012AMSD** SampType: **MSD** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164834**
Client ID: **ZZZZZZ** Batch ID: **R164834** TestNo: **EPA 218.6** Analysis Date: **8/12/2022** SeqNo: **4779258**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	9928.200	200	5000	5258	93.4	90	110	9929	0.0121	20	

Sample ID: **N052083-014ADUP** SampType: **DUP** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164834**
Client ID: **ZZZZZZ** Batch ID: **R164834** TestNo: **EPA 218.6** Analysis Date: **8/12/2022** SeqNo: **4779260**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2015.720	40						2015	0.0248	20	

Sample ID: **N052083-014AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164834**
Client ID: **ZZZZZZ** Batch ID: **R164834** TestNo: **EPA 218.6** Analysis Date: **8/12/2022** SeqNo: **4779261**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2983.180	40	1000	2015	96.8	90	110				

Sample ID: **N052083-013AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164834**
Client ID: **ZZZZZZ** Batch ID: **R164834** TestNo: **EPA 218.6** Analysis Date: **8/12/2022** SeqNo: **4779265**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	3006.480	40	1000	2052	95.4	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052083-015AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164834**
Client ID: **ZZZZZZ** Batch ID: **R164834** TestNo: **EPA 218.6** Analysis Date: **8/12/2022** SeqNo: **4779267**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1648.220	40	1000	646.8	100	90	110				

Sample ID: **N052083-016AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164834**
Client ID: **ZZZZZZ** Batch ID: **R164834** TestNo: **EPA 218.6** Analysis Date: **8/12/2022** SeqNo: **4779269**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	295.954	4.0	100.0	197.5	98.5	90	110				

Sample ID: **N052083-009AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164834**
Client ID: **ZZZZZZ** Batch ID: **R164834** TestNo: **EPA 218.6** Analysis Date: **8/12/2022** SeqNo: **4779273**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.002	0.20	1.000	0	100	90	110				

Sample ID: **N052083-008AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164834**
Client ID: **ZZZZZZ** Batch ID: **R164834** TestNo: **EPA 218.6** Analysis Date: **8/12/2022** SeqNo: **4779275**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.952	0.20	1.000	0	95.2	90	110				

Sample ID: **N052083-010AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164834**
Client ID: **ZZZZZZ** Batch ID: **R164834** TestNo: **EPA 218.6** Analysis Date: **8/12/2022** SeqNo: **4779277**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.942	0.20	1.000	0	94.2	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052083-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164834**
Client ID: **ZZZZZZ**	Batch ID: **R164834**	TestNo: **EPA 218.6**		Analysis Date: **8/12/2022**	SeqNo: **4779279**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.885	1.0	5.000	0	97.7	90	110				

Sample ID: **N052083-017AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164834**
Client ID: **ZZZZZZ**	Batch ID: **R164834**	TestNo: **EPA 218.6**		Analysis Date: **8/12/2022**	SeqNo: **4779281**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.944	0.20	1.000	0	94.4	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R164863**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164863**
Client ID: **PBW**	Batch ID: **R164863**	TestNo: **EPA 218.6**		Analysis Date: **8/15/2022**	SeqNo: **4781109**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R164863**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164863**
Client ID: **LCSW**	Batch ID: **R164863**	TestNo: **EPA 218.6**		Analysis Date: **8/15/2022**	SeqNo: **4781110**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.988	0.20	5.000	0	99.8	90	110				

Sample ID: **N052098-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164863**
Client ID: **ZZZZZZ**	Batch ID: **R164863**	TestNo: **EPA 218.6**		Analysis Date: **8/15/2022**	SeqNo: **4781112**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	204.400	4.0	100.0	104.5	99.9	90	110				

Sample ID: **N052098-005AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164863**
Client ID: **ZZZZZZ**	Batch ID: **R164863**	TestNo: **EPA 218.6**		Analysis Date: **8/15/2022**	SeqNo: **4781113**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	202.830	4.0	100.0	104.5	98.3	90	110	204.4	0.771	20	

Sample ID: **N052083-011AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164863**
Client ID: **ZZZZZZ**	Batch ID: **R164863**	TestNo: **EPA 218.6**		Analysis Date: **8/15/2022**	SeqNo: **4781115**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2182.480	40	1000	1194	98.9	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052083-011ADUP** SampType: **DUP** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164863**
Client ID: **ZZZZZZ** Batch ID: **R164863** TestNo: **EPA 218.6** Analysis Date: **8/15/2022** SeqNo: **4781116**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1176.840	40						1194	1.41	20	

Sample ID: **N052098-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164863**
Client ID: **ZZZZZZ** Batch ID: **R164863** TestNo: **EPA 218.6** Analysis Date: **8/15/2022** SeqNo: **4781118**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	886.350	20	500.0	393.6	98.5	90	110				

Sample ID: **N052083-007AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164863**
Client ID: **ZZZZZZ** Batch ID: **R164863** TestNo: **EPA 218.6** Analysis Date: **8/15/2022** SeqNo: **4781122**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.515	1.0	5.000	0	90.3	90	110				

Sample ID: **N052083-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164863**
Client ID: **ZZZZZZ** Batch ID: **R164863** TestNo: **EPA 218.6** Analysis Date: **8/15/2022** SeqNo: **4781124**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.733	1.0	5.000	0	94.6	90	110				

Sample ID: **N052083-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164863**
Client ID: **ZZZZZZ** Batch ID: **R164863** TestNo: **EPA 218.6** Analysis Date: **8/15/2022** SeqNo: **4781126**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.523	1.0	5.000	0	90.5	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052098-002AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164863**
Client ID: **ZZZZZZ** Batch ID: **R164863** TestNo: **EPA 218.6** Analysis Date: **8/15/2022** SeqNo: **4781128**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.916	0.20	1.000	0	91.6	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020DIS_CrPGE_TPK

Sample ID: **MB-94230**	SampType: **MBLK**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164893**
Client ID: **PBW**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783632**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									

Sample ID: **LCS-94230**	SampType: **LCS**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164893**
Client ID: **LCSW**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783633**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10.178	1.0	10.00	0	102	85	115				

Sample ID: **N052083-005B-MS**	SampType: **MS**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164893**
Client ID: **ZZZZZZ**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783638**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.801	1.0	10.00	0.1789	96.2	75	125				

Sample ID: **N052083-005B-MSD**	SampType: **MSD**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164893**
Client ID: **ZZZZZZ**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783639**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.871	1.0	10.00	0.1789	96.9	75	125	9.801	0.715	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-003

Client Sample ID: MW-34-080-Q322
Collection Date: 8/11/2022 8:14:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
EPA 300.0							
RunID: **NV00922-IC8_220813A** QC Batch: **R164814** PrepDate: Analyst: **RAB**							
Sulfate	540	3.0	25		mg/L	50	8/13/2022 12:38 PM
ANIONS BY ION CHROMATOGRAPHY							
EPA 300.0							
RunID: **NV00922-IC8_220812A** QC Batch: **R164809** PrepDate: Analyst: **RAB**							
Nitrate as N	ND	0.095	0.50		mg/L	10	8/12/2022 01:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-005

Client Sample ID: MW-44-115-Q322
Collection Date: 8/11/2022 9:52:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**			PrepDate:				Analyst: **RAB**
Sulfate	1000	6.1	50		mg/L	100	8/13/2022 02:13 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**			PrepDate:				Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/12/2022 01:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-006

Client Sample ID: MW-916-Q322
Collection Date: 8/11/2022 10:02:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**			PrepDate:				Analyst: **RAB**
Sulfate	940	6.1	50		mg/L	100	8/13/2022 02:29 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**			PrepDate:				Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/12/2022 02:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-007

Client Sample ID: MW-44-125-Q322
Collection Date: 8/11/2022 9:22:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**			PrepDate:				Analyst: **RAB**
Sulfate	1100	6.1	50		mg/L	100	8/13/2022 03:16 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**			PrepDate:				Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/12/2022 02:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-009

Client Sample ID: MW-45-095a-Q322
Collection Date: 8/11/2022 8:43:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**			PrepDate:				Analyst: **RAB**
Sulfate	430	3.0	25		mg/L	50	8/13/2022 01:26 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**			PrepDate:				Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/12/2022 02:43 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-011

Client Sample ID: MW-78-070-Q322
Collection Date: 8/11/2022 11:56:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/12/2022 10:46 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**				PrepDate:			Analyst: **RAB**
Sulfate	440	3.0	25		mg/L	50	8/13/2022 03:48 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrate as N	2.1	0.095	0.50		mg/L	10	8/12/2022 10:46 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-012

Client Sample ID: MW-78-142-Q322
Collection Date: 8/11/2022 12:34:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/12/2022 11:02 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**				PrepDate:			Analyst: **RAB**
Sulfate	840	6.1	50		mg/L	100	8/13/2022 03:32 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrate as N	9.0	0.095	0.50		mg/L	10	8/12/2022 11:02 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-013

Client Sample ID: MW-79-058-Q322
Collection Date: 8/11/2022 9:57:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/12/2022 11:18 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**				PrepDate:			Analyst: **RAB**
Sulfate	460	3.0	25		mg/L	50	8/13/2022 04:04 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrate as N	6.9	0.095	0.50		mg/L	10	8/12/2022 11:18 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-014

Client Sample ID: MW-79-102-Q322
Collection Date: 8/11/2022 10:43:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/12/2022 11:34 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**				PrepDate:			Analyst: **RAB**
Sulfate	660	3.0	25		mg/L	50	8/13/2022 04:19 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrate as N	3.6	0.095	0.50		mg/L	10	8/12/2022 11:34 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-015

Client Sample ID: MW-80-057-Q322
Collection Date: 8/11/2022 8:55:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/12/2022 11:49 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**				PrepDate:			Analyst: **RAB**
Sulfate	440	3.0	25		mg/L	50	8/13/2022 04:35 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrate as N	12	0.095	0.50		mg/L	10	8/12/2022 11:49 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-016

Client Sample ID: MW-80-082-Q322
Collection Date: 8/11/2022 8:06:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/12/2022 12:05 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**				PrepDate:			Analyst: **RAB**
Sulfate	530	3.0	25		mg/L	50	8/13/2022 04:51 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrate as N	1.2	0.095	0.50		mg/L	10	8/12/2022 12:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_NO2PGE

Sample ID: **MB-R164809_NO2**	SampType: **MBLK**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **PBW**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4778444**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	0.014	0.50									

Sample ID: **LCS-R164809_NO2**	SampType: **LCS**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **LCSW**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4778445**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	1.184	0.50	1.250	0	94.7	90	110				

Sample ID: **N052083-013DMS**	SampType: **MS**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **ZZZZZZ**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4778452**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	15.252	5.0	12.50	0	122	80	120				S

Sample ID: **N052083-013DMSD**	SampType: **MSD**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **ZZZZZZ**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4778453**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	15.139	5.0	12.50	0	121	80	120	15.25	0.744	20	S

Sample ID: **N052083-015DDUP**	SampType: **DUP**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **ZZZZZZ**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4778456**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	ND	5.0						0	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

  Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **MB-R164814_SO4**	SampType: **MBLK**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164814**
Client ID: **PBW**	Batch ID: **R164814**	TestNo: **EPA 300.0**		Analysis Date: **8/13/2022**	SeqNo: **4778349**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.50									

Sample ID: **LCS-R164814_SO4**	SampType: **LCS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164814**
Client ID: **LCSW**	Batch ID: **R164814**	TestNo: **EPA 300.0**		Analysis Date: **8/13/2022**	SeqNo: **4778350**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	4.087	0.50	4.000	0	102	90	110				

Sample ID: **N052083-003DMS**	SampType: **MS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164814**
Client ID: **ZZZZZZ**	Batch ID: **R164814**	TestNo: **EPA 300.0**		Analysis Date: **8/13/2022**	SeqNo: **4778352**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	771.600	25	200.0	537.7	117	80	120				

Sample ID: **N052083-003DMSD**	SampType: **MSD**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164814**
Client ID: **ZZZZZZ**	Batch ID: **R164814**	TestNo: **EPA 300.0**		Analysis Date: **8/13/2022**	SeqNo: **4778353**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	759.810	25	200.0	537.7	111	80	120	771.6	1.54	20	

Sample ID: **N052083-009DDUP**	SampType: **DUP**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164814**
Client ID: **ZZZZZZ**	Batch ID: **R164814**	TestNo: **EPA 300.0**		Analysis Date: **8/13/2022**	SeqNo: **4778355**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	430.605	25						431.4	0.183	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **N052083-009DMS**	SampType: **MS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164814**
Client ID: **ZZZZZZ**	Batch ID: **R164814**	TestNo: **EPA 300.0**		Analysis Date: **8/13/2022**	SeqNo: **4778356**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	622.910	25	200.0	431.4	95.8	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R164809_NO3**	SampType: **MBLK**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **PBW**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4777767**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R164809_NO3**	SampType: **LCS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **LCSW**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4777768**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.187	0.050	1.250	0	95.0	90	110				

Sample ID: **N052083-013DMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **ZZZZZZ**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4777775**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	20.635	0.50	12.50	6.870	110	80	120				

Sample ID: **N052083-013DMSD**	SampType: **MSD**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **ZZZZZZ**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4777776**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	20.191	0.50	12.50	6.870	107	80	120	20.64	2.18	20	

Sample ID: **N052083-015DDUP**	SampType: **DUP**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **ZZZZZZ**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4777779**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.586	0.50						11.81	1.87	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **N052083-009DMS** SampType: **MS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **164809**
Client ID: **ZZZZZZ** Batch ID: **R164809** TestNo: **EPA 300.0** Analysis Date: **8/12/2022** SeqNo: **4777785**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.775	0.50	12.50	0	94.2	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-080-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 8:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 01:24 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-115-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 9:52:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 01:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-916-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 10:02:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 03:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-125-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 9:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 03:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-45-095a-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 8:43:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 03:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-070-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 11:56:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 04:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-142-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 12:34:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 04:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-058-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 9:57:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 04:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-102-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 10:43:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 05:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-057-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 8:55:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 05:17 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-082-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 8:06:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 05:32 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R164829**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164829**
Client ID: **PBW**	Batch ID: **R164829**	TestNo: **SM 5310C**		Analysis Date: **8/12/2022**	SeqNo: **4779023**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R164829**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164829**
Client ID: **LCSW**	Batch ID: **R164829**	TestNo: **SM 5310C**		Analysis Date: **8/12/2022**	SeqNo: **4779024**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.050	1.0	5.000	0	101	85	115				

Sample ID: **N052058-010DMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164829**
Client ID: **ZZZZZZ**	Batch ID: **R164829**	TestNo: **SM 5310C**		Analysis Date: **8/12/2022**	SeqNo: **4779026**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.246	1.0	5.000	0.8311	88.3	75	125				

Sample ID: **N052058-010DMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164829**
Client ID: **ZZZZZZ**	Batch ID: **R164829**	TestNo: **SM 5310C**		Analysis Date: **8/12/2022**	SeqNo: **4779029**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.153	1.0	5.000	0.8311	86.4	75	125	5.246	1.78	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-003

Client Sample ID: MW-34-080-Q322
Collection Date: 8/11/2022 8:14:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**				PrepDate:	**8/13/2022**	Analyst: **DJ**
Iron	480	13	20		µg/L	1	8/28/2022 08:56 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-115-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 9:52:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 09:20 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-916-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 10:02:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 09:34 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-125-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 9:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Iron	390	13	20		µg/L	1	8/28/2022 09:39 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-45-095a-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 8:43:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 09:44 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-011

Client Sample ID: MW-78-070-Q322
Collection Date: 8/11/2022 11:56:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:		**8/13/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 09:49 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-142-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 12:34:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 09:54 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-058-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 9:57:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 09:59 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-102-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 10:43:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Iron	22	13	20		µg/L	1	8/28/2022 10:04 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-057-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 8:55:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 10:09 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-082-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 8:06:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Iron	33	13	20		µg/L	1	8/28/2022 10:13 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94229**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **165203**
Client ID: **PBW**	Batch ID: **94229**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803659**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-94229**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **165203**
Client ID: **LCSW**	Batch ID: **94229**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803660**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	105.444	20	100.0	0	105	85	115				

Sample ID: **N052083-003B-MS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **165203**
Client ID: **ZZZZZZ**	Batch ID: **94229**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803664**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	561.580	20	100.0	477.5	84.1	75	125				

Sample ID: **N052083-003B-MSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **165203**
Client ID: **ZZZZZZ**	Batch ID: **94229**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803665**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	562.154	20	100.0	477.5	84.7	75	125	561.6	0.102	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-003

Client Sample ID: MW-34-080-Q322
Collection Date: 8/11/2022 8:14:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220816E**	QC Batch: **94230**				PrepDate:	**8/13/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 03:40 PM
Barium	39	0.083	1.0		µg/L	1	8/16/2022 03:40 PM
Manganese	130	0.026	0.50		µg/L	1	8/16/2022 03:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-115-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 9:52:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220816E**	QC Batch: **94230**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 03:46 PM
Barium	19	0.083	1.0		µg/L	1	8/16/2022 03:46 PM
Manganese	46	0.026	0.50		µg/L	1	8/16/2022 03:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-006

Client Sample ID: MW-916-Q322
Collection Date: 8/11/2022 10:02:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220816E**	QC Batch: **94230**			PrepDate:		**8/13/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 04:16 PM
Barium	21	0.083	1.0		µg/L	1	8/16/2022 04:16 PM
Manganese	52	0.026	0.50		µg/L	1	8/16/2022 04:16 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-007

Client Sample ID: MW-44-125-Q322
Collection Date: 8/11/2022 9:22:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220816E**	QC Batch: **94230**				PrepDate:	**8/13/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 04:40 PM
Barium	46	0.083	1.0		µg/L	1	8/16/2022 04:40 PM
Manganese	540	0.13	2.5		µg/L	5	8/16/2022 06:16 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-009

Client Sample ID: MW-45-095a-Q322
Collection Date: 8/11/2022 8:43:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220816E**	QC Batch: **94230**				PrepDate:	**8/13/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 04:46 PM
Barium	28	0.083	1.0		µg/L	1	8/16/2022 04:46 PM
Manganese	230	0.13	2.5		µg/L	5	8/16/2022 06:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-011

Client Sample ID: MW-78-070-Q322
Collection Date: 8/11/2022 11:56:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220816E**	QC Batch: **94230**				PrepDate:	**8/13/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 04:52 PM
Barium	140	0.083	1.0		µg/L	1	8/16/2022 04:52 PM
Manganese	88	0.026	0.50		µg/L	1	8/16/2022 04:52 PM
Molybdenum	8.2	0.12	0.50		µg/L	1	8/16/2022 04:52 PM
Selenium	2.5	0.044	0.50		µg/L	1	8/16/2022 04:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-012

Client Sample ID: MW-78-142-Q322
Collection Date: 8/11/2022 12:34:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220816E** QC Batch: **94230**				PrepDate:	**8/13/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 04:58 PM
Barium	28	0.083	1.0		µg/L	1	8/16/2022 04:58 PM
Manganese	3.2	0.026	0.50		µg/L	1	8/16/2022 04:58 PM
Molybdenum	20	0.12	0.50		µg/L	1	8/16/2022 04:58 PM
Selenium	35	0.044	0.50		µg/L	1	8/16/2022 04:58 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-013

Client Sample ID: MW-79-058-Q322
Collection Date: 8/11/2022 9:57:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220816E** QC Batch: **94230**				PrepDate:		**8/13/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 05:04 PM
Barium	110	0.083	1.0		µg/L	1	8/16/2022 05:04 PM
Manganese	13	0.026	0.50		µg/L	1	8/16/2022 05:04 PM
Molybdenum	20	0.12	0.50		µg/L	1	8/16/2022 05:04 PM
Selenium	9.2	0.044	0.50		µg/L	1	8/16/2022 05:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-014

Client Sample ID: MW-79-102-Q322
Collection Date: 8/11/2022 10:43:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220816E** QC Batch: **94230**				PrepDate:	**8/13/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 05:10 PM
Barium	46	0.083	1.0		µg/L	1	8/16/2022 05:10 PM
Manganese	ND	0.026	0.50		µg/L	1	8/16/2022 05:10 PM
Molybdenum	27	0.12	0.50		µg/L	1	8/16/2022 05:10 PM
Selenium	11	0.044	0.50		µg/L	1	8/16/2022 05:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-015

Client Sample ID: MW-80-057-Q322
Collection Date: 8/11/2022 8:55:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220816E**	QC Batch: **94230**				PrepDate:	**8/13/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 05:16 PM
Barium	55	0.083	1.0		µg/L	1	8/16/2022 05:16 PM
Manganese	18	0.026	0.50		µg/L	1	8/16/2022 05:16 PM
Molybdenum	25	0.12	0.50		µg/L	1	8/16/2022 05:16 PM
Selenium	20	0.044	0.50		µg/L	1	8/16/2022 05:16 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-016

Client Sample ID: MW-80-082-Q322
Collection Date: 8/11/2022 8:06:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220816E** QC Batch: **94230**				PrepDate:	**8/13/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 05:22 PM
Barium	48	0.083	1.0		µg/L	1	8/16/2022 05:22 PM
Manganese	9.5	0.026	0.50		µg/L	1	8/16/2022 05:22 PM
Molybdenum	52	0.12	0.50		µg/L	1	8/16/2022 05:22 PM
Selenium	1.3	0.044	0.50		µg/L	1	8/16/2022 05:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94230**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164894**
Client ID: **PBW**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783735**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	0.047	0.50									
Molybdenum	ND	0.50									
Selenium	ND	0.50									

Sample ID: **LCS-94230**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164894**
Client ID: **LCSW**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783736**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.721	0.10	10.00	0	97.2	85	115				
Barium	9.938	1.0	10.00	0	99.4	85	115				
Manganese	98.288	0.50	100.0	0	98.3	85	115				
Molybdenum	9.699	0.50	10.00	0	97.0	85	115				
Selenium	9.794	0.50	10.00	0	97.9	85	115				

Sample ID: **N052083-005B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164894**
Client ID: **ZZZZZZ**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783741**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	7.165	0.10	10.00	0	71.6	75	125				S
Barium	31.206	1.0	10.00	19.50	117	75	125				
Manganese	141.841	0.50	100.0	46.35	95.5	75	125				
Molybdenum	58.629	0.50	10.00	44.37	143	75	125				S
Selenium	8.986	0.50	10.00	0.1978	87.9	75	125				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052083-005B-MSD** SampType: **MSD** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/13/2022** RunNo: **164894**
Client ID: **ZZZZZZ** Batch ID: **94230** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/16/2022** SeqNo: **4783742**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	7.341	0.10	10.00	0	73.4	75	125	7.165	2.44	20	S
Barium	31.596	1.0	10.00	19.50	121	75	125	31.21	1.24	20	
Manganese	145.068	0.50	100.0	46.35	98.7	75	125	141.8	2.25	20	
Molybdenum	60.063	0.50	10.00	44.37	157	75	125	58.63	2.42	20	S
Selenium	9.220	0.50	10.00	0.1978	90.2	75	125	8.986	2.57	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052083-005B-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164894**
Client ID: **ZZZZZZ** Batch ID: **94230** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/16/2022** SeqNo: **4783740**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	6.948	0.10	10.00	0	69.5	80	120				S
Barium	31.266	1.0	10.00	19.50	118	80	120				
Manganese	140.890	0.50	100.0	46.35	94.5	80	120				
Molybdenum	58.679	0.50	10.00	44.37	143	80	120				S
Selenium	9.453	0.50	10.00	0.1978	92.6	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ASSET LABORATORIES

ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

Page 1 of 1

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement		QA/QC		Sample Receipt Condition
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD		RTNE		Y N
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com daniel.moore@critigen.com	Address:	Geotracker		RWQCB	✓	1. Chilled ✓
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Labspec		CalTrans		2. Headspace
Submitted By: Riggie Tap			Others	✓	LEVEL III		3. Container Intact ✓
Title: Field Tech	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	Specify: RWQCB		LEVEL IV		4. Seal Present
Signature: Date: 8/11/22	Sampled By: Riggie Tap		Global ID:		Regulatory		5. IR number 3
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for				Specify State:		6. Method of Cooling: ICE
Project Name: PG&E Topock - PCM	Signature:	Date: 8/11/22					Sample Temp: 1.1°C, 2.4°C
Project Number: 30121866.3Q22GW							Courier: ASSET
							Tracking No.:

Matrix: Ground X | Sediment | Potable | Soil | NPDES | Other Solid | Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH 250 mL poly	Nitrite, Nitrate, sulfate (EPA 300.0) 1 L poly	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese 500mL poly	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, 500mL poly	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium 500mL poly	Total Organic Carbon (SM5310C); H2SO4 3x40 mL VOA	Total metals (SW6010) No filter; HNO3 Total Iron 500mL poly	Ammonia as Nitrogen (SM4500NH3); H2SO4 1 L poly	Nitrate, sulfate (EPA 300.0) 1 L poly	Nitrate/nitrite as Nitrogen (SM 4500-NO3); H2SO4 125 mL poly	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052083-01	MW-96-045-Q322	8/11/2022	11:01		X										E	1	P	BNS	
2	-02	MW-96-217-Q322	8/11/2022	11:36		X										E	1	P	BNS	
3	-03	MW-34-080-Q322	8/11/2022	8:14		X		X			X			X		E	6	P	BNS	
4	-04	MW-34-080-EB-Q322	8/11/2022	7:50		X										E	1	P	BNS	
5	-05	MW-44-115-Q322	8/11/2022	9:52		X		X			X			X		E	6	P	BNS	
6	-06	MW-916-Q322	8/11/2022	10:02		X		X			X			X		E	6	P	BNS	
7	-07	MW-44-125-Q322	8/11/2022	9:22		X		X			X			X	X	E	7	P	BNS	
8	-08	MW-44-125-EB-Q322	8/11/2022	9:00		X										E	1	P	BNS	
9	-09	MW-45-095a-Q322	8/11/2022	8:43		X		X			X			X		E	6	P	BNS	
10	-10	EB-715-Q322	8/11/2022	12:00		X										E	1	P	BNS	
11	-11	MW-78-070-Q322	8/11/2022	11:56		X	X	X	X	X	X		X			E	3	P	BNS	
12	-12	MW-78-142-Q322	8/11/2022	12:34		X	X	X	X	X	X		X			E	3	P	BNS	
13																				
14																				

Reliquished by (Signature and Printed Name):	Date/Time:	Reliquished by (Signature and Printed Name):	Date/Time:
Riggie Tap	8/11/22 1435	Dante Ortiz Dante Ortiz	8/11/22 14:25
Dante Ortiz Dante Ortiz	8/11/22 18:18	Dante Ortiz Dante Ortiz	8/11/22 18:18

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [X] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms

1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
   Less than 24 Hrs =200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy

Yellow=Customer's Copy

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes		EDD Requirement		QA/QC		Sample Receipt Condition	Y	N
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:		Excel EDD		RTNE		1. Chilled	✓	
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com daniel.moore@critigen.com	Address:		Geotracker		RWQCB	✓	2. Headspace		✓
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com	P.O.#	Labspec		CalTrans		3. Container Intact	✓	
Submitted By: Rissie Top		Phone: 949-727-1400, ext 200	Fax:	Others	✓	LEVEL III		4. Seal Present		
Title: Field Tech	Phone: 916-786-3302 Fax:			Specify: RWQCB		LEVEL IV		5. IR number	3	
Signature: Date: 8/11/22	Sampled By: Rissie Top			Global ID:		Regulatory		6. Method of Cooling: ICE		
I hereby authorize ASSET Labs to perform the tests indicated below.	*I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for*					Specify State:		Sample Temp: 2.4°C, 1.1°C		
Project Name: PG&E Topock - PCM	Signature: Date: 8/11/22							Courier: ASSET		
Project Number: 30121866.3Q22GW								Tracking No.:		

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrite, Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Nitrate/nitrite as Nitrogen (SM 4500-NO3) ; H2SO4 (125 mL poly)			Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052083-13	MW-79-058-Q322	8/11/2022	9:57		X	X	X	X	X	X		X					E	7	P	BNS	
2	-14	MW-79-102-Q322	8/11/2022	10:43		X	X	X	X	X	X		X					E	7	P	BNS	
3	-15	MW-80-057-Q322	8/11/2022	8:55		X	X	X	X	X	X		X					E	7	P	BNS	
4	-16	MW-80-082-Q322	8/11/2022	8:06		X	X	X	X	X	X		X					E	7	P	BNS	
5	-17	EB-716-Q322	8/11/2022	13:20		X												E	1	P	BNS	
6																						
7																						
8																						
9																						
10																						
11																						
12																						
13																						
14																						

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Rissie Top	8/11/22 1435	Dante Ortiz	8/11/22 14:35
Dante Ortiz	8/11/22 17:15	Dante Ortiz	8/11/22 18:18

Turn Around Time (TAT)

	A	< 24 Hrs or Same Day TAT
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TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

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1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
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Less than 24 Hrs =200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
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9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/11/2022	Workorder:	N052083
Rep sample Temp (Deg C):	2.4/1.1	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: EF EFanegoF 8/12/2022

Reviewed By: for: MBC 8/18/2022

ASSET Laboratories

WORK ORDER Summary

18-Aug-22

WorkOrder: N052083

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/11/2022 6:18 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052083-001A	MW-96-045-Q322	8/11/2022 11:01:00 AM	8/25/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-002A	MW-96-217-Q322	8/11/2022 11:36:00 AM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-003A	MW-34-080-Q322	8/11/2022 8:14:00 AM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-003B			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052083-003C			8/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052083-003D			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052083-004A	MW-34-080-EB-Q322	8/11/2022 7:50:00 AM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-005A	MW-44-115-Q322	8/11/2022 9:52:00 AM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-005B			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052083-005C			8/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052083-005D			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052083-006A	MW-916-Q322	8/11/2022 10:02:00 AM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-006B			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

18-Aug-22

WorkOrder: N052083

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/11/2022 6:18 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052083-006B	MW-916-Q322	8/11/2022 10:02:00 AM	8/25/2022	Groundwater	EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052083-006C			8/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052083-006D			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052083-007A	MW-44-125-Q322	8/11/2022 9:22:00 AM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-007B			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052083-007C			8/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052083-007D			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052083-007E			8/25/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052083-008A	MW-44-125-EB-Q322	8/11/2022 9:00:00 AM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-009A	MW-45-095a-Q322	8/11/2022 8:43:00 AM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-009B			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052083-009C			8/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052083-009D			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

18-Aug-22

WorkOrder: N052083

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/11/2022 6:18 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052083-009D	MW-45-095a-Q322	8/11/2022 8:43:00 AM	8/25/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052083-010A	EB-715-Q322	8/11/2022 12:00:00 PM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-011A	MW-78-070-Q322	8/11/2022 11:56:00 AM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-011B			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052083-011C			8/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052083-011D			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052083-011E			8/25/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052083-012A	MW-78-142-Q322	8/11/2022 12:34:00 PM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-012B			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052083-012C			8/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052083-012D			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

18-Aug-22

WorkOrder: N052083

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/11/2022 6:18 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052083-012D	MW-78-142-Q322	8/11/2022 12:34:00 PM	8/25/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052083-012E			8/25/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052083-013A	MW-79-058-Q322	8/11/2022 9:57:00 AM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-013B			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052083-013C			8/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052083-013D			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052083-013E			8/25/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052083-014A	MW-79-102-Q322	8/11/2022 10:43:00 AM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-014B			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052083-014C			8/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052083-014D			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

18-Aug-22

WorkOrder: N052083

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/11/2022 6:18 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052083-014D	MW-79-102-Q322	8/11/2022 10:43:00 AM	8/25/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052083-014E			8/25/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052083-015A	MW-80-057-Q322	8/11/2022 8:55:00 AM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-015B			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052083-015C			8/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052083-015D			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052083-015E			8/25/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052083-016A	MW-80-082-Q322	8/11/2022 8:06:00 AM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-016B			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052083-016C			8/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

18-Aug-22

WorkOrder: N052083

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/11/2022 6:18 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052083-016D	MW-80-082-Q322	8/11/2022 8:06:00 AM	8/25/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052083-016E			8/25/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052083-017A	EB-716-Q322	8/11/2022 1:20:00 PM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-018A	FOLDER	8/25/2022	8/25/2022		Folder	Folder	☐	☐	☐	LAB
			8/25/2022		Folder	Level IV Report	☐	☐	☐	LAB
			8/25/2022		Folder	Folder	☐	☐	☐	LAB

ASSET Laboratories
3151-3153 W Post Rd., Las Vegas, NV 89118
www.atl-labs.com
TEL: 7023072659 *FAX: 7023072691*

CHAIN-OF-CUSTODY RECORD

QC Level: Level IV

Subcontractor:

BC Labs
4100 Atlas Court
Bakersfield, CA 93308

TEL: (661) 327-4911
FAX: (661) 327-1918
Acct #:

Field Sampler: Rigie Tep

15-Aug-22

				Requested Tests		
Sample ID	Matrix	Date Collected	Bottle Type	Ammonia SM4500-NH3D	~~SM4500-NO3F~~ Nitrate/Nitrite	
N052083-007E / MW-44-125-Q322	Groundwater	8/11/2022 9:22:00 AM	8OZP		1	
N052083-011E / MW-78-070-Q322	Groundwater	8/11/2022 11:56:00 AM	8OZP	1		
N052083-012E / MW-78-142-Q322	Groundwater	8/11/2022 12:34:00 PM	8OZP	1		
N052083-013E / MW-79-058-Q322	Groundwater	8/11/2022 9:57:00 AM	8OZP	1		
N052083-014E / MW-79-102-Q322	Groundwater	8/11/2022 10:43:00 AM	8OZP	1		
N052083-015E / MW-80-057-Q322	Groundwater	8/11/2022 8:55:00 AM	8OZP	1		
N052083-016E / MW-80-082-Q322	Groundwater	8/11/2022 8:06:00 AM	8OZP	1		

General Comments: PLEASE EMAIL SAMPLE RECEIPT ACKNOWLEDGEMENT TO THE PM. ALWAYS CC: sonny.lorenzo@assetlaboratories.com

Please use PO#:N52083A Please email Invoices and Account Receivable Statements to elvira@assetlaboratories.com. For questions, call Marlon at (702)-307-2659. Please e-mail results to reports.lv@assetlaboratories.com by: Standard TAT.

EDD requirement Labspec7 edata.

GSO #: 557545146

	Date/Time		Date/Time
Relinquished by: YRJ	8/15/2022 1630	**Received by:**	
Relinquished by:		**Received by:**	

August 29, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052098

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 12, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Subcontracted Analyses:

Ammonia and Nitrate/Nitrite were subcontracted to BC Labs - Bakersfield, CA.

Analytical Comments for EPA 218.6:

Because the results for total dissolved chromium (5.8 ug/L) and hexavalent chromium (0 ug/L) for sample N052098-001 (MW-21-Q322) are discrepant, sample re-analysis and Matrix Spike protocol were performed and result confirmed initial analysis.

Dilution was necessary for some samples due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of sample upon the addition of eluent.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Nitrite in QC samples N052083-013DMS and N052083-013DMSD possibly due to matrix interference. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020_Dissolved:

Because the results for total dissolved chromium (5.8 ug/L) and hexavalent chromium (0 ug/L) for sample N052098-001 (MW-21-Q322) are discrepant, sample from both the total dissolved chromium and hexavalent chromium containers were redigested and analyzed for total dissolved chromium. The results from the redigested samples were 7.2 and 3.1 ug/L, respectively. Since these data confirmed the original result for total dissolved chromium, the original result is reported.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Arsenic and Molybdenum in QC samples N052083-005B-MS and N052083-005B-MSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052098
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052098-001A	MW-21-Q322	Groundwater	8/12/2022 7:14:00 AM	8/12/2022	8/29/2022
N052098-001B	MW-21-Q322	Groundwater	8/12/2022 7:14:00 AM	8/12/2022	8/29/2022
N052098-001C	MW-21-Q322	Groundwater	8/12/2022 7:14:00 AM	8/12/2022	8/29/2022
N052098-001D	MW-21-Q322	Groundwater	8/12/2022 7:14:00 AM	8/12/2022	8/29/2022
N052098-001E	MW-21-Q322	Groundwater	8/12/2022 7:14:00 AM	8/12/2022	8/29/2022
N052098-002A	MW-21-EB-Q322	Groundwater	8/12/2022 6:50:00 AM	8/12/2022	8/29/2022
N052098-003A	MW-71-035-Q322	Groundwater	8/12/2022 7:46:00 AM	8/12/2022	8/29/2022
N052098-003B	MW-71-035-Q322	Groundwater	8/12/2022 7:46:00 AM	8/12/2022	8/29/2022
N052098-003C	MW-71-035-Q322	Groundwater	8/12/2022 7:46:00 AM	8/12/2022	8/29/2022
N052098-003D	MW-71-035-Q322	Groundwater	8/12/2022 7:46:00 AM	8/12/2022	8/29/2022
N052098-003E	MW-71-035-Q322	Groundwater	8/12/2022 7:46:00 AM	8/12/2022	8/29/2022
N052098-003F	MW-71-035-Q322	Groundwater	8/12/2022 7:46:00 AM	8/12/2022	8/29/2022
N052098-004A	EB-717-Q322	Groundwater	8/12/2022 8:00:00 AM	8/12/2022	8/29/2022
N052098-005A	MW-26-Q322	Groundwater	8/12/2022 7:38:00 AM	8/12/2022	8/29/2022
N052098-005B	MW-26-Q322	Groundwater	8/12/2022 7:38:00 AM	8/12/2022	8/29/2022
N052098-005C	MW-26-Q322	Groundwater	8/12/2022 7:38:00 AM	8/12/2022	8/29/2022
N052098-005D	MW-26-Q322	Groundwater	8/12/2022 7:38:00 AM	8/12/2022	8/29/2022
N052098-005E	MW-26-Q322	Groundwater	8/12/2022 7:38:00 AM	8/12/2022	8/29/2022
N052098-006A	MW-51-Q322	Groundwater	8/12/2022 8:29:00 AM	8/12/2022	8/29/2022
N052098-006B	MW-51-Q322	Groundwater	8/12/2022 8:29:00 AM	8/12/2022	8/29/2022
N052098-006C	MW-51-Q322	Groundwater	8/12/2022 8:29:00 AM	8/12/2022	8/29/2022
N052098-006D	MW-51-Q322	Groundwater	8/12/2022 8:29:00 AM	8/12/2022	8/29/2022
N052098-006E	MW-51-Q322	Groundwater	8/12/2022 8:29:00 AM	8/12/2022	8/29/2022
N052098-007A	EB-718-Q322	Groundwater	8/12/2022 9:00:00 AM	8/12/2022	8/29/2022

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052098-001

Client Sample ID: MW-21-Q322
Collection Date: 8/12/2022 7:14:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220816A** QC Batch: **R164901**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/16/2022 03:18 PM
DISSOLVED METALS BY ICP-MS							
		EPA 3010A			**EPA 6020**		
RunID: **NV00922-ICP8_220816D** QC Batch: **94230**				PrepDate:	**8/13/2022**		Analyst: **DJ**
Chromium	5.8	0.035	1.0		µg/L	1	8/16/2022 05:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-EB-Q322
Lab Order:	N052098	**Collection Date:**	8/12/2022 6:50:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052098-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220815A**	QC Batch: **R164863**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/15/2022 04:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052098-003

Client Sample ID: MW-71-035-Q322
Collection Date: 8/12/2022 7:46:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220816A** QC Batch: **R164901**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/16/2022 03:37 PM
DISSOLVED METALS BY ICP-MS							
			EPA 3010A			**EPA 6020**	
RunID: **NV00922-ICP8_220816D** QC Batch: **94230**				PrepDate:		**8/13/2022**	Analyst: **DJ**
Chromium	ND	0.035	1.0		µg/L	1	8/16/2022 05:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-717-Q322
Lab Order:	N052098	**Collection Date:**	8/12/2022 8:00:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052098-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220816A**	QC Batch: **R164901**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/16/2022 03:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052098-005

Client Sample ID: MW-26-Q322
Collection Date: 8/12/2022 7:38:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220815A** QC Batch: **R164863**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	100	0.50	4.0		µg/L	20	8/15/2022 01:14 PM
DISSOLVED METALS BY ICP-MS							
			EPA 3010A		**EPA 6020**		
RunID: **NV00922-ICP8_220816D** QC Batch: **94230**				PrepDate:	**8/13/2022**		Analyst: **DJ**
Chromium	94	0.035	1.0		µg/L	1	8/16/2022 06:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052098-006

Client Sample ID: MW-51-Q322
Collection Date: 8/12/2022 8:29:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220815A** QC Batch: **R164863**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	390	2.5	20		µg/L	100	8/15/2022 02:11 PM
DISSOLVED METALS BY ICP-MS							
			EPA 3010A		**EPA 6020**		
RunID: **NV00922-ICP8_220816D** QC Batch: **94230**				PrepDate:	**8/13/2022**		Analyst: **DJ**
Chromium	450	0.18	5.0		µg/L	5	8/16/2022 07:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-718-Q322
Lab Order:	N052098	**Collection Date:**	8/12/2022 9:00:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052098-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220816A**	QC Batch: **R164901**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/16/2022 04:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R164863**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164863**
Client ID: **PBW**	Batch ID: **R164863**	TestNo: **EPA 218.6**		Analysis Date: **8/15/2022**	SeqNo: **4781109**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R164863**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164863**
Client ID: **LCSW**	Batch ID: **R164863**	TestNo: **EPA 218.6**		Analysis Date: **8/15/2022**	SeqNo: **4781110**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.988	0.20	5.000	0	99.8	90	110				

Sample ID: **N052098-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164863**
Client ID: **ZZZZZZ**	Batch ID: **R164863**	TestNo: **EPA 218.6**		Analysis Date: **8/15/2022**	SeqNo: **4781112**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	204.400	4.0	100.0	104.5	99.9	90	110				

Sample ID: **N052098-005AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164863**
Client ID: **ZZZZZZ**	Batch ID: **R164863**	TestNo: **EPA 218.6**		Analysis Date: **8/15/2022**	SeqNo: **4781113**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	202.830	4.0	100.0	104.5	98.3	90	110	204.4	0.771	20	

Sample ID: **N052083-011AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164863**
Client ID: **ZZZZZZ**	Batch ID: **R164863**	TestNo: **EPA 218.6**		Analysis Date: **8/15/2022**	SeqNo: **4781115**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2182.480	40	1000	1194	98.9	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052083-011ADUP** SampType: **DUP** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164863**
Client ID: **ZZZZZZ** Batch ID: **R164863** TestNo: **EPA 218.6** Analysis Date: **8/15/2022** SeqNo: **4781116**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1176.840	40						1194	1.41	20	

Sample ID: **N052098-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164863**
Client ID: **ZZZZZZ** Batch ID: **R164863** TestNo: **EPA 218.6** Analysis Date: **8/15/2022** SeqNo: **4781118**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	886.350	20	500.0	393.6	98.5	90	110				

Sample ID: **N052083-007AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164863**
Client ID: **ZZZZZZ** Batch ID: **R164863** TestNo: **EPA 218.6** Analysis Date: **8/15/2022** SeqNo: **4781122**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.515	1.0	5.000	0	90.3	90	110				

Sample ID: **N052083-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164863**
Client ID: **ZZZZZZ** Batch ID: **R164863** TestNo: **EPA 218.6** Analysis Date: **8/15/2022** SeqNo: **4781124**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.733	1.0	5.000	0	94.6	90	110				

Sample ID: **N052083-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164863**
Client ID: **ZZZZZZ** Batch ID: **R164863** TestNo: **EPA 218.6** Analysis Date: **8/15/2022** SeqNo: **4781126**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.523	1.0	5.000	0	90.5	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052098-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164863**
Client ID: **ZZZZZZ**	Batch ID: **R164863**	TestNo: **EPA 218.6**		Analysis Date: **8/15/2022**	SeqNo: **4781128**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.916	0.20	1.000	0	91.6	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R164901**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **PBW**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784260**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R164901**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **LCSW**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784261**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.064	0.20	5.000	0	101	90	110				

Sample ID: **N052126-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **ZZZZZZ**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784263**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.016	0.20	1.000	0	102	90	110				

Sample ID: **N052126-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **ZZZZZZ**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784265**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.998	0.20	1.000	0	99.8	90	110				

Sample ID: **N052126-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **ZZZZZZ**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784267**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.007	0.20	1.000	0	101	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052097-001ADUP** SampType: **DUP** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164901**
Client ID: **ZZZZZZ** Batch ID: **R164901** TestNo: **EPA 218.6** Analysis Date: **8/16/2022** SeqNo: **4784271**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	51.217	2.0						51.35	0.265	20	

Sample ID: **N052098-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164901**
Client ID: **ZZZZZZ** Batch ID: **R164901** TestNo: **EPA 218.6** Analysis Date: **8/16/2022** SeqNo: **4784273**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.276	1.0	5.000	0	106	90	110				

Sample ID: **N052098-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164901**
Client ID: **ZZZZZZ** Batch ID: **R164901** TestNo: **EPA 218.6** Analysis Date: **8/16/2022** SeqNo: **4784275**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.093	1.0	5.000	0	102	90	110				

Sample ID: **N052098-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164901**
Client ID: **ZZZZZZ** Batch ID: **R164901** TestNo: **EPA 218.6** Analysis Date: **8/16/2022** SeqNo: **4784277**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.980	0.20	1.000	0	98.0	90	110				

Sample ID: **N052098-007AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164901**
Client ID: **ZZZZZZ** Batch ID: **R164901** TestNo: **EPA 218.6** Analysis Date: **8/16/2022** SeqNo: **4784279**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.955	0.20	1.000	0	95.5	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052126-004AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **ZZZZZZ**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784282**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.974	0.20	1.000	0	97.4	90	110	1.007	3.33	20	

Sample ID: **N052126-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **ZZZZZZ**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784284**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	15.390	1.0	5.000	10.20	104	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020DIS_CrPGE_TPK

Sample ID: **MB-94230**	SampType: **MBLK**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164893**
Client ID: **PBW**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783632**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									

Sample ID: **LCS-94230**	SampType: **LCS**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164893**
Client ID: **LCSW**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783633**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10.178	1.0	10.00	0	102	85	115				

Sample ID: **N052083-005B-MS**	SampType: **MS**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164893**
Client ID: **ZZZZZZ**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783638**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.801	1.0	10.00	0.1789	96.2	75	125				

Sample ID: **N052083-005B-MSD**	SampType: **MSD**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164893**
Client ID: **ZZZZZZ**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783639**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.871	1.0	10.00	0.1789	96.9	75	125	9.801	0.715	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052098-001

Client Sample ID: MW-21-Q322
Collection Date: 8/12/2022 7:14:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/12/2022 04:20 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**				PrepDate:			Analyst: **RAB**
Sulfate	1600	12	100		mg/L	200	8/13/2022 05:07 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/12/2022 04:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052098-003

Client Sample ID: MW-71-035-Q322
Collection Date: 8/12/2022 7:46:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/12/2022 04:35 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**				PrepDate:			Analyst: **RAB**
Sulfate	1300	12	100		mg/L	200	8/13/2022 05:23 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/12/2022 04:35 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052098-005

Client Sample ID: MW-26-Q322
Collection Date: 8/12/2022 7:38:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/12/2022 04:51 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**				PrepDate:			Analyst: **RAB**
Sulfate	520	6.1	50		mg/L	100	8/13/2022 05:38 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/12/2022 04:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052098-006

Client Sample ID: MW-51-Q322
Collection Date: 8/12/2022 8:29:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/12/2022 05:39 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**				PrepDate:			Analyst: **RAB**
Sulfate	530	6.1	50		mg/L	100	8/13/2022 06:26 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrate as N	1.0	0.095	0.50		mg/L	10	8/12/2022 05:39 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_NO2PGE

Sample ID: **MB-R164809_NO2**	SampType: **MBLK**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **PBW**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4778444**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	0.014	0.50									

Sample ID: **LCS-R164809_NO2**	SampType: **LCS**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **LCSW**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4778445**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	1.184	0.50	1.250	0	94.7	90	110				

Sample ID: **N052083-013DMS**	SampType: **MS**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **ZZZZZZ**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4778452**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	15.252	5.0	12.50	0	122	80	120				S

Sample ID: **N052083-013DMSD**	SampType: **MSD**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **ZZZZZZ**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4778453**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	15.139	5.0	12.50	0	121	80	120	15.25	0.744	20	S

Sample ID: **N052083-015DDUP**	SampType: **DUP**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **ZZZZZZ**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4778456**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	ND	5.0						0	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **MB-R164814_SO4**	SampType: **MBLK**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164814**
Client ID: **PBW**	Batch ID: **R164814**	TestNo: **EPA 300.0**		Analysis Date: **8/13/2022**	SeqNo: **4778349**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.50									

Sample ID: **LCS-R164814_SO4**	SampType: **LCS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164814**
Client ID: **LCSW**	Batch ID: **R164814**	TestNo: **EPA 300.0**		Analysis Date: **8/13/2022**	SeqNo: **4778350**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	4.087	0.50	4.000	0	102	90	110				

Sample ID: **N052083-003DMS**	SampType: **MS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164814**
Client ID: **ZZZZZZ**	Batch ID: **R164814**	TestNo: **EPA 300.0**		Analysis Date: **8/13/2022**	SeqNo: **4778352**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	771.600	25	200.0	537.7	117	80	120				

Sample ID: **N052083-003DMSD**	SampType: **MSD**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164814**
Client ID: **ZZZZZZ**	Batch ID: **R164814**	TestNo: **EPA 300.0**		Analysis Date: **8/13/2022**	SeqNo: **4778353**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	759.810	25	200.0	537.7	111	80	120	771.6	1.54	20	

Sample ID: **N052083-009DDUP**	SampType: **DUP**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164814**
Client ID: **ZZZZZZ**	Batch ID: **R164814**	TestNo: **EPA 300.0**		Analysis Date: **8/13/2022**	SeqNo: **4778355**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	430.605	25						431.4	0.183	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **N052083-009DMS** SampType: **MS** TestCode: **300_W_SO4P** Units: **mg/L** Prep Date: RunNo: **164814**
Client ID: **ZZZZZZ** Batch ID: **R164814** TestNo: **EPA 300.0** Analysis Date: **8/13/2022** SeqNo: **4778356**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	622.910	25	200.0	431.4	95.8	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R164809_NO3** SampType: **MBLK** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **164809**
Client ID: **PBW** Batch ID: **R164809** TestNo: **EPA 300.0** Analysis Date: **8/12/2022** SeqNo: **4777767**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R164809_NO3** SampType: **LCS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **164809**
Client ID: **LCSW** Batch ID: **R164809** TestNo: **EPA 300.0** Analysis Date: **8/12/2022** SeqNo: **4777768**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.187	0.050	1.250	0	95.0	90	110				

Sample ID: **N052083-013DMS** SampType: **MS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **164809**
Client ID: **ZZZZZZ** Batch ID: **R164809** TestNo: **EPA 300.0** Analysis Date: **8/12/2022** SeqNo: **4777775**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	20.635	0.50	12.50	6.870	110	80	120				

Sample ID: **N052083-013DMSD** SampType: **MSD** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **164809**
Client ID: **ZZZZZZ** Batch ID: **R164809** TestNo: **EPA 300.0** Analysis Date: **8/12/2022** SeqNo: **4777776**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	20.191	0.50	12.50	6.870	107	80	120	20.64	2.18	20	

Sample ID: **N052083-015DDUP** SampType: **DUP** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **164809**
Client ID: **ZZZZZZ** Batch ID: **R164809** TestNo: **EPA 300.0** Analysis Date: **8/12/2022** SeqNo: **4777779**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.586	0.50						11.81	1.87	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **N052083-009DMS** SampType: **MS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **164809**
Client ID: **ZZZZZZ** Batch ID: **R164809** TestNo: **EPA 300.0** Analysis Date: **8/12/2022** SeqNo: **4777785**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.775	0.50	12.50	0	94.2	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-Q322
Lab Order:	N052098	**Collection Date:**	8/12/2022 7:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052098-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 06:34 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-71-035-Q322
Lab Order:	N052098	**Collection Date:**	8/12/2022 7:46:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052098-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 06:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-26-Q322
Lab Order:	N052098	**Collection Date:**	8/12/2022 7:38:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052098-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 07:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-51-Q322
Lab Order:	N052098	**Collection Date:**	8/12/2022 8:29:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052098-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 07:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R164829**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164829**
Client ID: **PBW**	Batch ID: **R164829**	TestNo: **SM 5310C**		Analysis Date: **8/12/2022**	SeqNo: **4779023**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R164829**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164829**
Client ID: **LCSW**	Batch ID: **R164829**	TestNo: **SM 5310C**		Analysis Date: **8/12/2022**	SeqNo: **4779024**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.050	1.0	5.000	0	101	85	115				

Sample ID: **N052058-010DMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164829**
Client ID: **ZZZZZZ**	Batch ID: **R164829**	TestNo: **SM 5310C**		Analysis Date: **8/12/2022**	SeqNo: **4779026**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.246	1.0	5.000	0.8311	88.3	75	125				

Sample ID: **N052058-010DMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164829**
Client ID: **ZZZZZZ**	Batch ID: **R164829**	TestNo: **SM 5310C**		Analysis Date: **8/12/2022**	SeqNo: **4779029**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.153	1.0	5.000	0.8311	86.4	75	125	5.246	1.78	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-Q322
Lab Order:	N052098	**Collection Date:**	8/12/2022 7:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052098-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Iron	1200	13	20		µg/L	1	8/28/2022 10:31 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-71-035-Q322
Lab Order:	N052098	**Collection Date:**	8/12/2022 7:46:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052098-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Iron	380	13	20		µg/L	1	8/28/2022 10:36 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-26-Q322
Lab Order:	N052098	**Collection Date:**	8/12/2022 7:38:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052098-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 10:40 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-51-Q322
Lab Order:	N052098	**Collection Date:**	8/12/2022 8:29:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052098-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 10:45 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94229**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **165203**
Client ID: **PBW**	Batch ID: **94229**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803659**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-94229**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **165203**
Client ID: **LCSW**	Batch ID: **94229**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803660**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	105.444	20	100.0	0	105	85	115				

Sample ID: **N052083-003B-MS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **165203**
Client ID: **ZZZZZZ**	Batch ID: **94229**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803664**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	561.580	20	100.0	477.5	84.1	75	125				

Sample ID: **N052083-003B-MSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **165203**
Client ID: **ZZZZZZ**	Batch ID: **94229**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803665**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	562.154	20	100.0	477.5	84.7	75	125	561.6	0.102	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052098-001

Client Sample ID: MW-21-Q322
Collection Date: 8/12/2022 7:14:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220816E**	QC Batch: **94230**			PrepDate:		**8/13/2022**	Analyst: **DJ**
Arsenic	5.7	0.050	0.10		µg/L	1	8/16/2022 05:51 PM
Barium	25	0.083	1.0		µg/L	1	8/16/2022 05:51 PM
Manganese	280	0.13	2.5		µg/L	5	8/16/2022 07:33 PM
Molybdenum	82	0.12	0.50		µg/L	1	8/16/2022 05:51 PM
Selenium	ND	0.044	0.50		µg/L	1	8/16/2022 05:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052098-003

Client Sample ID: MW-71-035-Q322
Collection Date: 8/12/2022 7:46:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220816E**	QC Batch: **94230**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 05:57 PM
Barium	52	0.083	1.0		µg/L	1	8/16/2022 05:57 PM
Manganese	2200	0.66	12		µg/L	25	8/16/2022 07:39 PM
Molybdenum	23	0.12	0.50		µg/L	1	8/16/2022 05:57 PM
Selenium	ND	0.044	0.50		µg/L	1	8/16/2022 05:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052098-005

Client Sample ID: MW-26-Q322
Collection Date: 8/12/2022 7:38:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220816E**	QC Batch: **94230**			PrepDate:		**8/13/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 06:03 PM
Barium	73	0.083	1.0		µg/L	1	8/16/2022 06:03 PM
Manganese	3.2	0.026	0.50		µg/L	1	8/16/2022 06:03 PM
Molybdenum	4.1	0.12	0.50		µg/L	1	8/16/2022 06:03 PM
Selenium	0.53	0.044	0.50		µg/L	1	8/17/2022 03:36 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052098-006

Client Sample ID: MW-51-Q322
Collection Date: 8/12/2022 8:29:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220816E**	QC Batch: **94230**				PrepDate:	**8/13/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 06:09 PM
Barium	36	0.083	1.0		µg/L	1	8/16/2022 06:09 PM
Manganese	ND	0.026	0.50		µg/L	1	8/16/2022 06:09 PM
Molybdenum	57	0.12	0.50		µg/L	1	8/16/2022 06:09 PM
Selenium	2.9	0.044	0.50		µg/L	1	8/16/2022 06:09 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94230**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164894**
Client ID: **PBW**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783735**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	0.047	0.50									
Molybdenum	ND	0.50									
Selenium	ND	0.50									

Sample ID: **LCS-94230**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164894**
Client ID: **LCSW**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783736**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.721	0.10	10.00	0	97.2	85	115				
Barium	9.938	1.0	10.00	0	99.4	85	115				
Manganese	98.288	0.50	100.0	0	98.3	85	115				
Molybdenum	9.699	0.50	10.00	0	97.0	85	115				
Selenium	9.794	0.50	10.00	0	97.9	85	115				

Sample ID: **N052083-005B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164894**
Client ID: **ZZZZZZ**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783741**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	7.165	0.10	10.00	0	71.6	75	125				S
Barium	31.206	1.0	10.00	19.50	117	75	125				
Manganese	141.841	0.50	100.0	46.35	95.5	75	125				
Molybdenum	58.629	0.50	10.00	44.37	143	75	125				S
Selenium	8.986	0.50	10.00	0.1978	87.9	75	125				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052083-005B-MSD** SampType: **MSD** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/13/2022** RunNo: **164894**
Client ID: **ZZZZZZ** Batch ID: **94230** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/16/2022** SeqNo: **4783742**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	7.341	0.10	10.00	0	73.4	75	125	7.165	2.44	20	S
Barium	31.596	1.0	10.00	19.50	121	75	125	31.21	1.24	20	
Manganese	145.068	0.50	100.0	46.35	98.7	75	125	141.8	2.25	20	
Molybdenum	60.063	0.50	10.00	44.37	157	75	125	58.63	2.42	20	S
Selenium	9.220	0.50	10.00	0.1978	90.2	75	125	8.986	2.57	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052083-005B-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164894**
Client ID: **ZZZZZZ** Batch ID: **94230** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/16/2022** SeqNo: **4783740**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	6.948	0.10	10.00	0	69.5	80	120				S
Barium	31.266	1.0	10.00	19.50	118	80	120				
Manganese	140.890	0.50	100.0	46.35	94.5	80	120				
Molybdenum	58.679	0.50	10.00	44.37	143	80	120				S
Selenium	9.453	0.50	10.00	0.1978	92.6	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ASSET LABORATORIES
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CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement: Excel EDD; Geotracker; Labspec; Others ✓; Specify: RWQCB
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	QA/QC: RTNE; RWQCB ✓; CalTrans; LEVEL III; LEVEL IV; Regulatory
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Global ID:
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Specify State:
Submitted By: Riggie Tap	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	
Title: Field Tech			

Sample Receipt Condition

	Y	N
1. Chilled	✓	
2. Headspace		
3. Container Intact	✓	
4. Seal Present	✓	
5. IR number	3	
6. Method of Cooling: ICE		

Sample Temp: 4.3 °C

Signature: Date: 8/12/22
I hereby authorize ASSET Labs to perform the tests indicated below.

Sampled By: Riggie Tap
I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for
Signature: Date: 8/12/22

Project Name: PG&E Topock - PCM
Project Number: 30121866.3Q22GW

Courier:
Tracking No.:

Matrix: Ground X | Sediment | Potable | Soil | NPDES | Other Solid | Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrite, Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Nitrate/nitrite as Nitrogen (SM 4500-NO3) ; H2SO4 (125 mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052098-01	MW-21-Q322	8/12/2022	7:14		X	X	X	X	X	X		X			E	7	P	BNS	
2	-02	MW-21-EB-Q322	8/12/2022	6:50		X										E	1	P	BNS	
3	-03	MW-71-035-Q322	8/12/2022	7:46		X	X	X	X	X	X		X		X	E	8	P	BNS	
4	-04	EB-717-Q322	8/12/2022	8:00		X										E	1	P	BNS	
5	-05	MW-26-Q322	8/12/2022	7:38		X	X	X	X	X	X		X			E	7	P	BNS	
6	-06	MW-51-Q322	8/12/2022	8:29		X	X	X	X	X	X		X			E	7	P	BNS	
7	-07	EB-718-Q322	8/12/2022	9:00		X										E	1	P	BNS	
8																				
9																				
10																				
11																				
12																				
13																				
14																				

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Riggie Tap	8/12/22 1138	MORRISON	8/12/22 @1134
MBCARTIN	8/12/22 1520	Chris Ranco	8/12/22 1520

Turn Around Time (TAT)

	A	< 24 Hrs or Same Day TAT
	B	= Next Workday
	C	= 2 Workdays
	D	= 3 Workdays
X	E	= Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analyses
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:

H=HCl	N=HNO_3	S=H_2SO_4	C=4°C
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$	
Others/Specify:	B	(NH4)2SO4/NH4OH	

Container Type:

T=Tube	V=VOA	P=Pint
J=Jar	B=Tedlar	G=Glass
M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/12/2022	Workorder:	N052098
Rep sample Temp (Deg C):	4.3	IR Gun ID:	3
Temp Blank:	☑ Yes ☐ No		
Carrier name:	ASSET		
Last 4 digits of Tracking No.:	NA	Packing Material Used:	None
Cooling process:	☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None		

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: EF EFanegoF 8/12/2022

Reviewed By: for: MBC 8/17/2022

ASSET Laboratories

WORK ORDER Summary

15-Aug-22

WorkOrder: N052098

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/12/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052098-001A	MW-21-Q322	8/12/2022 7:14:00 AM	8/26/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052098-001B			8/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052098-001C			8/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052098-001D			8/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052098-001E			8/26/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052098-002A	MW-21-EB-Q322	8/12/2022 6:50:00 AM	8/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052098-003A	MW-71-035-Q322	8/12/2022 7:46:00 AM	8/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052098-003B			8/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052098-003C			8/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052098-003D			8/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

15-Aug-22

WorkOrder: N052098

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/12/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052098-003E	MW-71-035-Q322	8/12/2022 7:46:00 AM	8/26/2022	Groundwater	SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052098-003F			8/26/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052098-004A	EB-717-Q322	8/12/2022 8:00:00 AM	8/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052098-005A	MW-26-Q322	8/12/2022 7:38:00 AM	8/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052098-005B			8/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052098-005C			8/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052098-005D			8/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052098-005E			8/26/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052098-006A	MW-51-Q322	8/12/2022 8:29:00 AM	8/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052098-006B			8/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052098-006C			8/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

15-Aug-22

WorkOrder: N052098

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/12/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052098-006C	MW-51-Q322	8/12/2022 8:29:00 AM	8/26/2022	Groundwater	EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052098-006D			8/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052098-006E			8/26/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052098-007A	EB-718-Q322	8/12/2022 9:00:00 AM	8/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052098-008A	FOLDER	8/26/2022	8/26/2022		Folder	Folder	☐	☐	☐	LAB
			8/26/2022		Folder	Level IV Report	☐	☐	☐	LAB
			8/26/2022		Folder	Folder	☐	☐	☐	LAB

ASSET Laboratories
3151-3153 W Post Rd., Las Vegas, NV 89118
www.atl-labs.com
TEL: 7023072659 *FAX: 7023072691*

CHAIN-OF-CUSTODY RECORD

QC Level: Level IV

Subcontractor:

BC Labs
4100 Atlas Court
Bakersfield, CA 93308

TEL: (661) 327-4911
FAX: (661) 327-1918
Acct #:

Field Sampler: Riggie Tep

15-Aug-22

				Requested Tests		
Sample ID	**Matrix**	**Date Collected**	**Bottle Type**	**SM4500-NH3D**	**SM4500-NO3F**	
N052098-001E / MW-21-Q322	Groundwater	8/12/2022 7:14:00 AM	16OZP	1		
N052098-003E / MW-71-035-Q322	Groundwater	8/12/2022 7:46:00 AM	16OZP	1		
N052098-003F / MW-71-035-Q322	Groundwater	8/12/2022 7:46:00 AM	8OZP		1	
N052098-005E / MW-26-Q322	Groundwater	8/12/2022 7:38:00 AM	16OZP	1		
N052098-006E / MW-51-Q322	Groundwater	8/12/2022 8:29:00 AM	16OZP	1		

General Comments: PLEASE EMAIL SAMPLE RECEIPT ACKNOWLEDGEMENT TO THE PM. ALWAYS CC: sonny.lorenzo@assetlaboratories.com

Please use PO#:N52098A Please email Invoices and Account Receivable Statements to elvira@assetlaboratories.com. For questions, call Marlon at (702)-307-2659. Please e-mail results to reports.lv@assetlaboratories.com by: Standard TAT.

EDD requirement Labspec7 edata.

GSO #: 557545146

		Date/Time		Date/Time
Relinquished by:	YRJ	8/15/2022 1630	**Received by:**	
Relinquished by:			**Received by:**	

August 31, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052126

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 15, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for SM 5310C:

Matrix Spike (MS) is outside recovery criteria in QC sample N052065-001CMS at lower dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N052065-001 and MS/MSD were reported at 10x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052126
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052126-001A	PT5D-Q322	Groundwater	8/15/2022 12:37:00 PM	8/15/2022	8/31/2022
N052126-001B	PT5D-Q322	Groundwater	8/15/2022 12:37:00 PM	8/15/2022	8/31/2022
N052126-001C	PT5D-Q322	Groundwater	8/15/2022 12:37:00 PM	8/15/2022	8/31/2022
N052126-001D	PT5D-Q322	Groundwater	8/15/2022 12:37:00 PM	8/15/2022	8/31/2022
N052126-002A	PT5M-Q322	Groundwater	8/15/2022 12:04:00 PM	8/15/2022	8/31/2022
N052126-002B	PT5M-Q322	Groundwater	8/15/2022 12:04:00 PM	8/15/2022	8/31/2022
N052126-002C	PT5M-Q322	Groundwater	8/15/2022 12:04:00 PM	8/15/2022	8/31/2022
N052126-002D	PT5M-Q322	Groundwater	8/15/2022 12:04:00 PM	8/15/2022	8/31/2022
N052126-003A	PT5S-Q322	Groundwater	8/15/2022 11:39:00 AM	8/15/2022	8/31/2022
N052126-003B	PT5S-Q322	Groundwater	8/15/2022 11:39:00 AM	8/15/2022	8/31/2022
N052126-003C	PT5S-Q322	Groundwater	8/15/2022 11:39:00 AM	8/15/2022	8/31/2022
N052126-003D	PT5S-Q322	Groundwater	8/15/2022 11:39:00 AM	8/15/2022	8/31/2022
N052126-004A	EB-719-Q322	Groundwater	8/15/2022 1:00:00 PM	8/15/2022	8/31/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	PT5D-Q322
Lab Order:	N052126	**Collection Date:**	8/15/2022 12:37:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052126-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220816A**	QC Batch: **R164901**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	10	0.13	1.0		µg/L	5	8/16/2022 05:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	PT5M-Q322
Lab Order:	N052126	**Collection Date:**	8/15/2022 12:04:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052126-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220816A**	QC Batch: **R164901**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/16/2022 01:43 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	PT5S-Q322
Lab Order:	N052126	**Collection Date:**	8/15/2022 11:39:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052126-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220816A**	QC Batch: **R164901**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/16/2022 02:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-719-Q322
Lab Order:	N052126	**Collection Date:**	8/15/2022 1:00:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052126-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
EPA 218.6							
RunID: **NV00922-IC7_220816A** QC Batch: **R164901** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/16/2022 02:21 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R164901**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **PBW**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784260**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R164901**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **LCSW**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784261**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.064	0.20	5.000	0	101	90	110				

Sample ID: **N052126-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **ZZZZZZ**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784263**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.016	0.20	1.000	0	102	90	110				

Sample ID: **N052126-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **ZZZZZZ**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784265**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.998	0.20	1.000	0	99.8	90	110				

Sample ID: **N052126-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **ZZZZZZ**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784267**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.007	0.20	1.000	0	101	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052097-001ADUP** SampType: **DUP** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164901**
Client ID: **ZZZZZZ** Batch ID: **R164901** TestNo: **EPA 218.6** Analysis Date: **8/16/2022** SeqNo: **4784271**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	51.217	2.0						51.35	0.265	20	

Sample ID: **N052098-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164901**
Client ID: **ZZZZZZ** Batch ID: **R164901** TestNo: **EPA 218.6** Analysis Date: **8/16/2022** SeqNo: **4784273**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.276	1.0	5.000	0	106	90	110				

Sample ID: **N052098-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164901**
Client ID: **ZZZZZZ** Batch ID: **R164901** TestNo: **EPA 218.6** Analysis Date: **8/16/2022** SeqNo: **4784275**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.093	1.0	5.000	0	102	90	110				

Sample ID: **N052098-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164901**
Client ID: **ZZZZZZ** Batch ID: **R164901** TestNo: **EPA 218.6** Analysis Date: **8/16/2022** SeqNo: **4784277**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.980	0.20	1.000	0	98.0	90	110				

Sample ID: **N052098-007AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164901**
Client ID: **ZZZZZZ** Batch ID: **R164901** TestNo: **EPA 218.6** Analysis Date: **8/16/2022** SeqNo: **4784279**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.955	0.20	1.000	0	95.5	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052126-004AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **ZZZZZZ**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784282**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.974	0.20	1.000	0	97.4	90	110	1.007	3.33	20	

Sample ID: **N052126-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **ZZZZZZ**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784284**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	15.390	1.0	5.000	10.20	104	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	PT5D-Q322
Lab Order:	N052126	**Collection Date:**	8/15/2022 12:37:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052126-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220816A**	QC Batch: **R164903**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/16/2022 10:57 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	PT5M-Q322
Lab Order:	N052126	**Collection Date:**	8/15/2022 12:04:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052126-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220816A**	QC Batch: **R164903**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/16/2022 11:13 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	PT5S-Q322
Lab Order:	N052126	**Collection Date:**	8/15/2022 11:39:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052126-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220816A** QC Batch: **R164903** PrepDate: Analyst: **RAB**							
Nitrate as N	ND	0.048	0.25		mg/L	5	8/16/2022 11:29 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R164903_NO3**	SampType: **MBLK**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164903**
Client ID: **PBW**	Batch ID: **R164903**	TestNo: **EPA 300.0**		Analysis Date: **8/16/2022**	SeqNo: **4784356**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R164903_NO3**	SampType: **LCS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164903**
Client ID: **LCSW**	Batch ID: **R164903**	TestNo: **EPA 300.0**		Analysis Date: **8/16/2022**	SeqNo: **4784357**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.227	0.050	1.250	0	98.1	90	110				

Sample ID: **N052126-002DMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164903**
Client ID: **ZZZZZZ**	Batch ID: **R164903**	TestNo: **EPA 300.0**		Analysis Date: **8/16/2022**	SeqNo: **4784361**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.883	0.50	12.50	0	95.1	80	120				

Sample ID: **N052126-001DDUP**	SampType: **DUP**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164903**
Client ID: **ZZZZZZ**	Batch ID: **R164903**	TestNo: **EPA 300.0**		Analysis Date: **8/16/2022**	SeqNo: **4784362**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	0.338	0.50						0.3390	0	20	

Sample ID: **N052126-002DMSD**	SampType: **MSD**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164903**
Client ID: **ZZZZZZ**	Batch ID: **R164903**	TestNo: **EPA 300.0**		Analysis Date: **8/16/2022**	SeqNo: **4784363**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.956	0.50	12.50	0	95.6	80	120	11.88	0.612	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **N051601-009ADUP** SampType: **DUP** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **164903**
Client ID: **ZZZZZZ** Batch ID: **R164903** TestNo: **EPA 300.0** Analysis Date: **8/17/2022** SeqNo: **4784373**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	5.228	0.25						5.184	0.845	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052126-001

Client Sample ID: PT5D-Q322
Collection Date: 8/15/2022 12:37:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220818A**	QC Batch: **R164969**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/18/2022 11:56 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	PT5M-Q322
Lab Order:	N052126	**Collection Date:**	8/15/2022 12:04:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052126-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220818A**	QC Batch: **R164969**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/18/2022 12:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	PT5S-Q322
Lab Order:	N052126	**Collection Date:**	8/15/2022 11:39:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052126-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220818A**	QC Batch: **R164969**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.9	0.14	1.0		mg/L	1	8/18/2022 02:31 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R164969**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164969**
Client ID: **PBW**	Batch ID: **R164969**	TestNo: **SM 5310C**		Analysis Date: **8/18/2022**	SeqNo: **4787509**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R164969**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164969**
Client ID: **LCSW**	Batch ID: **R164969**	TestNo: **SM 5310C**		Analysis Date: **8/18/2022**	SeqNo: **4787510**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.014	1.0	5.000	0	100	85	115				

Sample ID: **N052065-001CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164969**
Client ID: **ZZZZZZ**	Batch ID: **R164969**	TestNo: **SM 5310C**		Analysis Date: **8/18/2022**	SeqNo: **4787516**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	37.836	10	50.00	0	75.7	75	125				

Sample ID: **N052065-001CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164969**
Client ID: **ZZZZZZ**	Batch ID: **R164969**	TestNo: **SM 5310C**		Analysis Date: **8/18/2022**	SeqNo: **4787521**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	37.826	10	50.00	0	75.7	75	125	37.84	0.0264	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052126-001

Client Sample ID: PT5D-Q322
Collection Date: 8/15/2022 12:37:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94362**			PrepDate:		**8/22/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 10:59 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052126-002

Client Sample ID: PT5M-Q322
Collection Date: 8/15/2022 12:04:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94362**			PrepDate:	**8/22/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 11:45 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052126-003

Client Sample ID: PT5S-Q322
Collection Date: 8/15/2022 11:39:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94362**			PrepDate:	**8/22/2022**		Analyst: **DJ**
Iron	1100	13	20		µg/L	1	8/28/2022 11:50 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94362**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165203**
Client ID: **PBW**	Batch ID: **94362**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803685**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-94362**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165203**
Client ID: **LCSW**	Batch ID: **94362**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803686**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	97.982	20	100.0	0	98.0	85	115				

Sample ID: **N052126-001B-MS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165203**
Client ID: **ZZZZZZ**	Batch ID: **94362**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803690**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	97.277	20	100.0	0	97.3	75	125				

Sample ID: **N052126-001B-MSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165203**
Client ID: **ZZZZZZ**	Batch ID: **94362**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803695**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	112.701	20	100.0	0	113	75	125	97.28	14.7	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	PT5D-Q322
Lab Order:	N052126	**Collection Date:**	8/15/2022 12:37:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052126-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C** QC Batch: **94305**				PrepDate:	**8/18/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/18/2022 08:37 PM
Barium	29	0.083	1.0		µg/L	1	8/18/2022 08:37 PM
Manganese	13	0.026	0.50		µg/L	1	8/18/2022 08:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052126-002

Client Sample ID: PT5M-Q322
Collection Date: 8/15/2022 12:04:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220830B**	QC Batch: **94305**			PrepDate:		**8/18/2022**	Analyst: **DJ**
Arsenic	1.1	0.050	0.10		µg/L	1	8/30/2022 06:48 PM
Barium	41	0.083	1.0		µg/L	1	8/18/2022 09:48 PM
Manganese	1100	0.66	12		µg/L	25	8/18/2022 10:33 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052126-003

Client Sample ID: PT5S-Q322
Collection Date: 8/15/2022 11:39:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220818C** QC Batch: **94305**				PrepDate:		**8/18/2022**	Analyst: **DJ**
Arsenic	14	0.050	0.10		µg/L	1	8/18/2022 10:00 PM
Barium	110	0.083	1.0		µg/L	1	8/18/2022 10:00 PM
Manganese	290	0.13	2.5		µg/L	5	8/18/2022 10:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94305** SampType: **MBLK** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/18/2022** RunNo: **164980**
Client ID: **PBW** Batch ID: **94305** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/18/2022** SeqNo: **4788698**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID: **LCS-94305** SampType: **LCS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/18/2022** RunNo: **164980**
Client ID: **LCSW** Batch ID: **94305** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/18/2022** SeqNo: **4788699**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.491	0.10	10.00	0	94.9	85	115				
Barium	10.288	1.0	10.00	0	103	85	115				
Manganese	97.090	0.50	100.0	0	97.1	85	115				

Sample ID: **N052126-001B-MS** SampType: **MS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/18/2022** RunNo: **164980**
Client ID: **ZZZZZZ** Batch ID: **94305** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/18/2022** SeqNo: **4788705**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	8.148	0.10	10.00	0	81.5	75	125				
Barium	38.598	1.0	10.00	28.96	96.3	75	125				
Manganese	102.992	0.50	100.0	13.36	89.6	75	125				

Sample ID: **N052126-001B-MSD** SampType: **MSD** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/18/2022** RunNo: **164980**
Client ID: **ZZZZZZ** Batch ID: **94305** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/18/2022** SeqNo: **4788709**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	8.226	0.10	10.00	0	82.3	75	125	8.148	0.956	20	
Barium	38.043	1.0	10.00	28.96	90.8	75	125	38.60	1.45	20	
Manganese	103.836	0.50	100.0	13.36	90.5	75	125	103.0	0.817	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement	QA/QC	Sample Receipt Condition
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	Excel EDD	RTNE	Y N
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker	RWQCB ✓	1. Chilled
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	Labspec	CalTrans	2. Headspace
Submitted By: Riggie Tep			Others ✓	LEVEL III	3. Container Intact
Title: Field Tech	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	Specify: RWQCB	LEVEL IV	4. Seal Present
Signature: Date: 8/15/22	Sampled By: Rissie Tep		Global ID:	Regulatory	5. IR number 3
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for			Specify State:	6. Method of Cooling: Ice
Project Name: PG&E Topock - PCM	Signature: Date: 8/15/22				Sample Temp: 3.9°C
Project Number: 30121866.3Q22GW					Courier: Asset
					Tracking No.:

Matrix: Ground X | Sediment | Potable | Soil | NPDES | Other Solid | Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate (EPA 300.0) (1 L poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052126-01	PT5D-Q322	8/15/2022	12:37		X		X			X			X	E	6	P	BNS	
2	-02	PT5M-Q322	8/15/2022	12:04		X		X			X			X	E	6	P	BNS	
3	-03	PT5S-Q322	8/15/2022	11:39		X		X			X			X	E	6	P	BNS	
4	-04	EB-719-Q322	8/15/2022	13:00		X									E	1	P	BNS	
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Rissie Tep	8/15/22 14:08	Dante Ortiz	8/15/22 14:08
Dante Ortiz	8/15/22 17:14	Joandra Rodriguez	8/15/22 1714

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B	(NH4)2SO4/NH4OH		M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/15/2022	Workorder:	N052126
Rep sample Temp (Deg C):	3.9	IR Gun ID:	3
Temp Blank:	☑ Yes ☐ No		
Carrier name:	ASSET		
Last 4 digits of Tracking No.:	NA	Packing Material Used:	None
Cooling process:	☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None		

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: EF *EFanegoF* 8/16/2022

Reviewed By: for: MBC 8/17/2022

ASSET Laboratories

WORK ORDER Summary

16-Aug-22

WorkOrder: N052126

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/15/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052126-001A	PT5D-Q322	8/15/2022 12:37:00 PM	8/29/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052126-001B			8/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052126-001C			8/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052126-001D			8/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052126-002A	PT5M-Q322	8/15/2022 12:04:00 PM	8/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052126-002B			8/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052126-002C			8/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052126-002D			8/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052126-003A	PT5S-Q322	8/15/2022 11:39:00 AM	8/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052126-003B			8/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052126-003C			8/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052126-003D			8/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052126-004A	EB-719-Q322	8/15/2022 1:00:00 PM	8/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

16-Aug-22

WorkOrder: N052126

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/15/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052126-005A	FOLDER	8/29/2022	8/29/2022		Folder	Folder	☐	☐	☐	LAB
			8/29/2022		Folder	Level IV Report	☐	☐	☐	LAB
			8/29/2022		Folder	Folder	☐	☐	☐	LAB

August 31, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052173

RE: PG&E Topock - RCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 17, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab Order: N052173

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Samples N052173-007(AmbientBlank-1-Q322) and N052173-009(AmbientBlank-2-Q322) were not analyzed as per attached correspondence.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab Order: N052173
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052173-001A	MW-929-Q322	Surface Water	8/17/2022 8:34:00 AM	8/17/2022	8/31/2022
N052173-001B	MW-929-Q322	Surface Water	8/17/2022 8:34:00 AM	8/17/2022	8/31/2022
N052173-002A	C-R22A-D-Q322	Surface Water	8/17/2022 9:21:00 AM	8/17/2022	8/31/2022
N052173-002B	C-R22A-D-Q322	Surface Water	8/17/2022 9:21:00 AM	8/17/2022	8/31/2022
N052173-003A	C-R22A-S-Q322	Surface Water	8/17/2022 9:29:00 AM	8/17/2022	8/31/2022
N052173-003B	C-R22A-S-Q322	Surface Water	8/17/2022 9:29:00 AM	8/17/2022	8/31/2022
N052173-004A	C-R27-D-Q322	Surface Water	8/17/2022 9:58:00 AM	8/17/2022	8/31/2022
N052173-004B	C-R27-D-Q322	Surface Water	8/17/2022 9:58:00 AM	8/17/2022	8/31/2022
N052173-005A	C-R27-S-Q322	Surface Water	8/17/2022 10:07:00 AM	8/17/2022	8/31/2022
N052173-005B	C-R27-S-Q322	Surface Water	8/17/2022 10:07:00 AM	8/17/2022	8/31/2022
N052173-006A	C-TAZ-D-Q322	Surface Water	8/17/2022 8:14:00 AM	8/17/2022	8/31/2022
N052173-006B	C-TAZ-D-Q322	Surface Water	8/17/2022 8:14:00 AM	8/17/2022	8/31/2022
N052173-007A	AmbientBlank-1-Q322	Surface Water	8/17/2022 9:40:00 AM	8/17/2022	8/31/2022
N052173-008A	C-TAZ-S-Q322	Surface Water	8/17/2022 8:24:00 AM	8/17/2022	8/31/2022
N052173-008B	C-TAZ-S-Q322	Surface Water	8/17/2022 8:24:00 AM	8/17/2022	8/31/2022
N052173-009A	AmbientBlank-2-Q322	Surface Water	8/17/2022 10:14:00 AM	8/17/2022	8/31/2022
N052173-010A	R-28-Q322	Surface Water	8/17/2022 10:18:00 AM	8/17/2022	8/31/2022
N052173-010B	R-28-Q322	Surface Water	8/17/2022 10:18:00 AM	8/17/2022	8/31/2022
N052173-011A	R63-Q322	Surface Water	8/17/2022 9:11:00 AM	8/17/2022	8/31/2022
N052173-011B	R63-Q322	Surface Water	8/17/2022 9:11:00 AM	8/17/2022	8/31/2022
N052173-012A	C-BNS-Q322	Surface Water	8/17/2022 9:44:00 AM	8/17/2022	8/31/2022
N052173-012B	C-BNS-Q322	Surface Water	8/17/2022 9:44:00 AM	8/17/2022	8/31/2022
N052173-013A	C-I-3-D-Q322	Surface Water	8/17/2022 8:42:00 AM	8/17/2022	8/31/2022
N052173-013B	C-I-3-D-Q322	Surface Water	8/17/2022 8:42:00 AM	8/17/2022	8/31/2022
N052173-014A	C-I-3-S-Q322	Surface Water	8/17/2022 8:51:00 AM	8/17/2022	8/31/2022
N052173-014B	C-I-3-S-Q322	Surface Water	8/17/2022 8:51:00 AM	8/17/2022	8/31/2022
N052173-015A	MW-931-Q322	Surface Water	8/17/2022 9:01:00 AM	8/17/2022	8/31/2022
N052173-015B	MW-931-Q322	Surface Water	8/17/2022 9:01:00 AM	8/17/2022	8/31/2022
N052173-016A	SW1-Q322	Surface Water	8/17/2022 10:30:00 AM	8/17/2022	8/31/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab Order: N052173
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052173-016B	SW1-Q322	Surface Water	8/17/2022 10:30:00 AM	8/17/2022	8/31/2022
N052173-017A	SW2-Q322	Surface Water	8/17/2022 11:00:00 AM	8/17/2022	8/31/2022
N052173-017B	SW2-Q322	Surface Water	8/17/2022 11:00:00 AM	8/17/2022	8/31/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-929-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 8:34:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 10:53 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-R22A-D-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 9:21:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 11:12 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-R22A-S-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 9:29:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 11:50 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-R27-D-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 9:58:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 12:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-R27-S-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 10:07:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 12:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-TAZ-D-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 8:14:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 01:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-TAZ-S-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 8:24:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 01:34 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	R-28-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 10:18:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 02:21 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	R63-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 9:11:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 02:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-BNS-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 9:44:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 02:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-I-3-D-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 8:42:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 03:18 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-I-3-S-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 8:51:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 03:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-931-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 9:01:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 04:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	SW1-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 10:30:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 05:09 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	SW2-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 11:00:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 05:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052173
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	MB-R164972	SampType:	MBLK	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	PBW	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788199

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID	LCS-R164972	SampType:	LCS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	LCSW	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788200

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.090	0.20	5.000	0	102	90	110				

Sample ID	N052173-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788202

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.036	0.20	1.000	0	104	90	110				

Sample ID	N052173-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788204

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.031	0.20	1.000	0	103	90	110				

Sample ID	N052173-002AMSD	SampType:	MSD	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788205

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.009	0.20	1.000	0	101	90	110	1.031	2.17	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052173
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052173-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972		
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788207		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	1.018	0.20	1.000	0	102	90	110						

Sample ID	N052173-004AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972		
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788211		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	1.054	0.20	1.000	0	105	90	110						

Sample ID	N052173-005ADUP	SampType:	DUP	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972		
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788213		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	ND	0.20						0	0	20			

Sample ID	N052173-005AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972		
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788214		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	1.008	0.20	1.000	0	101	90	110						

Sample ID	N052173-006AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972		
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788216		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	1.006	0.20	1.000	0	101	90	110						

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052173
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052173-008AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788218

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.053	0.20	1.000	0	105	90	110				

Sample ID	N052173-010AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788223

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.080	0.20	1.000	0	108	90	110				

Sample ID	N052173-011AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788225

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.053	0.20	1.000	0	105	90	110				

Sample ID	N052173-012AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788227

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.069	0.20	1.000	0	107	90	110				

Sample ID	N052173-013AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788229

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.042	0.20	1.000	0	104	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052173
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052173-014AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788231

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.049	0.20	1.000	0	105	90	110				

Sample ID	N052173-015AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788237

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.043	0.20	1.000	0	104	90	110				

Sample ID	N052173-016AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788239

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.010	0.20	1.000	0	101	90	110				

Sample ID	N052173-017AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788241

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.017	0.20	1.000	0	102	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-929-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 8:34:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:	**8/18/2022**		Analyst: **DJ**
Arsenic	2.2	0.050	0.10		µg/L	1	8/18/2022 10:12 PM
Manganese	2.7	0.026	0.50		µg/L	1	8/18/2022 10:12 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-R22A-D-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 9:21:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:	**8/18/2022**		Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	8/18/2022 10:27 PM
Manganese	2.8	0.026	0.50		µg/L	1	8/18/2022 10:27 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-R22A-S-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 9:29:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:		**8/18/2022**	Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	8/18/2022 11:09 PM
Manganese	2.5	0.026	0.50		µg/L	1	8/18/2022 11:09 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-R27-D-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 9:58:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:	**8/18/2022**		Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	8/18/2022 11:21 PM
Manganese	1.3	0.026	0.50		µg/L	1	8/18/2022 11:21 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-R27-S-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 10:07:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:	**8/18/2022**		Analyst: **DJ**
Arsenic	2.2	0.050	0.10		µg/L	1	8/18/2022 11:32 PM
Manganese	1.3	0.026	0.50		µg/L	1	8/18/2022 11:32 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-TAZ-D-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 8:14:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:	**8/18/2022**		Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	8/18/2022 11:44 PM
Manganese	3.1	0.026	0.50		µg/L	1	8/18/2022 11:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-TAZ-S-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 8:24:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:		**8/18/2022**	Analyst: **DJ**
Arsenic	2.2	0.050	0.10		µg/L	1	8/19/2022 12:14 AM
Manganese	2.6	0.026	0.50		µg/L	1	8/19/2022 12:14 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	R-28-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 10:18:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:	**8/18/2022**		Analyst: **DJ**
Arsenic	2.2	0.050	0.10		µg/L	1	8/19/2022 12:25 AM
Manganese	2.3	0.026	0.50		µg/L	1	8/19/2022 12:25 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	R63-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 9:11:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:		**8/18/2022**	Analyst: **DJ**
Arsenic	2.0	0.050	0.10		µg/L	1	8/19/2022 12:37 AM
Manganese	8.7	0.026	0.50		µg/L	1	8/19/2022 12:37 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-BNS-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 9:44:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:		**8/18/2022**	Analyst: **DJ**
Arsenic	2.3	0.050	0.10		µg/L	1	8/19/2022 12:49 AM
Manganese	1.3	0.026	0.50		µg/L	1	8/19/2022 12:49 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-I-3-D-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 8:42:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:	**8/18/2022**		Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	8/19/2022 01:01 AM
Manganese	1.5	0.026	0.50		µg/L	1	8/19/2022 01:01 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-I-3-S-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 8:51:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:		**8/18/2022**	Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	8/19/2022 01:30 AM
Manganese	2.2	0.026	0.50		µg/L	1	8/19/2022 01:30 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-931-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 9:01:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:		**8/18/2022**	Analyst: **DJ**
Arsenic	2.5	0.050	0.10		µg/L	1	8/19/2022 01:42 AM
Manganese	1.7	0.026	0.50		µg/L	1	8/19/2022 01:42 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	SW1-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 10:30:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:		**8/18/2022**	Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	8/19/2022 01:54 AM
Manganese	7.7	0.026	0.50		µg/L	1	8/19/2022 01:54 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	SW2-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 11:00:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:	**8/18/2022**		Analyst: **DJ**
Arsenic	2.2	0.050	0.10		µg/L	1	8/19/2022 02:06 AM
Manganese	9.1	0.026	0.50		µg/L	1	8/19/2022 02:06 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052173
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID **MB-94305**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/18/2022**	RunNo: **164980**
Client ID: **PBW**	Batch ID: **94305**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/18/2022**	SeqNo: **4788698**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Manganese	ND	0.50									

Sample ID **LCS-94305**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/18/2022**	RunNo: **164980**
Client ID: **LCSW**	Batch ID: **94305**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/18/2022**	SeqNo: **4788699**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.491	0.10	10.00	0	94.9	85	115				
Manganese	97.090	0.50	100.0	0	97.1	85	115				

Sample ID **N052126-001B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/18/2022**	RunNo: **164980**
Client ID: **ZZZZZZ**	Batch ID: **94305**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/18/2022**	SeqNo: **4788705**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	8.148	0.10	10.00	0	81.5	75	125				
Manganese	102.992	0.50	100.0	13.36	89.6	75	125				

Sample ID **N052126-001B-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/18/2022**	RunNo: **164980**
Client ID: **ZZZZZZ**	Batch ID: **94305**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/18/2022**	SeqNo: **4788709**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	8.226	0.10	10.00	0	82.3	75	125	8.148	0.956	20	
Manganese	103.836	0.50	100.0	13.36	90.5	75	125	103.0	0.817	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

ASSET LABORATORIES
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CHAIN OF CUSTODY RECORD

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement	QA/QC	Sample Receipt Condition
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	Excel EDD	RTNE	Y N
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker	RWQCB ✓	1. Chilled ✓
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	Labspec	CalTrans	2. Headspace
Submitted By: Ryan Tap			Others ✓	LEVEL III	3. Container Intact ✓
Title: Field Tech	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	Specify: RWQCB	LEVEL IV	4. Seal Present
Signature: Date: 8/17/22	Sampled By: Ryan Tap		Global ID:	Regulatory	5. IR number 3
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for			Specify State:	6. Method of Cooling: ICE
Project Name: PG&E Topock - RCM	Signature: Date: 8/17/22				Sample Temp: 2.1 C
Project Number: 30121866.3Q22GW					Courier: ASSET
					Tracking No.:

Matrix: Ground ☐ Sediment ☐ | Potable ☐ Soil ☐ | NPDES ☐ Other Solid ☐ | Surface X ☐

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH 250 mL poly	Nitrate/Nitrite (SM4500N03) Nitrogen; H2SO4 125 mL poly	Dissolved metals (SW6020) FF; HNO3 Arsenic, Manganese, 500mL poly	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, 500mL poly	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052173-01	MW-929-Q322	8/17/2022	8:34		X		X	X	E	2	P	BN	
2	-02	C-R22A-D-Q322	8/17/2022	9:21		X		X	X	E	2	P	BN	
3	-03	C-R22A-S-Q322	8/17/2022	9:29		X		X	X	E	2	P	BN	
4	-04	C-R27-D-Q322	8/17/2022	9:58		X		X	X	E	2	P	BN	
5	-05	C-R27-S-Q322	8/17/2022	10:07		X		X	X	E	2	P	BN	
	-06	C-TAZ-D-Q322	8/17/2022	8:14		X		X	X	E	2	P	BN	
7	-07	AmbientBlank-1-Q322	8/17/2022	9:40		X		X	X	E	2	P	BN	Hold
8	-08	C-TAZ-S-Q322	8/17/2022	8:24		X		X	X	E	2	P	BN	
9	-09	AmbientBlank-2-Q322	8/17/2022	10:14		X		X	X	E	2	P	BN	Hold
10	-10	R-28-Q322	8/17/2022	10:18		X		X	X	E	2	P	BN	
11	-11	R63-Q322	8/17/2022	9:11		X		X	X	E	2	P	BN	
12	-12	C-BNS-Q322	8/17/2022	9:44		X		X	X	E	2	P	BN	
13	-13	C-I-3-D-Q322	8/17/2022	8:42		X		X	X	E	2	P	BN	
14	-14	C-I-3-S-Q322	8/17/2022	8:51		X		X	X	E	2	P	BN	

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Ryan Tap	8/17/22 1440	Dan Bush Arcadis	8/17/22 14:40
Dan Bush Arcadis	8/17/22 20:33	Dan Bush Arcadis	8/17/22 20:33

Turn Around Time (TAT)

- ☐ A = < 24 Hrs or Same Day TAT
- ☐ B = Next Workday
- ☐ C = 2 Workdays
- ☐ D = 3 Workdays
- ☒ E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs =200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:

H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		
Others/Specify:	B (NH4)2SO4/NH4OH			

Container Type:

T=Tube	V=VOA	P=Pint
J=Jar	B=Tedlar	G=Glass
M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 2 of 2

| | | |

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/17/2022	Workorder:	N052173
Rep sample Temp (Deg C):	2.1	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: EF *EFanegoF* 8/18/2022

Reviewed By: for: MBC 8/18/2022

Subject: RE: PG&E Topock - RCM, 30121866.3Q22GW (ASSET Labs No. N052173)
From: "Madsen, Laura" <Laura.Madsen@arcadis.com>
Date: 8/18/2022, 1:11 PM
To: Yoandra Rodriguez <yoandra@assetlaboratories.com>
CC: "maryann.balilu@assetlaboratoriesph.com" <maryann.balilu@assetlaboratoriesph.com>, "rustico.aquino@assetlaboratoriesph.com" <rustico.aquino@assetlaboratoriesph.com>, Tina Rice <Tina.Rice@critigen.com>

Hi,
Yes, that is correct. The Ambient blank samples should be on hold.

Laura Madsen PG
Project Geologist
Arcadis U.S., Inc.
M +1 303 653 5749

From: Yoandra Rodriguez <yoandra@assetlaboratories.com>
Sent: Thursday, August 18, 2022 2:57 PM
To: Madsen, Laura <Laura.Madsen@arcadis.com>
Cc: maryann.balilu@assetlaboratoriesph.com; rustico.aquino@assetlaboratoriesph.com; Tina Rice <Tina.Rice@critigen.com>
Subject: Re: PG&E Topock - RCM, 30121866.3Q22GW (ASSET Labs No. N052173)

Hi Laura,

Noted. But, they are on hold for Cr 6+ per instructions on COC, correct?

Thanks,

On 8/18/2022 12:47 PM, Madsen, Laura wrote:

> Hi Yoandra,
> The Samples 7 and 9 (Ambient blank) should only need Cr6, the COC inadvertently was marked for the additional metal by mistake.
>
> Thanks,
> Laura
>
> **Laura Madsen** PG
> Project Geologist
> Arcadis U.S., Inc.
> M +1 303 653 5749
>
> ---
>
> **From:** Yoandra Rodriguez <yoandra@assetlaboratories.com>
> **Sent:** Thursday, August 18, 2022 2:34 PM
> **To:** Madsen, Laura <Laura.Madsen@arcadis.com>
> **Cc:** maryann.balilu@assetlaboratoriesph.com; rustico.aquino@assetlaboratoriesph.com; Tina Rice <Tina.Rice@critigen.com>
> **Subject:** PG&E Topock - RCM, 30121866.3Q22GW (ASSET Labs No. N052173)

Hi Laura,

We did not receive the bottle for Metals for samples 7 (AmbientBlank-1-Q322) and 9 (AmbientBlank-2-Q322) on the attached COC.

Please advise.

--
Thanks,

Yoandra Rodriguez
Project Manager

Nevada: 3151 W. Post Road, Las Vegas, NV 89118 | P: 702.307.2659 | F: 702.307.2691
California: 11110 Artesia Blvd., Ste. B, Cerritos, CA 90703 | P: 562.219.7435 | F: 562.219.7436

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--
Thanks,

Yoandra Rodriguez
Project Manager

Nevada: 3151 W. Post Road, Las Vegas, NV 89118 | P: 702.307.2659 | F: 702.307.2691
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ASSET Laboratories

WORK ORDER Summary

18-Aug-22

WorkOrder: N052173

Client ID: ARCUS02

Project: PG&E Topock - RCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/17/2022 8:33 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052173-001A	MW-929-Q322	8/17/2022 8:34:00 AM	8/31/2022	Surface Water	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-001B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052173-002A	C-R22A-D-Q322	8/17/2022 9:21:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-002B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052173-003A	C-R22A-S-Q322	8/17/2022 9:29:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-003B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052173-004A	C-R27-D-Q322	8/17/2022 9:58:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-004B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052173-005A	C-R27-S-Q322	8/17/2022 10:07:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-005B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052173-006A	C-TAZ-D-Q322	8/17/2022 8:14:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-006B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052173-007A	AmbientBlank-1-Q322	8/17/2022 9:40:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☑	☐	☐	WW
N052173-008A	C-TAZ-S-Q322	8/17/2022 8:24:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-008B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

18-Aug-22

WorkOrder: N052173

Client ID: ARCUS02

Project: PG&E Topock - RCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/17/2022 8:33 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052173-009A	AmbientBlank-2-Q322	8/17/2022 10:14:00 AM	8/31/2022	Surface Water	EPA 218.6	Hexavalent Chromium by IC	☑	☐	☐	WW
N052173-010A	R-28-Q322	8/17/2022 10:18:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-010B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052173-011A	R63-Q322	8/17/2022 9:11:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-011B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052173-012A	C-BNS-Q322	8/17/2022 9:44:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-012B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052173-013A	C-I-3-D-Q322	8/17/2022 8:42:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-013B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052173-014A	C-I-3-S-Q322	8/17/2022 8:51:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-014B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052173-015A	MW-931-Q322	8/17/2022 9:01:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-015B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052173-016A	SW1-Q322	8/17/2022 10:30:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-016B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

18-Aug-22

WorkOrder: N052173

Client ID: ARCUS02

Project: PG&E Topock - RCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/17/2022 8:33 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052173-017A	SW2-Q322	8/17/2022 11:00:00 AM	8/31/2022	Surface Water	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-017B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052173-018A	FOLDER	8/31/2022	8/31/2022		Folder	Folder	☐	☐	☐	LAB
			8/31/2022		Folder	Level IV Report	☐	☐	☐	LAB
			8/31/2022		Folder	Folder	☐	☐	☐	LAB

September 01, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052191

RE: PG&E Topock - RCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 18, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

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CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab Order: N052191

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab Order: N052191
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052191-001A	C-CON-D-Q322	Surface Water	8/18/2022 8:06:00 AM	8/18/2022	9/1/2022
N052191-001B	C-CON-D-Q322	Surface Water	8/18/2022 8:06:00 AM	8/18/2022	9/1/2022
N052191-002A	MW-926-Q322	Surface Water	8/18/2022 8:16:00 AM	8/18/2022	9/1/2022
N052191-002B	MW-926-Q322	Surface Water	8/18/2022 8:16:00 AM	8/18/2022	9/1/2022
N052191-003A	C-CON-S-Q322	Surface Water	8/18/2022 8:24:00 AM	8/18/2022	9/1/2022
N052191-003B	C-CON-S-Q322	Surface Water	8/18/2022 8:24:00 AM	8/18/2022	9/1/2022
N052191-004A	C-NR1-D-Q322	Surface Water	8/18/2022 8:32:00 AM	8/18/2022	9/1/2022
N052191-004B	C-NR1-D-Q322	Surface Water	8/18/2022 8:32:00 AM	8/18/2022	9/1/2022
N052191-005A	C-NR1-S-Q322	Surface Water	8/18/2022 8:50:00 AM	8/18/2022	9/1/2022
N052191-005B	C-NR1-S-Q322	Surface Water	8/18/2022 8:50:00 AM	8/18/2022	9/1/2022
N052191-006A	C-NR3-D-Q322	Surface Water	8/18/2022 8:58:00 AM	8/18/2022	9/1/2022
N052191-006B	C-NR3-D-Q322	Surface Water	8/18/2022 8:58:00 AM	8/18/2022	9/1/2022
N052191-007A	MW-927-Q322	Surface Water	8/18/2022 8:42:00 AM	8/18/2022	9/1/2022
N052191-007B	MW-927-Q322	Surface Water	8/18/2022 8:42:00 AM	8/18/2022	9/1/2022
N052191-008A	C-NR3-S-Q322	Surface Water	8/18/2022 9:05:00 AM	8/18/2022	9/1/2022
N052191-008B	C-NR3-S-Q322	Surface Water	8/18/2022 9:05:00 AM	8/18/2022	9/1/2022
N052191-009A	C-NR4-D-Q322	Surface Water	8/18/2022 9:15:00 AM	8/18/2022	9/1/2022
N052191-009B	C-NR4-D-Q322	Surface Water	8/18/2022 9:15:00 AM	8/18/2022	9/1/2022
N052191-010A	C-NR4-S-Q322	Surface Water	8/18/2022 9:25:00 AM	8/18/2022	9/1/2022
N052191-010B	C-NR4-S-Q322	Surface Water	8/18/2022 9:25:00 AM	8/18/2022	9/1/2022
N052191-011A	R-19-Q322	Surface Water	8/18/2022 9:45:00 AM	8/18/2022	9/1/2022
N052191-011B	R-19-Q322	Surface Water	8/18/2022 9:45:00 AM	8/18/2022	9/1/2022
N052191-012A	C-MAR-D-Q322	Surface Water	8/18/2022 9:55:00 AM	8/18/2022	9/1/2022
N052191-012B	C-MAR-D-Q322	Surface Water	8/18/2022 9:55:00 AM	8/18/2022	9/1/2022
N052191-013A	C-MAR-S-Q322	Surface Water	8/18/2022 10:01:00 AM	8/18/2022	9/1/2022
N052191-013B	C-MAR-S-Q322	Surface Water	8/18/2022 10:01:00 AM	8/18/2022	9/1/2022
N052191-014A	RRB-Q322	Surface Water	8/18/2022 10:13:00 AM	8/18/2022	9/1/2022
N052191-014B	RRB-Q322	Surface Water	8/18/2022 10:13:00 AM	8/18/2022	9/1/2022
N052191-015A	AmbientBlank-3-Q322	Surface Water	8/18/2022 10:10:00 AM	8/18/2022	9/1/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab Order: N052191
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052191-016A	MW-928-Q322	Surface Water	8/18/2022 9:35:00 AM	8/18/2022	9/1/2022
N052191-016B	MW-928-Q322	Surface Water	8/18/2022 9:35:00 AM	8/18/2022	9/1/2022
N052191-017A	MW-930-Q322	Surface Water	8/18/2022 10:23:00 AM	8/18/2022	9/1/2022
N052191-017B	MW-930-Q322	Surface Water	8/18/2022 10:23:00 AM	8/18/2022	9/1/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-CON-D-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:06:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 11:22 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-926-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:16:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 12:09 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-CON-S-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:24:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 12:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-NR1-D-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:32:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 12:47 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-NR1-S-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:50:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 01:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-NR3-D-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:58:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 01:25 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-927-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:42:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 02:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-NR3-S-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 9:05:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 02:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-NR4-D-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 9:15:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 10:21 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-NR4-S-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 9:25:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 02:41 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	R-19-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 9:45:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 03:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-MAR-D-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 9:55:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 03:19 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-MAR-S-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 10:01:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 10:54 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	RRB-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 10:13:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 03:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-928-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 9:35:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 04:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-930-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 10:23:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 04:34 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052191
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R164992**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164992**
Client ID: **PBW**	Batch ID: **R164992**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789163**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R164992**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164992**
Client ID: **LCSW**	Batch ID: **R164992**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789164**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.955	0.20	5.000	0	99.1	90	110				

Sample ID: **N052191-009AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164992**
Client ID: **ZZZZZZ**	Batch ID: **R164992**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789166**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.991	0.20	1.000	0	99.1	90	110				

Sample ID: **N052191-009AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164992**
Client ID: **ZZZZZZ**	Batch ID: **R164992**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789167**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.055	0.20	1.000	0	106	90	110	0.9908	6.31	20	

Sample ID: **N052191-013AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164992**
Client ID: **ZZZZZZ**	Batch ID: **R164992**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789169**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.023	0.20	1.000	0	102	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052191
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052191-013AMSD** SampType: **MSD** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164992**
Client ID: **ZZZZZZ** Batch ID: **R164992** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789170**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.018	0.20	1.000	0	102	90	110	1.023	0.559	20	

Sample ID: **N052191-001ADUP** SampType: **DUP** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164992**
Client ID: **ZZZZZZ** Batch ID: **R164992** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789172**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20						0	0	20	

Sample ID: **N052191-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164992**
Client ID: **ZZZZZZ** Batch ID: **R164992** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789175**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.000	0.20	1.000	0	100	90	110				

Sample ID: **N052191-002AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164992**
Client ID: **ZZZZZZ** Batch ID: **R164992** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789177**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.997	0.20	1.000	0	99.7	90	110				

Sample ID: **N052191-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164992**
Client ID: **ZZZZZZ** Batch ID: **R164992** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789179**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.997	0.20	1.000	0	99.7	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052191
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052191-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164992**
Client ID: **ZZZZZZ**	Batch ID: **R164992**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789181**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.999	0.20	1.000	0	99.9	90	110				

Sample ID: **N052191-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164992**
Client ID: **ZZZZZZ**	Batch ID: **R164992**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789183**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.020	0.20	1.000	0	102	90	110				

Sample ID: **N052191-006AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164992**
Client ID: **ZZZZZZ**	Batch ID: **R164992**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789187**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.979	0.20	1.000	0	97.9	90	110				

Sample ID: **N052191-007AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164992**
Client ID: **ZZZZZZ**	Batch ID: **R164992**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789189**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.034	0.20	1.000	0	103	90	110				

Sample ID: **N052191-008AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164992**
Client ID: **ZZZZZZ**	Batch ID: **R164992**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789191**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.022	0.20	1.000	0	102	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052191
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052191-010AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164992**
Client ID: **ZZZZZZ** Batch ID: **R164992** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789193**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.021	0.20	1.000	0	102	90	110				

Sample ID: **N052191-011AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164992**
Client ID: **ZZZZZZ** Batch ID: **R164992** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789195**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.008	0.20	1.000	0	101	90	110				

Sample ID: **N052191-012AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164992**
Client ID: **ZZZZZZ** Batch ID: **R164992** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789199**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.978	0.20	1.000	0	97.8	90	110				

Sample ID: **N052191-014AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164992**
Client ID: **ZZZZZZ** Batch ID: **R164992** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789201**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.025	0.20	1.000	0	103	90	110				

Sample ID: **N052191-016AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164992**
Client ID: **ZZZZZZ** Batch ID: **R164992** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789203**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.029	0.20	1.000	0	103	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052191-017AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164992**
Client ID: **ZZZZZZ**	Batch ID: **R164992**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789205**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.006	0.20	1.000	0	101	90	110				

Sample ID: **N052202-004BMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164992**
Client ID: **ZZZZZZ**	Batch ID: **R164992**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789207**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.962	0.20	1.000	0	96.2	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-CON-D-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:06:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**			PrepDate:	**8/22/2022**		Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	8/25/2022 12:51 AM
Manganese	0.72	0.026	0.50		µg/L	1	8/25/2022 12:51 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-926-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:16:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220824D** QC Batch: **94363**				PrepDate:	**8/22/2022**		Analyst: **DJ**
Arsenic	2.2	0.050	0.10		µg/L	1	8/25/2022 01:03 AM
Manganese	4.1	0.026	0.50		µg/L	1	8/25/2022 01:03 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-CON-S-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:24:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**			PrepDate:	**8/22/2022**		Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	8/25/2022 01:15 AM
Manganese	0.92	0.026	0.50		µg/L	1	8/25/2022 01:15 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-NR1-D-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:32:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**			PrepDate:	**8/22/2022**		Analyst: **DJ**
Arsenic	2.5	0.050	0.10		µg/L	1	8/25/2022 01:27 AM
Manganese	ND	0.026	0.50		µg/L	1	8/25/2022 01:27 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-NR1-S-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:50:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**			PrepDate:		**8/22/2022**	Analyst: **DJ**
Arsenic	2.3	0.050	0.10		µg/L	1	8/25/2022 01:50 AM
Manganese	ND	0.026	0.50		µg/L	1	8/25/2022 01:50 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-NR3-D-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:58:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**			PrepDate:		**8/22/2022**	Analyst: **DJ**
Arsenic	2.2	0.050	0.10		µg/L	1	8/25/2022 02:02 AM
Manganese	ND	0.026	0.50		µg/L	1	8/25/2022 02:02 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-927-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:42:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220824D** QC Batch: **94363**				PrepDate:		**8/22/2022**	Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	8/25/2022 02:14 AM
Manganese	ND	0.026	0.50		µg/L	1	8/25/2022 02:14 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-NR3-S-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 9:05:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**				PrepDate:	**8/22/2022**	Analyst: **DJ**
Arsenic	2.3	0.050	0.10		µg/L	1	8/25/2022 02:26 AM
Manganese	ND	0.026	0.50		µg/L	1	8/25/2022 02:26 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-NR4-D-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 9:15:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**			PrepDate:		**8/22/2022**	Analyst: **DJ**
Arsenic	2.3	0.050	0.10		µg/L	1	8/25/2022 02:38 AM
Manganese	ND	0.026	0.50		µg/L	1	8/25/2022 02:38 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-NR4-S-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 9:25:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**			PrepDate:		**8/22/2022**	Analyst: **DJ**
Arsenic	2.3	0.050	0.10		µg/L	1	8/25/2022 03:55 AM
Manganese	ND	0.026	0.50		µg/L	1	8/25/2022 03:55 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	R-19-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 9:45:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**			PrepDate:		**8/22/2022**	Analyst: **DJ**
Arsenic	2.5	0.050	0.10		µg/L	1	8/25/2022 04:18 AM
Manganese	1.2	0.026	0.50		µg/L	1	8/25/2022 04:18 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-MAR-D-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 9:55:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**			PrepDate:	**8/22/2022**		Analyst: **DJ**
Arsenic	3.5	0.050	0.10		µg/L	1	8/25/2022 04:30 AM
Manganese	130	0.026	0.50		µg/L	1	8/25/2022 04:30 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-MAR-S-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 10:01:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**			PrepDate:		**8/22/2022**	Analyst: **DJ**
Arsenic	4.2	0.050	0.10		µg/L	1	8/25/2022 04:42 AM
Manganese	140	0.13	2.5		µg/L	5	8/25/2022 04:48 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	RRB-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 10:13:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**			PrepDate:		**8/22/2022**	Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	8/25/2022 05:47 AM
Manganese	17	0.026	0.50		µg/L	1	8/25/2022 05:47 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-928-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 9:35:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220824D** QC Batch: **94363**				PrepDate:		**8/22/2022**	Analyst: **DJ**
Arsenic	2.3	0.050	0.10		µg/L	1	8/25/2022 05:59 AM
Manganese	ND	0.026	0.50		µg/L	1	8/25/2022 05:59 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-930-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 10:23:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**			PrepDate:		**8/22/2022**	Analyst: **DJ**
Arsenic	2.1	0.050	0.10		µg/L	1	8/25/2022 06:11 AM
Manganese	15	0.026	0.50		µg/L	1	8/25/2022 06:11 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052191
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94363**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **PBW**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799475**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Manganese	ND	0.50									

Sample ID: **LCS-94363**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **LCSW**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799476**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.875	0.10	10.00	0	98.7	85	115				
Manganese	100.982	0.50	100.0	0	101	85	115				

Sample ID: **N052191-009BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **ZZZZZZ**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799504**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.169	0.10	10.00	2.328	98.4	75	125				
Manganese	98.871	0.50	100.0	0	98.9	75	125				

Sample ID: **N052191-009BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **ZZZZZZ**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799506**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.370	0.10	10.00	2.328	100	75	125	12.17	1.64	20	
Manganese	101.929	0.50	100.0	0	102	75	125	98.87	3.04	20	

Sample ID: **N052191-013BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **ZZZZZZ**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799523**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052191
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052191-013BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **ZZZZZZ**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799523**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.904	0.10	10.00	4.178	97.3	75	125				

Sample ID: **N052191-013BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **ZZZZZZ**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799524**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	247.503	2.5	100.0	143.4	104	75	125				

Sample ID: **N052191-013BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **ZZZZZZ**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799525**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.677	0.10	10.00	4.178	95.0	75	125	13.90	1.65	20	

Sample ID: **N052191-013BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **ZZZZZZ**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799526**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	244.461	2.5	100.0	143.4	101	75	125	247.5	1.24	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

ARCUS02 C: 9/1/2022 12:00 AM
FOLDER R: 8/18/2022
N052191-018A 1 of 1

Page 1 of 2

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com	P.O.#
Submitted By: Reggie Tap		Phone: 949-727-1400, ext 200	Fax:
Title: Field Tech	Phone: 916-786-3302 Fax:		
Signature: Date: 8/18/22	Sampled By: Reggie Tap		
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for		
Project Name: PG&E Topock - RCM	Signature: Date: 8/18/22		
Project Number: 30121866.3Q22GW			

Excel EDD		RTNE	
Geotracker		RWQCB	✓
Labspec		CalTrans	
Others	✓	LEVEL III	
Specify: RWQCB		LEVEL IV	
Global ID:		Regulatory	
		Specify State:	

Matrix: Ground | Sediment | Potable | Soil | NPDES | Other Solid | Surface X

Sample Condition

	Y	N
1. Chilled	/	
2. Headspace		
3. Container Intact	/	
4. Seal Present		/
5. IR number	3	

6. Method of Cooling: ICE
Sample Temp: 3.4 c°
Courier: ASSET
Tracking No.:

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH 250 mL poly	Nitrate/Nitrite (SM4500N03) Nitrogen; H2SO4 125 mL poly	Dissolved metals (SW6020) FF; HNO3 Arsenic, Manganese, 500mL poly	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, 500mL poly	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052191-01	C-CON-D-Q322	8/18/2022	8:06		X		X		E	2	P	BN	
2	-02	MW-926-Q322	8/18/2022	8:16		X		X		E	2	P	BN	
3	-03	C-CON-S-Q322	8/18/2022	8:24		X		X		E	2	P	BN	
4	-04	C-NR1-D-Q322	8/18/2022	8:32		X		X		E	2	P	BN	
5	-05	C-NR1-S-Q322	8/18/2022	8:50		X		X		E	2	P	BN	
	-06	C-NR3-D-Q322	8/18/2022	8:58		X		X		E	2	P	BN	
7	-07	MW-927-Q322	8/18/2022	8:42		X		X		E	2	P	BN	
8	-08	C-NR3-S-Q322	8/18/2022	9:05		X		X		E	2	P	BN	
9	-09	C-NR4-D-Q322	8/18/2022	9:15		X		X		E	2	P	BN	MS/MSD
10	-10	C-NR4-S-Q322	8/18/2022	9:25		X		X		E	2	P	BN	
11	-11	R-19-Q322	8/18/2022	9:45		X		X		E	2	P	BN	
12	-12	C-MAR-D-Q322	8/18/2022	9:55		X		X		E	2	P	BN	
13	-13	C-MAR-S-Q322	8/18/2022	10:01		X		X		E	2	P	BN	MS/MSD
14	-14	RRB-Q322	8/18/2022	10:13		X		X		E	2	P	BN	

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Reggie Tap	8/18/22 1820	Stanley Clark Waste Chem	8/18/22 18:20
Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Stanley Clark Waste Chem	8/18/22 21:03	Federal Express	8/18/22 21:03
Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:

Turn Around Time (TAT)

	A	< 24 Hrs or Same Day TAT
	B	= Next Workday
	C	= 2 Workdays
	D	= 3 Workdays
X	E	= Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=60% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Plnt
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F: 562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement: Excel EDD; Geotracker; Labspec; Others ✓ (Specify: RWQCB)
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	QA/QC: RTNE; RWQCB ✓; CalTrans; LEVEL III ✓; LEVEL IV; Regulatory
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Global ID: Specify State:
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	
Submitted By: Riggie Top		Phone: 949-727-1400, ext 200 Fax:	
Title: Field Tech	Phone: 916-786-3302 Fax:		
Signature: Date: 8/18/22	Sampled By: Riggie Top		

I hereby authorize ASSET Labs to perform the tests indicated below.

I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for

Signature: Date: 8/18/22

Project Name: PG&E Topock - RCM

Project Number: 30121866.3Q22GW

Matrix: Ground; Sediment; Potable; Soil; NPDES; Other Solid; Surface X

Sample Receipt Condition

	Y	N
1. Chilled	✓	
2. Headspace		
3. Container Intact	✓	
4. Seal Present		✓
5. IR number	3	

6. Method of Cooling: ICE

Sample Temp: 3.4 C°

Courier: ASSET

Tracking No.:

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) 250 mL poly (NH4)2, SO4, NH4, OH	Nitrate/Nitrite (SM4500N03) 125 mL poly Nitrogen; H2SO4	Dissolved metals (SW6020) FF; HNO3 500mL poly Arsenic, Manganese,	Dissolved metals (SW6020) FF; HNO3 500mL poly Total Dissolved Chromium,	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052191-15	AmbientBlank-3-Q322	8/18/2022	10:10		X				E	1	P	BN	Hold
2	-16	MW-928-Q322	8/18/2022	9:35		X		X		E	2	P	BN	
3	-17	MW-930-Q322	8/18/2022	10:23		X		X		E	2	P	BN	
4														
5														
7														
8														
9														
10														
11														
12														
13														
14														

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Riggie Top	8/18/22 1850	Dan Bush	8/18/22 19:20
Dan Bush	8/18/22 2100	Dan Bush Arcadis.com	8/18/22 21:07

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy

Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/18/2022	Workorder:	N052191
Rep sample Temp (Deg C):	3.4	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: YR YRJ 8/19/2022

Reviewed By: for: MBC 8/20/2022

ASSET Laboratories

WORK ORDER Summary

19-Aug-22

WorkOrder: N052191

Client ID: ARCUS02

Project: PG&E Topock - RCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/18/2022 9:03 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052191-001A	C-CON-D-Q322	8/18/2022 8:06:00 AM	9/1/2022	Surface Water	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052191-001B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-002A	MW-926-Q322	8/18/2022 8:16:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052191-002B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-003A	C-CON-S-Q322	8/18/2022 8:24:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052191-003B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-004A	C-NR1-D-Q322	8/18/2022 8:32:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052191-004B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-005A	C-NR1-S-Q322	8/18/2022 8:50:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052191-005B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-006A	C-NR3-D-Q322	8/18/2022 8:58:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052191-006B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-007A	MW-927-Q322	8/18/2022 8:42:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052191-007B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-008A	C-NR3-S-Q322	8/18/2022 9:05:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

19-Aug-22

WorkOrder: N052191

Client ID: ARCUS02

Project: PG&E Topock - RCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/18/2022 9:03 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052191-008B	C-NR3-S-Q322	8/18/2022 9:05:00 AM	9/1/2022	Surface Water	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-009A	C-NR4-D-Q322	8/18/2022 9:15:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☑	☐	WW
N052191-009B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☑	☐	WW
N052191-010A	C-NR4-S-Q322	8/18/2022 9:25:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052191-010B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-011A	R-19-Q322	8/18/2022 9:45:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052191-011B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-012A	C-MAR-D-Q322	8/18/2022 9:55:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052191-012B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-013A	C-MAR-S-Q322	8/18/2022 10:01:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☑	☐	WW
N052191-013B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☑	☐	WW
N052191-014A	RRB-Q322	8/18/2022 10:13:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052191-014B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-015A	AmbientBlank-3-Q322	8/18/2022 10:10:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☑	☐	☐	WW
N052191-016A	MW-928-Q322	8/18/2022 9:35:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

19-Aug-22

WorkOrder: N052191

Client ID: ARCUS02

Project: PG&E Topock - RCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/18/2022 9:03 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052191-016B	MW-928-Q322	8/18/2022 9:35:00 AM	9/1/2022	Surface Water	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-017A	MW-930-Q322	8/18/2022 10:23:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052191-017B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-018A	FOLDER	9/1/2022	9/1/2022		Folder	Folder	☐	☐	☐	LAB
			9/1/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/1/2022		Folder	Folder	☐	☐	☐	LAB

September 01, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052192

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 18, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052192

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Subcontracted Analyses:

Nitrate/Nitrite was subcontracted to BC Labs - Bakersfield, CA

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of sample upon the addition of eluent.

Analytical Comments for SM 5310C:

Matrix Spike (MS) is outside recovery criteria in QC sample N052192-001CMS at several dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N052192-001 and MS/MSD were reported at 5x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Barium in QC samples N052191-009BMS, N052191-009BMSD and N052191-013BMSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

ASSET Laboratories

Date: *01-Sep-22*

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052192
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052192-001A	MW-42-030-Q322	Groundwater	8/18/2022 12:35:00 PM	8/18/2022	9/1/2022
N052192-001B	MW-42-030-Q322	Groundwater	8/18/2022 12:35:00 PM	8/18/2022	9/1/2022
N052192-001C	MW-42-030-Q322	Groundwater	8/18/2022 12:35:00 PM	8/18/2022	9/1/2022
N052192-001D	MW-42-030-Q322	Groundwater	8/18/2022 12:35:00 PM	8/18/2022	9/1/2022
N052192-001E	MW-42-030-Q322	Groundwater	8/18/2022 12:35:00 PM	8/18/2022	9/1/2022
N052192-002A	MW-42-055-Q322	Groundwater	8/18/2022 12:16:00 PM	8/18/2022	9/1/2022
N052192-002B	MW-42-055-Q322	Groundwater	8/18/2022 12:16:00 PM	8/18/2022	9/1/2022
N052192-002C	MW-42-055-Q322	Groundwater	8/18/2022 12:16:00 PM	8/18/2022	9/1/2022
N052192-002D	MW-42-055-Q322	Groundwater	8/18/2022 12:16:00 PM	8/18/2022	9/1/2022
N052192-003A	MW-42-055-EB-Q322	Groundwater	8/18/2022 11:58:00 AM	8/18/2022	9/1/2022
N052192-004A	MW-42-065-Q322	Groundwater	8/18/2022 11:54:00 AM	8/18/2022	9/1/2022
N052192-004B	MW-42-065-Q322	Groundwater	8/18/2022 11:54:00 AM	8/18/2022	9/1/2022
N052192-004C	MW-42-065-Q322	Groundwater	8/18/2022 11:54:00 AM	8/18/2022	9/1/2022
N052192-004D	MW-42-065-Q322	Groundwater	8/18/2022 11:54:00 AM	8/18/2022	9/1/2022
N052192-005A	MW-42-065-EB-Q322	Groundwater	8/18/2022 11:30:00 AM	8/18/2022	9/1/2022
N052192-006A	EB-723-Q322	Groundwater	8/18/2022 12:58:00 PM	8/18/2022	9/1/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-42-030-Q322
Lab Order:	N052192	**Collection Date:**	8/18/2022 12:35:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052192-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819B**	QC Batch: **R164993**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 06:38 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-42-055-Q322
Lab Order:	N052192	**Collection Date:**	8/18/2022 12:16:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052192-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819B**	QC Batch: **R164993**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 06:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-42-055-EB-Q322
Lab Order:	N052192	**Collection Date:**	8/18/2022 11:58:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052192-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819B**	QC Batch: **R164993**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 07:25 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-42-065-Q322
Lab Order:	N052192	**Collection Date:**	8/18/2022 11:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052192-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819B**	QC Batch: **R164993**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 07:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-42-065-EB-Q322
Lab Order:	N052192	**Collection Date:**	8/18/2022 11:30:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052192-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819B**	QC Batch: **R164993**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 08:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-723-Q322
Lab Order:	N052192	**Collection Date:**	8/18/2022 12:58:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052192-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819B**	QC Batch: **R164993**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 08:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **LCS-R164993**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164993**
Client ID: **LCSW**	Batch ID: **R164993**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789269**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.026	0.20	5.000	0	101	90	110				

Sample ID: **MB-R164993**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164993**
Client ID: **PBW**	Batch ID: **R164993**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789272**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **N052192-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164993**
Client ID: **ZZZZZZ**	Batch ID: **R164993**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789274**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.977	0.20	1.000	0	97.7	90	110				

Sample ID: **N052192-002AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164993**
Client ID: **ZZZZZZ**	Batch ID: **R164993**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789275**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.977	0.20	1.000	0	97.7	90	110	0.9770	0.0205	20	

Sample ID: **N052192-001ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164993**
Client ID: **ZZZZZZ**	Batch ID: **R164993**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789277**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20						0	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052192-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **ZZZZZZ** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789278**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.957	0.20	1.000	0	95.7	90	110				

Sample ID: **N052192-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **ZZZZZZ** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789280**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.960	0.20	1.000	0	96.0	90	110				

Sample ID: **N052192-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **ZZZZZZ** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789282**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.972	0.20	1.000	0	97.2	90	110				

Sample ID: **N052192-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **ZZZZZZ** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789286**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.979	0.20	1.000	0	97.9	90	110				

Sample ID: **N052192-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **ZZZZZZ** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789288**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.963	0.20	1.000	0	96.3	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052194-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164993**
Client ID: **ZZZZZZ**	Batch ID: **R164993**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789290**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	376.120	80	400.0	0	94.0	90	110				

Sample ID: **N052194-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164993**
Client ID: **ZZZZZZ**	Batch ID: **R164993**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789292**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	52364.000	1000	25000	27550	99.2	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-42-030-Q322
Lab Order:	N052192	**Collection Date:**	8/18/2022 12:35:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052192-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220819A**	QC Batch: **R164987**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/19/2022 11:03 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-42-055-Q322
Lab Order:	N052192	**Collection Date:**	8/18/2022 12:16:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052192-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220819A**	QC Batch: **R164987**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/19/2022 11:19 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-42-065-Q322
Lab Order:	N052192	**Collection Date:**	8/18/2022 11:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052192-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220819A**	QC Batch: **R164987**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/19/2022 11:35 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R164987_NO3**	SampType: **MBLK**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **PBW**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789103**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R164987_NO3**	SampType: **LCS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **LCSW**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789104**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.244	0.050	1.250	0	99.5	90	110				

Sample ID: **N052192-001DMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **ZZZZZZ**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789110**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.063	0.25	6.250	0.1725	94.2	80	120				

Sample ID: **N052192-001DMSD**	SampType: **MSD**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **ZZZZZZ**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789111**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.224	0.25	6.250	0.1725	96.8	80	120	6.062	2.63	20	

Sample ID: **N052194-002BDUP**	SampType: **DUP**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **ZZZZZZ**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789112**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	23.954	1.0						23.99	0.150	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-42-030-Q322
Lab Order:	N052192	**Collection Date:**	8/18/2022 12:35:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052192-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220819A**	QC Batch: **R164991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.68	5.0		mg/L	5	8/19/2022 01:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-42-055-Q322
Lab Order:	N052192	**Collection Date:**	8/18/2022 12:16:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052192-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220819A**	QC Batch: **R164991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/19/2022 01:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-42-065-Q322
Lab Order:	N052192	**Collection Date:**	8/18/2022 11:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052192-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220819A**	QC Batch: **R164991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/19/2022 02:13 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R164991**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164991**
Client ID: **PBW**	Batch ID: **R164991**	TestNo: **SM 5310C**		Analysis Date: **8/19/2022**	SeqNo: **4790078**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R164991**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164991**
Client ID: **LCSW**	Batch ID: **R164991**	TestNo: **SM 5310C**		Analysis Date: **8/19/2022**	SeqNo: **4790079**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.004	1.0	5.000	0	100	85	115				

Sample ID: **N052192-001CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164991**
Client ID: **ZZZZZZ**	Batch ID: **R164991**	TestNo: **SM 5310C**		Analysis Date: **8/19/2022**	SeqNo: **4790090**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	29.460	5.0	25.00	4.016	102	75	125				

Sample ID: **N052192-001CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164991**
Client ID: **ZZZZZZ**	Batch ID: **R164991**	TestNo: **SM 5310C**		Analysis Date: **8/19/2022**	SeqNo: **4790091**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	29.502	5.0	25.00	4.016	102	75	125	29.46	0.142	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052192-001

Client Sample ID: MW-42-030-Q322
Collection Date: 8/18/2022 12:35:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94362**				PrepDate:	**8/22/2022**	Analyst: **DJ**
Iron	830	13	20		µg/L	1	8/28/2022 11:58 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-42-055-Q322
Lab Order:	N052192	**Collection Date:**	8/18/2022 12:16:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052192-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94362**			PrepDate:	**8/22/2022**		Analyst: **DJ**
Iron	180	13	20		µg/L	1	8/28/2022 12:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052192-004

Client Sample ID: MW-42-065-Q322
Collection Date: 8/18/2022 11:54:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94362**			PrepDate:		**8/22/2022**	Analyst: **DJ**
Iron	410	13	20		µg/L	1	8/28/2022 12:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94362**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165203**
Client ID: **PBW**	Batch ID: **94362**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803685**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-94362**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165203**
Client ID: **LCSW**	Batch ID: **94362**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803686**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	97.982	20	100.0	0	98.0	85	115				

Sample ID: **N052126-001B-MS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165203**
Client ID: **ZZZZZZ**	Batch ID: **94362**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803690**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	97.277	20	100.0	0	97.3	75	125				

Sample ID: **N052126-001B-MSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165203**
Client ID: **ZZZZZZ**	Batch ID: **94362**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803695**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	112.701	20	100.0	0	113	75	125	97.28	14.7	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052192-001

Client Sample ID: MW-42-030-Q322
Collection Date: 8/18/2022 12:35:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220824D** QC Batch: **94363**				PrepDate:		**8/22/2022**	Analyst: **DJ**
Arsenic	1.6	0.050	0.10		µg/L	1	8/25/2022 06:34 AM
Barium	150	0.083	1.0		µg/L	1	8/25/2022 06:34 AM
Manganese	200	0.13	2.5		µg/L	5	8/25/2022 06:40 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052192-002

Client Sample ID: MW-42-055-Q322
Collection Date: 8/18/2022 12:16:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**			PrepDate:		**8/22/2022**	Analyst: **DJ**
Arsenic	10	0.050	0.10		µg/L	1	8/25/2022 06:46 AM
Barium	150	0.083	1.0		µg/L	1	8/25/2022 06:46 AM
Manganese	250	0.13	2.5		µg/L	5	8/25/2022 06:52 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052192-004

Client Sample ID: MW-42-065-Q322
Collection Date: 8/18/2022 11:54:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220824D** QC Batch: **94363**				PrepDate:	**8/22/2022**		Analyst: **DJ**
Arsenic	1.6	0.050	0.10		µg/L	1	8/25/2022 06:58 AM
Barium	110	0.083	1.0		µg/L	1	8/25/2022 06:58 AM
Manganese	2300	0.66	12		µg/L	25	8/25/2022 09:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94363**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **PBW**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799475**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID: **LCS-94363**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **LCSW**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799476**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.875	0.10	10.00	0	98.7	85	115				
Barium	10.371	1.0	10.00	0	104	85	115				
Manganese	100.982	0.50	100.0	0	101	85	115				

Sample ID: **N052191-009BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **ZZZZZZ**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799504**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.169	0.10	10.00	2.328	98.4	75	125				
Barium	124.453	1.0	10.00	117.7	67.8	75	125				S
Manganese	98.871	0.50	100.0	0	98.9	75	125				

Sample ID: **N052191-009BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **ZZZZZZ**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799506**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.370	0.10	10.00	2.328	100	75	125	12.17	1.64	20	
Barium	120.555	1.0	10.00	117.7	28.8	75	125	124.5	3.18	20	S
Manganese	101.929	0.50	100.0	0	102	75	125	98.87	3.04	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052191-013BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **ZZZZZZ**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799523**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.904	0.10	10.00	4.178	97.3	75	125				
Barium	126.070	1.0	10.00	114.3	118	75	125				

Sample ID: **N052191-013BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **ZZZZZZ**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799524**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	247.503	2.5	100.0	143.4	104	75	125				

Sample ID: **N052191-013BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **ZZZZZZ**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799525**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.677	0.10	10.00	4.178	95.0	75	125	13.90	1.65	20	
Barium	127.742	1.0	10.00	114.3	135	75	125	126.1	1.32	20	S

Sample ID: **N052191-013BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **ZZZZZZ**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799526**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	244.461	2.5	100.0	143.4	101	75	125	247.5	1.24	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052191-009B-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **165137**
Client ID: **ZZZZZZ** Batch ID: **94363** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/25/2022** SeqNo: **4799502**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.304	0.10	10.00	2.328	99.8	80	120				
Barium	123.358	1.0	10.00	117.7	56.8	80	120				S
Manganese	98.909	0.50	100.0	0	98.9	80	120				

Sample ID: **N052191-013B-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **165137**
Client ID: **ZZZZZZ** Batch ID: **94363** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/25/2022** SeqNo: **4799519**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	14.160	0.10	10.00	4.178	99.8	80	120				
Barium	127.259	1.0	10.00	114.3	130	80	120				S

Sample ID: **N052191-013B-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **165137**
Client ID: **ZZZZZZ** Batch ID: **94363** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/25/2022** SeqNo: **4799520**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	246.403	2.5	100.0	143.4	103	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ARCUS02 C: 9/1/2022 12:00 AM
FOLDER R: 8/18/2022
N052192-007A 1 of 1

ASSET LABORATORIES

ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDF	RTNE	
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	Excel EDD	RWQCB ✓	1. Chilled ✓
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com daniel.moore@critigen.com	Address:	Geotracker	CalTrans	2. Headspace
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mboles@pivox.com P.O.#	Labspec	LEVEL III	3. Container Intact ✓
Submitted By: Riggie Top		Phone: 949-727-1400, ext 200 Fax:	Others ✓	LEVEL IV	4. Seal Present ✓
Title: Field Tech	Phone: 916-786-3302 Fax:		Specify: RWQCB	Regulatory	5. IR number 3
Signature: Date: 8/18/22	Sampled By: Riggie Top		Global ID:	Specify State:	6. Method of Cooling: ICE
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for				Sample Temp: 5.8 c
Project Name: PG&E Topock - PCM	Signature: Date: 8/18/22				Courier: ASSET
Project Number: 30121866.3Q22GW					Tracking No.:

Matrix: Ground X | Sediment; Potable | Soil; NPDES | Other Solid; Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate (EPA 300.0) (1 L poly)	Nitrate/nitrite as Nitrogen (SM 4500-NO3); H2SO4 (125 mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052192-01	MW-42-030-Q322	8/18/2022	12:35		X		X			X			X	X	E	7	P	BNS	
2	-02	MW-42-055-Q322	8/18/2022	12:16		X		X			X			X		E	6	P	BNS	
3	-03	MW-42-055-EB-Q322	8/18/2022	11:58		X										E	1	P	BNS	
4	-04	MW-42-065-Q322	8/18/2022	1154		X		X			X			X		E	6	P	BNS	
5	-05	MW-42-065-EB-Q322	8/18/2022	11:30		X										E	1	P	BNS	
6	-06	EB-72[illegible]-Q322	8/18/2022	12:58		X										E	1	P	BNS	
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Riggie Top	8/18/22 1820	Dan Bush - Bank one	8/19/22 10:20
Dan Bush	8/18/22 21:03 Bank one	Jennifer Bunkowski	8/18/22 21:03
Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 5% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy

Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/18/2022	Workorder:	N052192
Rep sample Temp (Deg C):	5.8	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: YR YRJ 8/19/2022

Reviewed By: for: MBC 8/20/2022

ASSET Laboratories

WORK ORDER Summary

21-Aug-22

WorkOrder: N052192

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/18/2022 9:03 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052192-001A	MW-42-030-Q322	8/18/2022 12:35:00 PM	9/1/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052192-001B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052192-001C			9/1/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052192-001D			9/1/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052192-001E			9/1/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052192-002A	MW-42-055-Q322	8/18/2022 12:16:00 PM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052192-002B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052192-002C			9/1/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052192-002D			9/1/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052192-003A	MW-42-055-EB-Q322	8/18/2022 11:58:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052192-004A	MW-42-065-Q322	8/18/2022 11:54:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052192-004B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052192-004C			9/1/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

21-Aug-22

WorkOrder: N052192

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/18/2022 9:03 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052192-004D	MW-42-065-Q322	8/18/2022 11:54:00 AM	9/1/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052192-005A	MW-42-065-EB-Q322	8/18/2022 11:30:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052192-006A	EB-723-Q322	8/18/2022 12:58:00 PM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052192-007A	FOLDER	9/1/2022	9/1/2022		Folder	Folder	☐	☐	☐	LAB
			9/1/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/1/2022		Folder	Folder	☐	☐	☐	LAB

ASSET Laboratories
3151-3153 W Post Rd., Las Vegas, NV 89118
www.atl-labs.com
TEL: 7023072659 *FAX: 7023072691*

CHAIN-OF-CUSTODY RECORD

QC Level: Level IV

Subcontractor:

BC Labs
4100 Atlas Court
Bakersfield, CA 93308

TEL: (661) 327-4911
FAX: (661) 327-1918
Acct #:

Field Sampler: Riggie Tep

19-Aug-22

				Nitrate/Nitrite	Requested Tests	
Sample ID	**Matrix**	**Date Collected**	**Bottle Type**	~~**SM4500-NO3F**~~		
N052192-001E / MW-42-030-Q322	Groundwater	8/18/2022 12:35:00 PM	8OZP	1		

General Comments: PLEASE EMAIL SAMPLE RECEIPT ACKNOWLEDGEMENT TO THE PM. ALWAYS CC: sonny.lorenzo@assetlaboratories.com

Please use PO#:N52192A Please email Invoices and Account Receivable Statements to elvira@assetlaboratories.com. For questions, call Marlon at (702)-307-2659. Please e-mail results to reports.lv@assetlaboratories.com by: Standard TAT.

Please analyze for Nitrate/Nitrite. EDD requirement Labspec7 edata.

GSO #: 557585740

		Date/Time			Date/Time
Relinquished by:	Eilen Fanego	8/22/2022 1630	**Received by:**		
Relinquished by:			**Received by:**		

September 02, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052194

RE: PG&E Topock - RCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 18, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Dilution was necessary for sample N052194-001 due to matrix. Sample is colored.

Analytical Comments for EPA 300:

Dilution was necessary for sample N052194-001 due to matrix. Sample is colored.

ASSET Laboratories

Date: *02-Sep-22*

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab Order: N052194
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052194-001A	MW-67-185-Q322	Groundwater	8/18/2022 11:50:00 AM	8/18/2022	9/2/2022
N052194-001B	MW-67-185-Q322	Groundwater	8/18/2022 11:50:00 AM	8/18/2022	9/2/2022
N052194-001C	MW-67-185-Q322	Groundwater	8/18/2022 11:50:00 AM	8/18/2022	9/2/2022
N052194-002A	MW-68-180-Q322	Groundwater	8/18/2022 12:54:00 PM	8/18/2022	9/2/2022
N052194-002B	MW-68-180-Q322	Groundwater	8/18/2022 12:54:00 PM	8/18/2022	9/2/2022
N052194-002C	MW-68-180-Q322	Groundwater	8/18/2022 12:54:00 PM	8/18/2022	9/2/2022

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052194
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab ID: N052194-001

Client Sample ID: MW-67-185-Q322
Collection Date: 8/18/2022 11:50:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819B** QC Batch: **R164993**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	10	80		µg/L	400	8/19/2022 08:41 PM
DISSOLVED METALS BY ICP-MS							
		EPA 3010A	**EPA 6020**				
RunID: **NV00922-ICP8_220825D** QC Batch: **94421**				PrepDate:		**8/25/2022**	Analyst: **DJ**
Chromium	ND	0.18	5.0		µg/L	5	8/25/2022 11:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-68-180-Q322
Lab Order:	N052194	**Collection Date:**	8/18/2022 12:54:00 PM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052194-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819B**	QC Batch: **R164993**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	28000	130	1000		µg/L	5000	8/19/2022 09:00 PM
DISSOLVED METALS BY ICP-MS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220826E**	QC Batch: **94421**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Chromium	31000	8.8	250		µg/L	250	8/26/2022 09:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052194
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **LCS-R164993** SampType: **LCS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **LCSW** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789269**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.026	0.20	5.000	0	101	90	110				

Sample ID: **MB-R164993** SampType: **MBLK** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **PBW** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789272**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **N052192-002AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **ZZZZZZ** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789274**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.977	0.20	1.000	0	97.7	90	110				

Sample ID: **N052192-002AMSD** SampType: **MSD** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **ZZZZZZ** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789275**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.977	0.20	1.000	0	97.7	90	110	0.9770	0.0205	20	

Sample ID: **N052192-001ADUP** SampType: **DUP** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **ZZZZZZ** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789277**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20						0	0	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052194
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052192-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **ZZZZZZ** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789278**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.957	0.20	1.000	0	95.7	90	110				

Sample ID: **N052192-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **ZZZZZZ** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789280**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.960	0.20	1.000	0	96.0	90	110				

Sample ID: **N052192-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **ZZZZZZ** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789282**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.972	0.20	1.000	0	97.2	90	110				

Sample ID: **N052192-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **ZZZZZZ** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789286**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.979	0.20	1.000	0	97.9	90	110				

Sample ID: **N052192-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **ZZZZZZ** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789288**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.963	0.20	1.000	0	96.3	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052194
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052194-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164993**
Client ID: **ZZZZZZ**	Batch ID: **R164993**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789290**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	376.120	80	400.0	0	94.0	90	110				

Sample ID: **N052194-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164993**
Client ID: **ZZZZZZ**	Batch ID: **R164993**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789292**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	52364.000	1000	25000	27550	99.2	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052194
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020DIS_CrPGE_TPK

Sample ID: **MB-94421**	SampType: **MBLK**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165200**
Client ID: **PBW**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4803316**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									

Sample ID: **LCS-94421**	SampType: **LCS**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165200**
Client ID: **LCSW**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4803317**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10.350	1.0	10.00	0	104	85	115				

Sample ID: **N052261-001B-MS**	SampType: **MS**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165200**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803337**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10.890	1.0	10.00	0.09027	108	75	125				

Sample ID: **N052261-001B-MSD**	SampType: **MSD**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165200**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803340**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10.965	1.0	10.00	0.09027	109	75	125	10.89	0.687	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-67-185-Q322
Lab Order:	N052194	**Collection Date:**	8/18/2022 11:50:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052194-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220819A** QC Batch: **R164987** PrepDate: Analyst: **RAB**							
Nitrate as N	23	3.8	20		mg/L	400	8/19/2022 10:47 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-68-180-Q322
Lab Order:	N052194	**Collection Date:**	8/18/2022 12:54:00 PM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052194-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220819A** QC Batch: **R164987** PrepDate: Analyst: **RAB**							
Nitrate as N	24	0.19	1.0		mg/L	20	8/19/2022 10:31 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052194
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R164987_NO3**	SampType: **MBLK**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **PBW**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789103**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R164987_NO3**	SampType: **LCS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **LCSW**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789104**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.244	0.050	1.250	0	99.5	90	110				

Sample ID: **N052192-001DMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **ZZZZZZ**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789110**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.063	0.25	6.250	0.1725	94.2	80	120				

Sample ID: **N052192-001DMSD**	SampType: **MSD**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **ZZZZZZ**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789111**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.224	0.25	6.250	0.1725	96.8	80	120	6.062	2.63	20	

Sample ID: **N052194-002BDUP**	SampType: **DUP**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **ZZZZZZ**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789112**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	23.954	1.0						23.99	0.150	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052194
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab ID: N052194-001

Client Sample ID: MW-67-185-Q322
Collection Date: 8/18/2022 11:50:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220825E**	QC Batch: **94421**			PrepDate:		**8/25/2022**	Analyst: **DJ**
Manganese	800	0.13	2.5		µg/L	5	8/25/2022 11:11 PM
Molybdenum	39	0.60	2.5		µg/L	5	8/25/2022 11:11 PM
Selenium	87	0.22	2.5		µg/L	5	8/25/2022 11:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-68-180-Q322
Lab Order:	N052194	**Collection Date:**	8/18/2022 12:54:00 PM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052194-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E** QC Batch: **94421**				PrepDate:	**8/25/2022**		Analyst: **DJ**
Molybdenum	64	0.60	2.5		µg/L	5	8/25/2022 11:23 PM
Selenium	28	0.22	2.5		µg/L	5	8/25/2022 11:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052194
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94421** SampType: **MBLK** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/25/2022** RunNo: **165202**
Client ID: **PBW** Batch ID: **94421** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/25/2022** SeqNo: **4803568**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	ND	0.50									
Molybdenum	ND	0.50									
Selenium	ND	0.50									

Sample ID: **LCS-94421** SampType: **LCS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/25/2022** RunNo: **165202**
Client ID: **LCSW** Batch ID: **94421** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/25/2022** SeqNo: **4803569**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	104.749	0.50	100.0	0	105	85	115				
Molybdenum	9.943	0.50	10.00	0	99.4	85	115				
Selenium	9.470	0.50	10.00	0	94.7	85	115				

Sample ID: **N052261-001B-MS** SampType: **MS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/25/2022** RunNo: **165202**
Client ID: **ZZZZZZ** Batch ID: **94421** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/26/2022** SeqNo: **4803589**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	14.930	0.50	10.00	4.330	106	75	125				
Selenium	9.964	0.50	10.00	0.04683	99.2	75	125				

Sample ID: **N052261-001B-MSD** SampType: **MSD** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/25/2022** RunNo: **165202**
Client ID: **ZZZZZZ** Batch ID: **94421** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/26/2022** SeqNo: **4803592**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	14.857	0.50	10.00	4.330	105	75	125	14.93	0.494	20	
Selenium	10.236	0.50	10.00	0.04683	102	75	125	9.964	2.69	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052194
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052261-001B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4804956**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	185.613	2.5	100.0	107.5	78.2	75	125				

Sample ID: **N052261-001B-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4804957**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	189.146	2.5	100.0	107.5	81.7	75	125	185.6	1.89	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ARCUS02 C: 9/1/2022 12:00 AM
FOLDER R: 8/18/2022
N052194-003A 1 of 1

ASSET LABORATORIES

ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Format
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	Excel EDD
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	Labspec
Submitted By: Nara Tay	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	Others ✓
Title: Project Manager			Specify: RWQCB
Signature: Date: 8/18/22	Sampled By: Nara Tay		Global ID:
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample, I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for		
Project Name: PG&E Topock - RCM	Signature: Date: 8/18/22		
Project Number: 30121866.3Q22GW			

RTNE		1. Chilled	✓
RWQCB	✓	2. Headspace	
CalTrans		3. Container Intact	✓
LEVEL III		4. Seal Present	✓
LEVEL IV		5. IR number	3
Regulatory		6. Method of Cooling: ICE	
Specify State:		Sample Temp: 3.9 C	

Courier: ASSET
Tracking No.:

Matrix			
Ground	X	Sediment	
Potable		Soil	
NPDES		Other Solid	
Surface			

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Manganese, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Selenium (500mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052194-01	MW-67-185-Q322	8/18/2022	11:50		X	X	X	X	X	X	E	3	P	BNS	
2	-02	MW-68-180-Q322	8/18/2022	12:54		X	X		X	X	X	E	3	P	BNS	
3																
4																
5																
7																
8																
9																
10																
11																
12																
13																
14																

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Nara Tay	8/18/22 1820	Dan Bush	8/18/22 18:20
Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Dan Bush	8/18/22 21:05	Dan Bush	8/18/22 21:05 Dan Bush
Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/18/2022	Workorder:	N052194
Rep sample Temp (Deg C):	3.4	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: YR YRJ 8/19/2022

Reviewed By: for MBC 8/19/2022

ASSET Laboratories

WORK ORDER Summary

19-Aug-22

WorkOrder: N052194

Client ID: ARCUS02

Project: PG&E Topock - RCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/18/2022 9:03 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052194-001A	MW-67-185-Q322	8/18/2022 11:50:00 AM	9/1/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052194-001B			9/1/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052194-001C			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052194-002A	MW-68-180-Q322	8/18/2022 12:54:00 PM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052194-002B			9/1/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052194-002C			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052194-003A	FOLDER	9/1/2022	9/1/2022		Folder	Folder	☐	☐	☐	LAB
			9/1/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/1/2022		Folder	Folder	☐	☐	☐	LAB

September 06, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052214

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 19, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052214

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Subcontracted Analyses:

Nitrate/Nitrite was subcontracted to BC Labs - Bakersfield, CA.

Analytical Comments for EPA 218.6:

Dilution was necessary for samples N052214-001 and N052214-002 due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for EPA 6020:

Matrix Spike Duplicate (MSD) is outside recovery criteria for Barium in QC sample N052261-001B-MSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052214
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052214-001A	MW-90-031-Q322	Groundwater	8/19/2022 7:41:00 AM	8/19/2022	9/6/2022
N052214-001B	MW-90-031-Q322	Groundwater	8/19/2022 7:41:00 AM	8/19/2022	9/6/2022
N052214-001C	MW-90-031-Q322	Groundwater	8/19/2022 7:41:00 AM	8/19/2022	9/6/2022
N052214-001D	MW-90-031-Q322	Groundwater	8/19/2022 7:41:00 AM	8/19/2022	9/6/2022
N052214-001E	MW-90-031-Q322	Groundwater	8/19/2022 7:41:00 AM	8/19/2022	9/6/2022
N052214-002A	MW-22-Q322	Groundwater	8/19/2022 7:15:00 AM	8/19/2022	9/6/2022
N052214-002B	MW-22-Q322	Groundwater	8/19/2022 7:15:00 AM	8/19/2022	9/6/2022
N052214-002C	MW-22-Q322	Groundwater	8/19/2022 7:15:00 AM	8/19/2022	9/6/2022
N052214-002D	MW-22-Q322	Groundwater	8/19/2022 7:15:00 AM	8/19/2022	9/6/2022
N052214-002E	MW-22-Q322	Groundwater	8/19/2022 7:15:00 AM	8/19/2022	9/6/2022
N052214-003A	MW-32-020-Q322	Groundwater	8/19/2022 8:04:00 AM	8/19/2022	9/6/2022
N052214-003B	MW-32-020-Q322	Groundwater	8/19/2022 8:04:00 AM	8/19/2022	9/6/2022
N052214-003C	MW-32-020-Q322	Groundwater	8/19/2022 8:04:00 AM	8/19/2022	9/6/2022
N052214-003D	MW-32-020-Q322	Groundwater	8/19/2022 8:04:00 AM	8/19/2022	9/6/2022
N052214-004A	MW-32-020-EB-Q322	Groundwater	8/19/2022 7:45:00 AM	8/19/2022	9/6/2022
N052214-005A	MW-32-035-Q322	Groundwater	8/19/2022 8:34:00 AM	8/19/2022	9/6/2022
N052214-005B	MW-32-035-Q322	Groundwater	8/19/2022 8:34:00 AM	8/19/2022	9/6/2022
N052214-005C	MW-32-035-Q322	Groundwater	8/19/2022 8:34:00 AM	8/19/2022	9/6/2022
N052214-005D	MW-32-035-Q322	Groundwater	8/19/2022 8:34:00 AM	8/19/2022	9/6/2022
N052214-005E	MW-32-035-Q322	Groundwater	8/19/2022 8:34:00 AM	8/19/2022	9/6/2022
N052214-006A	EB-724-Q322	Groundwater	8/19/2022 8:40:00 AM	8/19/2022	9/6/2022
N052214-007A	MW-32-035-EB-Q322	Groundwater	8/19/2022 8:13:00 AM	8/19/2022	9/6/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-90-031-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 7:41:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220822A**	QC Batch: **R165063**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/22/2022 02:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-22-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 7:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220822A**	QC Batch: **R165063**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/22/2022 03:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-32-020-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 8:04:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220822A**	QC Batch: **R165063**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/22/2022 02:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-32-020-EB-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 7:45:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220822A**	QC Batch: **R165063**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/22/2022 03:29 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-32-035-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 8:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220822A**	QC Batch: **R165063**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/22/2022 01:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-724-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 8:40:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220822A**	QC Batch: **R165063**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/22/2022 03:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-32-035-EB-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 8:13:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220822A**	QC Batch: **R165063**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/22/2022 04:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052214
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R165063**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165063**
Client ID: **PBW**	Batch ID: **R165063**	TestNo: **EPA 218.6**		Analysis Date: **8/22/2022**	SeqNo: **4795000**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R165063**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165063**
Client ID: **LCSW**	Batch ID: **R165063**	TestNo: **EPA 218.6**		Analysis Date: **8/22/2022**	SeqNo: **4795001**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.913	0.20	5.000	0	98.3	90	110				

Sample ID: **N052214-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165063**
Client ID: **ZZZZZZ**	Batch ID: **R165063**	TestNo: **EPA 218.6**		Analysis Date: **8/22/2022**	SeqNo: **4795003**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.970	0.20	1.000	0	97.0	90	110				

Sample ID: **N052214-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165063**
Client ID: **ZZZZZZ**	Batch ID: **R165063**	TestNo: **EPA 218.6**		Analysis Date: **8/22/2022**	SeqNo: **4795005**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.652	1.0	5.000	0	93.0	90	110				

Sample ID: **N052214-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165063**
Client ID: **ZZZZZZ**	Batch ID: **R165063**	TestNo: **EPA 218.6**		Analysis Date: **8/22/2022**	SeqNo: **4795009**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.796	1.0	5.000	0	95.9	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052214
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052214-002AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165063**
Client ID: **ZZZZZZ** Batch ID: **R165063** TestNo: **EPA 218.6** Analysis Date: **8/22/2022** SeqNo: **4795011**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.728	1.0	5.000	0	94.6	90	110				

Sample ID: **N052214-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165063**
Client ID: **ZZZZZZ** Batch ID: **R165063** TestNo: **EPA 218.6** Analysis Date: **8/22/2022** SeqNo: **4795013**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.994	0.20	1.000	0	99.4	90	110				

Sample ID: **N052214-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165063**
Client ID: **ZZZZZZ** Batch ID: **R165063** TestNo: **EPA 218.6** Analysis Date: **8/22/2022** SeqNo: **4795015**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.000	0.20	1.000	0	100	90	110				

Sample ID: **N052214-007AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165063**
Client ID: **ZZZZZZ** Batch ID: **R165063** TestNo: **EPA 218.6** Analysis Date: **8/22/2022** SeqNo: **4795019**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.081	0.20	1.000	0	108	90	110				

Sample ID: **N052214-002AMSD** SampType: **MSD** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165063**
Client ID: **ZZZZZZ** Batch ID: **R165063** TestNo: **EPA 218.6** Analysis Date: **8/22/2022** SeqNo: **4795020**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.735	1.0	5.000	0	94.7	90	110	4.728	0.148	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052214
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052217-001ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165063**
Client ID: **ZZZZZZ**	Batch ID: **R165063**	TestNo: **EPA 218.6**		Analysis Date: **8/22/2022**	SeqNo: **4795022**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	21.615	1.0						21.07	2.56	20	

Sample ID: **N052225-001BMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165063**
Client ID: **ZZZZZZ**	Batch ID: **R165063**	TestNo: **EPA 218.6**		Analysis Date: **8/22/2022**	SeqNo: **4795024**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2674.760	40	1000	1675	100	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-90-031-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 7:41:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220819A** QC Batch: **R164987** PrepDate: Analyst: **RAB**							
Nitrate as N	ND	0.095	0.50		mg/L	10	8/19/2022 05:39 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-22-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 7:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220819A**	QC Batch: **R164987**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/19/2022 05:55 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-32-020-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 8:04:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220819A**	QC Batch: **R164987**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/19/2022 06:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-32-035-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 8:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220819A**	QC Batch: **R164987**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/19/2022 06:26 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052214
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R164987_NO3**	SampType: **MBLK**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **PBW**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789103**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R164987_NO3**	SampType: **LCS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **LCSW**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789104**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.244	0.050	1.250	0	99.5	90	110				

Sample ID: **N052192-001DMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **ZZZZZZ**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789110**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.063	0.25	6.250	0.1725	94.2	80	120				

Sample ID: **N052192-001DMSD**	SampType: **MSD**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **ZZZZZZ**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789111**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.224	0.25	6.250	0.1725	96.8	80	120	6.062	2.63	20	

Sample ID: **N052194-002BDUP**	SampType: **DUP**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **ZZZZZZ**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789112**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	23.954	1.0						23.99	0.150	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-90-031-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 7:41:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220819A**	QC Batch: **R164991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	2.2	0.14	1.0		mg/L	1	8/19/2022 05:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-22-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 7:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220819A**	QC Batch: **R164991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.3	0.14	1.0		mg/L	1	8/19/2022 06:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-32-020-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 8:04:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220823A**	QC Batch: **R165080**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	8.2	0.68	5.0		mg/L	5	8/23/2022 12:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-32-035-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 8:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220819A**	QC Batch: **R164991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.8	0.14	1.0		mg/L	1	8/19/2022 06:32 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052214
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R164991**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164991**
Client ID: **PBW**	Batch ID: **R164991**	TestNo: **SM 5310C**		Analysis Date: **8/19/2022**	SeqNo: **4790078**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R164991**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164991**
Client ID: **LCSW**	Batch ID: **R164991**	TestNo: **SM 5310C**		Analysis Date: **8/19/2022**	SeqNo: **4790079**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.004	1.0	5.000	0	100	85	115				

Sample ID: **N052192-001CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164991**
Client ID: **ZZZZZZ**	Batch ID: **R164991**	TestNo: **SM 5310C**		Analysis Date: **8/19/2022**	SeqNo: **4790090**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	29.460	5.0	25.00	4.016	102	75	125				

Sample ID: **N052192-001CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164991**
Client ID: **ZZZZZZ**	Batch ID: **R164991**	TestNo: **SM 5310C**		Analysis Date: **8/19/2022**	SeqNo: **4790091**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	29.502	5.0	25.00	4.016	102	75	125	29.46	0.142	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052214
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R165080**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165080**
Client ID: **PBW**	Batch ID: **R165080**	TestNo: **SM 5310C**		Analysis Date: **8/23/2022**	SeqNo: **4796121**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R165080**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165080**
Client ID: **LCSW**	Batch ID: **R165080**	TestNo: **SM 5310C**		Analysis Date: **8/23/2022**	SeqNo: **4796122**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	4.993	1.0	5.000	0	99.9	85	115				

Sample ID: **N052246-008CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165080**
Client ID: **ZZZZZZ**	Batch ID: **R165080**	TestNo: **SM 5310C**		Analysis Date: **8/23/2022**	SeqNo: **4796127**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	34.234	5.0	25.00	11.87	89.5	75	125				

Sample ID: **N052246-008CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165080**
Client ID: **ZZZZZZ**	Batch ID: **R165080**	TestNo: **SM 5310C**		Analysis Date: **8/23/2022**	SeqNo: **4796131**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	34.371	5.0	25.00	11.87	90.0	75	125	34.23	0.399	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-90-031-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 7:41:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94362**			PrepDate:	**8/22/2022**		Analyst: **DJ**
Iron	7800	13	20		µg/L	1	8/28/2022 12:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-22-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 7:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94362**			PrepDate:		**8/22/2022**	Analyst: **DJ**
Iron	16000	13	20		µg/L	1	8/28/2022 12:29 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052214
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052214-003

Client Sample ID: MW-32-020-Q322
Collection Date: 8/19/2022 8:04:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94362**				PrepDate:	**8/22/2022**	Analyst: **DJ**
Iron	3600	13	20		µg/L	1	8/28/2022 12:34 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-32-035-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 8:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94362**			PrepDate:		**8/22/2022**	Analyst: **DJ**
Iron	10000	13	20		µg/L	1	8/28/2022 12:39 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052214
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94362**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165203**
Client ID: **PBW**	Batch ID: **94362**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803685**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-94362**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165203**
Client ID: **LCSW**	Batch ID: **94362**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803686**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	97.982	20	100.0	0	98.0	85	115				

Sample ID: **N052126-001B-MS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165203**
Client ID: **ZZZZZZ**	Batch ID: **94362**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803690**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	97.277	20	100.0	0	97.3	75	125				

Sample ID: **N052126-001B-MSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165203**
Client ID: **ZZZZZZ**	Batch ID: **94362**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803695**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	112.701	20	100.0	0	113	75	125	97.28	14.7	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-90-031-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 7:41:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E**	QC Batch: **94421**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/25/2022 11:35 PM
Barium	110	0.083	1.0		µg/L	1	8/25/2022 11:35 PM
Manganese	63	0.026	0.50		µg/L	1	8/25/2022 11:41 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052214
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052214-002

Client Sample ID: MW-22-Q322
Collection Date: 8/19/2022 7:15:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220826F**	QC Batch: **94421**			PrepDate:		**8/25/2022**	Analyst: **DJ**
Arsenic	14	0.050	0.10		µg/L	1	8/26/2022 09:26 PM
Barium	150	0.083	1.0		µg/L	1	8/25/2022 11:47 PM
Manganese	5300	3.3	62		µg/L	125	8/26/2022 09:32 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-32-020-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 8:04:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E** QC Batch: **94421**				PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	2.6	0.050	0.10		µg/L	1	8/26/2022 12:22 AM
Barium	120	0.083	1.0		µg/L	1	8/26/2022 12:22 AM
Manganese	280	0.13	2.5		µg/L	5	8/26/2022 12:29 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052214
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052214-005

Client Sample ID: MW-32-035-Q322
Collection Date: 8/19/2022 8:34:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220825E**	QC Batch: **94421**			PrepDate:		**8/25/2022**	Analyst: **DJ**
Arsenic	17	0.050	0.10		µg/L	1	8/26/2022 12:34 AM
Barium	260	0.42	5.0		µg/L	5	9/4/2022 07:32 PM
Manganese	770	0.13	2.5		µg/L	5	8/26/2022 09:38 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052214
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94421**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **PBW**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4803568**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID: **LCS-94421**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **LCSW**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4803569**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.213	0.10	10.00	0	102	85	115				
Barium	10.416	1.0	10.00	0	104	85	115				
Manganese	104.749	0.50	100.0	0	105	85	115				

Sample ID: **N052261-001B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803589**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.700	0.10	10.00	3.352	103	75	125				
Barium	37.857	1.0	10.00	29.94	79.2	75	125				

Sample ID: **N052261-001B-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803592**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.699	0.10	10.00	3.352	103	75	125	13.70	0.00515	20	
Barium	36.755	1.0	10.00	29.94	68.2	75	125	37.86	2.95	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052214
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052261-001B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4804956**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	185.613	2.5	100.0	107.5	78.2	75	125				

Sample ID: **N052261-001B-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4804957**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	189.146	2.5	100.0	107.5	81.7	75	125	185.6	1.89	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052214
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052261-001B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803588**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.563	0.10	10.00	3.352	102	80	120				
Barium	37.573	1.0	10.00	29.94	76.4	80	120				S

Sample ID: **N052261-001B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4804955**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	190.684	2.5	100.0	107.5	83.2	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement		QA/QC		Sample Receipt Condition	Y	N
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	Excel EDD		RTNE		1. Chilled	1	
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker		RWQCB	✓	2. Headspace		
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	Labspec		CalTrans		3. Container Intact	1	
Submitted By: Riggie Top			Others	✓	LEVEL III		4. Seal Present		1
Title: Field Tech	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	Specify: RWQCB		LEVEL IV		5. IR number	3	
Signature: Date: 8/19/22	Sampled By: Riggie Top		Global ID:		Regulatory		6. Method of Cooling: ICE		
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for				Specify State:		Sample Temp: 5.2 c		
Project Name: PG&E Topock - PCM	Signature: Date: 8/19/22	Matrix: Ground X, Sediment; Potable, Soil; NPDES, Other Solid; Surface					Courier: ASSET		
Project Number: 30121866.3Q22GW							Tracking No.:		

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate (EPA 300.0) (1 L poly)	Nitrate/nitrite as Nitrogen (SM 4500-NO3); H2SO4 (125 mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052214-01	MW-90-031-Q322	8/19/2022	7:41		X		X			X			X	X	E	7	P	BNS	
2	-02	MW-22-Q322	8/19/2022	7:15		X		X			X			X	X	E	7	P	BNS	
3	-03	MW-32-020-Q322	8/19/2022	8:04		X		X			X			X		E	6	P	BNS	
4	-04	MW-32-020-EB-Q322	8/19/2022	7:45		X										E	1	P	BNS	
5	-05	MW-32-035-Q322	8/19/2022	8:34		X		X			X			X	X	E	7	P	BNS	
6	-06	EB-724-Q322	8/19/2022	8:40		X										E	1	P	BNS	
7	-07	MW-32-035-EB-Q322	8/19/2022	8:13		X										E	1	P	BNS	
8																				
9																				
10																				
11																				
12																				
13																				
14																				

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Riggie Top	8/19/22 1203	MSCARTIN	8/19/22 1203
Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
MSCARTIN	8/19/22 1621	Ruben Fanega	8/19/22 1621
Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:

Turn Around Time (TAT)

	A	< 24 Hrs or Same Day TAT
	B	= Next Workday
	C	= 2 Workdays
	D	= 3 Workdays
X	E	= Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis.
Less than 24 Hrs =200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/19/2022	Workorder:	N052214
Rep sample Temp (Deg C):	5.2	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: EF EFanegoF 8/19/2022

Reviewed By: for: MBC 8/24/2022

ASSET Laboratories

WORK ORDER Summary

24-Aug-22

WorkOrder: N052214

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/19/2022 4:21 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052214-001A	MW-90-031-Q322	8/19/2022 7:41:00 AM	9/2/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052214-001B			9/2/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/2/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/2/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/2/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052214-001C			9/2/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052214-001D			9/2/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052214-001E			9/2/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052214-002A	MW-22-Q322	8/19/2022 7:15:00 AM	9/2/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052214-002B			9/2/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/2/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/2/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/2/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052214-002C			9/2/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052214-002D			9/2/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052214-002E			9/2/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052214-003A	MW-32-020-Q322	8/19/2022 8:04:00 AM	9/2/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052214-003B			9/2/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/2/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/2/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/2/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

24-Aug-22

WorkOrder: N052214

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/19/2022 4:21 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052214-003C	MW-32-020-Q322	8/19/2022 8:04:00 AM	9/2/2022	Groundwater	SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052214-003D			9/2/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052214-004A	MW-32-020-EB-Q322	8/19/2022 7:45:00 AM	9/2/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052214-005A	MW-32-035-Q322	8/19/2022 8:34:00 AM	9/2/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052214-005B			9/2/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/2/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/2/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/2/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052214-005C			9/2/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052214-005D			9/2/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052214-005E			9/2/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052214-006A	EB-724-Q322	8/19/2022 8:40:00 AM	9/2/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052214-007A	MW-32-035-EB-Q322	8/19/2022 8:13:00 AM	9/2/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052214-008A	FOLDER	9/2/2022	9/2/2022		Folder	Folder	☐	☐	☐	LAB
			9/2/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/2/2022		Folder	Folder	☐	☐	☐	LAB

ASSET Laboratories
3151-3153 W Post Rd., Las Vegas, NV 89118
www.atl-labs.com
TEL: 7023072659 *FAX: 7023072691*

CHAIN-OF-CUSTODY RECORD

QC Level: Level IV

Subcontractor:

BC Labs
4100 Atlas Court
Bakersfield, CA 93308

TEL: (661) 327-4911
FAX: (661) 327-1918
Acct #:

Field Sampler: Riggie Tep

22-Aug-22

				Nitrate/Nitrite	Requested Tests	
Sample ID	**Matrix**	**Date Collected**	**Bottle Type**	~~SM4500-NO3F~~		
N052214-001E / MW-90-031-Q322	Groundwater	8/19/2022 7:41:00 AM	8OZP	1		
N052214-002E / MW-22-Q322	Groundwater	8/19/2022 7:15:00 AM	8OZP	1		
N052214-005E / MW-32-035-Q322	Groundwater	8/19/2022 8:34:00 AM	8OZP	1		

General Comments: PLEASE EMAIL SAMPLE RECEIPT ACKNOWLEDGEMENT TO THE PM. ALWAYS CC: sonny.lorenzo@assetlaboratories.com

Please use PO#:N52214A Please email Invoices and Account Receivable Statements to elvira@assetlaboratories.com. For questions, call Marlon at (702)-307-2659. Please e-mail results to reports.lv@assetlaboratories.com by: Standard TAT

Please analyze for Nitrate/Nitrite. EDD requirement Labspec7 edata.

GSO #: 557585740

		Date/Time			Date/Time
Relinquished by:	YRJ	8/22/2022 16:30	**Received by:**		
Relinquished by:			**Received by:**		

September 07, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052246

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 22, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052246

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Dilution was necessary for some samples due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of sample upon the addition of eluent.

Analytical Comments for SM 5310C:

Matrix Spike (MS) is outside recovery criteria in QC sample N052246-008CMS at 1x dilution possibly due to matrix interference. QC samples were diluted and recovery passed criteria. Thus sample reference N052246-008 and MS/MSD were reported at 5x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6010B:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Iron in QC samples N052262-011BMS and N052262-011BMSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020:

Matrix Spike Duplicate (MSD) is outside recovery criteria for Barium in QC sample N052261-001B-MSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052246
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052246-001A	MW-97-042-Q322	Groundwater	8/22/2022 1:38:00 PM	8/22/2022	9/7/2022
N052246-002A	MW-97-202-Q322	Groundwater	8/22/2022 12:52:00 PM	8/22/2022	9/7/2022
N052246-003A	TW-04-Q322	Groundwater	8/22/2022 2:20:00 PM	8/22/2022	9/7/2022
N052246-004A	EB-725-Q322	Groundwater	8/22/2022 1:20:00 PM	8/22/2022	9/7/2022
N052246-005A	MW-35-060-Q322	Groundwater	8/22/2022 11:56:00 AM	8/22/2022	9/7/2022
N052246-006A	MW-913-Q322	Groundwater	8/22/2022 12:06:00 PM	8/22/2022	9/7/2022
N052246-007A	MW-35-135-Q322	Groundwater	8/22/2022 12:36:00 PM	8/22/2022	9/7/2022
N052246-008A	MW-30-030-Q322	Groundwater	8/22/2022 1:13:00 PM	8/22/2022	9/7/2022
N052246-008B	MW-30-030-Q322	Groundwater	8/22/2022 1:13:00 PM	8/22/2022	9/7/2022
N052246-008C	MW-30-030-Q322	Groundwater	8/22/2022 1:13:00 PM	8/22/2022	9/7/2022
N052246-008D	MW-30-030-Q322	Groundwater	8/22/2022 1:13:00 PM	8/22/2022	9/7/2022
N052246-009A	MW-30-030-EB-Q322	Groundwater	8/22/2022 12:55:00 PM	8/22/2022	9/7/2022
N052246-010A	EB-726-Q322	Groundwater	8/22/2022 2:30:00 PM	8/22/2022	9/7/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-97-042-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 1:38:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220823A**	QC Batch: **R165071**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	21	0.13	1.0		µg/L	5	8/23/2022 12:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-97-202-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 12:52:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220823A**	QC Batch: **R165071**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/23/2022 01:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-04-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 2:20:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220823A** QC Batch: **R165071**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	12	0.13	1.0		µg/L	5	8/23/2022 01:36 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-725-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 1:20:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220823A**	QC Batch: **R165071**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/23/2022 03:21 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-35-060-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 11:56:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220823A** QC Batch: **R165071** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	20	0.13	1.0		µg/L	5	8/23/2022 12:21 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-913-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 12:06:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220823A**	QC Batch: **R165071**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	20	0.13	1.0		µg/L	5	8/23/2022 12:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-35-135-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 12:36:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220823A**	QC Batch: **R165071**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	27	0.13	1.0		µg/L	5	8/23/2022 12:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-030-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 1:13:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220823A**	QC Batch: **R165071**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/23/2022 01:55 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-030-EB-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 12:55:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220823A**	QC Batch: **R165071**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/23/2022 03:39 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-726-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 2:30:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220823A**	QC Batch: **R165071**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/23/2022 04:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052246
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R165071**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165071**
Client ID: **PBW**	Batch ID: **R165071**	TestNo: **EPA 218.6**		Analysis Date: **8/23/2022**	SeqNo: **4795626**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R165071**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165071**
Client ID: **LCSW**	Batch ID: **R165071**	TestNo: **EPA 218.6**		Analysis Date: **8/23/2022**	SeqNo: **4795627**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.940	0.20	5.000	0	98.8	90	110				

Sample ID: **N052246-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165071**
Client ID: **ZZZZZZ**	Batch ID: **R165071**	TestNo: **EPA 218.6**		Analysis Date: **8/23/2022**	SeqNo: **4795635**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.190	1.0	5.000	0	104	90	110				

Sample ID: **N052246-002AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165071**
Client ID: **ZZZZZZ**	Batch ID: **R165071**	TestNo: **EPA 218.6**		Analysis Date: **8/23/2022**	SeqNo: **4795636**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.085	1.0	5.000	0	102	90	110	5.190	2.03	20	

Sample ID: **N052246-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165071**
Client ID: **ZZZZZZ**	Batch ID: **R165071**	TestNo: **EPA 218.6**		Analysis Date: **8/23/2022**	SeqNo: **4795638**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	17.263	1.0	5.000	11.95	106	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052246
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052246-008AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165071**
Client ID: **ZZZZZZ** Batch ID: **R165071** TestNo: **EPA 218.6** Analysis Date: **8/23/2022** SeqNo: **4795640**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.856	1.0	5.000	0	97.1	90	110				

Sample ID: **N052246-001ADUP** SampType: **DUP** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165071**
Client ID: **ZZZZZZ** Batch ID: **R165071** TestNo: **EPA 218.6** Analysis Date: **8/23/2022** SeqNo: **4795641**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	21.258	1.0						20.84	2.00	20	

Sample ID: **N052246-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165071**
Client ID: **ZZZZZZ** Batch ID: **R165071** TestNo: **EPA 218.6** Analysis Date: **8/23/2022** SeqNo: **4795642**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	46.117	1.0	25.00	20.84	101	90	110				

Sample ID: **N052246-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165071**
Client ID: **ZZZZZZ** Batch ID: **R165071** TestNo: **EPA 218.6** Analysis Date: **8/23/2022** SeqNo: **4795643**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	44.909	1.0	25.00	19.95	99.8	90	110				

Sample ID: **N052246-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165071**
Client ID: **ZZZZZZ** Batch ID: **R165071** TestNo: **EPA 218.6** Analysis Date: **8/23/2022** SeqNo: **4795646**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	45.237	1.0	25.00	19.64	102	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052246
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052246-007AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165071**
Client ID: **ZZZZZZ** Batch ID: **R165071** TestNo: **EPA 218.6** Analysis Date: **8/23/2022** SeqNo: **4795647**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	52.909	1.0	25.00	26.67	105	90	110				

Sample ID: **N052246-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165071**
Client ID: **ZZZZZZ** Batch ID: **R165071** TestNo: **EPA 218.6** Analysis Date: **8/23/2022** SeqNo: **4795649**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.989	0.20	1.000	0	98.9	90	110				

Sample ID: **N052246-009AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165071**
Client ID: **ZZZZZZ** Batch ID: **R165071** TestNo: **EPA 218.6** Analysis Date: **8/23/2022** SeqNo: **4795651**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.011	0.20	1.000	0	101	90	110				

Sample ID: **N052246-010AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165071**
Client ID: **ZZZZZZ** Batch ID: **R165071** TestNo: **EPA 218.6** Analysis Date: **8/23/2022** SeqNo: **4795654**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.994	0.20	1.000	0	99.4	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-030-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 1:13:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220823A**	QC Batch: **R165067**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/23/2022 11:28 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052246
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R165067_NO3**	SampType: **MBLK**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165067**
Client ID: **PBW**	Batch ID: **R165067**	TestNo: **EPA 300.0**		Analysis Date: **8/23/2022**	SeqNo: **4795533**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R165067_NO3**	SampType: **LCS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165067**
Client ID: **LCSW**	Batch ID: **R165067**	TestNo: **EPA 300.0**		Analysis Date: **8/23/2022**	SeqNo: **4795534**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.205	0.050	1.250	0	96.4	90	110				

Sample ID: **N052246-008DDUP**	SampType: **DUP**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165067**
Client ID: **ZZZZZZ**	Batch ID: **R165067**	TestNo: **EPA 300.0**		Analysis Date: **8/23/2022**	SeqNo: **4795536**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	0.276	0.50						0.2890	0	20	

Sample ID: **N052246-008DMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165067**
Client ID: **ZZZZZZ**	Batch ID: **R165067**	TestNo: **EPA 300.0**		Analysis Date: **8/23/2022**	SeqNo: **4795537**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.029	0.50	12.50	0.2890	93.9	80	120				

Sample ID: **N052246-008DMSD**	SampType: **MSD**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165067**
Client ID: **ZZZZZZ**	Batch ID: **R165067**	TestNo: **EPA 300.0**		Analysis Date: **8/23/2022**	SeqNo: **4795538**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.153	0.50	12.50	0.2890	94.9	80	120	12.03	1.03	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-030-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 1:13:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220823A**	QC Batch: **R165080**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	12	0.68	5.0		mg/L	5	8/23/2022 12:18 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052246
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R165080**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165080**
Client ID: **PBW**	Batch ID: **R165080**	TestNo: **SM 5310C**		Analysis Date: **8/23/2022**	SeqNo: **4796121**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R165080**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165080**
Client ID: **LCSW**	Batch ID: **R165080**	TestNo: **SM 5310C**		Analysis Date: **8/23/2022**	SeqNo: **4796122**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	4.993	1.0	5.000	0	99.9	85	115				

Sample ID: **N052246-008CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165080**
Client ID: **ZZZZZZ**	Batch ID: **R165080**	TestNo: **SM 5310C**		Analysis Date: **8/23/2022**	SeqNo: **4796127**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	34.234	5.0	25.00	11.87	89.5	75	125				

Sample ID: **N052246-008CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165080**
Client ID: **ZZZZZZ**	Batch ID: **R165080**	TestNo: **SM 5310C**		Analysis Date: **8/23/2022**	SeqNo: **4796131**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	34.371	5.0	25.00	11.87	90.0	75	125	34.23	0.399	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-030-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 1:13:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	370	13	20		µg/L	1	8/28/2022 12:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052246
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94418**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165203**
Client ID: **PBW**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803709**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-94418**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165203**
Client ID: **LCSW**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803710**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	100.086	20	100.0	0	100	85	115				

Sample ID: **N052262-011BMS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165476**
Client ID: **ZZZZZZ**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/7/2022**	SeqNo: **4820442**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	92.846	20	100.0	42.21	50.6	75	125				S

Sample ID: **N052262-011BMSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165476**
Client ID: **ZZZZZZ**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/7/2022**	SeqNo: **4820443**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	92.672	20	100.0	42.21	50.5	75	125	92.85	0.188	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052246
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **N052262-011B-PS** SampType: **PS** TestCode: **6010_WDPGE** Units: **µg/L** Prep Date: RunNo: **165476**
Client ID: **ZZZZZZ** Batch ID: **94418** TestNo: **EPA 6010B** **EPA 3010A** Analysis Date: **9/7/2022** SeqNo: **4820441**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	91.979	20	100.0	42.21	49.8	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-030-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 1:13:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220825E**	QC Batch: **94421**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 12:41 AM
Barium	240	0.42	5.0		µg/L	5	8/26/2022 12:46 AM
Manganese	110	0.026	0.50		µg/L	1	8/26/2022 12:41 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052246
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94421**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **PBW**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4803568**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID: **LCS-94421**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **LCSW**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4803569**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.213	0.10	10.00	0	102	85	115				
Barium	10.416	1.0	10.00	0	104	85	115				
Manganese	104.749	0.50	100.0	0	105	85	115				

Sample ID: **N052261-001B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803589**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.700	0.10	10.00	3.352	103	75	125				
Barium	37.857	1.0	10.00	29.94	79.2	75	125				

Sample ID: **N052261-001B-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803592**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.699	0.10	10.00	3.352	103	75	125	13.70	0.00515	20	
Barium	36.755	1.0	10.00	29.94	68.2	75	125	37.86	2.95	20	S

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052246
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052261-001B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4804956**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	185.613	2.5	100.0	107.5	78.2	75	125				

Sample ID: **N052261-001B-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4804957**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	189.146	2.5	100.0	107.5	81.7	75	125	185.6	1.89	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052246
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052261-001B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803588**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.563	0.10	10.00	3.352	102	80	120				
Barium	37.573	1.0	10.00	29.94	76.4	80	120				S

Sample ID: **N052261-001B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4804955**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	190.684	2.5	100.0	107.5	83.2	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ARCUS02 C: 9/5/2022 12:00 AM
FOLDER R: 8/22/2022
N052246-011A 1 of 1

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement		QA/QC		Sample Receipt Condition	Y	N
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	Excel EDD		RTNE		1. Chilled	X	
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker		RWQCB	✓	2. Headspace		
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	Labspec		CalTrans		3. Container Intact	X	
Submitted By: Russie Tap		Phone: 949-727-1400, ext 200 Fax:	Others	✓	LEVEL III		4. Seal Present		
Title: Field Tech	Phone: 916-786-3302 Fax:		Specify: RWQCB		LEVEL IV		5. IR number 3		
Signature: Date: 8/22/22	Sampled By: Russie Tap		Global ID:		Regulatory		6. Method of Cooling: ICE		
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for				Specify State:		Sample Temp: 1.2°C		
Project Name: PG&E Topock - PCM	Signature: Date: 8/22/22						Courier: ASSET		
Project Number: 30121866.3Q22GW							Tracking No.:		

Matrix: Ground X; Potable; NPDES; Surface; Sediment; Soil; Other Solid

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate (EPA 300.0) (1 L poly)	Nitrate/nitrite as Nitrogen (SM 4500-NO3); H2SO4 (125 mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052246-01	MW-97-042-Q322	8/22/2022	13:38		X										E	1	P	BNS	
2	-02	MW-97-202-Q322	8/22/2022	12:52		X										E	1	P	BNS	MS/MSD
3	-03	TW-04-Q322	8/22/2022	14:20		X										E	1	P	BNS	
4	-04	EB-725-Q322	8/22/2022	13:20		X										E	1	P	BNS	
5	-05	MW-35-060-Q322	8/22/2022	11:56		X										E	1	P	BNS	
6	-06	MW-913-Q322	8/22/2022	12:06		X										E	1	P	BNS	
7	-07	MW-35-135-Q322	8/22/2022	12:36		X										E	1	P	BNS	
8	-08	MW-30-030-Q322	8/22/2022	13:13		X		X			X			X		E	6	P	BNS	
9	-09	MW-30-030-EB-Q322	8/22/2022	12:55		X										E	1	P	BNS	
10	-10	EB-726-Q322	8/22/2022	14:30		X										E	1	P	BNS	
11																				
12																				
13																				
14																				

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Russie Tap	8/22/22	MSCHERTIN	8/22/22 @ 1630
REL/REC: MSCHERTIN			8/22/22 @ 1935

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
   Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/22/2022	Workorder:	N052246
Rep sample Temp (Deg C):	1.2	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For:

Checklist Completed By: MBC EFanegoF 8/23/2022

Reviewed By: for: MBC 8/25/2022

ASSET Laboratories

WORK ORDER Summary

25-Aug-22

WorkOrder: N052246

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/22/2022 7:35 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052246-001A	MW-97-042-Q322	8/22/2022 1:38:00 PM	9/6/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052246-002A	MW-97-202-Q322	8/22/2022 12:52:00 PM	9/6/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☑	☐	WW
N052246-003A	TW-04-Q322	8/22/2022 2:20:00 PM	9/6/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052246-004A	EB-725-Q322	8/22/2022 1:20:00 PM	9/6/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052246-005A	MW-35-060-Q322	8/22/2022 11:56:00 AM	9/6/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052246-006A	MW-913-Q322	8/22/2022 12:06:00 PM	9/6/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052246-007A	MW-35-135-Q322	8/22/2022 12:36:00 PM	9/6/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052246-008A	MW-30-030-Q322	8/22/2022 1:13:00 PM	9/6/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052246-008B			9/6/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/6/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/6/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/6/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052246-008C			9/6/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052246-008D			9/6/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052246-009A	MW-30-030-EB-Q322	8/22/2022 12:55:00 PM	9/6/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052246-010A	EB-726-Q322	8/22/2022 2:30:00 PM	9/6/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052246-011A	FOLDER	9/6/2022	9/6/2022		Folder	Folder	☐	☐	☐	LAB
			9/6/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/6/2022		Folder	Folder	☐	☐	☐	LAB

September 07, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052261

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 23, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Subcontracted Analyses:

Nitrate/Nitrite was subcontracted to BC Labs - Bakersfield, CA.

Analytical Comments for EPA 218.6:

Dilution was necessary for sample N052261-017 due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for SM 5310C:

Matrix Spike (MS) is outside recovery criteria in QC sample N052262-011CMS at several dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N052262-011 and MS/MSD were reported at 20x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6010B:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Iron in QC samples N052262-011BMS and N052262-011BMSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria.The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020:

Matrix Spike Duplicate (MSD) is outside recovery criteria for Barium in QC sample N052261-001B-MSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052261
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052261-001A	MW-34-055-Q322	Groundwater	8/23/2022 1:39:00 PM	8/23/2022	9/7/2022
N052261-001B	MW-34-055-Q322	Groundwater	8/23/2022 1:39:00 PM	8/23/2022	9/7/2022
N052261-001C	MW-34-055-Q322	Groundwater	8/23/2022 1:39:00 PM	8/23/2022	9/7/2022
N052261-001D	MW-34-055-Q322	Groundwater	8/23/2022 1:39:00 PM	8/23/2022	9/7/2022
N052261-001E	MW-34-055-Q322	Groundwater	8/23/2022 1:39:00 PM	8/23/2022	9/7/2022
N052261-002A	MW-34-055-EB-Q322	Groundwater	8/23/2022 1:20:00 PM	8/23/2022	9/7/2022
N052261-003A	MW-34-100-Q322	Groundwater	8/23/2022 1:13:00 PM	8/23/2022	9/7/2022
N052261-003B	MW-34-100-Q322	Groundwater	8/23/2022 1:13:00 PM	8/23/2022	9/7/2022
N052261-003C	MW-34-100-Q322	Groundwater	8/23/2022 1:13:00 PM	8/23/2022	9/7/2022
N052261-003D	MW-34-100-Q322	Groundwater	8/23/2022 1:13:00 PM	8/23/2022	9/7/2022
N052261-003E	MW-34-100-Q322	Groundwater	8/23/2022 1:13:00 PM	8/23/2022	9/7/2022
N052261-004A	EB-728-Q322	Groundwater	8/23/2022 1:45:00 PM	8/23/2022	9/7/2022
N052261-005A	MW-28-090-Q322	Groundwater	8/23/2022 11:54:00 AM	8/23/2022	9/7/2022
N052261-005B	MW-28-090-Q322	Groundwater	8/23/2022 11:54:00 AM	8/23/2022	9/7/2022
N052261-005C	MW-28-090-Q322	Groundwater	8/23/2022 11:54:00 AM	8/23/2022	9/7/2022
N052261-005D	MW-28-090-Q322	Groundwater	8/23/2022 11:54:00 AM	8/23/2022	9/7/2022
N052261-006A	MW-28-090-EB-Q322	Groundwater	8/23/2022 11:30:00 AM	8/23/2022	9/7/2022
N052261-007A	EB-727-Q322	Groundwater	8/23/2022 2:55:00 PM	8/23/2022	9/7/2022
N052261-008A	MW-36-020-Q322	Groundwater	8/23/2022 8:58:00 AM	8/23/2022	9/7/2022
N052261-008B	MW-36-020-Q322	Groundwater	8/23/2022 8:58:00 AM	8/23/2022	9/7/2022
N052261-008C	MW-36-020-Q322	Groundwater	8/23/2022 8:58:00 AM	8/23/2022	9/7/2022
N052261-008D	MW-36-020-Q322	Groundwater	8/23/2022 8:58:00 AM	8/23/2022	9/7/2022
N052261-009A	MW-36-040-Q322	Groundwater	8/23/2022 9:23:00 AM	8/23/2022	9/7/2022
N052261-009B	MW-36-040-Q322	Groundwater	8/23/2022 9:23:00 AM	8/23/2022	9/7/2022
N052261-009C	MW-36-040-Q322	Groundwater	8/23/2022 9:23:00 AM	8/23/2022	9/7/2022
N052261-009D	MW-36-040-Q322	Groundwater	8/23/2022 9:23:00 AM	8/23/2022	9/7/2022
N052261-009E	MW-36-040-Q322	Groundwater	8/23/2022 9:23:00 AM	8/23/2022	9/7/2022
N052261-010A	MW-36-050-Q322	Groundwater	8/23/2022 9:50:00 AM	8/23/2022	9/7/2022
N052261-010B	MW-36-050-Q322	Groundwater	8/23/2022 9:50:00 AM	8/23/2022	9/7/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052261
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052261-010C	MW-36-050-Q322	Groundwater	8/23/2022 9:50:00 AM	8/23/2022	9/7/2022
N052261-010D	MW-36-050-Q322	Groundwater	8/23/2022 9:50:00 AM	8/23/2022	9/7/2022
N052261-011A	MW-44-070-Q322	Groundwater	8/23/2022 10:26:00 AM	8/23/2022	9/7/2022
N052261-011B	MW-44-070-Q322	Groundwater	8/23/2022 10:26:00 AM	8/23/2022	9/7/2022
N052261-011C	MW-44-070-Q322	Groundwater	8/23/2022 10:26:00 AM	8/23/2022	9/7/2022
N052261-011D	MW-44-070-Q322	Groundwater	8/23/2022 10:26:00 AM	8/23/2022	9/7/2022
N052261-011E	MW-44-070-Q322	Groundwater	8/23/2022 10:26:00 AM	8/23/2022	9/7/2022
N052261-012A	MW-44-070-EB-Q322	Groundwater	8/23/2022 10:05:00 AM	8/23/2022	9/7/2022
N052261-013A	MW-27-020-Q322	Groundwater	8/23/2022 12:35:00 PM	8/23/2022	9/7/2022
N052261-013B	MW-27-020-Q322	Groundwater	8/23/2022 12:35:00 PM	8/23/2022	9/7/2022
N052261-013C	MW-27-020-Q322	Groundwater	8/23/2022 12:35:00 PM	8/23/2022	9/7/2022
N052261-013D	MW-27-020-Q322	Groundwater	8/23/2022 12:35:00 PM	8/23/2022	9/7/2022
N052261-014A	MW-27-020-EB-Q322	Groundwater	8/23/2022 12:18:00 PM	8/23/2022	9/7/2022
N052261-015A	MW-27-060-Q322	Groundwater	8/23/2022 11:40:00 AM	8/23/2022	9/7/2022
N052261-015B	MW-27-060-Q322	Groundwater	8/23/2022 11:40:00 AM	8/23/2022	9/7/2022
N052261-015C	MW-27-060-Q322	Groundwater	8/23/2022 11:40:00 AM	8/23/2022	9/7/2022
N052261-015D	MW-27-060-Q322	Groundwater	8/23/2022 11:40:00 AM	8/23/2022	9/7/2022
N052261-015E	MW-27-060-Q322	Groundwater	8/23/2022 11:40:00 AM	8/23/2022	9/7/2022
N052261-016A	MW-27-060-EB-Q322	Groundwater	8/23/2022 11:20:00 AM	8/23/2022	9/7/2022
N052261-017A	MW-27-085-Q322	Groundwater	8/23/2022 12:06:00 PM	8/23/2022	9/7/2022
N052261-017B	MW-27-085-Q322	Groundwater	8/23/2022 12:06:00 PM	8/23/2022	9/7/2022
N052261-017C	MW-27-085-Q322	Groundwater	8/23/2022 12:06:00 PM	8/23/2022	9/7/2022
N052261-017D	MW-27-085-Q322	Groundwater	8/23/2022 12:06:00 PM	8/23/2022	9/7/2022
N052261-017E	MW-27-085-Q322	Groundwater	8/23/2022 12:06:00 PM	8/23/2022	9/7/2022
N052261-018A	MW-27-085-EB-Q322	Groundwater	8/23/2022 11:49:00 AM	8/23/2022	9/7/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-055-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 1:39:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 09:17 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-055-EB-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 1:20:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 02:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-100-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 1:13:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/24/2022 01:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-728-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 1:45:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 02:39 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-28-090-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 11:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 10:14 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-28-090-EB-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 11:30:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 02:58 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-727-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 2:55:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 03:16 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-020-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 8:58:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 10:52 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-040-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 9:23:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 11:10 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-050-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 9:50:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 11:48 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-070-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 10:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 12:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-070-EB-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 10:05:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 03:35 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-020-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 12:35:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 12:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-020-EB-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 12:18:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 03:54 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-060-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 11:40:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 01:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-060-EB-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 11:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 05:09 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-085-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 12:06:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/24/2022 01:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-085-EB-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 11:49:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-018		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 05:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R165131**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165131**
Client ID: **PBW**	Batch ID: **R165131**	TestNo: **EPA 218.6**		Analysis Date: **8/24/2022**	SeqNo: **4798750**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R165131**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165131**
Client ID: **LCSW**	Batch ID: **R165131**	TestNo: **EPA 218.6**		Analysis Date: **8/24/2022**	SeqNo: **4798751**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.102	0.20	5.000	0	102	90	110				

Sample ID: **N052261-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165131**
Client ID: **ZZZZZZ**	Batch ID: **R165131**	TestNo: **EPA 218.6**		Analysis Date: **8/24/2022**	SeqNo: **4798753**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.977	0.20	1.000	0	97.7	90	110				

Sample ID: **N052261-001AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165131**
Client ID: **ZZZZZZ**	Batch ID: **R165131**	TestNo: **EPA 218.6**		Analysis Date: **8/24/2022**	SeqNo: **4798754**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.975	0.20	1.000	0	97.5	90	110	0.9769	0.205	20	

Sample ID: **N052261-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165131**
Client ID: **ZZZZZZ**	Batch ID: **R165131**	TestNo: **EPA 218.6**		Analysis Date: **8/24/2022**	SeqNo: **4798756**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.966	0.20	1.000	0	96.6	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052261-008AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798760**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.026	0.20	1.000	0	103	90	110				

Sample ID: **N052261-009AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798762**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.049	0.20	1.000	0	105	90	110				

Sample ID: **N052261-010AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798764**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.981	0.20	1.000	0	98.1	90	110				

Sample ID: **N052261-011AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798766**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.966	0.20	1.000	0	96.6	90	110				

Sample ID: **N052261-013AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798770**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.017	0.20	1.000	0	102	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052261-015AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798772**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.018	0.20	1.000	0	102	90	110				

Sample ID: **N052261-017AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798774**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.060	1.0	5.000	0	101	90	110				

Sample ID: **N052261-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798776**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.095	1.0	5.000	0	102	90	110				

Sample ID: **N052261-002AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798778**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.051	0.20	1.000	0	105	90	110				

Sample ID: **N052261-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798782**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.059	0.20	1.000	0	106	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052261-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798784**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.020	0.20	1.000	0	102	90	110				

Sample ID: **N052261-007AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798786**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.038	0.20	1.000	0	104	90	110				

Sample ID: **N052261-012AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798788**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.027	0.20	1.000	0	103	90	110				

Sample ID: **N052261-014AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798790**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.028	0.20	1.000	0	103	90	110				

Sample ID: **N052261-009ADUP** SampType: **DUP** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798794**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20						0	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052261-016AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165131**
Client ID: **ZZZZZZ**	Batch ID: **R165131**	TestNo: **EPA 218.6**		Analysis Date: **8/24/2022**	SeqNo: **4798796**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.005	0.20	1.000	0	101	90	110				

Sample ID: **N052261-018AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165131**
Client ID: **ZZZZZZ**	Batch ID: **R165131**	TestNo: **EPA 218.6**		Analysis Date: **8/24/2022**	SeqNo: **4798798**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.029	0.20	1.000	0	103	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-055-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 1:39:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/24/2022 12:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-100-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 1:13:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/24/2022 01:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-28-090-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 11:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/24/2022 01:18 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-020-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 8:58:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/24/2022 02:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-040-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 9:23:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/24/2022 02:21 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-050-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 9:50:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/24/2022 02:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-070-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 10:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/24/2022 02:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-020-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 12:35:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/24/2022 03:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-060-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 11:40:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/24/2022 03:24 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-085-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 12:06:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/24/2022 03:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R165101_NO3** SampType: **MBLK** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165101**
Client ID: **PBW** Batch ID: **R165101** TestNo: **EPA 300.0** Analysis Date: **8/24/2022** SeqNo: **4797939**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R165101_NO3** SampType: **LCS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165101**
Client ID: **LCSW** Batch ID: **R165101** TestNo: **EPA 300.0** Analysis Date: **8/24/2022** SeqNo: **4797940**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.184	0.050	1.250	0	94.7	90	110				

Sample ID: **N052262-011DMS** SampType: **MS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165101**
Client ID: **ZZZZZZ** Batch ID: **R165101** TestNo: **EPA 300.0** Analysis Date: **8/24/2022** SeqNo: **4797942**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.692	0.50	12.50	0.3730	90.6	80	120				

Sample ID: **N052262-011DMSD** SampType: **MSD** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165101**
Client ID: **ZZZZZZ** Batch ID: **R165101** TestNo: **EPA 300.0** Analysis Date: **8/24/2022** SeqNo: **4797943**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.699	0.50	12.50	0.3730	90.6	80	120	11.69	0.0599	20	

Sample ID: **N052261-001DDUP** SampType: **DUP** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165101**
Client ID: **ZZZZZZ** Batch ID: **R165101** TestNo: **EPA 300.0** Analysis Date: **8/24/2022** SeqNo: **4797945**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.25						0	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

  Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **N052261-001DMS** SampType: **MS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165101**
Client ID: **ZZZZZZ** Batch ID: **R165101** TestNo: **EPA 300.0** Analysis Date: **8/24/2022** SeqNo: **4797946**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	5.821	0.25	6.250	0	93.1	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-055-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 1:39:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.1	0.14	1.0		mg/L	1	8/24/2022 02:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-100-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 1:13:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/24/2022 03:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-28-090-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 11:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/24/2022 04:32 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-020-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 8:58:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.6	0.14	1.0		mg/L	1	8/24/2022 04:47 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-040-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 9:23:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.8	0.14	1.0		mg/L	1	8/24/2022 06:13 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-050-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 9:50:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.2	0.14	1.0		mg/L	1	8/24/2022 07:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-070-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 10:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/24/2022 07:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-020-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 12:35:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.1	0.14	1.0		mg/L	1	8/24/2022 07:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-060-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 11:40:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.4	0.14	1.0		mg/L	1	8/24/2022 07:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-085-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 12:06:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/24/2022 08:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R165107**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165107**
Client ID: **PBW**	Batch ID: **R165107**	TestNo: **SM 5310C**		Analysis Date: **8/24/2022**	SeqNo: **4798232**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R165107**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165107**
Client ID: **LCSW**	Batch ID: **R165107**	TestNo: **SM 5310C**		Analysis Date: **8/24/2022**	SeqNo: **4798233**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.246	1.0	5.000	0	105	85	115				

Sample ID: **N052262-011CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165107**
Client ID: **ZZZZZZ**	Batch ID: **R165107**	TestNo: **SM 5310C**		Analysis Date: **8/24/2022**	SeqNo: **4798244**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	87.532	20	100.0	0	87.5	75	125				

Sample ID: **N052262-011CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165107**
Client ID: **ZZZZZZ**	Batch ID: **R165107**	TestNo: **SM 5310C**		Analysis Date: **8/24/2022**	SeqNo: **4798247**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	90.554	20	100.0	0	90.6	75	125	87.53	3.39	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052261-001

Client Sample ID: MW-34-055-Q322
Collection Date: 8/23/2022 1:39:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	94	13	20		µg/L	1	8/28/2022 01:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-100-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 1:13:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Iron	55	13	20		µg/L	1	8/28/2022 01:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-28-090-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 11:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Iron	1100	13	20		µg/L	1	8/28/2022 01:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-020-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 8:58:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	3700	13	20		µg/L	1	8/28/2022 01:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-040-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 9:23:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	470	13	20		µg/L	1	8/28/2022 01:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-050-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 9:50:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	200	13	20		µg/L	1	8/28/2022 01:32 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-070-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 10:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Iron	650	13	20		µg/L	1	8/28/2022 01:36 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-020-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 12:35:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 01:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-060-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 11:40:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	330	13	20		µg/L	1	8/28/2022 01:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-085-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 12:06:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Iron	270	13	20		µg/L	1	8/28/2022 01:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94418**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165203**
Client ID: **PBW**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803709**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-94418**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165203**
Client ID: **LCSW**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803710**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	100.086	20	100.0	0	100	85	115				

Sample ID: **N052262-011BMS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165476**
Client ID: **ZZZZZZ**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/7/2022**	SeqNo: **4820442**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	92.846	20	100.0	42.21	50.6	75	125				S

Sample ID: **N052262-011BMSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165476**
Client ID: **ZZZZZZ**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/7/2022**	SeqNo: **4820443**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	92.672	20	100.0	42.21	50.5	75	125	92.85	0.188	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **N052262-011B-PS** SampType: **PS** TestCode: **6010_WDPGE** Units: **µg/L** Prep Date: RunNo: **165476**
Client ID: **ZZZZZZ** Batch ID: **94418** TestNo: **EPA 6010B** **EPA 3010A** Analysis Date: **9/7/2022** SeqNo: **4820441**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	91.979	20	100.0	42.21	49.8	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052261-001

Client Sample ID: MW-34-055-Q322
Collection Date: 8/23/2022 1:39:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E** QC Batch: **94421**				PrepDate:		**8/25/2022**	Analyst: **DJ**
Arsenic	3.4	0.050	0.10		µg/L	1	8/26/2022 12:52 AM
Barium	30	0.083	1.0		µg/L	1	8/26/2022 12:52 AM
Manganese	110	0.13	2.5		µg/L	5	8/26/2022 09:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-100-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 1:13:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E**	QC Batch: **94421**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 01:40 AM
Barium	21	0.083	1.0		µg/L	1	8/26/2022 01:40 AM
Manganese	120	0.026	0.50		µg/L	1	8/26/2022 01:40 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-28-090-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 11:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220825E**	QC Batch: **94421**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 01:46 AM
Barium	32	0.083	1.0		µg/L	1	8/26/2022 01:46 AM
Manganese	410	0.13	2.5		µg/L	5	8/26/2022 10:13 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-020-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 8:58:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220825E**	QC Batch: **94421**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 01:52 AM
Barium	340	0.42	5.0		µg/L	5	9/4/2022 07:38 PM
Manganese	720	0.13	2.5		µg/L	5	8/26/2022 10:31 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-040-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 9:23:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E**	QC Batch: **94421**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	6.7	0.050	0.10		µg/L	1	8/26/2022 01:58 AM
Barium	55	0.083	1.0		µg/L	1	8/26/2022 01:58 AM
Manganese	170	0.026	0.50		µg/L	1	8/26/2022 01:58 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-050-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 9:50:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220825E**	QC Batch: **94421**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	5.6	0.050	0.10		µg/L	1	8/26/2022 02:03 AM
Barium	28	0.083	1.0		µg/L	1	8/26/2022 02:03 AM
Manganese	320	0.13	2.5		µg/L	5	8/26/2022 10:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-070-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 10:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E** QC Batch: **94421**				PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	2.8	0.050	0.10		µg/L	1	8/26/2022 02:09 AM
Barium	33	0.083	1.0		µg/L	1	8/26/2022 02:09 AM
Manganese	320	0.13	2.5		µg/L	5	8/26/2022 10:43 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-020-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 12:35:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220825E**	QC Batch: **94421**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	0.67	0.050	0.10		µg/L	1	8/26/2022 02:15 AM
Barium	57	0.083	1.0		µg/L	1	8/26/2022 02:15 AM
Manganese	36	0.026	0.50		µg/L	1	8/26/2022 02:15 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-060-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 11:40:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E** QC Batch: **94421**				PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	8.7	0.050	0.10		µg/L	1	8/26/2022 02:21 AM
Barium	62	0.083	1.0		µg/L	1	8/26/2022 02:21 AM
Manganese	260	0.13	2.5		µg/L	5	8/26/2022 10:49 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-085-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 12:06:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220825E**	QC Batch: **94421**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 02:45 AM
Barium	50	0.083	1.0		µg/L	1	8/26/2022 02:45 AM
Manganese	260	0.13	2.5		µg/L	5	8/26/2022 10:54 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94421**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **PBW**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4803568**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID: **LCS-94421**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **LCSW**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4803569**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.213	0.10	10.00	0	102	85	115				
Barium	10.416	1.0	10.00	0	104	85	115				
Manganese	104.749	0.50	100.0	0	105	85	115				

Sample ID: **N052261-001B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803589**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.700	0.10	10.00	3.352	103	75	125				
Barium	37.857	1.0	10.00	29.94	79.2	75	125				

Sample ID: **N052261-001B-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803592**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.699	0.10	10.00	3.352	103	75	125	13.70	0.00515	20	
Barium	36.755	1.0	10.00	29.94	68.2	75	125	37.86	2.95	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052261-001B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4804956**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	185.613	2.5	100.0	107.5	78.2	75	125				

Sample ID: **N052261-001B-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4804957**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	189.146	2.5	100.0	107.5	81.7	75	125	185.6	1.89	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052261-001B-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **165202**
Client ID: **ZZZZZZ** Batch ID: **94421** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/26/2022** SeqNo: **4803588**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.563	0.10	10.00	3.352	102	80	120				
Barium	37.573	1.0	10.00	29.94	76.4	80	120				S

Sample ID: **N052261-001B-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **165217**
Client ID: **ZZZZZZ** Batch ID: **94421** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/26/2022** SeqNo: **4804955**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	190.684	2.5	100.0	107.5	83.2	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

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CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement	QA/QC	Sample Receipt Condition	Y N
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	Excel EDD	RTNE	1. Chilled	X
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker	RWQCB ✓	2. Headspace	
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	Labspec	CalTrans	3. Container Intact	X
Submitted By: Riggie Tep			Others ✓	LEVEL III	4. Seal Present	
Title: Field Tech	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	Specify: RWQCB	LEVEL IV	5. IR number 3	
Signature: Date: 8/23/22	Sampled By: Riggie Tep		Global ID:	Regulatory	6. Method of Cooling: ICE	
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for			Specify State:	Sample Temp: 2.1 °C 5.1 °C	
Project Name: PG&E Topock - PCM	Signature: Date: 8/22/22				Courier: ASSET	
Project Number: 30121866.3Q22GW					Tracking No.:	

Matrix: Ground X | Sediment | Potable | Soil | NPDES | Other Solid | Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH 250 mL poly	Nitrate, sulfate (EPA 300.0) 1 L poly	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese 500mL poly	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, 500mL poly	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium 500mL poly	Total Organic Carbon (SM5310C); H2SO4 3x40 mL VOA	Total metals (SW6010) No filter; HNO3 Total Iron 500mL poly	Ammonia as Nitrogen (SM4500NH3); H2SO4 1 L poly	Nitrate (EPA 300.0) 1 L poly	Nitrate/nitrite as Nitrogen (SM 4500-NO3); H2SO4 125 mL poly	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052261-01	MW-34-055-Q322	8/23/2022	13:39		X		X			X			X	X	E	7	P	BNS	
2	-02	MW-34-055-EB-Q322	8/23/2022	13:20		X										E	1	P	BNS	
3	-03	MW-34-100-Q322	8/23/2022	13:13		X		X			X			X	X	E	7	P	BNS	
4	-04	EB-728-Q322	8/23/2022	13:45		X										E	1	P	BNS	
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				

Reliquished by (Signature and Printed Name):	Date/Time:	Reliquished by (Signature and Printed Name):	Date/Time:
PD Riggie Tep	8/23/22 1539	MBOYLAN	8/23/22 @ 1539
Reliquished by (Signature and Printed Name):	Date/Time:	Reliquished by (Signature and Printed Name):	Date/Time:
REL/REC: MBCARTIN			8/23/22 @1848
Reliquished by (Signature and Printed Name):	Date/Time:	Reliquished by (Signature and Printed Name):	Date/Time:

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Preservatives:

H=HCL	N=HNO_3	S=H_2SO_4	C=4°C
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$	
Others/Specify:	B	(NH4)2SO4/NH4OH	

Container Type:

T=Tube	V=VOA	P=Pint
J=Jar	B=Tedlar	G=Glass
M=Metal	M=Metal	C=Can

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

White=Laboratory Copy

Yellow=Customer's Copy

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement	QA/QC	Sample Receipt Condition
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	Excel EDD	RTNE	1. Chilled: Y X
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker	RWQCB ✓	2. Headspace
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	Labspec	CalTrans	3. Container Intact: X
Submitted By: Riggie Tap		Phone: 949-727-1400, ext 200 Fax:	Others ✓	LEVEL III	4. Seal Present
Title: Field Tech	Phone: 916-786-3302 Fax:		Specify: RWQCB	LEVEL IV	5. IR number: 3
Signature: Date: RT 8/23/22	Sampled By: Riggie Tap		Global ID:	Regulatory	6. Method of Cooling: ICE
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for			Specify State:	Sample Temp: 2.6, 5.1°C
Project Name: PG&E Topock - PCM	Signature: Date: 8/23/22				Courier: ASSET
Project Number: 30121866.3Q22GW					Tracking No.:

Matrix: Ground X | Sediment | Potable | Soil | NPDES | Other Solid | Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate (EPA 300.0) (1 L poly)	Nitrate/nitrite as Nitrogen (SM 4500-NO3); H2SO4 (125 mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052261-05	MW-28-090-Q322	8/23/2022	11:54		X		X			X			X		E	6	P	BNS	
2	-06	MW-28-090-EB-Q322	8/23/2022	11:30		X										E	1	P	BNS	
3	-07	EB-727-Q322	8/23/2022	14:55		X										E	1	P	BNS	
4	-08	MW-36-020-Q322	8/23/2022	8:58		X		X			X			X		E	6	P	BNS	
5	-09	MW-36-040-Q322	8/23/2022	9:23		X		X			X			X	X	E	7	P	BNS	
6	-10	MW-36-050-Q322	8/23/2022	9:50		X		X			X			X		E	6	P	BNS	
7	-11	MW-44-070-Q322	8/23/2022	10:26		X		X			X			X	X	E	7	P	BNS	
8	-12	MW-44-070-EB-Q322	8/23/2022	10:05		X										E	1	P	BNS	
9	-13	MW-27-020-Q322	8/23/2022	12:35		X		X			X			X		E	6	P	BNS	
10	-14	MW-27-020-EB-Q322	8/23/2022	12:18		X										E	1	P	BNS	
11	-15	MW-27-060-Q322	8/23/2022	11:40		X		X			X			X	X	E	7	P	BNS	
12	-16	MW-27-060-EB-Q322	8/23/2022	11:20		X										E	1	P	BNS	
13	-17	MW-27-085-Q322	8/23/2022	12:06		X		X			X			X	X	E	7	P	BNS	
14	-18	MW-27-085-EB-Q322	8/23/2022	11:49		X										E	1	P	BNS	

Relinquished by (Signature and Printed Name): Riggie Tap Date/Time: 8/23/22 1539
Received by (Signature and Printed Name): Date/Time: 8/23/22 @1539
Relinquished by (Signature and Printed Name): REL/REC! MBCARTIN Date/Time:
Received by (Signature and Printed Name): Date/Time: 8/23/22 @1848
Relinquished by (Signature and Printed Name): Date/Time:
Received by (Signature and Printed Name): Date/Time:

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Preservatives:

H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		
Others/Specify:	B	(NH4)2SO4/NH4OH		

Container Type:

T=Tube	V=VOA	P=Pint
J=Jar	B=Tedlar	G=Glass
M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/23/2022	Workorder:	N052261
Rep sample Temp (Deg C):	2.1/5.1	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For:

Checklist Completed By: MBC EFanegoF 8/24/2022

Reviewed By: for: MBC 8/31/2022

ASSET Laboratories

WORK ORDER Summary

31-Aug-22

WorkOrder: N052261

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/23/2022 6:48 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052261-001A	MW-34-055-Q322	8/23/2022 1:39:00 PM	9/7/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-001B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052261-001C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	V-W
N052261-001D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052261-001E			9/7/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052261-002A	MW-34-055-EB-Q322	8/23/2022 1:20:00 PM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-003A	MW-34-100-Q322	8/23/2022 1:13:00 PM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-003B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052261-003C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	V-W
N052261-003D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052261-003E			9/7/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052261-004A	EB-728-Q322	8/23/2022 1:45:00 PM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-005A	MW-28-090-Q322	8/23/2022 11:54:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-005B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

31-Aug-22

WorkOrder: N052261

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/23/2022 6:48 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052261-005B	MW-28-090-Q322	8/23/2022 11:54:00 AM	9/7/2022	Groundwater	EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052261-005C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	V-W
N052261-005D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052261-006A	MW-28-090-EB-Q322	8/23/2022 11:30:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-007A	EB-727-Q322	8/23/2022 2:55:00 PM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-008A	MW-36-020-Q322	8/23/2022 8:58:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-008B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052261-008C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	V-W
N052261-008D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052261-009A	MW-36-040-Q322	8/23/2022 9:23:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-009B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052261-009C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	V-W
N052261-009D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052261-009E			9/7/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052261-010A	MW-36-050-Q322	8/23/2022 9:50:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

31-Aug-22

WorkOrder: N052261

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/23/2022 6:48 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052261-010B	MW-36-050-Q322	8/23/2022 9:50:00 AM	9/7/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052261-010C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	V-W
N052261-010D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052261-011A	MW-44-070-Q322	8/23/2022 10:26:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-011B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052261-011C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	V-W
N052261-011D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052261-011E			9/7/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052261-012A	MW-44-070-EB-Q322	8/23/2022 10:05:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-013A	MW-27-020-Q322	8/23/2022 12:35:00 PM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-013B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052261-013C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	V-W
N052261-013D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

31-Aug-22

WorkOrder: N052261

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/23/2022 6:48 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052261-014A	MW-27-020-EB-Q322	8/23/2022 12:18:00 PM	9/7/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-015A	MW-27-060-Q322	8/23/2022 11:40:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-015B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052261-015C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	V-W
N052261-015D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052261-015E			9/7/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052261-016A	MW-27-060-EB-Q322	8/23/2022 11:20:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-017A	MW-27-085-Q322	8/23/2022 12:06:00 PM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-017B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052261-017C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	V-CA
N052261-017D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052261-017E			9/7/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052261-018A	MW-27-085-EB-Q322	8/23/2022 11:49:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-019A	FOLDER	9/7/2022	9/7/2022		Folder	Folder	☐	☐	☐	LAB
			9/7/2022		Folder	Level IV Report	☐	☐	☐	LAB

ASSET Laboratories

WORK ORDER Summary

31-Aug-22

WorkOrder: N052261

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/23/2022 6:48 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052261-019A	FOLDER	9/7/2022	9/7/2022		Folder	Folder	☐	☐	☐	LAB

ASSET Laboratories
3151-3153 W Post Rd., Las Vegas, NV 89118
www.atl-labs.com
TEL: 7023072659 *FAX: 7023072691*

CHAIN-OF-CUSTODY RECORD

QC Level: Level IV

Subcontractor:

BC Labs
4100 Atlas Court
Bakersfield, CA 93308

TEL: (661) 327-4911
FAX: (661) 327-1918
Acct #:

Field Sampler: Riggie Tep

24-Aug-22

				Nitrate/Nitrite	Requested Tests	
Sample ID	**Matrix**	**Date Collected**	**Bottle Type**	**SM4500-NO3F**		
N052261-001E / MW-34-055-Q322	Groundwater	8/23/2022 1:39:00 PM	8OZP	1		
N052261-003E / MW-34-100-Q322	Groundwater	8/23/2022 1:13:00 PM	8OZP	1		
N052261-009E / MW-36-040-Q322	Groundwater	8/23/2022 9:23:00 AM	8OZP	1		
N052261-011E / MW-44-070-Q322	Groundwater	8/23/2022 10:26:00 AM	8OZP	1		
N052261-015E / MW-27-060-Q322	Groundwater	8/23/2022 11:40:00 AM	8OZP	1		
N052261-017E / MW-27-085-Q322	Groundwater	8/23/2022 12:06:00 PM	8OZP	1		

General Comments: PLEASE EMAIL SAMPLE RECEIPT ACKNOWLEDGEMENT TO THE PM. ALWAYS CC: sonny.lorenzo@assetlaboratories.com

Please use PO#:N52261A Please email Invoices and Account Receivable Statements to elvira@assetlaboratories.com. For questions, call Marlon at (702)-307-2659. Please e-mail results to reports.lv@assetlaboratories.com by: Standard TAT

Please analyze for Nitrate/Nitrite as Nitrogen. EDD requirement Labspec7 edata.

GSO #: 557616784

		Date/Time			Date/Time
Relinquished by:	YRJ	8/24/2022 16:30	**Received by:**		
Relinquished by:			**Received by:**		

September 12, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052262

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 23, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052262

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Dilution was necessary for some samples due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for SM 5310C:

Matrix Spike (MS) is outside recovery criteria in QC sample N052262-011CMS at several dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N052262-011 and MS/MSD were reported at 20x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020_Dissolved:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for some analytes in QC samples N052262-011BMS and N052262-011BMSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Manganese in QC samples N052262-011BMS and N052262-011BMSD since the analyte concentration in the sample is disproportionate to the spike level. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052262
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052262-001A	MW-49-135-Q322	Groundwater	8/23/2022 10:34:00 AM	8/23/2022	9/12/2022
N052262-002A	MW-49-135-EB-Q322	Groundwater	8/23/2022 10:05:00 AM	8/23/2022	9/12/2022
N052262-003A	MW-49-275-Q322	Groundwater	8/23/2022 9:52:00 AM	8/23/2022	9/12/2022
N052262-004A	MW-49-275-EB-Q322	Groundwater	8/23/2022 9:20:00 AM	8/23/2022	9/12/2022
N052262-005A	MW-49-365-Q322	Groundwater	8/23/2022 9:02:00 AM	8/23/2022	9/12/2022
N052262-006A	MW-49-365-EB-Q322	Groundwater	8/23/2022 8:20:00 AM	8/23/2022	9/12/2022
N052262-007A	MW-29-Q322	Groundwater	8/23/2022 11:12:00 AM	8/23/2022	9/12/2022
N052262-008A	MW-29-EB-Q322	Groundwater	8/23/2022 10:45:00 AM	8/23/2022	9/12/2022
N052262-009A	MW-86-030-Q322	Groundwater	8/23/2022 2:46:00 PM	8/23/2022	9/12/2022
N052262-009B	MW-86-030-Q322	Groundwater	8/23/2022 2:46:00 PM	8/23/2022	9/12/2022
N052262-009C	MW-86-030-Q322	Groundwater	8/23/2022 2:46:00 PM	8/23/2022	9/12/2022
N052262-009D	MW-86-030-Q322	Groundwater	8/23/2022 2:46:00 PM	8/23/2022	9/12/2022
N052262-010A	MW-86-066-Q322	Groundwater	8/23/2022 2:10:00 PM	8/23/2022	9/12/2022
N052262-010B	MW-86-066-Q322	Groundwater	8/23/2022 2:10:00 PM	8/23/2022	9/12/2022
N052262-010C	MW-86-066-Q322	Groundwater	8/23/2022 2:10:00 PM	8/23/2022	9/12/2022
N052262-010D	MW-86-066-Q322	Groundwater	8/23/2022 2:10:00 PM	8/23/2022	9/12/2022
N052262-011A	MW-86-120-Q322	Groundwater	8/23/2022 1:36:00 PM	8/23/2022	9/12/2022
N052262-011B	MW-86-120-Q322	Groundwater	8/23/2022 1:36:00 PM	8/23/2022	9/12/2022
N052262-011C	MW-86-120-Q322	Groundwater	8/23/2022 1:36:00 PM	8/23/2022	9/12/2022
N052262-011D	MW-86-120-Q322	Groundwater	8/23/2022 1:36:00 PM	8/23/2022	9/12/2022
N052262-012A	MW-86-140-Q322	Groundwater	8/23/2022 1:04:00 PM	8/23/2022	9/12/2022
N052262-012B	MW-86-140-Q322	Groundwater	8/23/2022 1:04:00 PM	8/23/2022	9/12/2022
N052262-012C	MW-86-140-Q322	Groundwater	8/23/2022 1:04:00 PM	8/23/2022	9/12/2022
N052262-012D	MW-86-140-Q322	Groundwater	8/23/2022 1:04:00 PM	8/23/2022	9/12/2022
N052262-013A	MW-28-025-Q322	Groundwater	8/23/2022 12:28:00 PM	8/23/2022	9/12/2022
N052262-013B	MW-28-025-Q322	Groundwater	8/23/2022 12:28:00 PM	8/23/2022	9/12/2022
N052262-013C	MW-28-025-Q322	Groundwater	8/23/2022 12:28:00 PM	8/23/2022	9/12/2022
N052262-013D	MW-28-025-Q322	Groundwater	8/23/2022 12:28:00 PM	8/23/2022	9/12/2022
N052262-014A	MW-28-025-EB-Q322	Groundwater	8/23/2022 12:05:00 PM	8/23/2022	9/12/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-49-135-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 10:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824B**	QC Batch: **R165132**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	7.7	0.13	1.0		µg/L	5	8/25/2022 01:43 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-49-135-EB-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 10:05:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824B**	QC Batch: **R165132**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 10:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-49-275-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 9:52:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A**	QC Batch: **R165180**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/26/2022 04:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-49-275-EB-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 9:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824B**	QC Batch: **R165132**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/25/2022 12:09 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-49-365-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 9:02:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A**	QC Batch: **R165180**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/26/2022 05:09 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-49-365-EB-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 8:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824B**	QC Batch: **R165132**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/25/2022 12:46 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-29-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 11:12:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824B**	QC Batch: **R165132**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 09:18 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-29-EB-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 10:45:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824B**	QC Batch: **R165132**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/25/2022 01:05 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-030-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 2:46:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824B**	QC Batch: **R165132**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 08:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-066-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 2:10:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824B**	QC Batch: **R165132**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 09:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-120-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 1:36:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824B**	QC Batch: **R165132**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/24/2022 07:54 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-140-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 1:04:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824B**	QC Batch: **R165132**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/25/2022 03:18 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-28-025-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 12:28:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824B**	QC Batch: **R165132**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 09:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-28-025-EB-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 12:05:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
EPA 218.6							
RunID: **NV00922-IC7_220824B** QC Batch: **R165132** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/25/2022 01:24 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **LCS-R165132**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165132**
Client ID: **LCSW**	Batch ID: **R165132**	TestNo: **EPA 218.6**		Analysis Date: **8/24/2022**	SeqNo: **4798809**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.068	0.20	5.000	0	101	90	110				

Sample ID: **MB-R165132**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165132**
Client ID: **PBW**	Batch ID: **R165132**	TestNo: **EPA 218.6**		Analysis Date: **8/24/2022**	SeqNo: **4798810**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **N052262-011AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165132**
Client ID: **ZZZZZZ**	Batch ID: **R165132**	TestNo: **EPA 218.6**		Analysis Date: **8/24/2022**	SeqNo: **4798812**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.682	1.0	5.000	0	93.6	90	110				

Sample ID: **N052262-011AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165132**
Client ID: **ZZZZZZ**	Batch ID: **R165132**	TestNo: **EPA 218.6**		Analysis Date: **8/24/2022**	SeqNo: **4798813**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.875	1.0	5.000	0	97.5	90	110	4.682	4.04	20	

Sample ID: **N052262-009AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165132**
Client ID: **ZZZZZZ**	Batch ID: **R165132**	TestNo: **EPA 218.6**		Analysis Date: **8/24/2022**	SeqNo: **4798815**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.072	0.20	1.000	0	107	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052262-009ADUP** SampType: **DUP** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165132**
Client ID: **ZZZZZZ** Batch ID: **R165132** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798818**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20						0	0	20	

Sample ID: **N052262-007AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165132**
Client ID: **ZZZZZZ** Batch ID: **R165132** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798820**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.035	0.20	1.000	0	103	90	110				

Sample ID: **N052262-010AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165132**
Client ID: **ZZZZZZ** Batch ID: **R165132** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798822**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.013	0.20	1.000	0	101	90	110				

Sample ID: **N052262-013AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165132**
Client ID: **ZZZZZZ** Batch ID: **R165132** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798824**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.034	0.20	1.000	0	103	90	110				

Sample ID: **N052262-002AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165132**
Client ID: **ZZZZZZ** Batch ID: **R165132** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798826**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.991	0.20	1.000	0	99.1	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052262-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165132**
Client ID: **ZZZZZZ** Batch ID: **R165132** TestNo: **EPA 218.6** Analysis Date: **8/25/2022** SeqNo: **4798832**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.985	0.20	1.000	0	98.5	90	110				

Sample ID: **N052262-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165132**
Client ID: **ZZZZZZ** Batch ID: **R165132** TestNo: **EPA 218.6** Analysis Date: **8/25/2022** SeqNo: **4798836**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.026	0.20	1.000	0	103	90	110				

Sample ID: **N052262-008AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165132**
Client ID: **ZZZZZZ** Batch ID: **R165132** TestNo: **EPA 218.6** Analysis Date: **8/25/2022** SeqNo: **4798838**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.991	0.20	1.000	0	99.1	90	110				

Sample ID: **N052262-014AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165132**
Client ID: **ZZZZZZ** Batch ID: **R165132** TestNo: **EPA 218.6** Analysis Date: **8/25/2022** SeqNo: **4798840**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.988	0.20	1.000	0	98.8	90	110				

Sample ID: **N052262-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165132**
Client ID: **ZZZZZZ** Batch ID: **R165132** TestNo: **EPA 218.6** Analysis Date: **8/25/2022** SeqNo: **4798842**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	12.723	1.0	5.000	7.664	101	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052262-012AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165132**
Client ID: **ZZZZZZ**	Batch ID: **R165132**	TestNo: **EPA 218.6**		Analysis Date: **8/25/2022**	SeqNo: **4798848**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.787	1.0	5.000	0	95.7	90	110				

Sample ID: **N052287-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165132**
Client ID: **ZZZZZZ**	Batch ID: **R165132**	TestNo: **EPA 218.6**		Analysis Date: **8/25/2022**	SeqNo: **4798853**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.939	0.20	1.000	0	93.9	90	110				

Sample ID: **N052287-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165132**
Client ID: **ZZZZZZ**	Batch ID: **R165132**	TestNo: **EPA 218.6**		Analysis Date: **8/25/2022**	SeqNo: **4798854**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.993	0.20	1.000	0	99.3	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R165180**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **PBW**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801889**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R165180**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **LCSW**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801890**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.034	0.20	5.000	0	101	90	110				

Sample ID: **N052282-010AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801893**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	42.372	1.0	25.00	16.88	102	90	110				

Sample ID: **N052282-010AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801894**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	42.778	1.0	25.00	16.88	104	90	110	42.37	0.952	20	

Sample ID: **N052282-011ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801895**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	24.133	1.0						23.76	1.57	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052282-011AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801898**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	49.669	1.0	25.00	23.76	104	90	110				

Sample ID: **N052296-001BMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801900**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1510.700	20	500.0	990.6	104	90	110				

Sample ID: **N052282-013AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801905**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.979	0.20	1.000	0	97.9	90	110				

Sample ID: **N052282-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801909**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.018	0.20	1.000	0	102	90	110				

Sample ID: **N052282-012AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801911**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.023	0.20	1.000	0	102	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052282-014AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801913**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.955	0.20	1.000	0	95.5	90	110				

Sample ID: **N052288-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801915**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.021	0.20	1.000	0	102	90	110				

Sample ID: **N052286-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801917**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5608.450	100	2500	3094	101	90	110				

Sample ID: **N052262-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801921**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.474	1.0	5.000	0	109	90	110				

Sample ID: **N052262-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801923**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.173	1.0	5.000	0	103	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052282-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801925**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.386	1.0	5.000	0	108	90	110				

Sample ID: **N052282-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801927**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	8.143	1.0	5.000	2.820	106	90	110				

Sample ID: **N052282-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801929**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	7.809	1.0	5.000	2.701	102	90	110				

Sample ID: **N052282-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801933**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	11.873	1.0	5.000	6.504	107	90	110				

Sample ID: **N052282-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801935**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	16.565	1.0	5.000	11.26	106	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052282-007AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801937**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	9.317	1.0	5.000	4.290	101	90	110				

Sample ID: **N052282-008AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801939**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.307	1.0	5.000	0.6600	92.9	90	110				

Sample ID: **N052282-009AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801941**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.386	1.0	5.000	0.5725	96.3	90	110				

Sample ID: **N052288-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801944**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.967	0.20	1.000	0	96.7	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-030-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 2:46:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/24/2022 03:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-066-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 2:10:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.65	0.095	0.50		mg/L	10	8/24/2022 04:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-120-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 1:36:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/24/2022 11:27 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-140-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 1:04:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/24/2022 04:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-28-025-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 12:28:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/24/2022 05:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R165101_NO3**	SampType: **MBLK**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165101**
Client ID: **PBW**	Batch ID: **R165101**	TestNo: **EPA 300.0**		Analysis Date: **8/24/2022**	SeqNo: **4797939**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R165101_NO3**	SampType: **LCS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165101**
Client ID: **LCSW**	Batch ID: **R165101**	TestNo: **EPA 300.0**		Analysis Date: **8/24/2022**	SeqNo: **4797940**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.184	0.050	1.250	0	94.7	90	110				

Sample ID: **N052262-011DMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165101**
Client ID: **ZZZZZZ**	Batch ID: **R165101**	TestNo: **EPA 300.0**		Analysis Date: **8/24/2022**	SeqNo: **4797942**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.692	0.50	12.50	0.3730	90.6	80	120				

Sample ID: **N052262-011DMSD**	SampType: **MSD**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165101**
Client ID: **ZZZZZZ**	Batch ID: **R165101**	TestNo: **EPA 300.0**		Analysis Date: **8/24/2022**	SeqNo: **4797943**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.699	0.50	12.50	0.3730	90.6	80	120	11.69	0.0599	20	

Sample ID: **N052261-001DDUP**	SampType: **DUP**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165101**
Client ID: **ZZZZZZ**	Batch ID: **R165101**	TestNo: **EPA 300.0**		Analysis Date: **8/24/2022**	SeqNo: **4797945**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.25						0	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **N052261-001DMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165101**
Client ID: **ZZZZZZ**	Batch ID: **R165101**	TestNo: **EPA 300.0**		Analysis Date: **8/24/2022**	SeqNo: **4797946**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	5.821	0.25	6.250	0	93.1	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-030-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 2:46:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.7	0.14	1.0		mg/L	1	8/24/2022 01:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-066-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 2:10:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/24/2022 02:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-120-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 1:36:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	2.7	20		mg/L	20	8/24/2022 04:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-140-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 1:04:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/24/2022 05:58 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-28-025-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 12:28:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/24/2022 02:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R165107**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165107**
Client ID: **PBW**	Batch ID: **R165107**	TestNo: **SM 5310C**		Analysis Date: **8/24/2022**	SeqNo: **4798232**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R165107**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165107**
Client ID: **LCSW**	Batch ID: **R165107**	TestNo: **SM 5310C**		Analysis Date: **8/24/2022**	SeqNo: **4798233**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.246	1.0	5.000	0	105	85	115				

Sample ID: **N052262-011CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165107**
Client ID: **ZZZZZZ**	Batch ID: **R165107**	TestNo: **SM 5310C**		Analysis Date: **8/24/2022**	SeqNo: **4798244**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	87.532	20	100.0	0	87.5	75	125				

Sample ID: **N052262-011CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165107**
Client ID: **ZZZZZZ**	Batch ID: **R165107**	TestNo: **SM 5310C**		Analysis Date: **8/24/2022**	SeqNo: **4798247**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	90.554	20	100.0	0	90.6	75	125	87.53	3.39	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-030-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 2:46:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 01:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-066-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 2:10:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	42	13	20		µg/L	1	8/28/2022 01:58 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-120-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 1:36:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 02:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-140-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 1:04:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Iron	520	13	20		µg/L	1	8/28/2022 02:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-28-025-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 12:28:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 02:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94418**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165203**
Client ID: **PBW**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803709**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-94418**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165203**
Client ID: **LCSW**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803710**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	100.086	20	100.0	0	100	85	115				

Sample ID: **N052262-011BMS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165476**
Client ID: **ZZZZZZ**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/7/2022**	SeqNo: **4820442**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	92.846	20	100.0	0	92.8	75	125				

Sample ID: **N052262-011BMSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165476**
Client ID: **ZZZZZZ**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/7/2022**	SeqNo: **4820443**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	92.672	20	100.0	0	92.7	75	125	92.85	0.188	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-030-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 2:46:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	8/26/2022 03:21 AM
Barium	110	0.083	1.0		µg/L	1	8/26/2022 03:21 AM
Manganese	88	0.026	0.50		µg/L	1	8/26/2022 03:21 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-066-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 2:10:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 03:27 AM
Barium	78	0.083	1.0		µg/L	1	8/26/2022 03:27 AM
Manganese	690	0.66	12		µg/L	25	9/8/2022 05:38 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-120-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 1:36:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 03:33 AM
Barium	38	0.083	1.0		µg/L	1	8/26/2022 03:33 AM
Manganese	300	0.66	12		µg/L	25	8/27/2022 12:06 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-140-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 1:04:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 04:32 AM
Barium	83	0.083	1.0		µg/L	1	8/26/2022 04:32 AM
Manganese	790	0.13	2.5		µg/L	5	9/8/2022 05:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-28-025-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 12:28:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	0.38	0.050	0.10		µg/L	1	8/26/2022 04:38 AM
Barium	58	0.083	1.0		µg/L	1	8/26/2022 04:38 AM
Manganese	51	0.026	0.50		µg/L	1	8/26/2022 04:38 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94422** SampType: **MBLK** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/25/2022** RunNo: **165202**
Client ID: **PBW** Batch ID: **94422** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/26/2022** SeqNo: **4803607**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	0.108	0.50									

Sample ID: **LCS-94422** SampType: **LCS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/25/2022** RunNo: **165202**
Client ID: **LCSW** Batch ID: **94422** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/26/2022** SeqNo: **4803608**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.300	0.10	10.00	0	103	85	115				
Barium	9.871	1.0	10.00	0	98.7	85	115				
Manganese	105.351	0.50	100.0	0	105	85	115				

Sample ID: **N052262-011BMS** SampType: **MS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/25/2022** RunNo: **165202**
Client ID: **ZZZZZZ** Batch ID: **94422** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/26/2022** SeqNo: **4803618**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	6.532	0.10	10.00	0	65.3	75	125				S
Barium	44.365	1.0	10.00	38.18	61.8	75	125				S

Sample ID: **N052262-011BMSD** SampType: **MSD** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/25/2022** RunNo: **165202**
Client ID: **ZZZZZZ** Batch ID: **94422** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/26/2022** SeqNo: **4803619**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	5.778	0.10	10.00	0	57.8	75	125	6.532	12.3	20	S
Barium	47.657	1.0	10.00	38.18	94.8	75	125	44.36	7.15	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052262-011BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/27/2022**	SeqNo: **4804980**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	331.296	12	100.0	295.7	35.6	75	125				S

Sample ID: **N052262-011BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/27/2022**	SeqNo: **4804981**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	308.079	12	100.0	295.7	12.4	75	125	331.3	7.26	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052262-011B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803617**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	6.583	0.10	10.00	0	65.8	80	120				S
Barium	44.703	1.0	10.00	38.18	65.2	80	120				S

Sample ID: **N052262-011B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/27/2022**	SeqNo: **4804979**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	307.203	12	100.0	295.7	11.5	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ASSET LABORATORIES

ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

Page 1 of 1

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement	QA/QC	Sample Receipt Condition
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	Excel EDD	RTNE	Y N
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker	RWQCB ✓	1. Chilled X
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	Labspec	CalTrans	2. Headspace
Submitted By: Riggie Tep	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	Others ✓	LEVEL III	3. Container Intact X
Title: Field Tech			Specify: RWQCB	LEVEL IV	4. Seal Present
Signature: Date: RT 8/23/22	Sampled By: Riggie Tep		Global ID:	Regulatory	5. IR number 3
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for			Specify State:	6. Method of Cooling: ICE
Project Name: PG&E Topock - PCM	Signature: RT Date: 8/23/22				Sample Temp: 2.6, 5.1°C
Project Number: 30121866.3Q22GW					Courier: ASSET
					Tracking No.:

Matrix: Ground X | Sediment | Potable | Soil | NPDES | Other Solid | Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2. SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate (EPA 300.0) (1 L poly)	Nitrate/nitrite as Nitrogen (SM 4500-NO3); H2SO4 (125 mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052262-01	MW-49-135-Q322	8/23/2022	10:34		X										E	1	P	BNS	
2	-02	MW-49-135-EB-Q322	8/23/2022	10:05		X										E	1	P	BNS	
3	-03	MW-49-275-Q322	8/23/2022	9:52		X										E	1	P	BNS	
4	-04	MW-49-275-EB-Q322	8/23/2022	9:20		X										E	1	P	BNS	
5	-05	MW-49-365-Q322	8/23/2022	9:02		X										E	1	P	BNS	
6	-06	MW-49-365-EB-Q322	8/23/2022	8:20		X										E	1	P	BNS	
7	-07	MW-29-Q322	8/23/2022	11:12		X										E	1	P	BNS	
8	-08	MW-29-EB-Q322	8/23/2022	10:45		X										E	1	P	BNS	
9	-09	MW-86-030-Q322	8/23/2022	14:46		X		X			X			X		E	6	P	BNS	
10	-10	MW-86-066-Q322	8/23/2022	14:10		X		X			X			X		E	6	P	BNS	
11	-11	MW-86-120-Q322	8/23/2022	13:36		X		X			X			X		E	9	P	BNS	MSMSD 9
12	-12	MW-86-140-Q322	8/23/2022	13:04		X		X			X			X		E	6	P	BNS	
13	-13	MW-28-025-Q322	8/23/2022	12:28		X		X			X			X		E	6	P	BNS	
14	-14	MW-28-025-EB-Q322	8/23/2022	12:05		X										E	1	P	BNS	

Relinquished by (Signature and Printed Name):	Date/Time:	Received by (Signature and Printed Name):	Date/Time:
RT Riggie Tep	8/23/22 1539	MBCARTIN	8/23/22 1539
REL/REC: MBCARTIN	8/23/22 1848		

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy

Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/23/2022	Workorder:	N052262
Rep sample Temp (Deg C):	2.1/5.1	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For:

Checklist Completed By: MBC EFanegoF 8/24/2022

for:

Reviewed By: MBC 8/29/2022

ASSET Laboratories

WORK ORDER Summary

29-Aug-22

WorkOrder: N052262

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/23/2022 6:48 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052262-001A	MW-49-135-Q322	8/23/2022 10:34:00 AM	9/7/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052262-002A	MW-49-135-EB-Q322	8/23/2022 10:05:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052262-003A	MW-49-275-Q322	8/23/2022 9:52:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052262-004A	MW-49-275-EB-Q322	8/23/2022 9:20:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052262-005A	MW-49-365-Q322	8/23/2022 9:02:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052262-006A	MW-49-365-EB-Q322	8/23/2022 8:20:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052262-007A	MW-29-Q322	8/23/2022 11:12:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052262-008A	MW-29-EB-Q322	8/23/2022 10:45:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052262-009A	MW-86-030-Q322	8/23/2022 2:46:00 PM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052262-009B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052262-009C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052262-009D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052262-010A	MW-86-066-Q322	8/23/2022 2:10:00 PM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052262-010B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052262-010C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052262-010D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

29-Aug-22

WorkOrder: N052262

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/23/2022 6:48 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052262-011A	MW-86-120-Q322	8/23/2022 1:36:00 PM	9/7/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☑	☐	WW
N052262-011B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☑	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☑	☐	WW
N052262-011C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☑	☐	VW
N052262-011D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
N052262-012A	MW-86-140-Q322	8/23/2022 1:04:00 PM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052262-012B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052262-012C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052262-012D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052262-013A	MW-28-025-Q322	8/23/2022 12:28:00 PM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052262-013B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052262-013C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052262-013D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052262-014A	MW-28-025-EB-Q322	8/23/2022 12:05:00 PM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

29-Aug-22

WorkOrder: N052262

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/23/2022 6:48 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052262-015A	FOLDER	9/7/2022	9/7/2022		Folder	Folder	☐	☐	☐	LAB
			9/7/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/7/2022		Folder	Folder	☐	☐	☐	LAB

September 08, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052282

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 24, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Subcontracted Analyses:

Nitrate/Nitrite was subcontracted to BC Labs - Bakersfield, CA.

Analytical Comments for EPA 218.6:

Dilution was necessary for some samples due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for SM 5310C:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria in QC samples N052282-007CMS and N052282-007CMSD at several dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N052282-007 and MS/MSD were reported at 50x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6010B:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Iron in QC samples N052262-011BMS and N052262-011BMSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for some analytes in QC samples N052262-011BMS and N052262-011BMSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

ASSET Laboratories

Date: *08-Sep-22*

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052282
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052282-001A	MW-33-040-Q322	Groundwater	8/24/2022 10:36:00 AM	8/24/2022	9/8/2022
N052282-002A	MW-33-040-EB-Q322	Groundwater	8/24/2022 10:10:00 AM	8/24/2022	9/8/2022
N052282-003A	MW-33-090-Q322	Groundwater	8/24/2022 9:56:00 AM	8/24/2022	9/8/2022
N052282-004A	MW-912-Q322	Groundwater	8/24/2022 10:06:00 AM	8/24/2022	9/8/2022
N052282-005A	MW-33-150-Q322	Groundwater	8/24/2022 9:14:00 AM	8/24/2022	9/8/2022
N052282-006A	MW-33-210-Q322	Groundwater	8/24/2022 8:34:00 AM	8/24/2022	9/8/2022
N052282-007A	MW-46-175-Q322	Groundwater	8/24/2022 12:06:00 PM	8/24/2022	9/8/2022
N052282-007B	MW-46-175-Q322	Groundwater	8/24/2022 12:06:00 PM	8/24/2022	9/8/2022
N052282-007C	MW-46-175-Q322	Groundwater	8/24/2022 12:06:00 PM	8/24/2022	9/8/2022
N052282-007D	MW-46-175-Q322	Groundwater	8/24/2022 12:06:00 PM	8/24/2022	9/8/2022
N052282-007E	MW-46-175-Q322	Groundwater	8/24/2022 12:06:00 PM	8/24/2022	9/8/2022
N052282-008A	MW-46-205-Q322	Groundwater	8/24/2022 11:24:00 AM	8/24/2022	9/8/2022
N052282-008B	MW-46-205-Q322	Groundwater	8/24/2022 11:24:00 AM	8/24/2022	9/8/2022
N052282-008C	MW-46-205-Q322	Groundwater	8/24/2022 11:24:00 AM	8/24/2022	9/8/2022
N052282-008D	MW-46-205-Q322	Groundwater	8/24/2022 11:24:00 AM	8/24/2022	9/8/2022
N052282-009A	MW-917-Q322	Groundwater	8/24/2022 11:34:00 AM	8/24/2022	9/8/2022
N052282-009B	MW-917-Q322	Groundwater	8/24/2022 11:34:00 AM	8/24/2022	9/8/2022
N052282-009C	MW-917-Q322	Groundwater	8/24/2022 11:34:00 AM	8/24/2022	9/8/2022
N052282-009D	MW-917-Q322	Groundwater	8/24/2022 11:34:00 AM	8/24/2022	9/8/2022
N052282-010A	MW-47-055-Q322	Groundwater	8/24/2022 1:36:00 PM	8/24/2022	9/8/2022
N052282-011A	MW-47-115-Q322	Groundwater	8/24/2022 12:58:00 PM	8/24/2022	9/8/2022
N052282-012A	EB-729-Q322	Groundwater	8/24/2022 2:00:00 PM	8/24/2022	9/8/2022
N052282-013A	MW-43-025-Q322	Groundwater	8/24/2022 9:15:00 AM	8/24/2022	9/8/2022
N052282-013B	MW-43-025-Q322	Groundwater	8/24/2022 9:15:00 AM	8/24/2022	9/8/2022
N052282-013C	MW-43-025-Q322	Groundwater	8/24/2022 9:15:00 AM	8/24/2022	9/8/2022
N052282-013D	MW-43-025-Q322	Groundwater	8/24/2022 9:15:00 AM	8/24/2022	9/8/2022
N052282-014A	MW-43-025-EB-Q322	Groundwater	8/24/2022 8:55:00 AM	8/24/2022	9/8/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-33-040-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 10:36:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A**	QC Batch: **R165180**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/26/2022 05:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-33-040-EB-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 10:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A**	QC Batch: **R165180**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/26/2022 02:35 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-33-090-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 9:56:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A**	QC Batch: **R165180**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	2.8	0.13	1.0		µg/L	5	8/26/2022 05:47 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-912-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 10:06:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A**	QC Batch: **R165180**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	2.7	0.13	1.0		µg/L	5	8/26/2022 06:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-33-150-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 9:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A**	QC Batch: **R165180**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	6.5	0.13	1.0		µg/L	5	8/26/2022 06:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-33-210-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 8:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A** QC Batch: **R165180**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	11	0.13	1.0		µg/L	5	8/26/2022 07:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-46-175-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 12:06:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A**	QC Batch: **R165180**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	4.3	0.13	1.0		µg/L	5	8/26/2022 07:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-46-205-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 11:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A**	QC Batch: **R165180**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/26/2022 07:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-917-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 11:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A**	QC Batch: **R165180**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/26/2022 07:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-47-055-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 1:36:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A** QC Batch: **R165180**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	17	0.13	1.0		µg/L	5	8/26/2022 09:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-47-115-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 12:58:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
EPA 218.6							
RunID: **NV00922-IC7_220826A** QC Batch: **R165180** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	24	0.13	1.0		µg/L	5	8/26/2022 09:13 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-729-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 2:00:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A**	QC Batch: **R165180**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/26/2022 02:54 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-025-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 9:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A**	QC Batch: **R165180**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/26/2022 01:38 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-025-EB-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 8:55:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A**	QC Batch: **R165180**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/26/2022 03:13 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052282
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R165180**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **PBW**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801889**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R165180**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **LCSW**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801890**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.034	0.20	5.000	0	101	90	110				

Sample ID: **N052282-010AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801893**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	42.372	1.0	25.00	16.88	102	90	110				

Sample ID: **N052282-010AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801894**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	42.778	1.0	25.00	16.88	104	90	110	42.37	0.952	20	

Sample ID: **N052282-011ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801895**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	24.133	1.0						23.76	1.57	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052282
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052282-011AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801898**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	49.669	1.0	25.00	23.76	104	90	110				

Sample ID: **N052296-001BMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801900**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1510.700	20	500.0	990.6	104	90	110				

Sample ID: **N052282-013AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801905**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.979	0.20	1.000	0	97.9	90	110				

Sample ID: **N052282-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801909**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.018	0.20	1.000	0	102	90	110				

Sample ID: **N052282-012AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801911**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.023	0.20	1.000	0	102	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052282
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052282-014AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801913**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.955	0.20	1.000	0	95.5	90	110				

Sample ID: **N052288-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801915**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.021	0.20	1.000	0	102	90	110				

Sample ID: **N052286-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801917**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5608.450	100	2500	3094	101	90	110				

Sample ID: **N052262-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801921**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.474	1.0	5.000	0	109	90	110				

Sample ID: **N052262-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801923**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.173	1.0	5.000	0	103	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052282
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052282-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801925**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.386	1.0	5.000	0	108	90	110				

Sample ID: **N052282-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801927**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	8.143	1.0	5.000	2.820	106	90	110				

Sample ID: **N052282-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801929**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	7.809	1.0	5.000	2.701	102	90	110				

Sample ID: **N052282-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801933**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	11.873	1.0	5.000	6.504	107	90	110				

Sample ID: **N052282-006AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801935**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	16.565	1.0	5.000	11.26	106	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052282
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052282-007AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801937**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	9.317	1.0	5.000	4.290	101	90	110				

Sample ID: **N052282-008AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801939**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.307	1.0	5.000	0.6600	92.9	90	110				

Sample ID: **N052282-009AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801941**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.386	1.0	5.000	0.5725	96.3	90	110				

Sample ID: **N052288-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801944**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.967	0.20	1.000	0	96.7	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-46-175-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 12:06:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220825A**	QC Batch: **R165146**			PrepDate:			Analyst: **RAB**
Nitrate as N	1.0	0.048	0.25		mg/L	5	8/25/2022 10:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-46-205-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 11:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220825A**	QC Batch: **R165146**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.82	0.048	0.25		mg/L	5	8/25/2022 10:16 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-917-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 11:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220825A**	QC Batch: **R165146**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.83	0.048	0.25		mg/L	5	8/25/2022 10:31 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-025-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 9:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220825A**	QC Batch: **R165146**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/25/2022 10:47 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052282
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R165146_NO3**	SampType: **MBLK**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165146**
Client ID: **PBW**	Batch ID: **R165146**	TestNo: **EPA 300.0**		Analysis Date: **8/25/2022**	SeqNo: **4799746**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R165146_NO3**	SampType: **LCS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165146**
Client ID: **LCSW**	Batch ID: **R165146**	TestNo: **EPA 300.0**		Analysis Date: **8/25/2022**	SeqNo: **4799747**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.187	0.050	1.250	0	94.9	90	110				

Sample ID: **N052282-007DMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165146**
Client ID: **ZZZZZZ**	Batch ID: **R165146**	TestNo: **EPA 300.0**		Analysis Date: **8/25/2022**	SeqNo: **4799754**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.669	0.25	6.250	1.016	90.4	80	120				

Sample ID: **N052282-007DMSD**	SampType: **MSD**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165146**
Client ID: **ZZZZZZ**	Batch ID: **R165146**	TestNo: **EPA 300.0**		Analysis Date: **8/25/2022**	SeqNo: **4799755**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.430	0.25	6.250	1.016	86.6	80	120	6.669	3.65	20	

Sample ID: **N052283-005DDUP**	SampType: **DUP**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165146**
Client ID: **ZZZZZZ**	Batch ID: **R165146**	TestNo: **EPA 300.0**		Analysis Date: **8/25/2022**	SeqNo: **4799759**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	0.310	0.50						0.3370	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052282
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **N052283-005DMS** SampType: **MS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165146**
Client ID: **ZZZZZZ** Batch ID: **R165146** TestNo: **EPA 300.0** Analysis Date: **8/25/2022** SeqNo: **4799760**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.133	0.50	12.50	0.3370	86.4	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-46-175-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 12:06:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	6.8	50		mg/L	50	8/25/2022 02:49 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-46-205-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 11:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/25/2022 11:28 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-917-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 11:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/25/2022 11:43 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-025-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 9:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.9	0.14	1.0		mg/L	1	8/25/2022 11:59 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052282
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R165151**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165151**
Client ID: **PBW**	Batch ID: **R165151**	TestNo: **SM 5310C**		Analysis Date: **8/25/2022**	SeqNo: **4800089**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R165151**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165151**
Client ID: **LCSW**	Batch ID: **R165151**	TestNo: **SM 5310C**		Analysis Date: **8/25/2022**	SeqNo: **4800090**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.184	1.0	5.000	0	104	85	115				

Sample ID: **N052282-007CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165151**
Client ID: **ZZZZZZ**	Batch ID: **R165151**	TestNo: **SM 5310C**		Analysis Date: **8/25/2022**	SeqNo: **4800109**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	232.730	50	250.0	0	93.1	75	125				

Sample ID: **N052282-007CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165151**
Client ID: **ZZZZZZ**	Batch ID: **R165151**	TestNo: **SM 5310C**		Analysis Date: **8/25/2022**	SeqNo: **4800110**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	234.140	50	250.0	0	93.7	75	125	232.7	0.604	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-46-175-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 12:06:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Iron	100	13	20		µg/L	1	8/28/2022 02:58 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-46-205-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 11:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 03:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-917-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 11:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 03:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-025-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 9:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Iron	5300	13	20		µg/L	1	8/28/2022 03:25 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052282
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94418**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165203**
Client ID: **PBW**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803709**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-94418**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165203**
Client ID: **LCSW**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803710**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	100.086	20	100.0	0	100	85	115				

Sample ID: **N052262-011BMS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165476**
Client ID: **ZZZZZZ**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/7/2022**	SeqNo: **4820442**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	92.846	20	100.0	42.21	50.6	75	125				S

Sample ID: **N052262-011BMSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165476**
Client ID: **ZZZZZZ**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/7/2022**	SeqNo: **4820443**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	92.672	20	100.0	42.21	50.5	75	125	92.85	0.188	20	S

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052282
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **N052262-011B-PS** SampType: **PS** TestCode: **6010_WDPGE** Units: **µg/L** Prep Date: RunNo: **165476**
Client ID: **ZZZZZZ** Batch ID: **94418** TestNo: **EPA 6010B** **EPA 3010A** Analysis Date: **9/7/2022** SeqNo: **4820441**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	91.979	20	100.0	42.21	49.8	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-46-175-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 12:06:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E** QC Batch: **94422**				PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 04:44 AM
Barium	28	0.083	1.0		µg/L	1	8/26/2022 04:44 AM
Manganese	8.3	0.026	0.50		µg/L	1	8/26/2022 04:44 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-46-205-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 11:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 04:50 AM
Barium	34	0.083	1.0		µg/L	1	8/26/2022 04:50 AM
Manganese	35	0.026	0.50		µg/L	1	8/26/2022 04:50 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-917-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 11:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E** QC Batch: **94422**				PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 04:56 AM
Barium	33	0.083	1.0		µg/L	1	8/26/2022 04:56 AM
Manganese	35	0.026	0.50		µg/L	1	8/26/2022 04:56 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-025-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 9:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E** QC Batch: **94422**				PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	29	0.050	0.10		µg/L	1	8/26/2022 05:20 AM
Barium	80	0.083	1.0		µg/L	1	8/26/2022 05:20 AM
Manganese	550	0.13	2.5		µg/L	5	8/27/2022 12:35 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052282
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94422**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **PBW**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803607**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	0.108	0.50									

Sample ID: **LCS-94422**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **LCSW**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803608**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.300	0.10	10.00	0	103	85	115				
Barium	9.871	1.0	10.00	0	98.7	85	115				
Manganese	105.351	0.50	100.0	0	105	85	115				

Sample ID: **N052262-011BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803618**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	6.532	0.10	10.00	0	65.3	75	125				S
Barium	44.365	1.0	10.00	38.18	61.8	75	125				S

Sample ID: **N052262-011BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803619**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	5.778	0.10	10.00	0	57.8	75	125	6.532	12.3	20	S
Barium	47.657	1.0	10.00	38.18	94.8	75	125	44.36	7.15	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052282
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052262-011BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/27/2022**	SeqNo: **4804980**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	331.296	12	100.0	295.7	35.6	75	125				S

Sample ID: **N052262-011BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/27/2022**	SeqNo: **4804981**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	308.079	12	100.0	295.7	12.4	75	125	331.3	7.26	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052282
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052262-011B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803617**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	6.583	0.10	10.00	0	65.8	80	120				S
Barium	44.703	1.0	10.00	38.18	65.2	80	120				S

Sample ID: **N052262-011B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/27/2022**	SeqNo: **4804979**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	307.203	12	100.0	295.7	11.5	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ARCUS02
FOLDER
N052282-015A
C: 9/8/2022 12:00 A
R: 8/24/202
1 of 1

ASSET LABORATORIES

ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement: Others ✓ Specify: RWQCB; Global ID:
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	QA/QC: RWQCB ✓
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	
Submitted By: Riggie Tap		Phone: 949-727-1400, ext 200 Fax:	
Title: Field Tech	Phone: 916-786-3302 Fax:		
Signature: Date: RT 8/24/22	Sampled By: Riggie Tap		
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for		
Project Name: PG&E Topock - PCM	Signature: RT Date: 8/24/22		
Project Number: 30121866.3Q22GW			

Matrix: Ground X; Sediment; Potable; Soil; NPDES; Other Solid; Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate (EPA 300.0) (1 L poly)	Nitrate/nitrite as Nitrogen (SM 4500-NO3); H2SO4 (125 mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052282-01	MW-33-040-Q322	8/24/2022	10:36		X										E	1	P	BNS	
2	-02	MW-33-040-EB-Q322	8/24/2022	10:10		X										E	1	P	BNS	
3	-03	MW-33-090-Q322	8/24/2022	9:56		X										E	1	P	BNS	
4	-04	MW-912-Q322	8/24/2022	10:06		X										E	1	P	BNS	
5	-05	MW-33-150-Q322	8/24/2022	9:14		X										E	1	P	BNS	
6	-06	MW-33-210-Q322	8/24/2022	8:34		X										E	1	P	BNS	
7	-07	MW-46-175-Q322	8/24/2022	12:06		X		X			X			X	X	E	3	P	BNS	
8	-08	MW-46-205-Q322	8/24/2022	11:24		X		X			X			X		E	6	P	BNS	
9	-09	MW-917-Q322	8/24/2022	11:34		X		X			X			X		E	6	P	BNS	
10	-10	MW-47-055-Q322	8/24/2022	13:36		X										E	1	P	BNS	
11	-11	MW-47-115-Q322	8/24/2022	12:58		X										E	1	P	BNS	
12	-12	EB-729-Q322	8/24/2022	14:00		X										E	1	P	BNS	
13	-13	MW-43-025-Q322	8/24/2022	~~8:16~~ 9:15		X		X			X			X		E	6	P	BNS	
14	-14	MW-43-025-EB-Q322	8/24/2022	8:55		X										E	1	P	BNS	

Y N
1. Chilled ✓
2. Headspace
3. Container Intact ✓
4. Seal Present
5. IR number 3
6. Method of Cooling: ICE
Sample Temp: 2.1c 3.1c

Courier: ASET
Tracking No.:

Reliquished by (Signature and Printed Name):	Date/Time:	Reliquished by (Signature and Printed Name):	Date/Time:
RT Riggie Tap	8/24/22 1445	Paul Ont Dante Ontz	8/24/22 14:45
Reliquished by (Signature and Printed Name):	Date/Time:	Reliquished by (Signature and Printed Name):	Date/Time:
Paul Ont Dante Ontz	8/24/22 19:54	Paul Ont Dante Ontz	8/24/22 19:54
Reliquished by (Signature and Printed Name):	Date/Time:	Reliquished by (Signature and Printed Name):	Date/Time:

Turn Around Time (TAT)

	A	< 24 Hrs or Same Day TAT
	B	= Next Workday
	C	= 2 Workdays
	D	= 3 Workdays
X	E	= Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis.
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
6. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy

Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/24/2022	Workorder:	N052282
Rep sample Temp (Deg C):	2.1/3.1	IR Gun ID:	3
Temp Blank:	☑ Yes ☐ No		
Carrier name:	ASSET		
Last 4 digits of Tracking No.:	NA	Packing Material Used:	Bubble Wrap
Cooling process:	☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None		

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: EF EFanegoF 8/25/2022

Reviewed By: for: MBC 8/27/2022

ASSET Laboratories

WORK ORDER Summary

27-Aug-22

WorkOrder: N052282

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/24/2022 7:54 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052282-001A	MW-33-040-Q322	8/24/2022 10:36:00 AM	9/8/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052282-002A	MW-33-040-EB-Q322	8/24/2022 10:10:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052282-003A	MW-33-090-Q322	8/24/2022 9:56:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052282-004A	MW-912-Q322	8/24/2022 10:06:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052282-005A	MW-33-150-Q322	8/24/2022 9:14:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052282-006A	MW-33-210-Q322	8/24/2022 8:34:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052282-007A	MW-46-175-Q322	8/24/2022 12:06:00 PM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052282-007B			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/8/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052282-007C			9/8/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052282-007D			9/8/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052282-007E			9/8/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052282-008A	MW-46-205-Q322	8/24/2022 11:24:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052282-008B			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/8/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052282-008C			9/8/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052282-008D			9/8/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052282-009A	MW-917-Q322	8/24/2022 11:34:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

27-Aug-22

WorkOrder: N052282

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/24/2022 7:54 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052282-009B	MW-917-Q322	8/24/2022 11:34:00 AM	9/8/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/8/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052282-009C			9/8/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052282-009D			9/8/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052282-010A	MW-47-055-Q322	8/24/2022 1:36:00 PM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052282-011A	MW-47-115-Q322	8/24/2022 12:58:00 PM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052282-012A	EB-729-Q322	8/24/2022 2:00:00 PM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052282-013A	MW-43-025-Q322	8/24/2022 9:15:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052282-013B			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/8/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052282-013C			9/8/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052282-013D			9/8/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052282-014A	MW-43-025-EB-Q322	8/24/2022 8:55:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052282-015A	FOLDER	9/8/2022	9/8/2022		Folder	Folder	☐	☐	☐	LAB
			9/8/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/8/2022		Folder	Folder	☐	☐	☐	LAB

ASSET Laboratories
3151-3153 W Post Rd., Las Vegas, NV 89118
www.atl-labs.com
TEL: 7023072659 *FAX: 7023072691*

CHAIN-OF-CUSTODY RECORD

QC Level: Level IV

Subcontractor:

BC Labs
4100 Atlas Court
Bakersfield, CA 93308

TEL: (661) 327-4911
FAX: (661) 327-1918
Acct #:

Field Sampler: Riggie Tep

29-Aug-22

				Nitrate/Nitrite	Requested Tests	
Sample ID	**Matrix**	**Date Collected**	**Bottle Type**	**SM4500-NO3F**		
N052282-007E / MW-46-175-Q322	Groundwater	8/24/2022 12:06:00 PM	8OZP	1		

General Comments: PLEASE EMAIL SAMPLE RECEIPT ACKNOWLEDGEMENT TO THE PM. ALWAYS CC: sonny.lorenzo@assetlaboratories.com

Please use PO#:N52282A Please email Invoices and Account Receivable Statements to elvira@assetlaboratories.com. For questions, call Marlon at (702)-307-2659. Please e-mail results to reports.lv@assetlaboratories.com by: Standard TAT

Please analyze for Nitrate/Nitrite. EDD requirement Labspec7 edata.

GSO #: 557641344

		Date/Time			Date/Time
Relinquished by:	GGarcia	8/29/2022 16:30	**Received by:**		
Relinquished by:			**Received by:**		

September 13, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052283

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 24, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052283

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Dilution was necessary for some samples due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for EPA 6010B_Dissolved:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Iron in QC samples N052283-001B-MS and N052283-001B-MSD since the analyte concentration in the sample is disproportionate to the spike level. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020_Dissolved:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for some analytes in QC samples N052262-011BMS and N052262-011BMSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Manganese in QC samples N052262-011BMS and N052262-011BMSD since the analyte concentration in the sample is disproportionate to the spike level. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for SM 5310C:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria in QC samples N052282-007CMS and N052282-007CMSD at several dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N052282-007 and MS/MSD were reported at 50x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

ASSET Laboratories

Date: *13-Sep-22*

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052283
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052283-001A	MW-43-075-Q322	Groundwater	8/24/2022 8:52:00 AM	8/24/2022	9/13/2022
N052283-001B	MW-43-075-Q322	Groundwater	8/24/2022 8:52:00 AM	8/24/2022	9/13/2022
N052283-001C	MW-43-075-Q322	Groundwater	8/24/2022 8:52:00 AM	8/24/2022	9/13/2022
N052283-001D	MW-43-075-Q322	Groundwater	8/24/2022 8:52:00 AM	8/24/2022	9/13/2022
N052283-002A	MW-43-075-EB-Q322	Groundwater	8/24/2022 8:31:00 AM	8/24/2022	9/13/2022
N052283-003A	MW-43-090-Q322	Groundwater	8/24/2022 8:28:00 AM	8/24/2022	9/13/2022
N052283-003B	MW-43-090-Q322	Groundwater	8/24/2022 8:28:00 AM	8/24/2022	9/13/2022
N052283-003C	MW-43-090-Q322	Groundwater	8/24/2022 8:28:00 AM	8/24/2022	9/13/2022
N052283-003D	MW-43-090-Q322	Groundwater	8/24/2022 8:28:00 AM	8/24/2022	9/13/2022
N052283-004A	MW-43-090-EB-Q322	Groundwater	8/24/2022 8:05:00 AM	8/24/2022	9/13/2022
N052283-005A	MW-52D-Q322	Groundwater	8/24/2022 12:11:00 PM	8/24/2022	9/13/2022
N052283-005B	MW-52D-Q322	Groundwater	8/24/2022 12:11:00 PM	8/24/2022	9/13/2022
N052283-005C	MW-52D-Q322	Groundwater	8/24/2022 12:11:00 PM	8/24/2022	9/13/2022
N052283-005D	MW-52D-Q322	Groundwater	8/24/2022 12:11:00 PM	8/24/2022	9/13/2022
N052283-006A	MW-918-Q322	Groundwater	8/24/2022 12:21:00 PM	8/24/2022	9/13/2022
N052283-006B	MW-918-Q322	Groundwater	8/24/2022 12:21:00 PM	8/24/2022	9/13/2022
N052283-006C	MW-918-Q322	Groundwater	8/24/2022 12:21:00 PM	8/24/2022	9/13/2022
N052283-006D	MW-918-Q322	Groundwater	8/24/2022 12:21:00 PM	8/24/2022	9/13/2022
N052283-007A	MW-52M-Q322	Groundwater	8/24/2022 11:48:00 AM	8/24/2022	9/13/2022
N052283-007B	MW-52M-Q322	Groundwater	8/24/2022 11:48:00 AM	8/24/2022	9/13/2022
N052283-007C	MW-52M-Q322	Groundwater	8/24/2022 11:48:00 AM	8/24/2022	9/13/2022
N052283-007D	MW-52M-Q322	Groundwater	8/24/2022 11:48:00 AM	8/24/2022	9/13/2022
N052283-008A	MW-52S-Q322	Groundwater	8/24/2022 11:26:00 AM	8/24/2022	9/13/2022
N052283-008B	MW-52S-Q322	Groundwater	8/24/2022 11:26:00 AM	8/24/2022	9/13/2022
N052283-008C	MW-52S-Q322	Groundwater	8/24/2022 11:26:00 AM	8/24/2022	9/13/2022
N052283-008D	MW-52S-Q322	Groundwater	8/24/2022 11:26:00 AM	8/24/2022	9/13/2022
N052283-009A	MW-53D-Q322	Groundwater	8/24/2022 10:44:00 AM	8/24/2022	9/13/2022
N052283-009B	MW-53D-Q322	Groundwater	8/24/2022 10:44:00 AM	8/24/2022	9/13/2022
N052283-009C	MW-53D-Q322	Groundwater	8/24/2022 10:44:00 AM	8/24/2022	9/13/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052283
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052283-009D	MW-53D-Q322	Groundwater	8/24/2022 10:44:00 AM	8/24/2022	9/13/2022
N052283-010A	MW-53M-Q322	Groundwater	8/24/2022 10:14:00 AM	8/24/2022	9/13/2022
N052283-010B	MW-53M-Q322	Groundwater	8/24/2022 10:14:00 AM	8/24/2022	9/13/2022
N052283-010C	MW-53M-Q322	Groundwater	8/24/2022 10:14:00 AM	8/24/2022	9/13/2022
N052283-010D	MW-53M-Q322	Groundwater	8/24/2022 10:14:00 AM	8/24/2022	9/13/2022
N052283-011A	MW-53S-Q322	Groundwater	8/24/2022 9:49:00 AM	8/24/2022	9/13/2022
N052283-011B	MW-53S-Q322	Groundwater	8/24/2022 9:49:00 AM	8/24/2022	9/13/2022
N052283-011C	MW-53S-Q322	Groundwater	8/24/2022 9:49:00 AM	8/24/2022	9/13/2022
N052283-011D	MW-53S-Q322	Groundwater	8/24/2022 9:49:00 AM	8/24/2022	9/13/2022
N052283-012A	EB-730-Q322	Groundwater	8/24/2022 1:50:00 PM	8/24/2022	9/13/2022
N052283-013A	MW-75-033-Q322	Groundwater	8/24/2022 1:25:00 PM	8/24/2022	9/13/2022
N052283-014A	MW-75-117-Q322	Groundwater	8/24/2022 1:44:00 PM	8/24/2022	9/13/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-075-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 8:52:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220830B**	QC Batch: **R165355**			PrepDate:			Analyst: **CR**
Hexavalent Chromium	ND	0.18	1.0		µg/L	5	8/30/2022 09:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-075-EB-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 8:31:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220830B**	QC Batch: **R165355**			PrepDate:			Analyst: **CR**
Hexavalent Chromium	ND	0.037	0.20		µg/L	1	8/30/2022 03:55 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-090-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 8:28:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220830B**	QC Batch: **R165355**			PrepDate:			Analyst: **CR**
Hexavalent Chromium	ND	0.18	1.0		µg/L	5	8/30/2022 10:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-090-EB-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 8:05:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220830B**	QC Batch: **R165355**			PrepDate:			Analyst: **CR**
Hexavalent Chromium	ND	0.037	0.20		µg/L	1	8/30/2022 05:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52D-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 12:11:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220831A**	QC Batch: **R165356**			PrepDate:			Analyst: **AD**
Hexavalent Chromium	ND	0.18	1.0		µg/L	5	8/31/2022 12:47 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-918-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 12:21:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220831A**	QC Batch: **R165356**			PrepDate:			Analyst: **AD**
Hexavalent Chromium	ND	0.18	1.0		µg/L	5	8/31/2022 01:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52M-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 11:48:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220831A**	QC Batch: **R165356**			PrepDate:			Analyst: **AD**
Hexavalent Chromium	ND	0.18	1.0		µg/L	5	8/31/2022 01:32 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52S-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 11:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220831A**	QC Batch: **R165356**			PrepDate:			Analyst: **AD**
Hexavalent Chromium	ND	0.18	1.0		µg/L	5	8/31/2022 01:55 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53D-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 10:44:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220831A**	QC Batch: **R165356**			PrepDate:			Analyst: **AD**
Hexavalent Chromium	ND	0.18	1.0		µg/L	5	8/31/2022 02:41 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53M-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220831A**	QC Batch: **R165356**			PrepDate:			Analyst: **AD**
Hexavalent Chromium	ND	0.18	1.0		µg/L	5	8/31/2022 03:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53S-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 9:49:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220831A**	QC Batch: **R165356**			PrepDate:			Analyst: **AD**
Hexavalent Chromium	ND	0.037	0.20		µg/L	1	8/31/2022 03:26 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-730-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 1:50:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220831A**	QC Batch: **R165356**			PrepDate:			Analyst: **AD**
Hexavalent Chromium	ND	0.037	0.20		µg/L	1	8/31/2022 04:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-75-033-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 1:25:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220831A**	QC Batch: **R165356**			PrepDate:			Analyst: **AD**
Hexavalent Chromium	36	0.18	1.0		µg/L	5	8/31/2022 04:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-75-117-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 1:44:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220831A**	QC Batch: **R165356**			PrepDate:			Analyst: **AD**
Hexavalent Chromium	14	0.18	1.0		µg/L	5	8/31/2022 05:09 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: CA_218.6_WPGE

Sample ID: **MB1-R165355**	SampType: **MBLK**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165355**
Client ID: **PBW**	Batch ID: **R165355**	TestNo: **EPA 218.6**		Analysis Date: **8/30/2022**	SeqNo: **4814967**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS1-R165355**	SampType: **LCS**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165355**
Client ID: **LCSW**	Batch ID: **R165355**	TestNo: **EPA 218.6**		Analysis Date: **8/30/2022**	SeqNo: **4814968**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.044	0.20	5.000	0	101	90	110				

Sample ID: **N052283-002A-MS**	SampType: **MS**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165355**
Client ID: **ZZZZZZ**	Batch ID: **R165355**	TestNo: **EPA 218.6**		Analysis Date: **8/30/2022**	SeqNo: **4814974**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.087	0.20	1.000	0	109	90	110				

Sample ID: **N052283-004A-MS**	SampType: **MS**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165355**
Client ID: **ZZZZZZ**	Batch ID: **R165355**	TestNo: **EPA 218.6**		Analysis Date: **8/30/2022**	SeqNo: **4814980**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.994	0.20	1.000	0	99.4	90	110				

Sample ID: **N052283-001A-DUP**	SampType: **DUP**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165355**
Client ID: **ZZZZZZ**	Batch ID: **R165355**	TestNo: **EPA 218.6**		Analysis Date: **8/30/2022**	SeqNo: **4815006**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	1.0						0	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: CA_218.6_WPGE

Sample ID: **N052283-001A-MS**	SampType: **MS**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165355**
Client ID: **ZZZZZZ**	Batch ID: **R165355**	TestNo: **EPA 218.6**		Analysis Date: **8/30/2022**	SeqNo: **4815007**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.720	1.0	5.000	0	94.4	90	110				

Sample ID: **N052283-001A-MSD**	SampType: **MSD**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165355**
Client ID: **ZZZZZZ**	Batch ID: **R165355**	TestNo: **EPA 218.6**		Analysis Date: **8/30/2022**	SeqNo: **4815008**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.777	1.0	5.000	0	95.5	90	110	4.720	1.20	20	

Sample ID: **N052283-003A-MS**	SampType: **MS**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165355**
Client ID: **ZZZZZZ**	Batch ID: **R165355**	TestNo: **EPA 218.6**		Analysis Date: **8/30/2022**	SeqNo: **4815010**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.274	1.0	5.000	0	105	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: CA_218.6_WPGE

Sample ID: **MB1-R165356**	SampType: **MBLK**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165356**
Client ID: **PBW**	Batch ID: **R165356**	TestNo: **EPA 218.6**		Analysis Date: **8/31/2022**	SeqNo: **4815032**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS1-R165356**	SampType: **LCS**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165356**
Client ID: **LCSW**	Batch ID: **R165356**	TestNo: **EPA 218.6**		Analysis Date: **8/31/2022**	SeqNo: **4815033**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.882	0.20	5.000	0	97.6	90	110				

Sample ID: **N052283-005A-MS**	SampType: **MS**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165356**
Client ID: **ZZZZZZ**	Batch ID: **R165356**	TestNo: **EPA 218.6**		Analysis Date: **8/31/2022**	SeqNo: **4815035**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.702	1.0	5.000	0	94.0	90	110				

Sample ID: **N052283-006A-MS**	SampType: **MS**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165356**
Client ID: **ZZZZZZ**	Batch ID: **R165356**	TestNo: **EPA 218.6**		Analysis Date: **8/31/2022**	SeqNo: **4815037**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.932	1.0	5.000	0	98.6	90	110				

Sample ID: **N052283-007A-MS**	SampType: **MS**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165356**
Client ID: **ZZZZZZ**	Batch ID: **R165356**	TestNo: **EPA 218.6**		Analysis Date: **8/31/2022**	SeqNo: **4815039**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.138	1.0	5.000	0	103	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: CA_218.6_WPGE

Sample ID: **N052283-009A-MS** SampType: **MS** TestCode: **CA_218.6_W** Units: **µg/L** Prep Date: RunNo: **165356**
Client ID: **ZZZZZZ** Batch ID: **R165356** TestNo: **EPA 218.6** Analysis Date: **8/31/2022** SeqNo: **4815045**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.164	1.0	5.000	0	103	90	110				

Sample ID: **N052283-010A-MS** SampType: **MS** TestCode: **CA_218.6_W** Units: **µg/L** Prep Date: RunNo: **165356**
Client ID: **ZZZZZZ** Batch ID: **R165356** TestNo: **EPA 218.6** Analysis Date: **8/31/2022** SeqNo: **4815047**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.070	1.0	5.000	0	101	90	110				

Sample ID: **N052283-011A-MS** SampType: **MS** TestCode: **CA_218.6_W** Units: **µg/L** Prep Date: RunNo: **165356**
Client ID: **ZZZZZZ** Batch ID: **R165356** TestNo: **EPA 218.6** Analysis Date: **8/31/2022** SeqNo: **4815049**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.045	0.20	1.000	0.03730	101	90	110				

Sample ID: **N052283-011A-MSD** SampType: **MSD** TestCode: **CA_218.6_W** Units: **µg/L** Prep Date: RunNo: **165356**
Client ID: **ZZZZZZ** Batch ID: **R165356** TestNo: **EPA 218.6** Analysis Date: **8/31/2022** SeqNo: **4815050**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.048	0.20	1.000	0.03730	101	90	110	1.045	0.325	20	

Sample ID: **N052283-012A-MS** SampType: **MS** TestCode: **CA_218.6_W** Units: **µg/L** Prep Date: RunNo: **165356**
Client ID: **ZZZZZZ** Batch ID: **R165356** TestNo: **EPA 218.6** Analysis Date: **8/31/2022** SeqNo: **4815052**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.997	0.20	1.000	0	99.7	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: CA_218.6_WPGE

Sample ID: **N052283-013A-MS**	SampType: **MS**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165356**
Client ID: **ZZZZZZ**	Batch ID: **R165356**	TestNo: **EPA 218.6**		Analysis Date: **8/31/2022**	SeqNo: **4815056**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	60.933	1.0	25.00	35.87	100	90	110				

Sample ID: **N052283-014A-MS**	SampType: **MS**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165356**
Client ID: **ZZZZZZ**	Batch ID: **R165356**	TestNo: **EPA 218.6**		Analysis Date: **8/31/2022**	SeqNo: **4815058**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	39.660	1.0	25.00	14.15	102	90	110				

Sample ID: **N052283-008A-MS**	SampType: **MS**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165356**
Client ID: **ZZZZZZ**	Batch ID: **R165356**	TestNo: **EPA 218.6**		Analysis Date: **8/31/2022**	SeqNo: **4815059**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.376	1.0	5.000	0	108	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-075-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 8:52:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220825A**	QC Batch: **R165146**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/25/2022 11:03 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-090-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 8:28:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220825A**	QC Batch: **R165146**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/25/2022 11:19 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52D-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 12:11:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220825A**	QC Batch: **R165146**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/25/2022 12:38 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-918-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 12:21:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220825A**	QC Batch: **R165146**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/25/2022 01:25 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52M-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 11:48:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220825A**	QC Batch: **R165146**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/25/2022 01:41 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52S-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 11:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220825A**	QC Batch: **R165146**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/25/2022 01:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53D-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 10:44:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220825A**	QC Batch: **R165146**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/25/2022 02:13 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53M-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220825A**	QC Batch: **R165146**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/25/2022 02:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53S-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 9:49:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220825A**	QC Batch: **R165146**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/25/2022 02:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R165146_NO3** SampType: **MBLK** TestCode: **300WLLNO3** Units: **mg/L** Prep Date: RunNo: **165146**
Client ID: **PBW** Batch ID: **R165146** TestNo: **EPA 300.0** Analysis Date: **8/25/2022** SeqNo: **4799746**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R165146_NO3** SampType: **LCS** TestCode: **300WLLNO3** Units: **mg/L** Prep Date: RunNo: **165146**
Client ID: **LCSW** Batch ID: **R165146** TestNo: **EPA 300.0** Analysis Date: **8/25/2022** SeqNo: **4799747**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.187	0.050	1.250	0	94.9	90	110				

Sample ID: **N052282-007DMS** SampType: **MS** TestCode: **300WLLNO3** Units: **mg/L** Prep Date: RunNo: **165146**
Client ID: **ZZZZZZ** Batch ID: **R165146** TestNo: **EPA 300.0** Analysis Date: **8/25/2022** SeqNo: **4799754**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.669	0.25	6.250	1.016	90.4	80	120				

Sample ID: **N052282-007DMSD** SampType: **MSD** TestCode: **300WLLNO3** Units: **mg/L** Prep Date: RunNo: **165146**
Client ID: **ZZZZZZ** Batch ID: **R165146** TestNo: **EPA 300.0** Analysis Date: **8/25/2022** SeqNo: **4799755**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.430	0.25	6.250	1.016	86.6	80	120	6.669	3.65	20	

Sample ID: **N052283-005DDUP** SampType: **DUP** TestCode: **300WLLNO3** Units: **mg/L** Prep Date: RunNo: **165146**
Client ID: **ZZZZZZ** Batch ID: **R165146** TestNo: **EPA 300.0** Analysis Date: **8/25/2022** SeqNo: **4799759**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	0.310	0.50						0.3370	0	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **N052283-005DMS**	SampType: **MS**	TestCode: **300WLLNO3**	Units: **mg/L**	Prep Date:	RunNo: **165146**
Client ID: **ZZZZZZ**	Batch ID: **R165146**	TestNo: **EPA 300.0**		Analysis Date: **8/25/2022**	SeqNo: **4799760**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.133	0.50	12.50	0.3370	86.4	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-075-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 8:52:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/25/2022 01:31 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-090-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 8:28:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/25/2022 01:47 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52D-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 12:11:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/25/2022 02:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-918-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 12:21:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/25/2022 02:18 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52M-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 11:48:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/25/2022 02:33 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52S-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 11:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.9	0.14	1.0		mg/L	1	8/25/2022 04:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53D-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 10:44:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/25/2022 04:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53M-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/25/2022 04:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53S-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 9:49:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.5	0.14	1.0		mg/L	1	8/25/2022 04:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R165151**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165151**
Client ID: **PBW**	Batch ID: **R165151**	TestNo: **SM 5310C**		Analysis Date: **8/25/2022**	SeqNo: **4800089**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R165151**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165151**
Client ID: **LCSW**	Batch ID: **R165151**	TestNo: **SM 5310C**		Analysis Date: **8/25/2022**	SeqNo: **4800090**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.184	1.0	5.000	0	104	85	115				

Sample ID: **N052282-007CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165151**
Client ID: **ZZZZZZ**	Batch ID: **R165151**	TestNo: **SM 5310C**		Analysis Date: **8/25/2022**	SeqNo: **4800109**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	232.730	50	250.0	0	93.1	75	125				

Sample ID: **N052282-007CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165151**
Client ID: **ZZZZZZ**	Batch ID: **R165151**	TestNo: **SM 5310C**		Analysis Date: **8/25/2022**	SeqNo: **4800110**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	234.140	50	250.0	0	93.7	75	125	232.7	0.604	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-075-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 8:52:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220907B**	QC Batch: **94419**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	3000	13	20		µg/L	1	9/7/2022 09:51 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-090-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 8:28:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94419**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	1000	13	20		µg/L	1	8/28/2022 04:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52D-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 12:11:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94419**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	740	13	20		µg/L	1	8/28/2022 04:14 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-918-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 12:21:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94419**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	700	13	20		µg/L	1	8/28/2022 04:19 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52M-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 11:48:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94419**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	1600	13	20		µg/L	1	8/28/2022 04:24 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52S-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 11:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94419**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	20000	13	20		µg/L	1	8/28/2022 04:29 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53D-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 10:44:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94419**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	250	13	20		µg/L	1	8/28/2022 04:35 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53M-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94419**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	440	13	20		µg/L	1	8/28/2022 04:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53S-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 9:49:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94419**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	5900	13	20		µg/L	1	8/28/2022 04:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94419**	SampType: **MBLK**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165203**
Client ID: **PBW**	Batch ID: **94419**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803743**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-94419**	SampType: **LCS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165203**
Client ID: **LCSW**	Batch ID: **94419**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803744**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	108.905	20	100.0	0	109	85	115				

Sample ID: **N052283-001B-MS**	SampType: **MS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165476**
Client ID: **ZZZZZZ**	Batch ID: **94419**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/7/2022**	SeqNo: **4820449**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	3331.898	20	100.0	3047	284	75	125				S

Sample ID: **N052283-001B-MSD**	SampType: **MSD**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165476**
Client ID: **ZZZZZZ**	Batch ID: **94419**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/7/2022**	SeqNo: **4820450**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	3338.735	20	100.0	3047	291	75	125	3332	0.205	20	S

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **N052283-001B-PS** SampType: **PS** TestCode: **6010_WDPG** Units: **µg/L** Prep Date: RunNo: **165476**
Client ID: **ZZZZZZ** Batch ID: **94419** TestNo: **EPA 6010B** **EPA 3010A** Analysis Date: **9/7/2022** SeqNo: **4820446**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	3341.618	20	100.0	3047	294	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-075-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 8:52:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	7.0	0.050	0.10		µg/L	1	8/26/2022 05:26 AM
Barium	52	0.083	1.0		µg/L	1	8/26/2022 05:26 AM
Manganese	670	0.13	2.5		µg/L	5	8/27/2022 12:41 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-090-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 8:28:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:		**8/25/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 05:32 AM
Barium	54	0.083	1.0		µg/L	1	8/26/2022 05:32 AM
Manganese	640	0.66	12		µg/L	25	9/8/2022 05:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52D-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 12:11:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 05:38 AM
Barium	36	0.083	1.0		µg/L	1	8/26/2022 05:38 AM
Manganese	380	0.13	2.5		µg/L	5	8/27/2022 01:05 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052283-006

Client Sample ID: MW-918-Q322
Collection Date: 8/24/2022 12:21:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:		**8/25/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 05:44 AM
Barium	35	0.083	1.0		µg/L	1	8/26/2022 05:44 AM
Manganese	330	0.13	2.5		µg/L	5	8/27/2022 01:11 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52M-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 11:48:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:		**8/25/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 05:50 AM
Barium	56	0.083	1.0		µg/L	1	8/26/2022 05:50 AM
Manganese	280	0.13	2.5		µg/L	5	8/27/2022 01:17 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52S-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 11:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 05:56 AM
Barium	850	2.1	25		µg/L	25	9/12/2022 05:34 PM
Manganese	1300	0.66	12		µg/L	25	8/27/2022 01:23 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53D-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 10:44:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:		**8/25/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 06:02 AM
Barium	53	0.083	1.0		µg/L	1	8/26/2022 06:02 AM
Manganese	1200	0.66	12		µg/L	25	8/27/2022 01:29 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53M-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:		**8/25/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 06:08 AM
Barium	65	0.083	1.0		µg/L	1	8/26/2022 06:08 AM
Manganese	420	0.13	2.5		µg/L	5	8/27/2022 01:35 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53S-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 9:49:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:		**8/25/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 06:31 AM
Barium	190	0.42	5.0		µg/L	5	9/8/2022 06:13 PM
Manganese	1500	0.66	12		µg/L	25	8/27/2022 01:41 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94422**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **PBW**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803607**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	0.108	0.50									

Sample ID: **LCS-94422**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **LCSW**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803608**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.300	0.10	10.00	0	103	85	115				
Barium	9.871	1.0	10.00	0	98.7	85	115				
Manganese	105.351	0.50	100.0	0	105	85	115				

Sample ID: **N052262-011BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803618**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	6.532	0.10	10.00	0	65.3	75	125				S
Barium	44.365	1.0	10.00	38.18	61.8	75	125				S

Sample ID: **N052262-011BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803619**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	5.778	0.10	10.00	0	57.8	75	125	6.532	12.3	20	S
Barium	47.657	1.0	10.00	38.18	94.8	75	125	44.36	7.15	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052262-011BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/27/2022**	SeqNo: **4804980**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	331.296	12	100.0	295.7	35.6	75	125				S

Sample ID: **N052262-011BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/27/2022**	SeqNo: **4804981**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	308.079	12	100.0	295.7	12.4	75	125	331.3	7.26	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052262-011B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803617**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	6.583	0.10	10.00	0	65.8	80	120				S
Barium	44.703	1.0	10.00	38.18	65.2	80	120				S

Sample ID: **N052262-011B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/27/2022**	SeqNo: **4804979**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	307.203	12	100.0	295.7	11.5	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us: N052283
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement: Excel EDD; Geotracker; Labspec; Others ✓ Specify: RWQCB; Global ID:
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	QA/QC: RTNE; RWQCB ✓; CalTrans; LEVEL III; LEVEL IV; Regulatory; Specify State:
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Sample Receipt Condition: 1. Chilled ✓; 2. Headspace; 3. Container Intact ✓; 4. Seal Present; 5. IR number 3
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	6. Method of Cooling: ICE
Submitted By: Riggie Top		Phone: 949-727-1400, ext 200 Fax:	Sample Temp: 3.5C 2.1°C
Title: Field Tech	Phone: 916-786-3302 Fax:		
Signature: Date: 8/24/22	Sampled By: Riggie Top		Courier: ASSET
I hereby authorize ASSET Labs to perform the tests indicated below.	*I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for*		Tracking No.:
Project Name: PG&E Topock - PCM	Signature: Date: 8/24/22		
Project Number: 30121866.3Q22GW			

Matrix: Ground X; Potable; NPDES; Surface; Sediment; Soil; Other Solid

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate (EPA 300.0) (1 L poly)	Nitrate/nitrite as Nitrogen (SM 4500-NO3), H2SO4 (125 mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052283-01	MW-43-075-Q322	8/24/2022	8:52		X		X			X			X		E	6	P	BNS	
2	-02	MW-43-075-EB-Q322	8/24/2022	8:31		X										E	1	P	BNS	
3	-03	MW-43-090-Q322	8/24/2022	8:28		X		X			X			X		E	6	P	BNS	
4	-04	MW-43-090-EB-Q322	8/24/2022	8:05		X										E	6	P	BNS	
5	-05	MW-52D-Q322	8/24/2022	12:11		X		X			X			X		E	6	P	BNS	
6	-06	MW-918-Q322	8/24/2022	12:21		X		X			X			X		E	6	P	BNS	
7	-07	MW-52M-Q322	8/24/2022	11:48		X		X			X			X		E	6	P	BNS	
8	-08	MW-52S-Q322	8/24/2022	11:26		X		X			X			X		E	6	P	BNS	
9	-09	MW-53D-Q322	8/24/2022	10:44		X		X			X			X		E	6	P	BNS	
10	-10	MW-53M-Q322	8/24/2022	10:14		X		X			X			X		E	6	P	BNS	
11	-11	MW-53S-Q322	8/24/2022	9:49		X		X			X			X		E	6	P	BNS	
12	-12	EB-730-Q322	8/24/2022	13:50		X										E	1	P	BNS	
13	-13	MW-75-033-Q322	8/24/2022	13:25		X										E	1	P	BNS	
14	-14	MW-75-117-Q322	8/24/2022	13:44		X										E	1	P	BNS	

Relinquished by (Signature and Printed Name):	Date/Time:	Received by (Signature and Printed Name):	Date/Time:
Riggie Top	8/24/22 1445	Dante Ortiz	8/24/22 14:45
Dante Ortiz	8/24/22 19:54	Dante Ortiz	8/24/22 19:54

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives: H=HCL; N=HNO_3; S=H_2SO_4; C=4°C; Z=Zn(AC)$_2$; O=NaOH; T=$Na_2S_2O_3$; Others/Specify: B (NH4)2SO4/NH4OH

Container Type: T=Tube; V=VOA; P=Pint; J=Jar; B=Tedlar; G=Glass; M=Metal; M=Metal; C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/24/2022	Workorder:	N052283
Rep sample Temp (Deg C):	3.5/2.1	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: EF EFanegoF 8/25/2022

Reviewed By: for: MBC 8/27/2022

ASSET Laboratories

WORK ORDER Summary

27-Aug-22

WorkOrder: N052283

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/24/2022 7:54 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052283-001A	MW-43-075-Q322	8/24/2022 8:52:00 AM	9/8/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052283-001B			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/8/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052283-001C			9/8/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052283-001D			9/8/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052283-002A	MW-43-075-EB-Q322	8/24/2022 8:31:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052283-003A	MW-43-090-Q322	8/24/2022 8:28:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052283-003B			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/8/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052283-003C			9/8/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052283-003D			9/8/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052283-004A	MW-43-090-EB-Q322	8/24/2022 8:05:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052283-005A	MW-52D-Q322	8/24/2022 12:11:00 PM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052283-005B			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/8/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052283-005C			9/8/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

27-Aug-22

WorkOrder: N052283

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/24/2022 7:54 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052283-005D	MW-52D-Q322	8/24/2022 12:11:00 PM	9/8/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052283-006A	MW-918-Q322	8/24/2022 12:21:00 PM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052283-006B			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/8/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052283-006C			9/8/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052283-006D			9/8/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052283-007A	MW-52M-Q322	8/24/2022 11:48:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052283-007B			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/8/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052283-007C			9/8/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052283-007D			9/8/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052283-008A	MW-52S-Q322	8/24/2022 11:26:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052283-008B			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/8/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052283-008C			9/8/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052283-008D			9/8/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

27-Aug-22

WorkOrder: N052283

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/24/2022 7:54 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052283-009A	MW-53D-Q322	8/24/2022 10:44:00 AM	9/8/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052283-009B			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/8/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052283-009C			9/8/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052283-009D			9/8/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052283-010A	MW-53M-Q322	8/24/2022 10:14:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052283-010B			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/8/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052283-010C			9/8/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052283-010D			9/8/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052283-011A	MW-53S-Q322	8/24/2022 9:49:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052283-011B			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/8/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052283-011C			9/8/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052283-011D			9/8/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052283-012A	EB-730-Q322	8/24/2022 1:50:00 PM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

27-Aug-22

WorkOrder: N052283

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/24/2022 7:54 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052283-013A	MW-75-033-Q322	8/24/2022 1:25:00 PM	9/8/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052283-014A	MW-75-117-Q322	8/24/2022 1:44:00 PM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052283-015A	FOLDER	9/8/2022	9/8/2022		Folder	Folder	☐	☐	☐	LAB
			9/8/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/8/2022		Folder	Folder	☐	☐	☐	LAB

September 03, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052300

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 25, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Dilution was necessary for most of the samples due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052300
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052300-001A	MW-75-202-Q322	Groundwater	8/25/2022 8:30:00 AM	8/25/2022	9/3/2022
N052300-002A	MW-919-Q322	Groundwater	8/25/2022 8:40:00 AM	8/25/2022	9/3/2022
N052300-003A	MW-75-267-Q322	Groundwater	8/25/2022 8:57:00 AM	8/25/2022	9/3/2022
N052300-004A	MW-75-337-Q322	Groundwater	8/25/2022 9:16:00 AM	8/25/2022	9/3/2022
N052300-005A	EB-732-Q322	Groundwater	8/25/2022 12:20:00 PM	8/25/2022	9/3/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-75-202-Q322
Lab Order:	N052300	**Collection Date:**	8/25/2022 8:30:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052300-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220829A**	QC Batch: **R165279**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/29/2022 03:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-919-Q322
Lab Order:	N052300	**Collection Date:**	8/25/2022 8:40:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052300-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220829A**	QC Batch: **R165279**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/29/2022 04:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-75-267-Q322
Lab Order:	N052300	**Collection Date:**	8/25/2022 8:57:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052300-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220829A**	QC Batch: **R165279**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/29/2022 04:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-75-337-Q322
Lab Order:	N052300	**Collection Date:**	8/25/2022 9:16:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052300-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
EPA 218.6							
RunID: **NV00922-IC7_220829A** QC Batch: **R165279** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/29/2022 05:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-732-Q322
Lab Order:	N052300	**Collection Date:**	8/25/2022 12:20:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052300-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220829A**	QC Batch: **R165279**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/29/2022 01:54 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052300
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	MB-R165279	SampType:	MBLK	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279		
Client ID:	PBW	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808636		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	ND	0.20											

Sample ID	LCS-R165279	SampType:	LCS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279		
Client ID:	LCSW	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808637		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	5.205	0.20	5.000	0	104	90	110						

Sample ID	N052301-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279		
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808639		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	28.882	4.0	20.00	8.816	100	90	110						

Sample ID	N052301-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279		
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808644		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	57.369	1.0	25.00	31.48	104	90	110						

Sample ID	N052301-002AMSD	SampType:	MSD	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279		
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808645		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	57.378	1.0	25.00	31.48	104	90	110	57.37	0.0148	20			

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052300
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **N052301-006AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165279**
Client ID: **ZZZZZZ**	Batch ID: **R165279**	TestNo: **EPA 218.6**		Analysis Date: **8/29/2022**	SeqNo: **4808649**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.000	0.20	1.000	0	100	90	110				

Sample ID **N052301-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165279**
Client ID: **ZZZZZZ**	Batch ID: **R165279**	TestNo: **EPA 218.6**		Analysis Date: **8/29/2022**	SeqNo: **4808650**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	548.655	10	250.0	281.2	107	90	110				

Sample ID **N052301-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165279**
Client ID: **ZZZZZZ**	Batch ID: **R165279**	TestNo: **EPA 218.6**		Analysis Date: **8/29/2022**	SeqNo: **4808651**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	686.145	10	250.0	427.4	103	90	110				

Sample ID **N052301-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165279**
Client ID: **ZZZZZZ**	Batch ID: **R165279**	TestNo: **EPA 218.6**		Analysis Date: **8/29/2022**	SeqNo: **4808652**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	384.125	10	250.0	122.0	105	90	110				

Sample ID **N052301-003ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165279**
Client ID: **ZZZZZZ**	Batch ID: **R165279**	TestNo: **EPA 218.6**		Analysis Date: **8/29/2022**	SeqNo: **4808653**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	287.635	10						281.2	2.27	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052300
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052300-005AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808655

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.048	0.20	1.000	0	105	90	110				

Sample ID	N052300-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808659

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.032	1.0	5.000	0	101	90	110				

Sample ID	N052300-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808661

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.252	1.0	5.000	0	105	90	110				

Sample ID	N052300-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808665

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.157	1.0	5.000	0	103	90	110				

Sample ID	N052300-004AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808667

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.092	1.0	5.000	0	102	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

ARCUS02 C: 9/9/2022 12:00 AM
FOLDER R: 8/25/2022
N052300-006A 1 of 1

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement: Excel EDD; Geotracker; Labspec; Others ✓; Specify: RWQCB; Global ID:
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	QA/QC: RTNE; RWQCB ✓; CalTrans; LEVEL III; LEVEL IV; Regulatory; Specify State:
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	
Submitted By: Riggie Tap		Phone: 949-727-1400, ext 200 Fax:	
Title: Field Tech	Phone: 916-786-3302 Fax:		
Signature: Date: 8/25/22	Sampled By: Riggie Tap		

I hereby authorize ASSET Labs to perform the tests indicated below.

I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for

Project Name: PG&E Topock - PCM
Project Number: 30121866.3Q22GW

Signature: Date: 8/25/22

Matrix: Ground X; Sediment; Potable; Soil; NPDES; Other Solid; Surface

Sample Receipt Condition: 1. Chilled ✓; 2. Headspace; 3. Container Intact ✓; 4. Seal Present; 5. IR number 3; 6. Method of Cooling: ICE; Sample Temp: 1.8°C; Courier:; Tracking No.:

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate (EPA 300.0) (1 L poly)	Nitrate/nitrite as Nitrogen (SM 4500-NO3), H2SO4 (125 mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052300-01	MW-75-202-Q322	8/25/2022	8:30		X										E	1	P	BNS	
2	-02	MW-919-Q322	8/25/2022	8:40		X										E	1	P	BNS	
3	-03	MW-75-267-Q322	8/25/2022	8:57		X										E	1	P	BNS	
4	-04	MW-75-337-Q322	8/25/2022	9:16		X										E	1	P	BNS	
5	-05	EB-732-Q322	8/25/2022	12:20		X										E	1	P	BNS	
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Riggie Tap	8/25/22 1510	Dante Ortiz	8/25/22 15:10
Dante Ortiz	8/25/22 18:47	Dante Ortiz	8/25/22 18:47

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
   Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B	(NH4)2SO4/NH4OH		M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/25/2022	Workorder:	N052300
Rep sample Temp (Deg C):	1.8	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☐	No ☐	NA ☑
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: EF EFanegoF 8/26/2022

Reviewed By: for: MBC 8/27/2022

ASSET Laboratories

WORK ORDER Summary

26-Aug-22

WorkOrder: N052300

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/25/2022 6:47 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052300-001A	MW-75-202-Q322	8/25/2022 8:30:00 AM	9/9/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052300-002A	MW-919-Q322	8/25/2022 8:40:00 AM	9/9/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052300-003A	MW-75-267-Q322	8/25/2022 8:57:00 AM	9/9/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052300-004A	MW-75-337-Q322	8/25/2022 9:16:00 AM	9/9/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052300-005A	EB-732-Q322	8/25/2022 12:20:00 PM	9/9/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052300-006A	FOLDER	9/9/2022	9/9/2022		Folder	Folder	☐	☐	☐	LAB
			9/9/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/9/2022		Folder	Folder	☐	☐	☐	LAB

September 16, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052301

RE: PG&E Topock - RCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 25, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab Order: N052301

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Because the results for total dissolved chromium (11 ug/L) and hexavalent chromium (8.8 ug/L) for sample N052301-001 (MW-38D-Q322) are discrepant, sample re-analysis and Matrix Spike protocol were performed and result confirmed initial analysis.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for EPA 6020_Dissolved:

Sample N052301-001 was diluted due to matrix. Digestate is colored.

Because the results for total dissolved chromium (11 ug/L) and hexavalent chromium (8.8 ug/L) for sample N052301-001 (MW-38D-Q322) are discrepant, sample from both the total dissolved chromium and hexavalent chromium containers were redigested and analyzed for total dissolved chromium. The results from the redigested samples were 9.5 and 10 ug/L, respectively. Since these data confirmed the original result for total dissolved chromium, the original result is reported.

ASSET Laboratories

Date: *16-Sep-22*

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab Order: N052301
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052301-001A	MW-38D-Q322	Groundwater	8/25/2022 8:38:00 AM	8/25/2022	9/16/2022
N052301-001B	MW-38D-Q322	Groundwater	8/25/2022 8:38:00 AM	8/25/2022	9/16/2022
N052301-001C	MW-38D-Q322	Groundwater	8/25/2022 8:38:00 AM	8/25/2022	9/16/2022
N052301-002A	MW-38S-Q322	Groundwater	8/25/2022 9:16:00 AM	8/25/2022	9/16/2022
N052301-002B	MW-38S-Q322	Groundwater	8/25/2022 9:16:00 AM	8/25/2022	9/16/2022
N052301-002C	MW-38S-Q322	Groundwater	8/25/2022 9:16:00 AM	8/25/2022	9/16/2022
N052301-003A	MW-65-160-Q322	Groundwater	8/25/2022 11:43:00 AM	8/25/2022	9/16/2022
N052301-003B	MW-65-160-Q322	Groundwater	8/25/2022 11:43:00 AM	8/25/2022	9/16/2022
N052301-003C	MW-65-160-Q322	Groundwater	8/25/2022 11:43:00 AM	8/25/2022	9/16/2022
N052301-004A	MW-65-225-Q322	Groundwater	8/25/2022 11:48:00 AM	8/25/2022	9/16/2022
N052301-004B	MW-65-225-Q322	Groundwater	8/25/2022 11:48:00 AM	8/25/2022	9/16/2022
N052301-004C	MW-65-225-Q322	Groundwater	8/25/2022 11:48:00 AM	8/25/2022	9/16/2022
N052301-005A	MW-69-195-Q322	Groundwater	8/25/2022 10:56:00 AM	8/25/2022	9/16/2022
N052301-005B	MW-69-195-Q322	Groundwater	8/25/2022 10:56:00 AM	8/25/2022	9/16/2022
N052301-005C	MW-69-195-Q322	Groundwater	8/25/2022 10:56:00 AM	8/25/2022	9/16/2022
N052301-006A	EB-731-Q322	Groundwater	8/25/2022 12:10:00 PM	8/25/2022	9/16/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-38D-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 8:38:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220829A**	QC Batch: **R165279**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	8.8	0.50	4.0		µg/L	20	8/29/2022 11:23 AM
DISSOLVED METALS BY ICP-MS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220904C**	QC Batch: **94557**			PrepDate:	**9/2/2022**		Analyst: **DJ**
Chromium	11	0.18	5.0		µg/L	5	9/4/2022 08:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-38S-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 9:16:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
EPA 218.6							
RunID: **NV00922-IC7_220829A** QC Batch: **R165279** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	31	0.13	1.0		µg/L	5	8/29/2022 11:42 AM
DISSOLVED METALS BY ICP-MS							
EPA 3010A **EPA 6020**							
RunID: **NV00922-ICP8_220904C** QC Batch: **94557** PrepDate: **9/2/2022** Analyst: **DJ**							
Chromium	31	0.035	1.0		µg/L	1	9/4/2022 09:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-65-160-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 11:43:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220829A**	QC Batch: **R165279**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	280	1.3	10		µg/L	50	8/29/2022 11:51 AM
DISSOLVED METALS BY ICP-MS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220915B**	QC Batch: **94714**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Chromium	300	0.18	5.0		µg/L	5	9/15/2022 06:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-65-225-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 11:48:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220829A**	QC Batch: **R165279**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	430	1.3	10		µg/L	50	8/29/2022 12:01 PM
DISSOLVED METALS BY ICP-MS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220909B**	QC Batch: **94557**			PrepDate:	**9/2/2022**		Analyst: **DJ**
Chromium	510	0.18	5.0		µg/L	5	9/9/2022 01:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-69-195-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 10:56:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220829A**	QC Batch: **R165279**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	120	1.3	10		µg/L	50	8/29/2022 12:10 PM
DISSOLVED METALS BY ICP-MS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220904C**	QC Batch: **94557**			PrepDate:	**9/2/2022**		Analyst: **DJ**
Chromium	100	0.035	1.0		µg/L	1	9/4/2022 09:18 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-731-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 12:10:00 PM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220829A**	QC Batch: **R165279**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/29/2022 12:57 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052301
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	MB-R165279	SampType:	MBLK	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	PBW	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808636

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID	LCS-R165279	SampType:	LCS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	LCSW	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808637

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.205	0.20	5.000	0	104	90	110				

Sample ID	N052301-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808639

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	28.882	4.0	20.00	8.816	100	90	110				

Sample ID	N052301-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808644

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	57.369	1.0	25.00	31.48	104	90	110				

Sample ID	N052301-002AMSD	SampType:	MSD	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808645

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	57.378	1.0	25.00	31.48	104	90	110	57.37	0.0148	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052301
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052301-006AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808649

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.000	0.20	1.000	0	100	90	110				

Sample ID	N052301-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808650

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	548.655	10	250.0	281.2	107	90	110				

Sample ID	N052301-004AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808651

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	686.145	10	250.0	427.4	103	90	110				

Sample ID	N052301-005AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808652

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	384.125	10	250.0	122.0	105	90	110				

Sample ID	N052301-003ADUP	SampType:	DUP	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808653

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	287.635	10						281.2	2.27	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052301
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052300-005AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808655

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.048	0.20	1.000	0	105	90	110				

Sample ID	N052300-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808659

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.032	1.0	5.000	0	101	90	110				

Sample ID	N052300-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808661

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.252	1.0	5.000	0	105	90	110				

Sample ID	N052300-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808665

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.157	1.0	5.000	0	103	90	110				

Sample ID	N052300-004AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808667

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.092	1.0	5.000	0	102	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052301
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020DIS_CrPGE_TPK

Sample ID	MB-94557	SampType:	MBLK	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	9/2/2022	RunNo:	165443
Client ID:	PBW	Batch ID:	94557	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/4/2022	SeqNo:	4819240

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									

Sample ID	LCS-94557	SampType:	LCS	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	9/2/2022	RunNo:	165443
Client ID:	LCSW	Batch ID:	94557	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/4/2022	SeqNo:	4819241

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.868	1.0	10.00	0	98.7	85	115				

Sample ID	N052394-001A-MS	SampType:	MS	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	9/2/2022	RunNo:	165571
Client ID:	ZZZZZZ	Batch ID:	94557	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/8/2022	SeqNo:	4826456

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	13.045	1.0	10.00	3.575	94.7	75	125				

Sample ID	N052394-001A-MSD	SampType:	MSD	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	9/2/2022	RunNo:	165571
Client ID:	ZZZZZZ	Batch ID:	94557	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/8/2022	SeqNo:	4826457

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	13.002	1.0	10.00	3.575	94.3	75	125	13.04	0.330	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052301
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020DIS_CrPGE_TPK

Sample ID	MB-94714	SampType:	MBLK	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	9/14/2022	RunNo:	165724
Client ID:	PBW	Batch ID:	94714	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/15/2022	SeqNo:	4834856

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									

Sample ID	LCS-94714	SampType:	LCS	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	9/14/2022	RunNo:	165724
Client ID:	LCSW	Batch ID:	94714	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/15/2022	SeqNo:	4834857

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10.433	1.0	10.00	0	104	85	115				

Sample ID	N052565-007BMS	SampType:	MS	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	9/14/2022	RunNo:	165724
Client ID:	ZZZZZZ	Batch ID:	94714	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/15/2022	SeqNo:	4834870

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	11.768	1.0	10.00	2.166	96.0	75	125				

Sample ID	N052565-007BMSD	SampType:	MSD	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	9/14/2022	RunNo:	165724
Client ID:	ZZZZZZ	Batch ID:	94714	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/15/2022	SeqNo:	4834871

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	11.471	1.0	10.00	2.166	93.1	75	125	11.77	2.56	20	

Sample ID	N052565-015BMS	SampType:	MS	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	9/14/2022	RunNo:	165724
Client ID:	ZZZZZZ	Batch ID:	94714	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/15/2022	SeqNo:	4834883

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10.632	1.0	10.00	0.5205	101	75	125				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052301
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020DIS_CrPGE_TPK

Sample ID	N052565-015BMSD	SampType:	MSD	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	9/14/2022	RunNo:	165724
Client ID:	ZZZZZZ	Batch ID:	94714	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/15/2022	SeqNo:	4834884

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10.590	1.0	10.00	0.5205	101	75	125	10.63	0.392	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-38D-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 8:38:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220826A**	QC Batch: **R165177**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.19	1.0		mg/L	20	8/26/2022 09:34 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-38S-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 9:16:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220826A**	QC Batch: **R165177**			PrepDate:			Analyst: **RAB**
Nitrate as N	5.2	0.095	0.50		mg/L	10	8/26/2022 09:50 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-65-160-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 11:43:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220826A**	QC Batch: **R165177**			PrepDate:			Analyst: **RAB**
Nitrate as N	14	0.095	0.50		mg/L	10	8/26/2022 10:06 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-65-225-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 11:48:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220826A**	QC Batch: **R165177**			PrepDate:			Analyst: **RAB**
Nitrate as N	7.7	0.048	0.25		mg/L	5	8/26/2022 10:22 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-69-195-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 10:56:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220826A**	QC Batch: **R165177**			PrepDate:			Analyst: **RAB**
Nitrate as N	8.4	0.095	0.50		mg/L	10	8/26/2022 10:38 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052301
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	MB-R165177_NO3	SampType:	MBLK	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165177
Client ID:	PBW	Batch ID:	R165177	TestNo:	EPA 300.0			Analysis Date:	8/26/2022	SeqNo:	4802022

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID	LCS-R165177_NO3	SampType:	LCS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165177
Client ID:	LCSW	Batch ID:	R165177	TestNo:	EPA 300.0			Analysis Date:	8/26/2022	SeqNo:	4802023

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.166	0.050	1.250	0	93.3	90	110				

Sample ID	N052301-002BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165177
Client ID:	ZZZZZZ	Batch ID:	R165177	TestNo:	EPA 300.0			Analysis Date:	8/26/2022	SeqNo:	4802029

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	17.117	0.50	12.50	5.204	95.3	80	120				

Sample ID	N052301-002BMSD	SampType:	MSD	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165177
Client ID:	ZZZZZZ	Batch ID:	R165177	TestNo:	EPA 300.0			Analysis Date:	8/26/2022	SeqNo:	4802030

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	19.457	0.50	12.50	5.204	114	80	120	17.12	12.8	20	

Sample ID	N052301-003BDUP	SampType:	DUP	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165177
Client ID:	ZZZZZZ	Batch ID:	R165177	TestNo:	EPA 300.0			Analysis Date:	8/26/2022	SeqNo:	4802031

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	15.676	0.50						13.57	14.4	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-38D-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 8:38:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220904C**	QC Batch: **94557**			PrepDate:		**9/2/2022**	Analyst: **DJ**
Molybdenum	32	0.60	2.5		µg/L	5	9/4/2022 08:48 PM
Selenium	ND	0.22	2.5		µg/L	5	9/4/2022 08:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-38S-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 9:16:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220904C**	QC Batch: **94557**			PrepDate:		**9/2/2022**	Analyst: **DJ**
Molybdenum	9.0	0.12	0.50		µg/L	1	9/4/2022 09:00 PM
Selenium	5.0	0.044	0.50		µg/L	1	9/4/2022 09:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-65-160-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 11:43:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220904C**	QC Batch: **94557**			PrepDate:		**9/2/2022**	Analyst: **DJ**
Molybdenum	24	0.12	0.50		µg/L	1	9/4/2022 09:06 PM
Selenium	11	0.044	0.50		µg/L	1	9/4/2022 09:06 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-65-225-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 11:48:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220904C**	QC Batch: **94557**			PrepDate:		**9/2/2022**	Analyst: **DJ**
Molybdenum	28	0.12	0.50		µg/L	1	9/4/2022 09:12 PM
Selenium	5.8	0.044	0.50		µg/L	1	9/4/2022 09:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-69-195-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 10:56:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220904C**	QC Batch: **94557**			PrepDate:		**9/2/2022**	Analyst: **DJ**
Molybdenum	61	0.12	0.50		µg/L	1	9/4/2022 09:18 PM
Selenium	6.1	0.044	0.50		µg/L	1	9/4/2022 09:18 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052301
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	MB-94557	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/2/2022	RunNo:	165443
Client ID:	PBW	Batch ID:	94557	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/4/2022	SeqNo:	4819364

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	ND	0.50									
Selenium	ND	0.50									

Sample ID	LCS-94557	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/2/2022	RunNo:	165443
Client ID:	LCSW	Batch ID:	94557	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/4/2022	SeqNo:	4819365

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	9.123	0.50	10.00	0	91.2	85	115				
Selenium	9.140	0.50	10.00	0	91.4	85	115				

Sample ID	N052394-001A-MS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/2/2022	RunNo:	165443
Client ID:	ZZZZZZ	Batch ID:	94557	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/4/2022	SeqNo:	4819379

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	13.477	0.50	10.00	3.720	97.6	75	125				
Selenium	10.107	0.50	10.00	0.2746	98.3	75	125				

Sample ID	N052394-001A-MSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/2/2022	RunNo:	165443
Client ID:	ZZZZZZ	Batch ID:	94557	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/4/2022	SeqNo:	4819380

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	13.632	0.50	10.00	3.720	99.1	75	125	13.48	1.14	20	
Selenium	10.229	0.50	10.00	0.2746	99.5	75	125	10.11	1.20	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

ARCUS02 C: 9/9/2022 12:00 AM
FOLDER R: 8/25/2022
N052301-007A 1 of 1

ASSET LABORATORIES

ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requi
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	Excel EDD / RTNE
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker / RWQCB ✓
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	Labspec / CalTrans
Submitted By: Riggie Tep		Phone: 949-727-1400, ext 200 Fax:	Others ✓ / LEVEL III
Title: Field Tech	Phone: 916-786-3302 Fax:		Specify: RWQCB / LEVEL IV
Signature: Date: 8/25/22	Sampled By: Riggie Tep		Global ID: / Regulatory / Specify State:
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for		
Project Name: PG&E Topock - RCM	Signature: Date: 8/25/22		
Project Number: 30121866.3Q22GW			

Matrix			
Ground	X	Sediment	
Potable		Soil	
NPDES		Other Solid	
Surface			

1. Chilled	Y ✓ N
2. Headspace	
3. Container Intact	✓
4. Seal Present	
5. IR number	
6. Method of Cooling:	ICE
Sample Temp:	1.8°C
Courier:	
Tracking No.:	

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH 250 mL poly	Nitrate (EPA 300.0) 1 L poly	Dissolved metals (SW6020) FF; HNO3 Manganese, 500mL poly	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, 500mL poly	Dissolved metals (SW6020) FF; HNO3 Molybdenum 500mL poly	Dissolved metals (SW6020) FF; HNO3 Selenium 500mL poly	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052301-01	MW-38D-Q322	8/25/2022	8:38		X	X		X	X	X	E	3	P	BNS	
2	-02	MW-38S-Q322	8/25/2022	9:16		X	X		X	X	X	E	3	P	BNS	
3	-03	MW-65-160-Q322	8/25/2022	11:43		X	X		X	X	X	E	3	P	BNS	
4	-04	MW-65-225-Q322	8/25/2022	11:48		X	X		X	X	X	E	3	P	BNS	
5	-05	MW-69-195-Q322	8/25/2022	10:56		X	X		X	X	X	E	3	P	BNS	
	-06	EB-731-Q322	8/25/2022	12:10		X						E	3	P	BNS	
7																
8																
9																
10																
11																
12																
13																
14																

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Riggie Tep	8/25/22 1510	Dante Ortiz	8/25/22 1510
Dante Ortiz	8/25/22 18:47	Dante Ortiz	8/25/22 18:47

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms

1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
   Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:

H=HCL	N=HNO_3	S=H_2SO_4	C=4°C
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$	
Others/Specify:	B (NH4)2SO4/NH4OH		

Container Type:

T=Tube	V=VOA	P=Pint
J=Jar	B=Tedlar	G=Glass
M=Metal	M=Metal	C=Can

White=Laboratory Copy

Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/25/2022	Workorder:	N052301
Rep sample Temp (Deg C):	1.8	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: EF EFanegoF 8/26/2022

Reviewed By: for: MBC 8/27/2022

ASSET Laboratories

WORK ORDER Summary

26-Aug-22

WorkOrder: N052301

Client ID: ARCUS02

Project: PG&E Topock - RCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/25/2022 6:47 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052301-001A	MW-38D-Q322	8/25/2022 8:38:00 AM	9/9/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052301-001B			9/9/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052301-001C			9/9/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/9/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			9/9/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052301-002A	MW-38S-Q322	8/25/2022 9:16:00 AM	9/9/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052301-002B			9/9/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052301-002C			9/9/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/9/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			9/9/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052301-003A	MW-65-160-Q322	8/25/2022 11:43:00 AM	9/9/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052301-003B			9/9/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052301-003C			9/9/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/9/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			9/9/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052301-004A	MW-65-225-Q322	8/25/2022 11:48:00 AM	9/9/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052301-004B			9/9/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052301-004C			9/9/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/9/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			9/9/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052301-005A	MW-69-195-Q322	8/25/2022 10:56:00 AM	9/9/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052301-005B			9/9/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

26-Aug-22

WorkOrder: N052301

Client ID: ARCUS02

Project: PG&E Topock - RCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/25/2022 6:47 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052301-005C	MW-69-195-Q322	8/25/2022 10:56:00 AM	9/9/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/9/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			9/9/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052301-006A	EB-731-Q322	8/25/2022 12:10:00 PM	9/9/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052301-007A	FOLDER	9/9/2022	9/9/2022		Folder	Folder	☐	☐	☐	LAB
			9/9/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/9/2022		Folder	Folder	☐	☐	☐	LAB

September 22, 2022

Brian Prowd
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052495

RE: PG&E Topock - OMM TCS PWTF, 30106892

Attention: Brian Prowd

Enclosed are the results for sample(s) received on September 08, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - OMM TCS PWTF, 30106892
Lab Order: N052495

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 6020:

Matrix Spike (MS) and /or Matrix Spike Duplicate (MSD) are outside recovery criteria for Chromium in QC samples N052495-001C-MS and N052495-001C-MSD since the analyte concentration in the sample is disproportionate to the spike level. Post Spike (PS) passed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - OMM TCS PWTF, 30106892
Lab Order: N052495
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052495-001A	Backwash Pre-filter-090822	Water	9/8/2022 7:15:00 AM	9/8/2022	9/22/2022
N052495-001B	Backwash Pre-filter-090822	Water	9/8/2022 7:15:00 AM	9/8/2022	9/22/2022
N052495-001C	Backwash Pre-filter-090822	Water	9/8/2022 7:15:00 AM	9/8/2022	9/22/2022
N052495-002A	Backwash Post-filter-090822	Water	9/8/2022 7:30:00 AM	9/8/2022	9/22/2022
N052495-002B	Backwash Post-filter-090822	Water	9/8/2022 7:30:00 AM	9/8/2022	9/22/2022
N052495-002C	Backwash Post-filter-090822	Water	9/8/2022 7:30:00 AM	9/8/2022	9/22/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Pre-filter-090822
Lab Order:	N052495	**Collection Date:**	9/8/2022 7:15:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052495-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220909A**	QC Batch: **R165548**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	420	1.3	10		µg/L	50	9/9/2022 11:35 AM
TOTAL METALS BY ICPMS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220915E**	QC Batch: **94662**			PrepDate:	**9/12/2022**		Analyst: **DJ**
Chromium	450	0.18	5.0		µg/L	5	9/15/2022 05:17 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Post-filter-090822
Lab Order:	N052495	**Collection Date:**	9/8/2022 7:30:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052495-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220909A** QC Batch: **R165548**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	220	1.3	10		µg/L	50	9/9/2022 12:03 PM
TOTAL METALS BY ICPMS							
			EPA 3010A		**EPA 6020**		
RunID: **NV00922-ICP8_220915E** QC Batch: **94662**				PrepDate:	**9/12/2022**		Analyst: **DJ**
Chromium	240	0.18	5.0		µg/L	5	9/15/2022 05:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052495
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R165548**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165548**
Client ID: **PBW**	Batch ID: **R165548**	TestNo: **EPA 218.6**		Analysis Date: **9/9/2022**	SeqNo: **4825364**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R165548**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165548**
Client ID: **LCSW**	Batch ID: **R165548**	TestNo: **EPA 218.6**		Analysis Date: **9/9/2022**	SeqNo: **4825365**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.213	0.20	5.000	0	104	90	110				

Sample ID: **N052495-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165548**
Client ID: **ZZZZZZ**	Batch ID: **R165548**	TestNo: **EPA 218.6**		Analysis Date: **9/9/2022**	SeqNo: **4825369**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	672.215	10	250.0	423.2	99.6	90	110				

Sample ID: **N052495-001AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165548**
Client ID: **ZZZZZZ**	Batch ID: **R165548**	TestNo: **EPA 218.6**		Analysis Date: **9/9/2022**	SeqNo: **4825370**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	669.180	10	250.0	423.2	98.4	90	110	672.2	0.453	20	

Sample ID: **N052495-002ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165548**
Client ID: **ZZZZZZ**	Batch ID: **R165548**	TestNo: **EPA 218.6**		Analysis Date: **9/9/2022**	SeqNo: **4825374**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	218.435	10						217.9	0.264	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052495
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052495-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165548**
Client ID: **ZZZZZZ**	Batch ID: **R165548**	TestNo: **EPA 218.6**		Analysis Date: **9/9/2022**	SeqNo: **4825375**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	487.195	10	250.0	217.9	108	90	110				

Sample ID: **N052497-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165548**
Client ID: **ZZZZZZ**	Batch ID: **R165548**	TestNo: **EPA 218.6**		Analysis Date: **9/9/2022**	SeqNo: **4825376**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2557.540	40	1000	1506	105	90	110				

Sample ID: **N052497-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165548**
Client ID: **ZZZZZZ**	Batch ID: **R165548**	TestNo: **EPA 218.6**		Analysis Date: **9/9/2022**	SeqNo: **4825377**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	9533.300	200	5000	4198	107	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052495
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_W_CRPGE_TPK

Sample ID: **MB-94662**	SampType: **MBLK**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date: **9/12/2022**	RunNo: **165609**
Client ID: **PBW**	Batch ID: **94662**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/12/2022**	SeqNo: **4829857**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.086	1.0									

Sample ID: **LCS-94662**	SampType: **LCS**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date: **9/12/2022**	RunNo: **165609**
Client ID: **LCSW**	Batch ID: **94662**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/12/2022**	SeqNo: **4829858**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10.196	1.0	10.00	0	102	85	115				

Sample ID: **N052495-001C-MS**	SampType: **MS**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date: **9/12/2022**	RunNo: **165753**
Client ID: **ZZZZZZ**	Batch ID: **94662**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/15/2022**	SeqNo: **4836982**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	480.660	5.0	10.00	445.3	353	75	125				S

Sample ID: **N052495-001C-MSD**	SampType: **MSD**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date: **9/12/2022**	RunNo: **165753**
Client ID: **ZZZZZZ**	Batch ID: **94662**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/15/2022**	SeqNo: **4836983**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	440.188	5.0	10.00	445.3	-51.2	75	125	480.7	8.79	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052495
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_W_CRPGE_TPK

Sample ID: **N052495-001C-PS**	SampType: **PS**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date:	RunNo: **165753**							
Client ID: **ZZZZZZ**	Batch ID: **94662**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/15/2022**	SeqNo: **4836981**							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Chromium	456.988	5.0	10.00	445.3	117	80	120					

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Pre-filter-090822
Lab Order:	N052495	**Collection Date:**	9/8/2022 7:15:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052495-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C**	QC Batch: **94686**			PrepDate:	**9/13/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 03:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Post-filter-090822
Lab Order:	N052495	**Collection Date:**	9/8/2022 7:30:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052495-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94686**			PrepDate:	**9/13/2022**		Analyst: **DJ**
Iron	55	13	20		µg/L	1	9/20/2022 04:14 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052495
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94686**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/13/2022**	RunNo: **165864**
Client ID: **PBW**	Batch ID: **94686**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842723**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **N052389-002F-MS1**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/13/2022**	RunNo: **165864**
Client ID: **ZZZZZZ**	Batch ID: **94686**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842728**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	121.392	20	100.0	24.68	96.7	75	125				

Sample ID: **N052389-002F-MSD1**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/13/2022**	RunNo: **165864**
Client ID: **ZZZZZZ**	Batch ID: **94686**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842729**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	114.632	20	100.0	24.68	89.9	75	125	121.4	5.73	20	

Sample ID: **LCS1-94686**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/13/2022**	RunNo: **165864**
Client ID: **LCSW**	Batch ID: **94686**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842760**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	99.833	20	100.0	0	99.8	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Pre-filter-090822
Lab Order:	N052495	**Collection Date:**	9/8/2022 7:15:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052495-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220912D**	QC Batch: **94661**			PrepDate:	**9/12/2022**		Analyst: **DJ**
Manganese	1.5	0.026	0.50		µg/L	1	9/12/2022 06:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Post-filter-090822
Lab Order:	N052495	**Collection Date:**	9/8/2022 7:30:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052495-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220912D**	QC Batch: **94661**			PrepDate:	**9/12/2022**		Analyst: **DJ**
Manganese	3.6	0.026	0.50		µg/L	1	9/12/2022 06:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052495
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94661**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/12/2022**	RunNo: **165608**
Client ID: **PBW**	Batch ID: **94661**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/12/2022**	SeqNo: **4829752**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	ND	0.50									

Sample ID: **LCS-94661**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/12/2022**	RunNo: **165608**
Client ID: **LCSW**	Batch ID: **94661**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/12/2022**	SeqNo: **4829753**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	98.907	0.50	100.0	0	98.9	85	115				

Sample ID: **N052428-001B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/12/2022**	RunNo: **165608**
Client ID: **ZZZZZZ**	Batch ID: **94661**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/12/2022**	SeqNo: **4829757**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	96.092	0.50	100.0	1.450	94.6	75	125				

Sample ID: **N052428-001B-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/12/2022**	RunNo: **165608**
Client ID: **ZZZZZZ**	Batch ID: **94661**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/12/2022**	SeqNo: **4829758**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	97.016	0.50	100.0	1.450	95.6	75	125	96.09	0.957	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

N052495

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

ASSET LABORATORIES

ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Brian Prowd	Bill to: Marty Bloes	
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	
Address: Roseville, CA 95678	Email: brian.prowd@arcadis.com; daniel.moore@critigen.com	Address:	
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com	P.O.# SWA-ASSET-C9617-051
Submitted By: Kevin A.	Phone: 916-786-3302 Fax:	Phone: 949-727-1400. ext 200	Fax:
Title: O&M Operator	Sampled By: Kevin A. Imark		
Signature: Date: 9/8/22	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.		
I hereby authorize ASSET Labs to perform the tests indicated below.	Signature: Date: 9/8/22		
Project Name: PG&E Topock - O&M TCS PWTF			
Project Number: 30106892			

EDD Requirement		QA/QC		Sample Receipt Condition	Y	N
Excel EDD		RTNE		1. Chilled	✓	
Geotracker		RWQCB	✓	2. Headspace		
Labspec		CalTrans		3. Container Intact	✓	
Others	✓	LEVEL III		4. Seal Present		
Specify: RWQCB		LEVEL IV		5. IR number	3	
Global ID:		Regulatory		6. Method of Cooling: ICE		
		Specify State:		Sample Temp: 4.4°C		

Matrix: Ground; Potable; NPDES; Surface; Sediment; Soil; Other Solid; Water (X)

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	250 mL poly: Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH, Filtered	500mL poly: Dissolved metals Iron, Manganese (SW6020) FF; HNO3; Filtered	500mL poly: Total chromium (SW6020) No filter; HNO3	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052495-01	Backwash Pre-filter-090822	9/8/22	8:15		X	X	X	E	3	PV	BNS	
2	-02	Backwash Post-filter-090822	9/8/22	7:30		X	X	X	E	3	PV	BNS	
3													
4													
5													
7													
8													
9													
10													
11													
12													
13													
14													

Courier:

Tracking No.:

Relinquished by (Signature and Printed Name)	Date/Time	Received by (Signature and Printed Name)	Date/Time
Kevin Ashley	9/8/22	Dante Ortiz Dante Ortiz	9/8/22 14:44
Dante Ortiz Dante Ortiz	9/8/22 17:34	Dante Ortiz Dante Ortiz	9/8/22 17:34

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days. surcharges will apply for rush analysis.
Less than 24 Hr =200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDF will be an additional 3% of the total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of reports needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy

Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	9/8/2022	Workorder:	N052495
Rep sample Temp (Deg C):	4.4	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: EF *EFanegoF* 9/9/2022

Reviewed By: for: MBC 9/13/2022

ASSET Laboratories

WORK ORDER Summary

13-Sep-22

WorkOrder: N052495

Client ID: ARCUS02

Project: PG&E Topock - OMM TCS PWTF, 30106892 **QC Level:** Level IV **Date Received:** 9/8/2022 5:34 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052495-001A	Backwash Pre-filter-090822	9/8/2022 7:15:00 AM	9/22/2022	Water	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052495-001B			9/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/22/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052495-001C			9/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/22/2022		EPA 6020	TOTAL METALS BY ICPMS	☐	☐	☐	WW
N052495-002A	Backwash Post-filter-090822	9/8/2022 7:30:00 AM	9/22/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052495-002B			9/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/22/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052495-002C			9/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/22/2022		EPA 6020	TOTAL METALS BY ICPMS	☐	☐	☐	WW
N052495-003A	FOLDER	9/22/2022	9/22/2022		Folder	Folder	☐	☐	☐	LAB
			9/22/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/22/2022		Folder	Folder	☐	☐	☐	LAB

September 26, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052544

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on September 12, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052544

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Dilution was necessary for samples N052544-002 and -004 due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for SM 5310C:

Matrix Spike (MS) is outside recovery criteria in QC sample N052565-007CMS at lower dilutions possibly due to matrix interference. QC sample was diluted and recovery passed criteria. Thus sample reference N052565-007 and MS/MSD were reported at 20x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052544
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052544-001A	MW-76-039-0922	Groundwater	9/12/2022 3:18:00 PM	9/12/2022	9/26/2022
N052544-001B	MW-76-039-0922	Groundwater	9/12/2022 3:18:00 PM	9/12/2022	9/26/2022
N052544-001C	MW-76-039-0922	Groundwater	9/12/2022 3:18:00 PM	9/12/2022	9/26/2022
N052544-001D	MW-76-039-0922	Groundwater	9/12/2022 3:18:00 PM	9/12/2022	9/26/2022
N052544-002A	MW-76-156-0922	Groundwater	9/12/2022 2:34:00 PM	9/12/2022	9/26/2022
N052544-002B	MW-76-156-0922	Groundwater	9/12/2022 2:34:00 PM	9/12/2022	9/26/2022
N052544-002C	MW-76-156-0922	Groundwater	9/12/2022 2:34:00 PM	9/12/2022	9/26/2022
N052544-002D	MW-76-156-0922	Groundwater	9/12/2022 2:34:00 PM	9/12/2022	9/26/2022
N052544-003A	MW-76-181-0922	Groundwater	9/12/2022 1:48:00 PM	9/12/2022	9/26/2022
N052544-003B	MW-76-181-0922	Groundwater	9/12/2022 1:48:00 PM	9/12/2022	9/26/2022
N052544-003C	MW-76-181-0922	Groundwater	9/12/2022 1:48:00 PM	9/12/2022	9/26/2022
N052544-003D	MW-76-181-0922	Groundwater	9/12/2022 1:48:00 PM	9/12/2022	9/26/2022
N052544-004A	MW-76-218-0922	Groundwater	9/12/2022 1:02:00 PM	9/12/2022	9/26/2022
N052544-004B	MW-76-218-0922	Groundwater	9/12/2022 1:02:00 PM	9/12/2022	9/26/2022
N052544-004C	MW-76-218-0922	Groundwater	9/12/2022 1:02:00 PM	9/12/2022	9/26/2022
N052544-004D	MW-76-218-0922	Groundwater	9/12/2022 1:02:00 PM	9/12/2022	9/26/2022
N052544-005A	EB-727-Q322_N052544	Groundwater	9/12/2022 3:35:00 PM	9/12/2022	9/26/2022
N052544-006A	MW-77-046-0922	Groundwater	9/12/2022 12:34:00 PM	9/12/2022	9/26/2022
N052544-006B	MW-77-046-0922	Groundwater	9/12/2022 12:34:00 PM	9/12/2022	9/26/2022
N052544-006C	MW-77-046-0922	Groundwater	9/12/2022 12:34:00 PM	9/12/2022	9/26/2022
N052544-006D	MW-77-046-0922	Groundwater	9/12/2022 12:34:00 PM	9/12/2022	9/26/2022
N052544-007A	MW-77-102-0922	Groundwater	9/12/2022 2:17:00 PM	9/12/2022	9/26/2022
N052544-007B	MW-77-102-0922	Groundwater	9/12/2022 2:17:00 PM	9/12/2022	9/26/2022
N052544-007C	MW-77-102-0922	Groundwater	9/12/2022 2:17:00 PM	9/12/2022	9/26/2022
N052544-007D	MW-77-102-0922	Groundwater	9/12/2022 2:17:00 PM	9/12/2022	9/26/2022
N052544-008A	MW-77-158-0922	Groundwater	9/12/2022 1:49:00 PM	9/12/2022	9/26/2022
N052544-008B	MW-77-158-0922	Groundwater	9/12/2022 1:49:00 PM	9/12/2022	9/26/2022
N052544-008C	MW-77-158-0922	Groundwater	9/12/2022 1:49:00 PM	9/12/2022	9/26/2022
N052544-008D	MW-77-158-0922	Groundwater	9/12/2022 1:49:00 PM	9/12/2022	9/26/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052544
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052544-009A	MW-77-187-0922	Groundwater	9/12/2022 1:19:00 PM	9/12/2022	9/26/2022
N052544-009B	MW-77-187-0922	Groundwater	9/12/2022 1:19:00 PM	9/12/2022	9/26/2022
N052544-009C	MW-77-187-0922	Groundwater	9/12/2022 1:19:00 PM	9/12/2022	9/26/2022
N052544-009D	MW-77-187-0922	Groundwater	9/12/2022 1:19:00 PM	9/12/2022	9/26/2022
N052544-010A	EB-728-Q322_N052544	Groundwater	9/12/2022 3:00:00 PM	9/12/2022	9/26/2022
N052544-011A	MW-922-Q322	Groundwater	9/12/2022 3:28:00 PM	9/12/2022	9/26/2022
N052544-011B	MW-922-Q322	Groundwater	9/12/2022 3:28:00 PM	9/12/2022	9/26/2022
N052544-011C	MW-922-Q322	Groundwater	9/12/2022 3:28:00 PM	9/12/2022	9/26/2022
N052544-011D	MW-922-Q322	Groundwater	9/12/2022 3:28:00 PM	9/12/2022	9/26/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 3:18:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220913A**	QC Batch: **R165647**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	93	0.50	4.0		µg/L	20	9/13/2022 10:24 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 2:34:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
EPA 218.6							
RunID: **NV00922-IC7_220913A** QC Batch: **R165647** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	13	0.13	1.0		µg/L	5	9/13/2022 02:39 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-181-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:48:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220913A**	QC Batch: **R165647**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	1100	5.0	40		µg/L	200	9/13/2022 10:52 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-218-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:02:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220913A**	QC Batch: **R165647**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	9/13/2022 03:17 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-727-Q322_N052544
Lab Order:	N052544	**Collection Date:**	9/12/2022 3:35:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220913A**	QC Batch: **R165647**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/13/2022 11:49 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 12:34:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220913A**	QC Batch: **R165647**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/13/2022 12:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 2:17:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220913A**	QC Batch: **R165647**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	0.31	0.025	0.20		µg/L	1	9/13/2022 12:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:49:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220913A**	QC Batch: **R165647**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/13/2022 02:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220913A**	QC Batch: **R165647**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	40	0.13	1.0		µg/L	5	9/13/2022 04:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-728-Q322_N052544
Lab Order:	N052544	**Collection Date:**	9/12/2022 3:00:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220913A**	QC Batch: **R165647**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/13/2022 12:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-922-Q322
Lab Order:	N052544	**Collection Date:**	9/12/2022 3:28:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220913A**	QC Batch: **R165647**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	94	0.50	4.0		µg/L	20	9/13/2022 11:39 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052544
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R165647**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165647**
Client ID: **PBW**	Batch ID: **R165647**	TestNo: **EPA 218.6**		Analysis Date: **9/13/2022**	SeqNo: **4831652**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R165647**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165647**
Client ID: **LCSW**	Batch ID: **R165647**	TestNo: **EPA 218.6**		Analysis Date: **9/13/2022**	SeqNo: **4831653**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.110	0.20	5.000	0	102	90	110				

Sample ID: **N052543-001ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165647**
Client ID: **ZZZZZZ**	Batch ID: **R165647**	TestNo: **EPA 218.6**		Analysis Date: **9/13/2022**	SeqNo: **4831655**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.948	0.20						6.064	1.93	20	

Sample ID: **N052544-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165647**
Client ID: **ZZZZZZ**	Batch ID: **R165647**	TestNo: **EPA 218.6**		Analysis Date: **9/13/2022**	SeqNo: **4831658**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	192.106	4.0	100.0	93.15	99.0	90	110				

Sample ID: **N052544-001AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165647**
Client ID: **ZZZZZZ**	Batch ID: **R165647**	TestNo: **EPA 218.6**		Analysis Date: **9/13/2022**	SeqNo: **4831659**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	192.494	4.0	100.0	93.15	99.3	90	110	192.1	0.202	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052544
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052544-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165647**
Client ID: **ZZZZZZ** Batch ID: **R165647** TestNo: **EPA 218.6** Analysis Date: **9/13/2022** SeqNo: **4831661**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2149.060	40	1000	1137	101	90	110				

Sample ID: **N052544-011AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165647**
Client ID: **ZZZZZZ** Batch ID: **R165647** TestNo: **EPA 218.6** Analysis Date: **9/13/2022** SeqNo: **4831664**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	189.290	4.0	100.0	94.02	95.3	90	110				

Sample ID: **N052544-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165647**
Client ID: **ZZZZZZ** Batch ID: **R165647** TestNo: **EPA 218.6** Analysis Date: **9/13/2022** SeqNo: **4831667**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.982	0.20	1.000	0	98.2	90	110				

Sample ID: **N052544-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165647**
Client ID: **ZZZZZZ** Batch ID: **R165647** TestNo: **EPA 218.6** Analysis Date: **9/13/2022** SeqNo: **4831669**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.977	0.20	1.000	0	97.7	90	110				

Sample ID: **N052544-007AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165647**
Client ID: **ZZZZZZ** Batch ID: **R165647** TestNo: **EPA 218.6** Analysis Date: **9/13/2022** SeqNo: **4831671**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.331	0.20	1.000	0.3085	102	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052544
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052544-010AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165647**
Client ID: **ZZZZZZ** Batch ID: **R165647** TestNo: **EPA 218.6** Analysis Date: **9/13/2022** SeqNo: **4831673**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.987	0.20	1.000	0	98.7	90	110				

Sample ID: **N052544-008AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165647**
Client ID: **ZZZZZZ** Batch ID: **R165647** TestNo: **EPA 218.6** Analysis Date: **9/13/2022** SeqNo: **4831677**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.142	0.20	1.000	0.1596	98.2	90	110				

Sample ID: **N052544-002AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165647**
Client ID: **ZZZZZZ** Batch ID: **R165647** TestNo: **EPA 218.6** Analysis Date: **9/13/2022** SeqNo: **4831679**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	18.449	1.0	5.000	13.03	108	90	110				

Sample ID: **N052544-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165647**
Client ID: **ZZZZZZ** Batch ID: **R165647** TestNo: **EPA 218.6** Analysis Date: **9/13/2022** SeqNo: **4831683**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.789	1.0	5.000	0	95.8	90	110				

Sample ID: **N052544-009AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165647**
Client ID: **ZZZZZZ** Batch ID: **R165647** TestNo: **EPA 218.6** Analysis Date: **9/13/2022** SeqNo: **4831685**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	64.227	1.0	25.00	39.85	97.5	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052544
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052545-001BMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165647**
Client ID: **ZZZZZZ**	Batch ID: **R165647**	TestNo: **EPA 218.6**		Analysis Date: **9/13/2022**	SeqNo: **4831688**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2063.860	40	1000	1094	97.0	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 3:18:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Sulfate	250	1.2	10		mg/L	20	9/13/2022 11:47 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Nitrate as N	3.0	0.095	0.50		mg/L	10	9/13/2022 08:28 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 2:34:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Sulfate	760	6.1	50		mg/L	100	9/13/2022 12:32 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Nitrate as N	2.2	0.095	0.50		mg/L	10	9/13/2022 08:43 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-181-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:48:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Sulfate	820	6.1	50		mg/L	100	9/13/2022 03:21 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/13/2022 08:58 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-218-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:02:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Sulfate	680	6.1	50		mg/L	100	9/13/2022 01:18 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/13/2022 09:14 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 12:34:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Sulfate	530	6.1	50		mg/L	100	9/13/2022 02:04 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/13/2022 09:29 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 2:17:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A**	QC Batch: **R165618**			PrepDate:			Analyst: **RAB**
Sulfate	590	6.1	50		mg/L	100	9/13/2022 02:20 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A**	QC Batch: **R165618**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.90	0.095	0.50		mg/L	10	9/13/2022 09:44 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:49:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Sulfate	600	6.1	50		mg/L	100	9/13/2022 02:35 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/13/2022 09:59 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A**	QC Batch: **R165618**			PrepDate:			Analyst: **RAB**
Sulfate	860	6.1	50		mg/L	100	9/13/2022 02:50 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A**	QC Batch: **R165618**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.67	0.095	0.50		mg/L	10	9/13/2022 10:15 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052544
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052544-011

Client Sample ID: MW-922-Q322
Collection Date: 9/12/2022 3:28:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Sulfate	250	1.2	10		mg/L	20	9/13/2022 03:05 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Nitrate as N	3.0	0.095	0.50		mg/L	10	9/13/2022 01:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052544
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **MB-R165618_SO4**	SampType: **MBLK**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **165618**
Client ID: **PBW**	Batch ID: **R165618**	TestNo: **EPA 300.0**		Analysis Date: **9/13/2022**	SeqNo: **4830641**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.50									

Sample ID: **LCS-R165618_SO4**	SampType: **LCS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **165618**
Client ID: **LCSW**	Batch ID: **R165618**	TestNo: **EPA 300.0**		Analysis Date: **9/13/2022**	SeqNo: **4830642**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	4.048	0.50	4.000	0	101	90	110				

Sample ID: **N052544-001DMS**	SampType: **MS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **165618**
Client ID: **ZZZZZZ**	Batch ID: **R165618**	TestNo: **EPA 300.0**		Analysis Date: **9/13/2022**	SeqNo: **4830646**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	329.738	10	80.00	251.0	98.5	80	120				

Sample ID: **N052544-001DMSD**	SampType: **MSD**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **165618**
Client ID: **ZZZZZZ**	Batch ID: **R165618**	TestNo: **EPA 300.0**		Analysis Date: **9/13/2022**	SeqNo: **4830647**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	328.090	10	80.00	251.0	96.4	80	120	329.7	0.501	20	

Sample ID: **N052544-002DDUP**	SampType: **DUP**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **165618**
Client ID: **ZZZZZZ**	Batch ID: **R165618**	TestNo: **EPA 300.0**		Analysis Date: **9/13/2022**	SeqNo: **4830649**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	764.830	50						759.4	0.711	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052544
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R165618_NO3** SampType: **MBLK** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165618**
Client ID: **PBW** Batch ID: **R165618** TestNo: **EPA 300.0** Analysis Date: **9/13/2022** SeqNo: **4830617**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R165618_NO3** SampType: **LCS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165618**
Client ID: **LCSW** Batch ID: **R165618** TestNo: **EPA 300.0** Analysis Date: **9/13/2022** SeqNo: **4830618**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.280	0.050	1.250	0	102	90	110				

Sample ID: **N052544-001DMS** SampType: **MS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165618**
Client ID: **ZZZZZZ** Batch ID: **R165618** TestNo: **EPA 300.0** Analysis Date: **9/13/2022** SeqNo: **4830629**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	15.705	0.50	12.50	2.996	102	80	120				

Sample ID: **N052544-001DMSD** SampType: **MSD** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165618**
Client ID: **ZZZZZZ** Batch ID: **R165618** TestNo: **EPA 300.0** Analysis Date: **9/13/2022** SeqNo: **4830630**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	15.691	0.50	12.50	2.996	102	80	120	15.70	0.0892	20	

Sample ID: **N052544-007DDUP** SampType: **DUP** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165618**
Client ID: **ZZZZZZ** Batch ID: **R165618** TestNo: **EPA 300.0** Analysis Date: **9/13/2022** SeqNo: **4830631**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.000	0.50						0.9030	10.2	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 3:18:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 11:34 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 2:34:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 11:49 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-181-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:48:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 02:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-218-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:02:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 02:55 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 12:34:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 03:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 2:17:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 03:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:49:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 03:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 04:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-922-Q322
Lab Order:	N052544	**Collection Date:**	9/12/2022 3:28:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 04:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052544
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R165657**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165657**
Client ID: **PBW**	Batch ID: **R165657**	TestNo: **SM 5310C**		Analysis Date: **9/14/2022**	SeqNo: **4832783**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R165657**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165657**
Client ID: **LCSW**	Batch ID: **R165657**	TestNo: **SM 5310C**		Analysis Date: **9/14/2022**	SeqNo: **4832784**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	4.816	1.0	5.000	0	96.3	85	115				

Sample ID: **N052565-007CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165657**
Client ID: **ZZZZZZ**	Batch ID: **R165657**	TestNo: **SM 5310C**		Analysis Date: **9/14/2022**	SeqNo: **4832791**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	78.408	20	100.0	0	78.4	75	125				

Sample ID: **N052565-007CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165657**
Client ID: **ZZZZZZ**	Batch ID: **R165657**	TestNo: **SM 5310C**		Analysis Date: **9/14/2022**	SeqNo: **4832792**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	77.448	20	100.0	0	77.4	75	125	78.41	1.23	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 3:18:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94686**			PrepDate:	**9/13/2022**		Analyst: **DJ**
Iron	110	13	20		µg/L	1	9/20/2022 04:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 2:34:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94686**			PrepDate:	**9/13/2022**		Analyst: **DJ**
Iron	25	13	20		µg/L	1	9/20/2022 04:35 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-181-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:48:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C**	QC Batch: **94686**			PrepDate:	**9/13/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 04:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-218-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:02:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C**	QC Batch: **94686**			PrepDate:	**9/13/2022**		Analyst: **DJ**
Iron	29	13	20		µg/L	1	9/20/2022 04:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 12:34:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C**	QC Batch: **94686**			PrepDate:	**9/13/2022**		Analyst: **DJ**
Iron	76	13	20		µg/L	1	9/20/2022 04:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 2:17:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C**	QC Batch: **94686**			PrepDate:	**9/13/2022**		Analyst: **DJ**
Iron	54	13	20		µg/L	1	9/20/2022 04:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:49:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C**	QC Batch: **94686**			PrepDate:	**9/13/2022**		Analyst: **DJ**
Iron	29	13	20		µg/L	1	9/20/2022 05:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C**	QC Batch: **94686**			PrepDate:	**9/13/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 05:16 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-922-Q322
Lab Order:	N052544	**Collection Date:**	9/12/2022 3:28:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94686**			PrepDate:	**9/13/2022**		Analyst: **DJ**
Iron	78	13	20		µg/L	1	9/20/2022 05:21 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052544
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94686**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/13/2022**	RunNo: **165864**
Client ID: **PBW**	Batch ID: **94686**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842723**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **N052389-002F-MS1**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/13/2022**	RunNo: **165864**
Client ID: **ZZZZZZ**	Batch ID: **94686**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842728**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	121.392	20	100.0	24.68	96.7	75	125				

Sample ID: **N052389-002F-MSD1**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/13/2022**	RunNo: **165864**
Client ID: **ZZZZZZ**	Batch ID: **94686**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842729**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	114.632	20	100.0	24.68	89.9	75	125	121.4	5.73	20	

Sample ID: **LCS1-94686**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/13/2022**	RunNo: **165864**
Client ID: **LCSW**	Batch ID: **94686**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842760**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	99.833	20	100.0	0	99.8	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 3:18:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 05:47 AM
Barium	59	0.083	1.0		µg/L	1	9/18/2022 05:47 AM
Manganese	32	0.026	0.50		µg/L	1	9/19/2022 03:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 2:34:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 06:16 AM
Barium	45	0.083	1.0		µg/L	1	9/18/2022 06:16 AM
Manganese	85	0.026	0.50		µg/L	1	9/19/2022 04:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-181-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:48:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 06:22 AM
Barium	65	0.083	1.0		µg/L	1	9/18/2022 06:22 AM
Manganese	39	0.026	0.50		µg/L	1	9/20/2022 01:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-218-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:02:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:		**9/17/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 06:28 AM
Barium	86	0.083	1.0		µg/L	1	9/18/2022 06:28 AM
Manganese	430	0.13	2.5		µg/L	5	9/20/2022 02:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 12:34:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:		**9/17/2022**	Analyst: **DJ**
Arsenic	3.7	0.050	0.10		µg/L	1	9/18/2022 06:46 AM
Barium	59	0.083	1.0		µg/L	1	9/18/2022 06:46 AM
Manganese	470	0.13	2.5		µg/L	5	9/20/2022 02:16 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 2:17:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 06:52 AM
Barium	52	0.083	1.0		µg/L	1	9/18/2022 06:52 AM
Manganese	55	0.026	0.50		µg/L	1	9/20/2022 02:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:49:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	9/18/2022 06:58 AM
Barium	31	0.083	1.0		µg/L	1	9/18/2022 06:58 AM
Manganese	39	0.026	0.50		µg/L	1	9/20/2022 02:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:		**9/17/2022**	Analyst: **DJ**
Arsenic	2.1	0.050	0.10		µg/L	1	9/18/2022 07:04 AM
Barium	31	0.083	1.0		µg/L	1	9/18/2022 07:04 AM
Manganese	13	0.026	0.50		µg/L	1	9/20/2022 02:34 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-922-Q322
Lab Order:	N052544	**Collection Date:**	9/12/2022 3:28:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 07:10 AM
Barium	60	0.083	1.0		µg/L	1	9/18/2022 07:10 AM
Manganese	29	0.026	0.50		µg/L	1	9/20/2022 02:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052544
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94794**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165789**
Client ID: **PBW**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/18/2022**	SeqNo: **4839300**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									

Sample ID: **LCS-94794**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165789**
Client ID: **LCSW**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/18/2022**	SeqNo: **4839301**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.472	0.10	10.00	0	94.7	85	115				
Barium	10.073	1.0	10.00	0	101	85	115				

Sample ID: **N052544-001B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165789**
Client ID: **ZZZZZZ**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/18/2022**	SeqNo: **4839305**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.573	0.10	10.00	0.09992	94.7	75	125				
Barium	68.259	1.0	10.00	59.08	91.7	75	125				

Sample ID: **N052544-001B-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165789**
Client ID: **ZZZZZZ**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/18/2022**	SeqNo: **4839306**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.547	0.10	10.00	0.09992	94.5	75	125	9.573	0.275	20	
Barium	69.558	1.0	10.00	59.08	105	75	125	68.26	1.89	20	

Sample ID: **MB-94794**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165854**
Client ID: **PBW**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/19/2022**	SeqNo: **4842176**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052544
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94794**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165854**
Client ID: **PBW**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/19/2022**	SeqNo: **4842176**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	0.036	0.50									

Sample ID: **LCS-94794**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165854**
Client ID: **LCSW**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/19/2022**	SeqNo: **4842177**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	103.673	0.50	100.0	0	104	85	115				

Sample ID: **N052544-001B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165854**
Client ID: **ZZZZZZ**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/19/2022**	SeqNo: **4842181**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	128.929	0.50	100.0	32.15	96.8	75	125				

Sample ID: **N052544-001B-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165854**
Client ID: **ZZZZZZ**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/19/2022**	SeqNo: **4842182**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	130.434	0.50	100.0	32.15	98.3	75	125	128.9	1.16	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

N052544

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

| | | |

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	9/12/2022	Workorder:	N052544
Rep sample Temp (Deg C):	4.9	IR Gun ID:	3
Temp Blank:	☑ Yes ☐ No		
Carrier name:	ASSET		
Last 4 digits of Tracking No.:		Packing Material Used:	None
Cooling process:	☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None		

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For: 9/23/2022

Checklist Completed By: EF YRodriguez

Reviewed By: for: MBC 9/23/2022

Mary Ann Balilu

From: Yoandra Rodriguez <yoandra@assetlaboratories.com>
Sent: Tuesday, September 13, 2022 2:27 PM
To: rustico.aquino@assetlaboratoriesph.com; maryann.balilu@assetlaboratoriesph.com
Subject: Fwd: Topock - Sample ID Updates

-------- Forwarded Message --------
Subject: Topock - Sample ID Updates
Date: Tue, 13 Sep 2022 20:04:04 +0000
From: Tina Rice <Tina.Rice@locana.co>
To: Yoandra Rodriguez <yoandra@assetlaboratories.com>
CC: Nancy Sibucao <nancy@assetlaboratories.com>, Madsen, Laura <laura.madsen@arcadis.com>

Hi Yoandra,

Looks like a couple of sample names were duplicated so could you please update the samples in N052544 per below?

ClientSampID	New ClientSampID	WorkOrder	DateCollected
EB-727-Q322	EB-727-Q322_N052544	N052544	9/12/2022 15:35
EB-728-Q322	EB-728-Q322_N052544	N052544	9/12/2022 15:00

Thank you,
Tina
--

Thanks,

Yoandra Rodriguez
Project Manager

Nevada: 3151 W. Post Road, Las Vegas, NV 89118 | P: 702.307.2659 | F: 702.307.2691
California: 11110 Artesia Blvd., Ste. B, Cerritos, CA 90703 | P: 562.219.7435 | F: 562.219.7436

ASSET LABORATORIES - Serving Clients with Passion and Professionalism

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ASSET Laboratories

WORK ORDER Summary

23-Sep-22

WorkOrder: N052544

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/12/2022 6:37 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052544-001A	MW-76-039-0922	9/12/2022 3:18:00 PM	9/26/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052544-001B			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052544-001C			9/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052544-001D			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052544-002A	MW-76-156-0922	9/12/2022 2:34:00 PM	9/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052544-002B			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052544-002C			9/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052544-002D			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052544-003A	MW-76-181-0922	9/12/2022 1:48:00 PM	9/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052544-003B			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052544-003C			9/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

23-Sep-22

WorkOrder: N052544

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/12/2022 6:37 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052544-003D	MW-76-181-0922	9/12/2022 1:48:00 PM	9/26/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052544-004A	MW-76-218-0922	9/12/2022 1:02:00 PM	9/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052544-004B			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052544-004C			9/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052544-004D			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052544-005A	EB-727-Q322_N052544	9/12/2022 3:35:00 PM	9/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052544-006A	MW-77-046-0922	9/12/2022 12:34:00 PM	9/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052544-006B			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052544-006C			9/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052544-006D			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052544-007A	MW-77-102-0922	9/12/2022 2:17:00 PM	9/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052544-007B			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

23-Sep-22

WorkOrder: N052544

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/12/2022 6:37 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052544-007B	MW-77-102-0922	9/12/2022 2:17:00 PM	9/26/2022	Groundwater	EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052544-007C			9/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052544-007D			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052544-008A	MW-77-158-0922	9/12/2022 1:49:00 PM	9/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052544-008B			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052544-008C			9/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052544-008D			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052544-009A	MW-77-187-0922	9/12/2022 1:19:00 PM	9/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052544-009B			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052544-009C			9/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052544-009D			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052544-010A	EB-728-Q322_N052544	9/12/2022 3:00:00 PM	9/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

23-Sep-22

WorkOrder: N052544

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/12/2022 6:37 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052544-011A	MW-922-Q322	9/12/2022 3:28:00 PM	9/26/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052544-011B			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052544-011C			9/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052544-011D			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052544-012A	FOLDER	9/26/2022	9/26/2022		Folder	Folder	☐	☐	☐	LAB
			9/26/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/26/2022		Folder	Folder	☐	☐	☐	LAB

September 27, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052565

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on September 13, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Dilution was necessary for some samples due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Method Blank (MB) has detect greater than 1/2 the reporting limit for Sulfate. Samples result for this analyte was greater than 5x the Method Blank detection therefore reanalysis of the samples was not necessary.

Analytical Comments for SM 5310C:

Matrix Spike (MS) is outside recovery criteria in QC sample N052565-007CMS at lower dilutions possibly due to matrix interference. QC sample was diluted and recovery passed criteria. Thus sample reference N052565-007 and MS/MSD were reported at 20x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Matrix Spike (MS) is outside recovery criteria in QC sample N052565-015CMS at lower dilutions possibly due to matrix interference. QC sample was diluted and recovery passed criteria. Thus sample reference N052565-015 and MS/MSD were reported at 5x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT:	ARCADIS U.S., Inc. - California
Project:	PG&E Topock - PCM, 30121866.3Q22GW
Lab Order:	N052565

CASE NARRATIVE

Analytical Comments for EPA 6010B:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Barium in QC samples N052565-007BMS and N052565-007BMSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052565
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052565-001A	MW-82-046-0922	Groundwater	9/13/2022 11:25:00 AM	9/13/2022	9/27/2022
N052565-001B	MW-82-046-0922	Groundwater	9/13/2022 11:25:00 AM	9/13/2022	9/27/2022
N052565-001C	MW-82-046-0922	Groundwater	9/13/2022 11:25:00 AM	9/13/2022	9/27/2022
N052565-001D	MW-82-046-0922	Groundwater	9/13/2022 11:25:00 AM	9/13/2022	9/27/2022
N052565-002A	MW-82-112-0922	Groundwater	9/13/2022 10:54:00 AM	9/13/2022	9/27/2022
N052565-002B	MW-82-112-0922	Groundwater	9/13/2022 10:54:00 AM	9/13/2022	9/27/2022
N052565-002C	MW-82-112-0922	Groundwater	9/13/2022 10:54:00 AM	9/13/2022	9/27/2022
N052565-002D	MW-82-112-0922	Groundwater	9/13/2022 10:54:00 AM	9/13/2022	9/27/2022
N052565-003A	MW-82-168-0922	Groundwater	9/13/2022 10:12:00 AM	9/13/2022	9/27/2022
N052565-003B	MW-82-168-0922	Groundwater	9/13/2022 10:12:00 AM	9/13/2022	9/27/2022
N052565-003C	MW-82-168-0922	Groundwater	9/13/2022 10:12:00 AM	9/13/2022	9/27/2022
N052565-003D	MW-82-168-0922	Groundwater	9/13/2022 10:12:00 AM	9/13/2022	9/27/2022
N052565-004A	MW-925-Q322	Groundwater	9/13/2022 10:22:00 AM	9/13/2022	9/27/2022
N052565-004B	MW-925-Q322	Groundwater	9/13/2022 10:22:00 AM	9/13/2022	9/27/2022
N052565-004C	MW-925-Q322	Groundwater	9/13/2022 10:22:00 AM	9/13/2022	9/27/2022
N052565-004D	MW-925-Q322	Groundwater	9/13/2022 10:22:00 AM	9/13/2022	9/27/2022
N052565-005A	MW-82-198-0922	Groundwater	9/13/2022 9:24:00 AM	9/13/2022	9/27/2022
N052565-005B	MW-82-198-0922	Groundwater	9/13/2022 9:24:00 AM	9/13/2022	9/27/2022
N052565-005C	MW-82-198-0922	Groundwater	9/13/2022 9:24:00 AM	9/13/2022	9/27/2022
N052565-005D	MW-82-198-0922	Groundwater	9/13/2022 9:24:00 AM	9/13/2022	9/27/2022
N052565-006A	MW-81-043-0922	Groundwater	9/13/2022 1:56:00 PM	9/13/2022	9/27/2022
N052565-006B	MW-81-043-0922	Groundwater	9/13/2022 1:56:00 PM	9/13/2022	9/27/2022
N052565-006C	MW-81-043-0922	Groundwater	9/13/2022 1:56:00 PM	9/13/2022	9/27/2022
N052565-006D	MW-81-043-0922	Groundwater	9/13/2022 1:56:00 PM	9/13/2022	9/27/2022
N052565-007A	MW-81-098-0922	Groundwater	9/13/2022 1:22:00 PM	9/13/2022	9/27/2022
N052565-007B	MW-81-098-0922	Groundwater	9/13/2022 1:22:00 PM	9/13/2022	9/27/2022
N052565-007C	MW-81-098-0922	Groundwater	9/13/2022 1:22:00 PM	9/13/2022	9/27/2022
N052565-007D	MW-81-098-0922	Groundwater	9/13/2022 1:22:00 PM	9/13/2022	9/27/2022
N052565-008A	MW-44-115-0922	Groundwater	9/13/2022 12:08:00 PM	9/13/2022	9/27/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052565
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052565-008B	MW-44-115-0922	Groundwater	9/13/2022 12:08:00 PM	9/13/2022	9/27/2022
N052565-008C	MW-44-115-0922	Groundwater	9/13/2022 12:08:00 PM	9/13/2022	9/27/2022
N052565-008D	MW-44-115-0922	Groundwater	9/13/2022 12:08:00 PM	9/13/2022	9/27/2022
N052565-009A	MW-921-Q322	Groundwater	9/13/2022 12:18:00 PM	9/13/2022	9/27/2022
N052565-009B	MW-921-Q322	Groundwater	9/13/2022 12:18:00 PM	9/13/2022	9/27/2022
N052565-009C	MW-921-Q322	Groundwater	9/13/2022 12:18:00 PM	9/13/2022	9/27/2022
N052565-009D	MW-921-Q322	Groundwater	9/13/2022 12:18:00 PM	9/13/2022	9/27/2022
N052565-010A	MW-44-125-0922	Groundwater	9/13/2022 12:45:00 PM	9/13/2022	9/27/2022
N052565-010B	MW-44-125-0922	Groundwater	9/13/2022 12:45:00 PM	9/13/2022	9/27/2022
N052565-010C	MW-44-125-0922	Groundwater	9/13/2022 12:45:00 PM	9/13/2022	9/27/2022
N052565-010D	MW-44-125-0922	Groundwater	9/13/2022 12:45:00 PM	9/13/2022	9/27/2022
N052565-011A	EB-729-Q322_20220913	Groundwater	9/13/2022 2:10:00 PM	9/13/2022	9/27/2022
N052565-012A	MW-39-040-0922	Groundwater	9/13/2022 8:37:00 AM	9/13/2022	9/27/2022
N052565-012B	MW-39-040-0922	Groundwater	9/13/2022 8:37:00 AM	9/13/2022	9/27/2022
N052565-012C	MW-39-040-0922	Groundwater	9/13/2022 8:37:00 AM	9/13/2022	9/27/2022
N052565-012D	MW-39-040-0922	Groundwater	9/13/2022 8:37:00 AM	9/13/2022	9/27/2022
N052565-013A	MW-920-Q322	Groundwater	9/13/2022 8:42:00 AM	9/13/2022	9/27/2022
N052565-013B	MW-920-Q322	Groundwater	9/13/2022 8:42:00 AM	9/13/2022	9/27/2022
N052565-013C	MW-920-Q322	Groundwater	9/13/2022 8:42:00 AM	9/13/2022	9/27/2022
N052565-013D	MW-920-Q322	Groundwater	9/13/2022 8:42:00 AM	9/13/2022	9/27/2022
N052565-014A	MW-39-050-0922	Groundwater	9/13/2022 10:25:00 AM	9/13/2022	9/27/2022
N052565-014B	MW-39-050-0922	Groundwater	9/13/2022 10:25:00 AM	9/13/2022	9/27/2022
N052565-014C	MW-39-050-0922	Groundwater	9/13/2022 10:25:00 AM	9/13/2022	9/27/2022
N052565-014D	MW-39-050-0922	Groundwater	9/13/2022 10:25:00 AM	9/13/2022	9/27/2022
N052565-015A	MW-39-060-0922	Groundwater	9/13/2022 11:28:00 AM	9/13/2022	9/27/2022
N052565-015B	MW-39-060-0922	Groundwater	9/13/2022 11:28:00 AM	9/13/2022	9/27/2022
N052565-015C	MW-39-060-0922	Groundwater	9/13/2022 11:28:00 AM	9/13/2022	9/27/2022
N052565-015D	MW-39-060-0922	Groundwater	9/13/2022 11:28:00 AM	9/13/2022	9/27/2022
N052565-016A	MW-39-070-0922	Groundwater	9/13/2022 9:17:00 AM	9/13/2022	9/27/2022
N052565-016B	MW-39-070-0922	Groundwater	9/13/2022 9:17:00 AM	9/13/2022	9/27/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052565
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052565-016C	MW-39-070-0922	Groundwater	9/13/2022 9:17:00 AM	9/13/2022	9/27/2022
N052565-016D	MW-39-070-0922	Groundwater	9/13/2022 9:17:00 AM	9/13/2022	9/27/2022
N052565-017A	MW-39-080-0922	Groundwater	9/13/2022 9:53:00 AM	9/13/2022	9/27/2022
N052565-017B	MW-39-080-0922	Groundwater	9/13/2022 9:53:00 AM	9/13/2022	9/27/2022
N052565-017C	MW-39-080-0922	Groundwater	9/13/2022 9:53:00 AM	9/13/2022	9/27/2022
N052565-017D	MW-39-080-0922	Groundwater	9/13/2022 9:53:00 AM	9/13/2022	9/27/2022
N052565-018A	MW-39-100-0922	Groundwater	9/13/2022 12:01:00 PM	9/13/2022	9/27/2022
N052565-018B	MW-39-100-0922	Groundwater	9/13/2022 12:01:00 PM	9/13/2022	9/27/2022
N052565-018C	MW-39-100-0922	Groundwater	9/13/2022 12:01:00 PM	9/13/2022	9/27/2022
N052565-018D	MW-39-100-0922	Groundwater	9/13/2022 12:01:00 PM	9/13/2022	9/27/2022
N052565-019A	MW-30-050-0922	Groundwater	9/13/2022 12:57:00 PM	9/13/2022	9/27/2022
N052565-019B	MW-30-050-0922	Groundwater	9/13/2022 12:57:00 PM	9/13/2022	9/27/2022
N052565-019C	MW-30-050-0922	Groundwater	9/13/2022 12:57:00 PM	9/13/2022	9/27/2022
N052565-019D	MW-30-050-0922	Groundwater	9/13/2022 12:57:00 PM	9/13/2022	9/27/2022
N052565-020A	EB-730-Q322_20220913	Groundwater	9/13/2022 1:30:00 PM	9/13/2022	9/27/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-046-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 11:25:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/14/2022 05:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-112-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	0.29	0.025	0.20		µg/L	1	9/14/2022 12:43 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-168-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:12:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/14/2022 01:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-925-Q322
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/14/2022 01:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-198-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	4.1	0.13	1.0		µg/L	5	9/14/2022 07:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-043-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 1:56:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	10	0.025	0.20		µg/L	1	9/14/2022 12:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-098-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 1:22:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	9/14/2022 10:50 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-115-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:08:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	0.66	0.025	0.20		µg/L	1	9/14/2022 06:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-921-Q322
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:18:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	0.67	0.025	0.20		µg/L	1	9/14/2022 06:41 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-125-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:45:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	9/14/2022 08:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-729-Q322_20220913
Lab Order:	N052565	**Collection Date:**	9/13/2022 2:10:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/14/2022 09:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-040-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 8:37:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/14/2022 02:34 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-920-Q322
Lab Order:	N052565	**Collection Date:**	9/13/2022 8:42:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/14/2022 02:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:25:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/14/2022 03:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-060-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 11:28:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/14/2022 10:12 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-070-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 9:17:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/14/2022 03:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 9:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	17	0.13	1.0		µg/L	5	9/14/2022 09:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:01:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-018		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	110	0.50	4.0		µg/L	20	9/14/2022 11:47 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-050-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:57:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-019		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	3.4	0.025	0.20		µg/L	1	9/14/2022 04:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-730-Q322_20220913
Lab Order:	N052565	**Collection Date:**	9/13/2022 1:30:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-020		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/14/2022 04:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R165688**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165688**
Client ID: **PBW**	Batch ID: **R165688**	TestNo: **EPA 218.6**		Analysis Date: **9/14/2022**	SeqNo: **4833364**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R165688**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165688**
Client ID: **LCSW**	Batch ID: **R165688**	TestNo: **EPA 218.6**		Analysis Date: **9/14/2022**	SeqNo: **4833365**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.109	0.20	5.000	0	102	90	110				

Sample ID: **N052565-015AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165688**
Client ID: **ZZZZZZ**	Batch ID: **R165688**	TestNo: **EPA 218.6**		Analysis Date: **9/14/2022**	SeqNo: **4833367**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.009	0.20	1.000	0	101	90	110				

Sample ID: **N052565-007AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165688**
Client ID: **ZZZZZZ**	Batch ID: **R165688**	TestNo: **EPA 218.6**		Analysis Date: **9/14/2022**	SeqNo: **4833371**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.563	1.0	5.000	0.6460	98.3	90	110				

Sample ID: **N052565-007AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165688**
Client ID: **ZZZZZZ**	Batch ID: **R165688**	TestNo: **EPA 218.6**		Analysis Date: **9/14/2022**	SeqNo: **4833374**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.389	1.0	5.000	0.6460	94.9	90	110	5.563	3.18	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052565-015AMSD** SampType: **MSD** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833375**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.024	0.20	1.000	0	102	90	110	1.009	1.45	20	

Sample ID: **N052565-018ADUP** SampType: **DUP** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833377**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	107.032	4.0						105.3	1.61	20	

Sample ID: **N052565-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833382**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.062	0.20	1.000	0	106	90	110				

Sample ID: **N052565-002AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833383**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.241	0.20	1.000	0.2880	95.3	90	110				

Sample ID: **N052565-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833387**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.055	0.20	1.000	0	106	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052565-018AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165688**
Client ID: **ZZZZZZ**	Batch ID: **R165688**	TestNo: **EPA 218.6**		Analysis Date: **9/14/2022**	SeqNo: **4833388**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	206.162	4.0	100.0	105.3	101	90	110				

Sample ID: **N052565-006AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165688**
Client ID: **ZZZZZZ**	Batch ID: **R165688**	TestNo: **EPA 218.6**		Analysis Date: **9/14/2022**	SeqNo: **4833389**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	15.062	0.20	5.000	10.01	101	90	110				

Sample ID: **N052565-012AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165688**
Client ID: **ZZZZZZ**	Batch ID: **R165688**	TestNo: **EPA 218.6**		Analysis Date: **9/14/2022**	SeqNo: **4833391**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.055	0.20	1.000	0	106	90	110				

Sample ID: **N052565-013AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165688**
Client ID: **ZZZZZZ**	Batch ID: **R165688**	TestNo: **EPA 218.6**		Analysis Date: **9/14/2022**	SeqNo: **4833393**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.050	0.20	1.000	0	105	90	110				

Sample ID: **N052565-014AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165688**
Client ID: **ZZZZZZ**	Batch ID: **R165688**	TestNo: **EPA 218.6**		Analysis Date: **9/14/2022**	SeqNo: **4833395**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.071	0.20	1.000	0	107	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052565-016AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833399**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.037	0.20	1.000	0	104	90	110				

Sample ID: **N052565-019AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833401**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.364	0.20	1.000	3.357	101	90	110				

Sample ID: **N052565-020AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833403**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.004	0.20	1.000	0	100	90	110				

Sample ID: **N052565-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833405**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.997	0.20	1.000	0	99.7	90	110				

Sample ID: **N052565-008AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833409**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.620	0.20	1.000	0.6561	96.4	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052565-009AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833411**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.646	0.20	1.000	0.6671	97.9	90	110				

Sample ID: **N052565-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833417**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	8.878	1.0	5.000	4.108	95.4	90	110				

Sample ID: **N052565-010AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833419**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.922	1.0	5.000	0	98.4	90	110				

Sample ID: **N052565-011AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833421**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.001	0.20	1.000	0	100	90	110				

Sample ID: **N052565-017AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833425**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	41.782	1.0	25.00	16.84	99.8	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-046-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 11:25:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B**	QC Batch: **R165643**			PrepDate:			Analyst: **RAB**
Sulfate	1400	12	100		mg/L	200	9/14/2022 11:05 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A**	QC Batch: **R165642**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/14/2022 12:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-112-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B**	QC Batch: **R165643**			PrepDate:			Analyst: **RAB**
Sulfate	670	6.1	50		mg/L	100	9/14/2022 11:20 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A**	QC Batch: **R165642**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.92	0.095	0.50		mg/L	10	9/14/2022 01:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-168-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:12:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	570	3.0	25		mg/L	50	9/14/2022 11:35 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/14/2022 01:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052565-004

Client Sample ID: MW-925-Q322
Collection Date: 9/13/2022 10:22:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	570	3.0	25		mg/L	50	9/14/2022 11:51 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/14/2022 01:38 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-198-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	980	6.1	50		mg/L	100	9/15/2022 12:37 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	1.2	0.095	0.50		mg/L	10	9/14/2022 01:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-043-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 1:56:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	330	3.0	25		mg/L	50	9/15/2022 12:52 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	1.7	0.095	0.50		mg/L	10	9/14/2022 02:09 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-098-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 1:22:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	650	6.1	50		mg/L	100	9/14/2022 08:32 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	0.87	0.095	0.50		mg/L	10	9/14/2022 11:36 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-115-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:08:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	1000	6.1	50		mg/L	100	9/15/2022 01:07 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/14/2022 02:24 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-921-Q322
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:18:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	1200	6.1	50		mg/L	100	9/15/2022 01:23 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/14/2022 02:39 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-125-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:45:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	1300	6.1	50		mg/L	100	9/15/2022 01:38 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/14/2022 03:25 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-040-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 8:37:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	130	1.2	10		mg/L	20	9/15/2022 01:53 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	9/14/2022 03:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-920-Q322
Lab Order:	N052565	**Collection Date:**	9/13/2022 8:42:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	130	1.2	10		mg/L	20	9/15/2022 02:08 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	9/14/2022 03:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:25:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	200	1.2	10		mg/L	20	9/15/2022 02:24 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	9/14/2022 04:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-060-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 11:28:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	220	3.0	25		mg/L	50	9/14/2022 10:04 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	9/14/2022 07:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-070-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 9:17:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	280	3.0	25		mg/L	50	9/15/2022 02:39 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/14/2022 04:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 9:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	580	3.0	25		mg/L	50	9/15/2022 02:54 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/14/2022 04:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:01:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-018		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	880	6.1	50		mg/L	100	9/15/2022 03:40 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/14/2022 04:58 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-050-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:57:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-019		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	230	1.2	10		mg/L	20	9/15/2022 03:56 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Nitrate as N	0.51	0.048	0.25		mg/L	5	9/14/2022 08:17 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **LCS-R165643_SO4**	SampType: **LCS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **165643**
Client ID: **LCSW**	Batch ID: **R165643**	TestNo: **EPA 300.0**		Analysis Date: **9/14/2022**	SeqNo: **4833563**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	4.347	0.50	4.000	0	109	90	110				

Sample ID: **MB-R165643_SO4**	SampType: **MBLK**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **165643**
Client ID: **PBW**	Batch ID: **R165643**	TestNo: **EPA 300.0**		Analysis Date: **9/14/2022**	SeqNo: **4833564**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	0.331	0.50									

Sample ID: **N052565-007DMS**	SampType: **MS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **165643**
Client ID: **ZZZZZZ**	Batch ID: **R165643**	TestNo: **EPA 300.0**		Analysis Date: **9/14/2022**	SeqNo: **4833566**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	1062.350	50	400.0	654.9	102	80	120				

Sample ID: **N052565-007DMSD**	SampType: **MSD**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **165643**
Client ID: **ZZZZZZ**	Batch ID: **R165643**	TestNo: **EPA 300.0**		Analysis Date: **9/14/2022**	SeqNo: **4833569**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	1110.410	50	400.0	654.9	114	80	120	1062	4.42	20	

Sample ID: **N052565-007DDUP**	SampType: **DUP**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **165643**
Client ID: **ZZZZZZ**	Batch ID: **R165643**	TestNo: **EPA 300.0**		Analysis Date: **9/14/2022**	SeqNo: **4833570**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	651.080	50						654.9	0.580	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **N052565-015DMS**	SampType: **MS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **165643**
Client ID: **ZZZZZZ**	Batch ID: **R165643**	TestNo: **EPA 300.0**		Analysis Date: **9/14/2022**	SeqNo: **4833572**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	411.070	25	200.0	216.1	97.5	80	120				

Sample ID: **N052565-015DMSD**	SampType: **MSD**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **165643**
Client ID: **ZZZZZZ**	Batch ID: **R165643**	TestNo: **EPA 300.0**		Analysis Date: **9/14/2022**	SeqNo: **4833573**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	416.930	25	200.0	216.1	100	80	120	411.1	1.42	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: MB-R165642_NO3	SampType: MBLK	TestCode: 300WLLNO3P	Units: mg/L	Prep Date:	RunNo: 165642
Client ID: PBW	Batch ID: R165642	TestNo: EPA 300.0		Analysis Date: 9/14/2022	SeqNo: 4832431

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: LCS-R165642_NO3	SampType: LCS	TestCode: 300WLLNO3P	Units: mg/L	Prep Date:	RunNo: 165642
Client ID: LCSW	Batch ID: R165642	TestNo: EPA 300.0		Analysis Date: 9/14/2022	SeqNo: 4832432

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.288	0.050	1.250	0	103	90	110				

Sample ID: N052564-003BDUP	SampType: DUP	TestCode: 300WLLNO3P	Units: mg/L	Prep Date:	RunNo: 165642
Client ID: ZZZZZZ	Batch ID: R165642	TestNo: EPA 300.0		Analysis Date: 9/14/2022	SeqNo: 4832435

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	7.948	0.25						8.274	4.03	20	

Sample ID: N052558-006BMS	SampType: MS	TestCode: 300WLLNO3P	Units: mg/L	Prep Date:	RunNo: 165642
Client ID: ZZZZZZ	Batch ID: R165642	TestNo: EPA 300.0		Analysis Date: 9/14/2022	SeqNo: 4832436

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.554	0.25	6.250	0	105	80	120				

Sample ID: N052565-007DMS	SampType: MS	TestCode: 300WLLNO3P	Units: mg/L	Prep Date:	RunNo: 165642
Client ID: ZZZZZZ	Batch ID: R165642	TestNo: EPA 300.0		Analysis Date: 9/14/2022	SeqNo: 4832440

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	13.701	0.50	12.50	0.8730	103	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **N052565-007DMSD**	SampType: **MSD**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165642**
Client ID: **ZZZZZZ**	Batch ID: **R165642**	TestNo: **EPA 300.0**		Analysis Date: **9/14/2022**	SeqNo: **4832441**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	13.767	0.50	12.50	0.8730	103	80	120	13.70	0.481	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **LCS-R165643_NO3** SampType: **LCS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165643**
Client ID: **LCSW** Batch ID: **R165643** TestNo: **EPA 300.0** Analysis Date: **9/14/2022** SeqNo: **4833506**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.336	0.050	1.250	0	107	90	110				

Sample ID: **MB-R165643_NO3** SampType: **MBLK** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165643**
Client ID: **PBW** Batch ID: **R165643** TestNo: **EPA 300.0** Analysis Date: **9/14/2022** SeqNo: **4833507**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **N052565-015DDUP** SampType: **DUP** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165643**
Client ID: **ZZZZZZ** Batch ID: **R165643** TestNo: **EPA 300.0** Analysis Date: **9/14/2022** SeqNo: **4833509**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	0.159	0.25						0.1545	0	20	

Sample ID: **N052565-015DMS** SampType: **MS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165643**
Client ID: **ZZZZZZ** Batch ID: **R165643** TestNo: **EPA 300.0** Analysis Date: **9/14/2022** SeqNo: **4833510**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.644	0.25	6.250	0.1545	104	80	120				

Sample ID: **N052565-015DMSD** SampType: **MSD** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165643**
Client ID: **ZZZZZZ** Batch ID: **R165643** TestNo: **EPA 300.0** Analysis Date: **9/14/2022** SeqNo: **4833511**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.580	0.25	6.250	0.1545	103	80	120	6.644	0.968	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-046-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 11:25:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.6	0.14	1.0		mg/L	1	9/14/2022 04:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-112-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 05:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-168-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:12:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 05:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-925-Q322
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 05:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-198-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 06:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-043-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 1:56:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 06:17 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-098-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 1:22:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	2.7	20		mg/L	20	9/14/2022 12:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-115-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:08:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 06:32 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-921-Q322
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:18:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 06:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-125-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:45:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 07:34 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-040-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 8:37:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	2.6	0.14	1.0		mg/L	1	9/15/2022 11:52 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-920-Q322
Lab Order:	N052565	**Collection Date:**	9/13/2022 8:42:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	2.7	0.14	1.0		mg/L	1	9/15/2022 12:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:25:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 01:09 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-060-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 11:28:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.68	5.0		mg/L	5	9/15/2022 12:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-070-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 9:17:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 01:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 9:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 02:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:01:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-018		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 02:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-050-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:57:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-019		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 02:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R165657**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165657**
Client ID: **PBW**	Batch ID: **R165657**	TestNo: **SM 5310C**		Analysis Date: **9/14/2022**	SeqNo: **4832783**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R165657**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165657**
Client ID: **LCSW**	Batch ID: **R165657**	TestNo: **SM 5310C**		Analysis Date: **9/14/2022**	SeqNo: **4832784**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	4.816	1.0	5.000	0	96.3	85	115				

Sample ID: **N052565-007CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165657**
Client ID: **ZZZZZZ**	Batch ID: **R165657**	TestNo: **SM 5310C**		Analysis Date: **9/14/2022**	SeqNo: **4832791**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	78.408	20	100.0	0	78.4	75	125				

Sample ID: **N052565-007CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165657**
Client ID: **ZZZZZZ**	Batch ID: **R165657**	TestNo: **SM 5310C**		Analysis Date: **9/14/2022**	SeqNo: **4832792**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	77.448	20	100.0	0	77.4	75	125	78.41	1.23	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R165700**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165700**
Client ID: **PBW**	Batch ID: **R165700**	TestNo: **SM 5310C**		Analysis Date: **9/15/2022**	SeqNo: **4834043**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R165700**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165700**
Client ID: **LCSW**	Batch ID: **R165700**	TestNo: **SM 5310C**		Analysis Date: **9/15/2022**	SeqNo: **4834044**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.065	1.0	5.000	0	101	85	115				

Sample ID: **N052565-015CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165700**
Client ID: **ZZZZZZ**	Batch ID: **R165700**	TestNo: **SM 5310C**		Analysis Date: **9/15/2022**	SeqNo: **4834050**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	26.585	5.0	25.00	1.875	98.8	75	125				

Sample ID: **N052565-015CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165700**
Client ID: **ZZZZZZ**	Batch ID: **R165700**	TestNo: **SM 5310C**		Analysis Date: **9/15/2022**	SeqNo: **4834051**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	26.787	5.0	25.00	1.875	99.6	75	125	26.58	0.755	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052565-001

Client Sample ID: MW-82-046-0922
Collection Date: 9/13/2022 11:25:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	5500	13	20		µg/L	1	9/20/2022 06:49 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-112-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C** QC Batch: **94713**				PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	35	13	20		µg/L	1	9/20/2022 06:54 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-168-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:12:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	35	13	20		µg/L	1	9/20/2022 06:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052565-004

Client Sample ID: MW-925-Q322
Collection Date: 9/13/2022 10:22:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	51	13	20		µg/L	1	9/20/2022 07:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052565-005

Client Sample ID: MW-82-198-0922
Collection Date: 9/13/2022 9:24:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 07:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-043-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 1:56:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	53	13	20		µg/L	1	9/20/2022 07:25 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-098-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 1:22:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	190	13	20		µg/L	1	9/20/2022 07:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-115-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:08:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	41	13	20		µg/L	1	9/20/2022 07:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *27-Sep-22*

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-921-Q322
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:18:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	37	13	20		µg/L	1	9/20/2022 08:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-125-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:45:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	410	13	20		µg/L	1	9/20/2022 08:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-040-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 8:37:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	260	13	20		µg/L	1	9/20/2022 08:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052565-013

Client Sample ID: MW-920-Q322
Collection Date: 9/13/2022 8:42:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:		**9/14/2022**	Analyst: **DJ**
Iron	270	13	20		µg/L	1	9/20/2022 08:26 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:25:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	21	13	20		µg/L	1	9/20/2022 08:32 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-060-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 11:28:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	42	13	20		µg/L	1	9/20/2022 08:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-070-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 9:17:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 09:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 9:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 09:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:01:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-018		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 09:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-050-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:57:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-019		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 09:47 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94713**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/14/2022**	RunNo: **165864**
Client ID: **PBW**	Batch ID: **94713**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842761**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-94713**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/14/2022**	RunNo: **165864**
Client ID: **LCSW**	Batch ID: **94713**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842762**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	97.777	20	100.0	0	97.8	85	115				

Sample ID: **N052565-007BMS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/14/2022**	RunNo: **165864**
Client ID: **ZZZZZZ**	Batch ID: **94713**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842774**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	279.110	20	100.0	190.4	88.7	75	125				

Sample ID: **N052565-007BMSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/14/2022**	RunNo: **165864**
Client ID: **ZZZZZZ**	Batch ID: **94713**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842775**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	293.898	20	100.0	190.4	104	75	125	279.1	5.16	20	

Sample ID: **N052565-015BMS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/14/2022**	RunNo: **165864**
Client ID: **ZZZZZZ**	Batch ID: **94713**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842787**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	140.702	20	100.0	41.90	98.8	75	125				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **N052565-015BMSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/14/2022**	RunNo: **165864**
Client ID: **ZZZZZZ**	Batch ID: **94713**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842788**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	146.959	20	100.0	41.90	105	75	125	140.7	4.35	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052565-001

Client Sample ID: MW-82-046-0922
Collection Date: 9/13/2022 11:25:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:		**9/14/2022**	Analyst: **DJ**
Arsenic	23	0.050	0.10		µg/L	1	9/15/2022 06:36 PM
Barium	51	0.083	1.0		µg/L	1	9/15/2022 06:36 PM
Manganese	260	0.13	2.5		µg/L	5	9/15/2022 11:09 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-112-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220915F** QC Batch: **94714**				PrepDate:	**9/14/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/15/2022 06:42 PM
Barium	38	0.083	1.0		µg/L	1	9/15/2022 06:42 PM
Manganese	84	0.026	0.50		µg/L	1	9/15/2022 06:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-168-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:12:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/15/2022 06:48 PM
Barium	38	0.083	1.0		µg/L	1	9/15/2022 06:48 PM
Manganese	42	0.026	0.50		µg/L	1	9/15/2022 06:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-925-Q322
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/15/2022 06:54 PM
Barium	39	0.083	1.0		µg/L	1	9/15/2022 06:54 PM
Manganese	43	0.026	0.50		µg/L	1	9/15/2022 06:54 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052565-005

Client Sample ID: MW-82-198-0922
Collection Date: 9/13/2022 9:24:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:		**9/14/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/15/2022 07:00 PM
Barium	42	0.083	1.0		µg/L	1	9/15/2022 07:00 PM
Manganese	90	0.026	0.50		µg/L	1	9/15/2022 07:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-043-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 1:56:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220915F** QC Batch: **94714**				PrepDate:	**9/14/2022**		Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	9/15/2022 07:06 PM
Barium	69	0.083	1.0		µg/L	1	9/15/2022 07:06 PM
Manganese	24	0.026	0.50		µg/L	1	9/15/2022 07:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-098-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 1:22:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/15/2022 07:29 PM
Barium	80	0.083	1.0		µg/L	1	9/15/2022 07:29 PM
Manganese	130	0.13	2.5		µg/L	5	9/15/2022 07:35 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-115-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:08:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917A**	QC Batch: **94714**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/17/2022 01:41 PM
Barium	21	0.083	1.0		µg/L	1	9/15/2022 07:59 PM
Manganese	18	0.026	0.50		µg/L	1	9/15/2022 07:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-921-Q322
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:18:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/15/2022 08:05 PM
Barium	20	0.083	1.0		µg/L	1	9/15/2022 08:05 PM
Manganese	18	0.026	0.50		µg/L	1	9/15/2022 08:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-125-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:45:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/15/2022 08:11 PM
Barium	47	0.083	1.0		µg/L	1	9/15/2022 08:11 PM
Manganese	560	0.13	2.5		µg/L	5	9/16/2022 01:37 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052565-012

Client Sample ID: MW-39-040-0922
Collection Date: 9/13/2022 8:37:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:		**9/14/2022**	Analyst: **DJ**
Arsenic	15	0.050	0.10		µg/L	1	9/15/2022 08:17 PM
Barium	66	0.083	1.0		µg/L	1	9/15/2022 08:17 PM
Manganese	99	0.026	0.50		µg/L	1	9/15/2022 08:17 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052565-013

Client Sample ID: MW-920-Q322
Collection Date: 9/13/2022 8:42:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:		**9/14/2022**	Analyst: **DJ**
Arsenic	15	0.050	0.10		µg/L	1	9/15/2022 08:40 PM
Barium	61	0.083	1.0		µg/L	1	9/15/2022 08:40 PM
Manganese	98	0.026	0.50		µg/L	1	9/15/2022 08:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052565-014

Client Sample ID: MW-39-050-0922
Collection Date: 9/13/2022 10:25:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:		**9/14/2022**	Analyst: **DJ**
Arsenic	1.6	0.050	0.10		µg/L	1	9/15/2022 08:46 PM
Barium	43	0.083	1.0		µg/L	1	9/15/2022 08:46 PM
Manganese	210	0.13	2.5		µg/L	5	9/16/2022 01:42 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052565-015

Client Sample ID: MW-39-060-0922
Collection Date: 9/13/2022 11:28:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:		**9/14/2022**	Analyst: **DJ**
Arsenic	2.0	0.050	0.10		µg/L	1	9/15/2022 08:52 PM
Barium	32	0.083	1.0		µg/L	1	9/15/2022 08:52 PM
Manganese	180	0.13	2.5		µg/L	5	9/15/2022 08:58 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-070-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 9:17:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917A** QC Batch: **94714**				PrepDate:	**9/14/2022**		Analyst: **DJ**
Arsenic	1.2	0.050	0.10		µg/L	1	9/17/2022 01:47 PM
Barium	36	0.083	1.0		µg/L	1	9/15/2022 09:22 PM
Manganese	12	0.026	0.50		µg/L	1	9/15/2022 09:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

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ANALYTICAL RESULTS

Print Date: *27-Sep-22*

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 9:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/15/2022 09:28 PM
Barium	32	0.083	1.0		µg/L	1	9/15/2022 09:28 PM
Manganese	7.8	0.026	0.50		µg/L	1	9/15/2022 09:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:01:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-018		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/15/2022 10:57 PM
Barium	31	0.083	1.0		µg/L	1	9/15/2022 10:57 PM
Manganese	8.9	0.026	0.50		µg/L	1	9/15/2022 10:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

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ANALYTICAL RESULTS

Print Date: *27-Sep-22*

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-050-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:57:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-019		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Arsenic	2.9	0.050	0.10		µg/L	1	9/15/2022 11:03 PM
Barium	20	0.083	1.0		µg/L	1	9/15/2022 11:03 PM
Manganese	1.8	0.026	0.50		µg/L	1	9/15/2022 11:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94714** SampType: **MBLK** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **9/14/2022** RunNo: **165758**
Client ID: **PBW** Batch ID: **94714** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **9/15/2022** SeqNo: **4837263**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID: **LCS-94714** SampType: **LCS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **9/14/2022** RunNo: **165758**
Client ID: **LCSW** Batch ID: **94714** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **9/15/2022** SeqNo: **4837264**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.093	0.10	10.00	0	101	85	115				
Barium	10.748	1.0	10.00	0	107	85	115				
Manganese	108.372	0.50	100.0	0	108	85	115				

Sample ID: **N052565-007BMS** SampType: **MS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **9/14/2022** RunNo: **165758**
Client ID: **ZZZZZZ** Batch ID: **94714** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **9/15/2022** SeqNo: **4837277**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	8.076	0.10	10.00	0	80.8	75	125				
Barium	95.302	1.0	10.00	79.93	154	75	125				S

Sample ID: **N052565-007BMSD** SampType: **MSD** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **9/14/2022** RunNo: **165758**
Client ID: **ZZZZZZ** Batch ID: **94714** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **9/15/2022** SeqNo: **4837278**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	7.902	0.10	10.00	0	79.0	75	125	8.076	2.17	20	
Barium	93.721	1.0	10.00	79.93	138	75	125	95.30	1.67	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052565-015BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/14/2022**	RunNo: **165758**
Client ID: **ZZZZZZ**	Batch ID: **94714**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/15/2022**	SeqNo: **4837290**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.694	0.10	10.00	1.977	107	75	125				
Barium	40.739	1.0	10.00	31.62	91.2	75	125				

Sample ID: **N052565-015BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/14/2022**	RunNo: **165758**
Client ID: **ZZZZZZ**	Batch ID: **94714**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/15/2022**	SeqNo: **4837291**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.115	0.10	10.00	1.977	101	75	125	12.69	4.67	20	
Barium	40.613	1.0	10.00	31.62	90.0	75	125	40.74	0.310	20	

Sample ID: **N052565-007BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/14/2022**	RunNo: **165758**
Client ID: **ZZZZZZ**	Batch ID: **94714**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/16/2022**	SeqNo: **4837321**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	244.313	2.5	100.0	133.8	111	75	125				

Sample ID: **N052565-007BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/14/2022**	RunNo: **165758**
Client ID: **ZZZZZZ**	Batch ID: **94714**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/16/2022**	SeqNo: **4837322**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	247.774	2.5	100.0	133.8	114	75	125	244.3	1.41	20	

Sample ID: **N052565-015BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/14/2022**	RunNo: **165758**
Client ID: **ZZZZZZ**	Batch ID: **94714**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/16/2022**	SeqNo: **4837327**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	284.679	2.5	100.0	181.8	103	75	125				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052565-015BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/14/2022**	RunNo: **165758**
Client ID: **ZZZZZZ**	Batch ID: **94714**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/16/2022**	SeqNo: **4837328**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	291.681	2.5	100.0	181.8	110	75	125	284.7	2.43	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052565-007B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165758**
Client ID: **ZZZZZZ**	Batch ID: **94714**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/15/2022**	SeqNo: **4837276**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	8.131	0.10	10.00	0	81.3	80	120				
Barium	93.633	1.0	10.00	79.93	137	80	120				S

Sample ID: **N052565-015B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165758**
Client ID: **ZZZZZZ**	Batch ID: **94714**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/15/2022**	SeqNo: **4837289**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.331	0.10	10.00	1.977	104	80	120				
Barium	39.997	1.0	10.00	31.62	83.8	80	120				

Sample ID: **N052565-007B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165758**
Client ID: **ZZZZZZ**	Batch ID: **94714**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/16/2022**	SeqNo: **4837320**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	242.344	2.5	100.0	133.8	109	80	120				

Sample ID: **N052565-015B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165758**
Client ID: **ZZZZZZ**	Batch ID: **94714**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/16/2022**	SeqNo: **4837326**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	285.306	2.5	100.0	181.8	103	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

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CHAIN OF CUSTODY RECORD

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11050 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement: Excel EDD; Geotracker; Labspec; Others ✓; Specify: RWQCB; Global ID:
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	QA/QC: RTNE; RWQCB ✓; CalTrans; LEVEL III; LEVEL IV; Regulatory; Specify State:
Address: Roseville, CA 95678	Email: daniel.moore@arcadis-us.com	Address:	Sample Receipt Condition: 1. Chilled; 2. Headspace; 3. Container Intact; 4. Seal Present; 5. IR number 3; 6. Method of Cooling: Ice
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Sample Temp: 2.6°C / 5.4°C / 3.8°C
Submitted By:		Phone: 949-727-1400, ext 200 Fax:	
Title: Field Tech	Phone: 916-786-3302 Fax:		
Signature: Scott Moyer 9.13.22 Date:	Sampled By: Nara Tay		
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for		
Project Name: PG&E Topock - PCM	Signature: Date: 9/13/22		
Project Number: 30121866.3Q22GW			

Matrix: Ground X; Sediment; Potable; Soil; NPDES; Other Solid; Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrite, Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter, HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052565-01	MW-82-046-0922	9/13/2022	11:25		X		X			X			X	E	6	P	BNS	
2	-02	MW-82-112-0922	9/13/2022	10:54		X		X			X			X	E	6	P	BNS	
3	-03	MW-82-168-0922	9/13/2022	10:12		X		X			X			X	E	6	P	BNS	
4	-04	MW-925-Q322	9/13/2022	10:22		X		X			X			X	E	6	P	BNS	
5	-05	MW-82-198-0922	9/13/2022	9:24		X		X			X			X	E	6	P	BNS	
6	-06	MW-81-043-0922	9/13/2022	13:56		X		X			X			X	E	6	P	BNS	
7	-07	MW-81-098-0922	9/13/2022	13:22		X		X			X			X	E	9	P	BNS	MS/MSD
8	-08	MW-44-115-0922	9/13/2022	12:08		X		X			X			X	E	6	P	BNS	
9	-09	MW-921-Q322	9/13/2022	12:18		X		X			X			X	E	6	P	BNS	
10	-10	MW-44-125-0922	9/13/2022	12:45		X		X			X			X	E	6	P	BNS	
11	-11	EB-729-Q322	9/13/2022	14:10		X		X			X			X	E	1	P	BNS	
12	-12	MW-39-040-0922	9/13/2022	8:37		X		X			X			X	E	6	P	BNS	
13	-13	MW-920-Q322	9/13/2022	8:42		X		X			X			X	E	6	P	BNS	
14	-14	MW-39-050-0922	9/13/2022	10:25		X		X			X			X	E	6	P	BNS	

Relinquished by (Signature and Printed Name):	Date/Time:	Received by (Signature and Printed Name):	Date/Time:
Nara Tay	9/13/22 1530	NSCAYLEN	9/13/22@1530
NSCAYLEN	9/13/22 @1816	Jeandra Redinger	9/13/22 1816

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [X] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives: H=HCL; N=HNO_3; S=H_2SO_4; C=4°C; Z=Zn(AC)$_2$; O=NaOH; T=$Na_2S_2O_3$; Others/Specify: B (NH4)2SO4/NH4OH

Container Type: T=Tube; V=VOA; P=Pint; J=Jar; B=Tedlar; G=Glass; M=Metal; M=Metal; C=Can

White=Laboratory Copy
Yellow=Customer's Copy

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Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement	QA/QC	Sample Receipt Condition
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD	RTNE	Y N
Address: Roseville, CA 95678	Email: [illegible]@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker	RWQCB ✓	1. Chilled
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Labspec	CalTrans	2. Headspace
Submitted By:		Phone: 949-727-1400, ext 200 Fax:	Others ✓	LEVEL III	3. Container Intact
Title:	Phone: 916-786-3302 Fax:		Specify: RWQCB	LEVEL IV	4. Seal Present
Signature: Date:	Sampled By: Nava Tay		Global ID:	Regulatory	5. IR number
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for			Specify State:	6. Method of Cooling: Ice
Project Name: PG&E Topock - PCM	Signature:	Date: 9/13/22			Sample Temp: 2.6°C / 5.4°C / 3.8°C
Project Number: 30121868.3Q22GW7					

Matrix: Ground X | Sediment | Potable | Soil | NPDES | Other Solid | Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrite, Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052565-15	MW-39-060-0922	9/13/2022	11:28		X		X			X			X	E	9	P	BNS	MS/MSD
2	-16	MW-39-070-0922	9/13/2022	9:17		X		X			X			X	E	6	P	BNS	
3	-17	MW-39-080-0922	9/13/2022	9:53		X		X			X			X	E	6	P	BNS	
4	-18	MW-39-100-0922	9/13/2022	12:01		X		X			X			X	E	6	P	BNS	
5	-19	MW-30-050-0922	9/13/2022	12:57		X		X			X			X	E	6	P	BNS	
6	-20	EB-730-Q322	9/13/2022	13:30		X									E	1	P	BNS	
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			

Courier:
Tracking No.:

Relinquished by (Signature and Printed Name)	Date/Time	Relinquished by (Signature and Printed Name)	Date/Time
Nava Tay	9/13/22 1530	MCARTIN	9/13/22@1530
MCARTIN	9/13/22 @1816	Yoanna Rodriguez	9/13/22 1816
Relinquished by (Signature and Printed Name)	Date/Time	Relinquished by (Signature and Printed Name)	Date/Time

Turn Around Time (TAT)

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- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [X] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

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2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
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8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:

H=HCL	N=HNO_3	S=H_2SO_4	C=4°C
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$	
Others/Specify:	B (NH4)2SO4/NH4OH		

Container Type:

T=Tube	V=VOA	P=Pint
J=Jar	B=Tedlar	G=Glass
M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	9/13/2022	Workorder:	N052565
Rep sample Temp (Deg C):	2.6/5.4 /3.8	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

9/14/2022

Checklist Completed By: YR YRodriguez

Reviewed By: for: MBC 9/23/2022

Subject: Re: PG&E Topock - PCM, 30121866.3Q22GW (ASSET Labs No. N052565)
From: "Madsen, Laura" <Laura.Madsen@arcadis.com>
Date: 9/14/2022, 11:17 AM
To: Yoandra Rodriguez <yoandra@assetlaboratories.com>
CC: "maryann.balilu@assetlaboratoriesph.com" <maryann.balilu@assetlaboratoriesph.com>, "rustico.aquino@assetlaboratoriesph.com" <rustico.aquino@assetlaboratoriesph.com>, "giselle@assetlaboratories.com" <giselle@assetlaboratories.com>, Tina Rice <Tina.Rice@critigen.com>

Hi
Sample 11 should be hex cr only

Thanks!

Get Outlook for iOS

From: Yoandra Rodriguez <yoandra@assetlaboratories.com>
Sent: Wednesday, September 14, 2022 1:24:15 PM
To: Madsen, Laura <Laura.Madsen@arcadis.com>
Cc: maryann.balilu@assetlaboratoriesph.com <maryann.balilu@assetlaboratoriesph.com>; rustico.aquino@assetlaboratoriesph.com <rustico.aquino@assetlaboratoriesph.com>; giselle@assetlaboratories.com <giselle@assetlaboratories.com>; Tina Rice <Tina.Rice@critigen.com>
Subject: PG&E Topock - PCM, 30121866.3Q22GW (ASSET Labs No. N052565)

Hi Laura,

Please confirm if sample 11 (EB-729-Q322) should be analyzed only for Hex Cr.

COC is attached for reference.

--
Thanks,

Yoandra Rodriguez
Project Manager

Nevada: 3151 W. Post Road, Las Vegas, NV 89118 | P: 702.307.2659 | F: 702.307.2691
California: 11110 Artesia Blvd., Ste. B, Cerritos, CA 90703 | P: 562.219.7435 | F: 562.219.7436

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Mary Ann Balilu

From: Yoandra Rodriguez <yoandra@assetlaboratories.com>
Sent: Tuesday, September 20, 2022 3:26 PM
To: maryann.balilu@assetlaboratoriesph.com; rustico.aquino@assetlaboratoriesph.com
Subject: Fwd: Topock - Duplicate IDs

-------- Forwarded Message --------
Subject: Topock - Duplicate IDs
Date: Tue, 20 Sep 2022 22:13:57 +0000
From: Tina Rice <Tina.Rice@locana.co>
To: Yoandra Rodriguez <yoandra@assetlaboratories.com>
CC: Nancy Sibucao <nancy@assetlaboratories.com>, Madsen, Laura <laura.madsen@arcadis.com>

Hi Yoandra,

Could you please update the following sample IDs?

WorkOrder	ClientSampID	New ClientSampID	DateCollected
N052565	EB-729-Q322	EB-729-Q322_20220913	9/13/2022 14:10
N052565	EB-730-Q322	EB-730-Q322_20220913	9/13/2022 13:30
N052606	EB-731-Q322	EB-731-Q322_20220914	9/14/2022 12:50
N052606	EB-732-Q322	EB-732-Q322_20220914	9/14/2022 14:15

Thank you,
Tina
--
Thanks,

Yoandra Rodriguez
Project Manager

Nevada: 3151 W. Post Road, Las Vegas, NV 89118 | P: 702.307.2659 | F: 702.307.2691
California: 11110 Artesia Blvd., Ste. B, Cerritos, CA 90703 | P: 562.219.7435 | F: 562.219.7436

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ASSET Laboratories

WORK ORDER Summary

27-Sep-22

WorkOrder: N052565

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/13/2022 6:16 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052565-001A	MW-82-046-0922	9/13/2022 11:25:00 AM	9/27/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-001B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-001C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-001D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-002A	MW-82-112-0922	9/13/2022 10:54:00 AM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-002B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-002C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-002D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-003A	MW-82-168-0922	9/13/2022 10:12:00 AM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-003B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-003C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

27-Sep-22

WorkOrder: N052565

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/13/2022 6:16 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052565-003D	MW-82-168-0922	9/13/2022 10:12:00 AM	9/27/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-004A	MW-925-Q322	9/13/2022 10:22:00 AM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-004B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-004C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-004D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-005A	MW-82-198-0922	9/13/2022 9:24:00 AM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-005B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-005C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-005D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-006A	MW-81-043-0922	9/13/2022 1:56:00 PM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-006B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW

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WORK ORDER Summary

27-Sep-22

WorkOrder: N052565

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/13/2022 6:16 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052565-006B	MW-81-043-0922	9/13/2022 1:56:00 PM	9/27/2022	Groundwater	EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-006C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-006D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-007A	MW-81-098-0922	9/13/2022 1:22:00 PM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☑	☐	WW
N052565-007B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☑	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☑	☐	WW
N052565-007C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☑	☐	VW
N052565-007D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
N052565-008A	MW-44-115-0922	9/13/2022 12:08:00 PM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-008B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-008C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-008D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-009A	MW-921-Q322	9/13/2022 12:18:00 PM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-009B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW

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WORK ORDER Summary

27-Sep-22

WorkOrder: N052565

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/13/2022 6:16 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052565-009B	MW-921-Q322	9/13/2022 12:18:00 PM	9/27/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-009C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-009D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-010A	MW-44-125-0922	9/13/2022 12:45:00 PM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-010B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-010C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-010D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-011A	EB-729-Q322_20220913	9/13/2022 2:10:00 PM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-012A	MW-39-040-0922	9/13/2022 8:37:00 AM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-012B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-012C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-012D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

27-Sep-22

WorkOrder: N052565

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/13/2022 6:16 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052565-012D	MW-39-040-0922	9/13/2022 8:37:00 AM	9/27/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-013A	MW-920-Q322	9/13/2022 8:42:00 AM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-013B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-013C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-013D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-014A	MW-39-050-0922	9/13/2022 10:25:00 AM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-014B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-014C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-014D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-015A	MW-39-060-0922	9/13/2022 11:28:00 AM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☑	☐	WW
N052565-015B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☑	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☑	☐	WW

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WORK ORDER Summary

27-Sep-22

WorkOrder: N052565

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/13/2022 6:16 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052565-015C	MW-39-060-0922	9/13/2022 11:28:00 AM	9/27/2022	Groundwater	SM 5310C	TOTAL ORGANIC CARBON	☐	☑	☐	VW
N052565-015D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
N052565-016A	MW-39-070-0922	9/13/2022 9:17:00 AM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-016B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-016C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-016D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-017A	MW-39-080-0922	9/13/2022 9:53:00 AM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-017B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-017C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-017D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-018A	MW-39-100-0922	9/13/2022 12:01:00 PM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-018B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW

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WORK ORDER Summary

27-Sep-22

WorkOrder: N052565

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/13/2022 6:16 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052565-018B	MW-39-100-0922	9/13/2022 12:01:00 PM	9/27/2022	Groundwater	EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-018C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-018D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-019A	MW-30-050-0922	9/13/2022 12:57:00 PM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-019B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-019C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-019D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-020A	EB-730-Q322_20220913	9/13/2022 1:30:00 PM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-021A	FOLDER	9/27/2022	9/27/2022		Folder	Folder	☐	☐	☐	LAB
			9/27/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/27/2022		Folder	Folder	☐	☐	☐	LAB

September 27, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052605

RE: PG&E Topock - RCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on September 14, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

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CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab Order: N052605

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Sample N052605-001 was diluted due to matrix. Sample has bright pink color.

Analytical Comments for EPA 6020_Dissolved:

Samples were diluted due to matrix. Digestates are colored.

Analytical Comments for EPA 300.0:

Sample N052605-001 was diluted due to matrix. Sample has bright pink color.

ASSET Laboratories

Date: *27-Sep-22*

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab Order: N052605
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052605-001A	MW-67-185-0922	Groundwater	9/14/2022 11:34:00 AM	9/14/2022	9/27/2022
N052605-001B	MW-67-185-0922	Groundwater	9/14/2022 11:34:00 AM	9/14/2022	9/27/2022
N052605-001C	MW-67-185-0922	Groundwater	9/14/2022 11:34:00 AM	9/14/2022	9/27/2022
N052605-002A	MW-68-180-0922	Groundwater	9/14/2022 12:30:00 PM	9/14/2022	9/27/2022
N052605-002B	MW-68-180-0922	Groundwater	9/14/2022 12:30:00 PM	9/14/2022	9/27/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-67-185-0922
Lab Order:	N052605	**Collection Date:**	9/14/2022 11:34:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052605-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A** QC Batch: **R165731**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	10	80		µg/L	400	9/15/2022 05:57 PM
DISSOLVED METALS BY ICP-MS							
		EPA 3010A			**EPA 6020**		
RunID: **NV00922-ICP8_220917E** QC Batch: **94794**				PrepDate:	**9/17/2022**		Analyst: **DJ**
Chromium	ND	0.18	5.0		µg/L	5	9/18/2022 07:16 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-68-180-0922
Lab Order:	N052605	**Collection Date:**	9/14/2022 12:30:00 PM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052605-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	36000	130	1000		µg/L	5000	9/15/2022 05:19 PM
DISSOLVED METALS BY ICP-MS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220920B**	QC Batch: **94794**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Chromium	40000	22	620		µg/L	625	9/20/2022 03:33 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052605
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R165731**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165731**
Client ID: **PBW**	Batch ID: **R165731**	TestNo: **EPA 218.6**		Analysis Date: **9/15/2022**	SeqNo: **4835309**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R165731**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165731**
Client ID: **LCSW**	Batch ID: **R165731**	TestNo: **EPA 218.6**		Analysis Date: **9/15/2022**	SeqNo: **4835310**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.061	0.20	5.000	0	101	90	110				

Sample ID: **N052606-008AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165731**
Client ID: **ZZZZZZ**	Batch ID: **R165731**	TestNo: **EPA 218.6**		Analysis Date: **9/15/2022**	SeqNo: **4835312**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2723.060	40	1000	1728	99.5	90	110				

Sample ID: **N052606-008AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165731**
Client ID: **ZZZZZZ**	Batch ID: **R165731**	TestNo: **EPA 218.6**		Analysis Date: **9/15/2022**	SeqNo: **4835313**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2709.120	40	1000	1728	98.1	90	110	2723	0.513	20	

Sample ID: **N052606-009ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165731**
Client ID: **ZZZZZZ**	Batch ID: **R165731**	TestNo: **EPA 218.6**		Analysis Date: **9/15/2022**	SeqNo: **4835315**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1316.800	40						1336	1.43	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052605
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052606-009AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835316**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2293.040	40	1000	1336	95.7	90	110				

Sample ID: **N052606-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835318**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	810.435	10	250.0	559.8	100	90	110				

Sample ID: **N052606-002AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835322**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	230.274	4.0	100.0	131.1	99.1	90	110				

Sample ID: **N052606-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835324**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	786.260	10	250.0	551.9	93.8	90	110				

Sample ID: **N052606-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835326**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	43.328	1.0	25.00	19.31	96.1	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052605
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052606-007AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835328**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1068.760	20	500.0	564.8	101	90	110				

Sample ID: **N052606-013AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835330**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	40.881	1.0	25.00	16.15	98.9	90	110				

Sample ID: **N052606-015AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835334**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	44.064	1.0	25.00	19.42	98.6	90	110				

Sample ID: **N052606-014AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835336**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	946.330	20	500.0	461.9	96.9	90	110				

Sample ID: **N052606-016AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835338**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1162.090	20	500.0	665.9	99.2	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052605
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052606-010AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835340**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.004	0.20	1.000	0	100	90	110				

Sample ID: **N052606-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835346**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.004	0.20	1.000	0	100	90	110				

Sample ID: **N052606-012AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835348**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.978	0.20	1.000	0	97.8	90	110				

Sample ID: **N052605-002AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835350**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	60331.500	1000	25000	36410	95.7	90	110				

Sample ID: **N052605-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835354**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	370.520	80	400.0	0	92.6	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052605
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052606-011AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165731**
Client ID: **ZZZZZZ**	Batch ID: **R165731**	TestNo: **EPA 218.6**		Analysis Date: **9/15/2022**	SeqNo: **4835355**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.013	0.20	1.000	0	101	90	110				

Sample ID: **N052606-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165731**
Client ID: **ZZZZZZ**	Batch ID: **R165731**	TestNo: **EPA 218.6**		Analysis Date: **9/15/2022**	SeqNo: **4835356**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	53.828	1.0	25.00	29.92	95.6	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052605
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020DIS_CrPGE_TPK

Sample ID: **MB-94794**	SampType: **MBLK**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165788**
Client ID: **PBW**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/18/2022**	SeqNo: **4839146**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.114	1.0									

Sample ID: **LCS-94794**	SampType: **LCS**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165788**
Client ID: **LCSW**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/18/2022**	SeqNo: **4839147**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.772	1.0	10.00	0	97.7	85	115				

Sample ID: **N052544-001B-MS**	SampType: **MS**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165788**
Client ID: **ZZZZZZ**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/18/2022**	SeqNo: **4839151**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	100.231	1.0	10.00	91.61	86.2	75	125				

Sample ID: **N052544-001B-MSD**	SampType: **MSD**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165788**
Client ID: **ZZZZZZ**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/18/2022**	SeqNo: **4839152**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	100.998	1.0	10.00	91.61	93.9	75	125	100.2	0.763	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-67-185-0922
Lab Order:	N052605	**Collection Date:**	9/14/2022 11:34:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052605-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A**	QC Batch: **R165707**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	3.8	20		mg/L	400	9/15/2022 03:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052605
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R165707_NO3**	SampType: **MBLK**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165707**
Client ID: **PBW**	Batch ID: **R165707**	TestNo: **EPA 300.0**		Analysis Date: **9/15/2022**	SeqNo: **4834552**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R165707_NO3**	SampType: **LCS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165707**
Client ID: **LCSW**	Batch ID: **R165707**	TestNo: **EPA 300.0**		Analysis Date: **9/15/2022**	SeqNo: **4834553**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.249	0.050	1.250	0	99.9	90	110				

Sample ID: **N052606-005DMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165707**
Client ID: **ZZZZZZ**	Batch ID: **R165707**	TestNo: **EPA 300.0**		Analysis Date: **9/15/2022**	SeqNo: **4834555**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.970	0.50	12.50	0.4960	99.8	80	120				

Sample ID: **N052606-005DMSD**	SampType: **MSD**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165707**
Client ID: **ZZZZZZ**	Batch ID: **R165707**	TestNo: **EPA 300.0**		Analysis Date: **9/15/2022**	SeqNo: **4834556**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	13.038	0.50	12.50	0.4960	100	80	120	12.97	0.523	20	

Sample ID: **N052606-009DDUP**	SampType: **DUP**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165707**
Client ID: **ZZZZZZ**	Batch ID: **R165707**	TestNo: **EPA 300.0**		Analysis Date: **9/15/2022**	SeqNo: **4834558**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	4.041	0.50						4.149	2.64	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052605
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **N052606-009DMS** SampType: **MS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165707**
Client ID: **ZZZZZZ** Batch ID: **R165707** TestNo: **EPA 300.0** Analysis Date: **9/15/2022** SeqNo: **4834559**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	16.747	0.50	12.50	4.149	101	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052605
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab ID: N052605-001

Client Sample ID: MW-67-185-0922
Collection Date: 9/14/2022 11:34:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220920C**	QC Batch: **94794**			PrepDate:		**9/17/2022**	Analyst: **DJ**
Manganese	1100	0.66	12		µg/L	25	9/20/2022 03:10 PM
Molybdenum	41	0.60	2.5		µg/L	5	9/18/2022 07:16 AM
Selenium	81	0.22	2.5		µg/L	5	9/18/2022 07:16 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-68-180-0922
Lab Order:	N052605	**Collection Date:**	9/14/2022 12:30:00 PM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052605-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:		**9/17/2022**	Analyst: **DJ**
Molybdenum	45	0.60	2.5		µg/L	5	9/18/2022 07:28 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052605
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94794**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165789**
Client ID: **PBW**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/18/2022**	SeqNo: **4839300**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	ND	0.50									
Selenium	ND	0.50									

Sample ID: **LCS-94794**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165789**
Client ID: **LCSW**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/18/2022**	SeqNo: **4839301**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	10.150	0.50	10.00	0	102	85	115				
Selenium	8.942	0.50	10.00	0	89.4	85	115				

Sample ID: **N052544-001B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165789**
Client ID: **ZZZZZZ**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/18/2022**	SeqNo: **4839305**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	32.432	0.50	10.00	21.63	108	75	125				
Selenium	11.325	0.50	10.00	2.655	86.7	75	125				

Sample ID: **N052544-001B-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165789**
Client ID: **ZZZZZZ**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/18/2022**	SeqNo: **4839306**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	32.764	0.50	10.00	21.63	111	75	125	32.43	1.02	20	
Selenium	11.524	0.50	10.00	2.655	88.7	75	125	11.32	1.74	20	

Sample ID: **MB-94794**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165854**
Client ID: **PBW**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/19/2022**	SeqNo: **4842176**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052605
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94794**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165854**
Client ID: **PBW**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/19/2022**	SeqNo: **4842176**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	0.036	0.50									

Sample ID: **LCS-94794**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165854**
Client ID: **LCSW**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/19/2022**	SeqNo: **4842177**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	103.673	0.50	100.0	0	104	85	115				

Sample ID: **N052544-001B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165854**
Client ID: **ZZZZZZ**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/19/2022**	SeqNo: **4842181**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	128.929	0.50	100.0	32.15	96.8	75	125				

Sample ID: **N052544-001B-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165854**
Client ID: **ZZZZZZ**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/19/2022**	SeqNo: **4842182**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	130.434	0.50	100.0	32.15	98.3	75	125	128.9	1.16	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- Calculations are based on raw values

W052605

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com daniel.moore@critigen.com	Address:	
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com	P.O.#
Submitted By:		Phone: 949-727-1400, ext 200	Fax:
Title: Field Tech	Phone: 916-786-3302 Fax:		
Signature: [signature] Date: 9.14.22	Sampled By: Nara Tay		
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for		
Project Name: PG&E Topock - RCM	Signature: [signature] Date: 9/14/22		
Project Number: 30121866.3Q22GW			

EDD Requirement		QA/QC	
Excel EDD		RTNE	
Geotracker		RWQCB	✓
Labspec		CalTrans	
Others	✓	LEVEL III	
Specify: RWQCB		LEVEL IV	
		Regulatory	
Global ID:		Specify State:	

Sample Receipt Condition	Y	N
1. Chilled	✓	
2. Headspace		
3. Container Intact	✓	
4. Seal Present		
5. IR number	3	
6. Method of Cooling: ICE		
Sample Temp: 3.1, 6.1°C		

Courier: ASSET
Tracking No.:

9/15/22

Matrix			
Ground	X	Sediment	
Potable		Soil	
NPDES		Other Solid	
Surface			

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Manganese, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Selenium (500mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052605-01	MW-67-185-0922	9/14/2022	11:34		X	X	X	X	X	X	E	3	P	BNS	
2	-02	MW-68-180-0922	9/14/2022	12:30		X			X	X		E	2	P	BNS	
3																
4																
5																
7																
8																
9																
10																
11																
12																
13																
14																

Reliquished by (Signature and Printed Name):	Date/Time:	Reliquished by (Signature and Printed Name):	Date/Time:
[signature] Nara Tay	9/14/22 1530	Dante Ortiz [signature]	9/14/22 15:30
Dante Ortiz	9/14/22 20:11	Dante Ortiz [signature] Dante Ortiz	9/14/22 20:11

Turn Around Time (TAT)

- [ ] A < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [X] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:

H=HCL	N=HNO_3	S=H_2SO_4	C=4°C
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$	
Others/Specify:	B	(NH4)2SO4/NH4OH	

Container Type:

T=Tube	V=VOA	P=Pint
J=Jar	B=Tedlar	G=Glass
M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	9/14/2022	Workorder:	N052605
Rep sample Temp (Deg C):	3.1	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: EF EFanegoF 9/15/2022

Reviewed By: for: MBC 9/17/2022

ASSET Laboratories

WORK ORDER Summary

15-Sep-22

WorkOrder: N052605

Client ID: ARCUS02

Project: PG&E Topock - RCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/14/2022 8:11 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052605-001A	MW-67-185-0922	9/14/2022 11:34:00 AM	9/28/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052605-001B			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052605-001C			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052605-002A	MW-68-180-0922	9/14/2022 12:30:00 PM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052605-002B			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052605-003A	FOLDER	9/28/2022	9/28/2022		Folder	Folder	☐	☐	☐	LAB
			9/28/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/28/2022		Folder	Folder	☐	☐	☐	LAB

September 30, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052606

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on September 14, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Method Blank (MB-R165707) has detect greater than 1/2 the reporting limit for Sulfate. Samples result for this analyte were greater than 5x the Method Blank detection therefore reanalysis of the samples was not necessary.

Analytical Comments for EPA 6010B_Dissolved:

Matrix Spike Duplicate (MSD) is outside recovery and RPD criteria for Iron in QC sample N052606-001B-MSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020_Dissolved:

Matrix Spike (MS) is outside recovery criteria for Barium in QC sample N052628-010BMS possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for SM 5310C:

Matrix Spike (MS) is outside recovery criteria in QC sample N052565-015CMS at lower dilution possibly due to matrix interference. QC sample was diluted and recovery passed criteria. Thus sample

reference N052565-015 and MS/MSD were reported at 5x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Matrix Spike (MS) is outside recovery criteria in QC sample N052628-010CMS at several dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N052628-010 and MS/MSD were reported at 20x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052606
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052606-001A	TW-02D-0922	Groundwater	9/14/2022 8:48:00 AM	9/14/2022	9/30/2022
N052606-001B	TW-02D-0922	Groundwater	9/14/2022 8:48:00 AM	9/14/2022	9/30/2022
N052606-001C	TW-02D-0922	Groundwater	9/14/2022 8:48:00 AM	9/14/2022	9/30/2022
N052606-001D	TW-02D-0922	Groundwater	9/14/2022 8:48:00 AM	9/14/2022	9/30/2022
N052606-002A	TW-02S-0922	Groundwater	9/14/2022 8:14:00 AM	9/14/2022	9/30/2022
N052606-002B	TW-02S-0922	Groundwater	9/14/2022 8:14:00 AM	9/14/2022	9/30/2022
N052606-002C	TW-02S-0922	Groundwater	9/14/2022 8:14:00 AM	9/14/2022	9/30/2022
N052606-002D	TW-02S-0922	Groundwater	9/14/2022 8:14:00 AM	9/14/2022	9/30/2022
N052606-003A	TW-03D-0922	Groundwater	9/14/2022 9:24:00 AM	9/14/2022	9/30/2022
N052606-003B	TW-03D-0922	Groundwater	9/14/2022 9:24:00 AM	9/14/2022	9/30/2022
N052606-003C	TW-03D-0922	Groundwater	9/14/2022 9:24:00 AM	9/14/2022	9/30/2022
N052606-003D	TW-03D-0922	Groundwater	9/14/2022 9:24:00 AM	9/14/2022	9/30/2022
N052606-004A	EB-731-Q322_20220914	Groundwater	9/14/2022 12:50:00 PM	9/14/2022	9/30/2022
N052606-005A	MW-31-060-0922	Groundwater	9/14/2022 9:51:00 AM	9/14/2022	9/30/2022
N052606-005B	MW-31-060-0922	Groundwater	9/14/2022 9:51:00 AM	9/14/2022	9/30/2022
N052606-005C	MW-31-060-0922	Groundwater	9/14/2022 9:51:00 AM	9/14/2022	9/30/2022
N052606-005D	MW-31-060-0922	Groundwater	9/14/2022 9:51:00 AM	9/14/2022	9/30/2022
N052606-006A	MW-31-135-0922	Groundwater	9/14/2022 10:41:00 AM	9/14/2022	9/30/2022
N052606-006B	MW-31-135-0922	Groundwater	9/14/2022 10:41:00 AM	9/14/2022	9/30/2022
N052606-006C	MW-31-135-0922	Groundwater	9/14/2022 10:41:00 AM	9/14/2022	9/30/2022
N052606-006D	MW-31-135-0922	Groundwater	9/14/2022 10:41:00 AM	9/14/2022	9/30/2022
N052606-007A	MW-20-070-0922	Groundwater	9/14/2022 12:01:00 PM	9/14/2022	9/30/2022
N052606-007B	MW-20-070-0922	Groundwater	9/14/2022 12:01:00 PM	9/14/2022	9/30/2022
N052606-007C	MW-20-070-0922	Groundwater	9/14/2022 12:01:00 PM	9/14/2022	9/30/2022
N052606-007D	MW-20-070-0922	Groundwater	9/14/2022 12:01:00 PM	9/14/2022	9/30/2022
N052606-008A	MW-20-100-0922	Groundwater	9/14/2022 1:38:00 PM	9/14/2022	9/30/2022
N052606-008B	MW-20-100-0922	Groundwater	9/14/2022 1:38:00 PM	9/14/2022	9/30/2022
N052606-008C	MW-20-100-0922	Groundwater	9/14/2022 1:38:00 PM	9/14/2022	9/30/2022
N052606-008D	MW-20-100-0922	Groundwater	9/14/2022 1:38:00 PM	9/14/2022	9/30/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052606
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052606-009A	MW-20-130-0922	Groundwater	9/14/2022 12:49:00 PM	9/14/2022	9/30/2022
N052606-009B	MW-20-130-0922	Groundwater	9/14/2022 12:49:00 PM	9/14/2022	9/30/2022
N052606-009C	MW-20-130-0922	Groundwater	9/14/2022 12:49:00 PM	9/14/2022	9/30/2022
N052606-009D	MW-20-130-0922	Groundwater	9/14/2022 12:49:00 PM	9/14/2022	9/30/2022
N052606-010A	MW-36-090-0922	Groundwater	9/14/2022 8:03:00 AM	9/14/2022	9/30/2022
N052606-010B	MW-36-090-0922	Groundwater	9/14/2022 8:03:00 AM	9/14/2022	9/30/2022
N052606-010C	MW-36-090-0922	Groundwater	9/14/2022 8:03:00 AM	9/14/2022	9/30/2022
N052606-010D	MW-36-090-0922	Groundwater	9/14/2022 8:03:00 AM	9/14/2022	9/30/2022
N052606-011A	MW-36-100-0922	Groundwater	9/14/2022 8:39:00 AM	9/14/2022	9/30/2022
N052606-011B	MW-36-100-0922	Groundwater	9/14/2022 8:39:00 AM	9/14/2022	9/30/2022
N052606-011C	MW-36-100-0922	Groundwater	9/14/2022 8:39:00 AM	9/14/2022	9/30/2022
N052606-011D	MW-36-100-0922	Groundwater	9/14/2022 8:39:00 AM	9/14/2022	9/30/2022
N052606-012A	EB-732-Q322_20220914	Groundwater	9/14/2022 2:15:00 PM	9/14/2022	9/30/2022
N052606-013A	IRZ-09-100-0922	Groundwater	9/14/2022 11:15:00 AM	9/14/2022	9/30/2022
N052606-013B	IRZ-09-100-0922	Groundwater	9/14/2022 11:15:00 AM	9/14/2022	9/30/2022
N052606-013C	IRZ-09-100-0922	Groundwater	9/14/2022 11:15:00 AM	9/14/2022	9/30/2022
N052606-013D	IRZ-09-100-0922	Groundwater	9/14/2022 11:15:00 AM	9/14/2022	9/30/2022
N052606-013E	IRZ-09-100-0922	Groundwater	9/14/2022 11:15:00 AM	9/14/2022	9/30/2022
N052606-014A	IRZ-13D-210-0922	Groundwater	9/14/2022 10:25:00 AM	9/14/2022	9/30/2022
N052606-014B	IRZ-13D-210-0922	Groundwater	9/14/2022 10:25:00 AM	9/14/2022	9/30/2022
N052606-014C	IRZ-13D-210-0922	Groundwater	9/14/2022 10:25:00 AM	9/14/2022	9/30/2022
N052606-014D	IRZ-13D-210-0922	Groundwater	9/14/2022 10:25:00 AM	9/14/2022	9/30/2022
N052606-014E	IRZ-13D-210-0922	Groundwater	9/14/2022 10:25:00 AM	9/14/2022	9/30/2022
N052606-015A	IRZ-13S-095-0922	Groundwater	9/14/2022 10:10:00 AM	9/14/2022	9/30/2022
N052606-015B	IRZ-13S-095-0922	Groundwater	9/14/2022 10:10:00 AM	9/14/2022	9/30/2022
N052606-015C	IRZ-13S-095-0922	Groundwater	9/14/2022 10:10:00 AM	9/14/2022	9/30/2022
N052606-015D	IRZ-13S-095-0922	Groundwater	9/14/2022 10:10:00 AM	9/14/2022	9/30/2022
N052606-015E	IRZ-13S-095-0922	Groundwater	9/14/2022 10:10:00 AM	9/14/2022	9/30/2022
N052606-016A	IRZ-23-143-0922	Groundwater	9/14/2022 9:30:00 AM	9/14/2022	9/30/2022
N052606-016B	IRZ-23-143-0922	Groundwater	9/14/2022 9:30:00 AM	9/14/2022	9/30/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052606
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052606-016C	IRZ-23-143-0922	Groundwater	9/14/2022 9:30:00 AM	9/14/2022	9/30/2022
N052606-016D	IRZ-23-143-0922	Groundwater	9/14/2022 9:30:00 AM	9/14/2022	9/30/2022
N052606-016E	IRZ-23-143-0922	Groundwater	9/14/2022 9:30:00 AM	9/14/2022	9/30/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02D-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 8:48:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	560	1.3	10		µg/L	50	9/15/2022 11:17 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02S-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 8:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	130	0.50	4.0		µg/L	20	9/15/2022 11:54 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-03D-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	550	1.3	10		µg/L	50	9/15/2022 12:13 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-731-Q322_20220914
Lab Order:	N052606	**Collection Date:**	9/14/2022 12:50:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/15/2022 04:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-060-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 9:51:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	30	0.13	1.0		µg/L	5	9/15/2022 04:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-135-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:41:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	19	0.13	1.0		µg/L	5	9/15/2022 12:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-070-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 12:01:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	560	2.5	20		µg/L	100	9/15/2022 01:14 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-100-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 1:38:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	1700	5.0	40		µg/L	200	9/15/2022 10:16 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-130-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 12:49:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	1300	5.0	40		µg/L	200	9/15/2022 10:48 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-090-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 8:03:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/15/2022 03:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-100-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 8:39:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/15/2022 03:26 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-732-Q322_20220914
Lab Order:	N052606	**Collection Date:**	9/14/2022 2:15:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/15/2022 05:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-09-100-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 11:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	16	0.13	1.0		µg/L	5	9/15/2022 01:33 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-13D-210-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:25:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	460	2.5	20		µg/L	100	9/15/2022 02:29 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-13S-095-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	19	0.13	1.0		µg/L	5	9/15/2022 02:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-23-143-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 9:30:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	670	2.5	20		µg/L	100	9/15/2022 02:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	MB-R165731	SampType:	MBLK	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731		
Client ID:	PBW	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835309		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Hexavalent Chromium		ND	0.20										

Sample ID	LCS-R165731	SampType:	LCS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731		
Client ID:	LCSW	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835310		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Hexavalent Chromium		5.061	0.20	5.000	0	101	90	110					

Sample ID	N052606-008AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731		
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835312		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Hexavalent Chromium		2723.060	40	1000	1728	99.5	90	110					

Sample ID	N052606-008AMSD	SampType:	MSD	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731		
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835313		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Hexavalent Chromium		2709.120	40	1000	1728	98.1	90	110	2723	0.513	20		

Sample ID	N052606-009ADUP	SampType:	DUP	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731		
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835315		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Hexavalent Chromium		1316.800	40						1336	1.43	20		

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052606-009AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835316

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2293.040	40	1000	1336	95.7	90	110				

Sample ID	N052606-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835318

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	810.435	10	250.0	559.8	100	90	110				

Sample ID	N052606-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835322

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	230.274	4.0	100.0	131.1	99.1	90	110				

Sample ID	N052606-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835324

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	786.260	10	250.0	551.9	93.8	90	110				

Sample ID	N052606-006AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835326

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	43.328	1.0	25.00	19.31	96.1	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052606-007AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835328

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1068.760	20	500.0	564.8	101	90	110				

Sample ID	N052606-013AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835330

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	40.881	1.0	25.00	16.15	98.9	90	110				

Sample ID	N052606-015AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835334

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	44.064	1.0	25.00	19.42	98.6	90	110				

Sample ID	N052606-014AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835336

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	946.330	20	500.0	461.9	96.9	90	110				

Sample ID	N052606-016AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835338

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1162.090	20	500.0	665.9	99.2	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052606-010AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835340

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.004	0.20	1.000	0	100	90	110				

Sample ID	N052606-004AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835346

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.004	0.20	1.000	0	100	90	110				

Sample ID	N052606-012AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835348

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.978	0.20	1.000	0	97.8	90	110				

Sample ID	N052605-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835350

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	60331.500	1000	25000	36410	95.7	90	110				

Sample ID	N052605-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835354

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	370.520	80	400.0	0	92.6	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052606-011AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731		
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835355		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	1.013	0.20	1.000	0	101	90	110						

Sample ID	N052606-005AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731		
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835356		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	53.828	1.0	25.00	29.92	95.6	90	110						

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052606-001

Client Sample ID: TW-02D-0922
Collection Date: 9/14/2022 8:48:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Sulfate	740	6.1	50		mg/L	100	9/15/2022 06:56 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Nitrate as N	0.97	0.095	0.50		mg/L	10	9/15/2022 11:32 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02S-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 8:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Sulfate	230	1.2	10		mg/L	20	9/15/2022 07:11 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Nitrate as N	2.6	0.095	0.50		mg/L	10	9/15/2022 11:47 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-03D-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A**	QC Batch: **R165707**			PrepDate:			Analyst: **RAB**
Sulfate	790	6.1	50		mg/L	100	9/15/2022 07:26 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A**	QC Batch: **R165707**			PrepDate:			Analyst: **RAB**
Nitrate as N	1.0	0.095	0.50		mg/L	10	9/15/2022 12:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-060-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 9:51:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A**	QC Batch: **R165707**			PrepDate:			Analyst: **RAB**
Sulfate	570	6.1	50		mg/L	100	9/15/2022 04:38 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A**	QC Batch: **R165707**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/15/2022 10:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-135-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:41:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Sulfate	660	6.1	50		mg/L	100	9/15/2022 07:41 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Nitrate as N	1.3	0.095	0.50		mg/L	10	9/15/2022 01:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-070-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 12:01:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Sulfate	420	6.1	50		mg/L	100	9/15/2022 07:57 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Nitrate as N	25	0.19	1.0		mg/L	20	9/15/2022 12:33 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-100-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 1:38:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Sulfate	810	6.1	50		mg/L	100	9/15/2022 08:12 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Nitrate as N	9.1	0.095	0.50		mg/L	10	9/15/2022 01:19 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-130-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 12:49:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A**	QC Batch: **R165707**			PrepDate:			Analyst: **RAB**
Sulfate	1500	12	100		mg/L	200	9/15/2022 03:52 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A**	QC Batch: **R165707**			PrepDate:			Analyst: **RAB**
Nitrate as N	4.1	0.095	0.50		mg/L	10	9/15/2022 10:46 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052606-010

Client Sample ID: MW-36-090-0922
Collection Date: 9/14/2022 8:03:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Sulfate	290	1.2	10		mg/L	20	9/15/2022 08:27 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/15/2022 01:34 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052606-011

Client Sample ID: MW-36-100-0922
Collection Date: 9/14/2022 8:39:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Sulfate	350	1.2	10		mg/L	20	9/15/2022 08:43 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/15/2022 01:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-09-100-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 11:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Sulfate	520	3.0	25		mg/L	50	9/15/2022 08:58 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Nitrate as N	2.1	0.095	0.50		mg/L	10	9/15/2022 02:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-13D-210-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:25:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Sulfate	960	6.1	50		mg/L	100	9/15/2022 09:44 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Nitrate as N	2.1	0.095	0.50		mg/L	10	9/15/2022 02:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052606-015

Client Sample ID: IRZ-13S-095-0922
Collection Date: 9/14/2022 10:10:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Sulfate	400	3.0	25		mg/L	50	9/15/2022 09:59 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Nitrate as N	2.0	0.095	0.50		mg/L	10	9/15/2022 02:35 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052606-016

Client Sample ID: IRZ-23-143-0922
Collection Date: 9/14/2022 9:30:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A** QC Batch: **R165764**				PrepDate:			Analyst: **RAB**
Sulfate	470	3.0	25		mg/L	50	9/16/2022 04:26 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Nitrate as N	4.7	0.095	0.50		mg/L	10	9/15/2022 02:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	MB-R165707_SO4	SampType:	MBLK	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165707
Client ID:	PBW	Batch ID:	R165707	TestNo:	EPA 300.0			Analysis Date:	9/15/2022	SeqNo:	4834587

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	0.333	0.50									

Sample ID	LCS-R165707_SO4	SampType:	LCS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165707
Client ID:	LCSW	Batch ID:	R165707	TestNo:	EPA 300.0			Analysis Date:	9/15/2022	SeqNo:	4834588

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	4.026	0.50	4.000	0	101	90	110				

Sample ID	N052606-009DMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165707
Client ID:	ZZZZZZ	Batch ID:	R165707	TestNo:	EPA 300.0			Analysis Date:	9/15/2022	SeqNo:	4834594

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	2283.880	100	800.0	1470	102	80	120				

Sample ID	N052606-009DMSD	SampType:	MSD	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165707
Client ID:	ZZZZZZ	Batch ID:	R165707	TestNo:	EPA 300.0			Analysis Date:	9/15/2022	SeqNo:	4834595

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	2291.280	100	800.0	1470	103	80	120	2284	0.323	20	

Sample ID	N052606-005DDUP	SampType:	DUP	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165707
Client ID:	ZZZZZZ	Batch ID:	R165707	TestNo:	EPA 300.0			Analysis Date:	9/15/2022	SeqNo:	4834597

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	565.110	50						571.2	1.07	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	N052606-005DMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165707
Client ID:	ZZZZZZ	Batch ID:	R165707	TestNo:	EPA 300.0			Analysis Date:	9/15/2022	SeqNo:	4834598

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	968.850	50	400.0	571.2	99.4	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	LCS-R165764_SO4	SampType:	LCS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	LCSW	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838473

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	3.997	0.50	4.000	0	99.9	90	110				

Sample ID	MB-R165764_SO4	SampType:	MBLK	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	PBW	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838474

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.50									

Sample ID	N052628-010DMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	ZZZZZZ	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838480

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	1023.380	50	400.0	623.9	99.9	80	120				

Sample ID	N052628-010DMSD	SampType:	MSD	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	ZZZZZZ	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838481

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	1017.510	50	400.0	623.9	98.4	80	120	1023	0.575	20	

Sample ID	N052628-002DDUP	SampType:	DUP	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	ZZZZZZ	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838483

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	1519.600	100						1514	0.394	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	N052628-002DMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	ZZZZZZ	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838484

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	2332.900	100	800.0	1514	102	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	MB-R165707_NO3	SampType:	MBLK	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165707
Client ID:	PBW	Batch ID:	R165707	TestNo:	EPA 300.0			Analysis Date:	9/15/2022	SeqNo:	4834552

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID	LCS-R165707_NO3	SampType:	LCS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165707
Client ID:	LCSW	Batch ID:	R165707	TestNo:	EPA 300.0			Analysis Date:	9/15/2022	SeqNo:	4834553

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.249	0.050	1.250	0	99.9	90	110				

Sample ID	N052606-005DMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165707
Client ID:	ZZZZZZ	Batch ID:	R165707	TestNo:	EPA 300.0			Analysis Date:	9/15/2022	SeqNo:	4834555

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.970	0.50	12.50	0.4960	99.8	80	120				

Sample ID	N052606-005DMSD	SampType:	MSD	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165707
Client ID:	ZZZZZZ	Batch ID:	R165707	TestNo:	EPA 300.0			Analysis Date:	9/15/2022	SeqNo:	4834556

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	13.038	0.50	12.50	0.4960	100	80	120	12.97	0.523	20	

Sample ID	N052606-009DDUP	SampType:	DUP	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165707
Client ID:	ZZZZZZ	Batch ID:	R165707	TestNo:	EPA 300.0			Analysis Date:	9/15/2022	SeqNo:	4834558

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	4.041	0.50						4.149	2.64	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	N052606-009DMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165707
Client ID:	ZZZZZZ	Batch ID:	R165707	TestNo:	EPA 300.0			Analysis Date:	9/15/2022	SeqNo:	4834559

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	16.747	0.50	12.50	4.149	101	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02D-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 8:48:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 02:58 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02S-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 8:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 03:13 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-03D-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 03:29 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-060-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 9:51:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 03:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-135-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:41:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 04:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-070-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 12:01:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 04:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-100-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 1:38:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 05:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-130-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 12:49:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 05:17 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-090-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 8:03:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 05:33 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-100-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 8:39:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 05:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-09-100-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 11:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 06:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-13D-210-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:25:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 06:19 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-13S-095-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 12:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-23-143-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 9:30:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 12:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID **MB-R165700**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165700**
Client ID: **PBW**	Batch ID: **R165700**	TestNo: **SM 5310C**		Analysis Date: **9/15/2022**	SeqNo: **4834043**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID **LCS-R165700**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165700**
Client ID: **LCSW**	Batch ID: **R165700**	TestNo: **SM 5310C**		Analysis Date: **9/15/2022**	SeqNo: **4834044**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.065	1.0	5.000	0	101	85	115				

Sample ID **N052565-015CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165700**
Client ID: **ZZZZZZ**	Batch ID: **R165700**	TestNo: **SM 5310C**		Analysis Date: **9/15/2022**	SeqNo: **4834050**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	26.585	5.0	25.00	1.875	98.8	75	125				

Sample ID **N052565-015CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165700**
Client ID: **ZZZZZZ**	Batch ID: **R165700**	TestNo: **SM 5310C**		Analysis Date: **9/15/2022**	SeqNo: **4834051**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	26.787	5.0	25.00	1.875	99.6	75	125	26.58	0.755	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID	MB-R165755	SampType:	MBLK	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	165755		
Client ID:	PBW	Batch ID:	R165755	TestNo:	SM 5310C			Analysis Date:	9/16/2022	SeqNo:	4837063		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Organic Carbon, Total	ND	1.0											

Sample ID	LCS-R165755	SampType:	LCS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	165755		
Client ID:	LCSW	Batch ID:	R165755	TestNo:	SM 5310C			Analysis Date:	9/16/2022	SeqNo:	4837064		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Organic Carbon, Total	4.873	1.0	5.000	0	97.5	85	115						

Sample ID	N052628-010CMS	SampType:	MS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	165755		
Client ID:	ZZZZZZ	Batch ID:	R165755	TestNo:	SM 5310C			Analysis Date:	9/16/2022	SeqNo:	4837070		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Organic Carbon, Total	80.822	20	100.0	0	80.8	75	125						

Sample ID	N052628-010CMSD	SampType:	MSD	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	165755		
Client ID:	ZZZZZZ	Batch ID:	R165755	TestNo:	SM 5310C			Analysis Date:	9/16/2022	SeqNo:	4837075		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Organic Carbon, Total	80.406	20	100.0	0	80.4	75	125	80.82	0.516	20			

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052606-001

Client Sample ID: TW-02D-0922
Collection Date: 9/14/2022 8:48:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94833**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 10:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02S-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 8:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94833**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 10:54 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-03D-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94833**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	95	13	20		µg/L	1	9/20/2022 10:59 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-060-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 9:51:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94833**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	170	13	20		µg/L	1	9/20/2022 11:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-135-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:41:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94833**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 11:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-070-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 12:01:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94833**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 11:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-100-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 1:38:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94833**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 11:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-130-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 12:49:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94833**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 11:26 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-090-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 8:03:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C**	QC Batch: **94833**			PrepDate:	**9/20/2022**		Analyst: **DJ**
Iron	38	13	20		µg/L	1	9/20/2022 11:31 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-100-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 8:39:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94833**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	170	13	20		µg/L	1	9/20/2022 11:36 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052606-013

Client Sample ID: IRZ-09-100-0922
Collection Date: 9/14/2022 11:15:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94833**			PrepDate:		**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 11:42 PM
TOTAL METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220928B**	QC Batch: **94893**			PrepDate:		**9/22/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/28/2022 02:13 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-13D-210-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:25:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220929B**	QC Batch: **94833**			PrepDate:		**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/29/2022 02:42 PM
TOTAL METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220929B**	QC Batch: **94893**			PrepDate:		**9/22/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/29/2022 02:26 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-13S-095-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220929B**	QC Batch: **94833**			PrepDate:		**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/29/2022 03:02 PM
TOTAL METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220929B**	QC Batch: **94893**			PrepDate:		**9/22/2022**	Analyst: **DJ**
Iron	21	13	20		µg/L	1	9/29/2022 02:37 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit	
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified	
	DO	Surrogate Diluted Out			

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052606-016

Client Sample ID: IRZ-23-143-0922
Collection Date: 9/14/2022 9:30:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94833**			PrepDate:		**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/21/2022 12:07 AM
TOTAL METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220928B**	QC Batch: **94893**			PrepDate:		**9/22/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/28/2022 02:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	MB-94833	SampType:	MBLK	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	9/20/2022	RunNo:	165864
Client ID:	PBW	Batch ID:	94833	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/20/2022	SeqNo:	4842797

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID	LCS-94833	SampType:	LCS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	9/20/2022	RunNo:	165864
Client ID:	LCSW	Batch ID:	94833	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/20/2022	SeqNo:	4842798

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	95.646	20	100.0	0	95.6	85	115				

Sample ID	N052606-001B-MS	SampType:	MS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	9/20/2022	RunNo:	165864
Client ID:	ZZZZZZ	Batch ID:	94833	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/20/2022	SeqNo:	4842802

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	99.769	20	100.0	13.79	86.0	75	125				

Sample ID	N052606-001B-MSD	SampType:	MSD	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	9/20/2022	RunNo:	165864
Client ID:	ZZZZZZ	Batch ID:	94833	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/20/2022	SeqNo:	4842803

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	188.503	20	100.0	13.79	175	75	125	99.77	61.6	20	SR

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WPGEPPB

Sample ID	MB-94893	SampType:	MBLK	TestCode:	6010_WPGE	Units:	µg/L	Prep Date:	9/22/2022	RunNo:	166072
Client ID:	PBW	Batch ID:	94893	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/28/2022	SeqNo:	4853027

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID	LCS1-94893	SampType:	LCS	TestCode:	6010_WPGE	Units:	µg/L	Prep Date:	9/22/2022	RunNo:	166072
Client ID:	LCSW	Batch ID:	94893	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/28/2022	SeqNo:	4853028

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	94.780	20	100.0	0	94.8	85	115				

Sample ID	N052606-013E-MS1	SampType:	MS	TestCode:	6010_WPGE	Units:	µg/L	Prep Date:	9/22/2022	RunNo:	166072
Client ID:	ZZZZZZ	Batch ID:	94893	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/28/2022	SeqNo:	4853032

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	100.197	20	100.0	14.72	85.5	75	125				

Sample ID	N052606-013E-MSD	SampType:	MSD	TestCode:	6010_WPGE	Units:	µg/L	Prep Date:	9/22/2022	RunNo:	166072
Client ID:	ZZZZZZ	Batch ID:	94893	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/28/2022	SeqNo:	4853033

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	100.572	20	100.0	14.72	85.8	75	125	100.2	0.374	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	N052606-001B-PS	SampType:	PS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:		RunNo:	165864
Client ID:	ZZZZZZ	Batch ID:	94833	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/20/2022	SeqNo:	4842801

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	139.581	20	100.0	13.79	126	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WPGEPPB

Sample ID	N052606-013E-PS	SampType:	PS	TestCode:	6010_WPGE	Units:	µg/L	Prep Date:		RunNo:	166072
Client ID:	ZZZZZZ	Batch ID:	94893	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/28/2022	SeqNo:	4853031

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	99.725	20	100.0	14.72	85.0	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052606-001

Client Sample ID: TW-02D-0922
Collection Date: 9/14/2022 8:48:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:		**9/17/2022**	Analyst: **DJ**
Arsenic	3.1	0.050	0.10		µg/L	1	9/18/2022 07:40 AM
Barium	23	0.083	1.0		µg/L	1	9/18/2022 07:40 AM
Manganese	7.7	0.026	0.50		µg/L	1	9/20/2022 03:39 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052606-002

Client Sample ID: TW-02S-0922
Collection Date: 9/14/2022 8:14:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220919C**	QC Batch: **94794**			PrepDate:		**9/17/2022**	Analyst: **DJ**
Arsenic	0.81	0.050	0.10		µg/L	1	9/19/2022 06:36 PM
Barium	110	0.083	1.0		µg/L	1	9/19/2022 06:36 PM
Manganese	ND	0.026	0.50		µg/L	1	9/20/2022 03:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-03D-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	1.8	0.050	0.10		µg/L	1	9/18/2022 08:03 AM
Barium	29	0.083	1.0		µg/L	1	9/19/2022 06:42 PM
Manganese	19	0.026	0.50		µg/L	1	9/20/2022 03:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-060-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 9:51:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220927B**	QC Batch: **94794**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/27/2022 05:04 PM
Barium	99	0.083	1.0		µg/L	1	9/19/2022 06:48 PM
Manganese	980	0.66	12		µg/L	25	9/20/2022 04:24 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-135-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:41:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220919C**	QC Batch: **94794**			PrepDate:		**9/17/2022**	Analyst: **DJ**
Arsenic	1.1	0.050	0.10		µg/L	1	9/19/2022 07:18 PM
Barium	41	0.083	1.0		µg/L	1	9/19/2022 07:18 PM
Manganese	3.1	0.026	0.50		µg/L	1	9/20/2022 04:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-070-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 12:01:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	1.3	0.050	0.10		µg/L	1	9/18/2022 08:21 AM
Barium	32	0.083	1.0		µg/L	1	9/19/2022 07:24 PM
Manganese	ND	0.026	0.50		µg/L	1	9/20/2022 04:36 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-100-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 1:38:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 08:27 AM
Barium	77	0.083	1.0		µg/L	1	9/19/2022 07:29 PM
Manganese	ND	0.026	0.50		µg/L	1	9/20/2022 04:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052606-009

Client Sample ID: MW-20-130-0922
Collection Date: 9/14/2022 12:49:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:		**9/17/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 08:33 AM
Barium	33	0.083	1.0		µg/L	1	9/19/2022 07:35 PM
Manganese	16	0.026	0.50		µg/L	1	9/20/2022 04:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052606-010

Client Sample ID: MW-36-090-0922
Collection Date: 9/14/2022 8:03:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220919C**	QC Batch: **94794**			PrepDate:		**9/17/2022**	Analyst: **DJ**
Arsenic	2.0	0.050	0.10		µg/L	1	9/19/2022 07:41 PM
Barium	43	0.083	1.0		µg/L	1	9/19/2022 07:41 PM
Manganese	160	0.026	0.50		µg/L	1	9/20/2022 04:54 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052606-011

Client Sample ID: MW-36-100-0922
Collection Date: 9/14/2022 8:39:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220917F**	QC Batch: **94795**			PrepDate:		**9/17/2022**	Analyst: **DJ**
Arsenic	10	0.050	0.10		µg/L	1	9/18/2022 09:20 AM
Barium	40	0.083	1.0		µg/L	1	9/20/2022 05:36 PM
Manganese	340	0.13	2.5		µg/L	5	9/20/2022 05:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-09-100-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 11:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220920C**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Manganese	1.6	0.026	0.50		µg/L	1	9/20/2022 05:47 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-13D-210-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:25:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220920C**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Manganese	ND	0.026	0.50		µg/L	1	9/20/2022 05:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-13S-095-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220920C**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Manganese	ND	0.026	0.50		µg/L	1	9/20/2022 05:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-23-143-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 9:30:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220920C**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Manganese	ND	0.026	0.50		µg/L	1	9/20/2022 06:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	MB-94794	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165789
Client ID:	PBW	Batch ID:	94794	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839300

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									

Sample ID	LCS-94794	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165789
Client ID:	LCSW	Batch ID:	94794	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839301

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.472	0.10	10.00	0	94.7	85	115				
Barium	10.073	1.0	10.00	0	101	85	115				

Sample ID	N052544-001B-MS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165789
Client ID:	ZZZZZZ	Batch ID:	94794	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839305

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.573	0.10	10.00	0.09992	94.7	75	125				
Barium	68.259	1.0	10.00	59.08	91.7	75	125				

Sample ID	N052544-001B-MSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165789
Client ID:	ZZZZZZ	Batch ID:	94794	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839306

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.547	0.10	10.00	0.09992	94.5	75	125	9.573	0.275	20	
Barium	69.558	1.0	10.00	59.08	105	75	125	68.26	1.89	20	

Sample ID	MB-94794	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165854
Client ID:	PBW	Batch ID:	94794	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/19/2022	SeqNo:	4842176

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	MB-94794	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165854
Client ID:	PBW	Batch ID:	94794	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/19/2022	SeqNo:	4842176

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	0.036	0.50									

Sample ID	LCS-94794	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165854
Client ID:	LCSW	Batch ID:	94794	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/19/2022	SeqNo:	4842177

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	103.673	0.50	100.0	0	104	85	115				

Sample ID	N052544-001B-MS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165854
Client ID:	ZZZZZZ	Batch ID:	94794	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/19/2022	SeqNo:	4842181

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	128.929	0.50	100.0	32.15	96.8	75	125				

Sample ID	N052544-001B-MSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165854
Client ID:	ZZZZZZ	Batch ID:	94794	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/19/2022	SeqNo:	4842182

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	130.434	0.50	100.0	32.15	98.3	75	125	128.9	1.16	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	MB-94795	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165789
Client ID:	PBW	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839336

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									

Sample ID	LCS-94795	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165789
Client ID:	LCSW	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839337

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.323	0.10	10.00	0	93.2	85	115				

Sample ID	N052628-010BMS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165789
Client ID:	ZZZZZZ	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839359

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.690	0.10	10.00	1.092	86.0	75	125				

Sample ID	N052628-010BMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165789
Client ID:	ZZZZZZ	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839360

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.070	0.10	10.00	1.092	89.8	75	125	9.690	3.85	20	

Sample ID	N052628-010BMS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165854
Client ID:	ZZZZZZ	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/19/2022	SeqNo:	4842252

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	47.209	1.0	10.00	40.90	63.1	75	125				S
Manganese	103.705	0.50	100.0	7.234	96.5	75	125				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N052628-010BMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165854
Client ID:	ZZZZZZ	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/19/2022	SeqNo:	4842253

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	50.188	1.0	10.00	40.90	92.9	75	125	47.21	6.12	20	
Manganese	105.952	0.50	100.0	7.234	98.7	75	125	103.7	2.14	20	

Sample ID	MB-94795	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165884
Client ID:	PBW	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/20/2022	SeqNo:	4843861

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID	LCS-94795	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165884
Client ID:	LCSW	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/20/2022	SeqNo:	4843862

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	9.245	1.0	10.00	0	92.4	85	115				
Manganese	97.617	0.50	100.0	0	97.6	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N052544-001B-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	165789
Client ID:	ZZZZZZ	Batch ID:	94794	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839304

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.441	0.10	10.00	0.09992	93.4	80	120				
Barium	68.878	1.0	10.00	59.08	97.9	80	120				

Sample ID	N052544-001B-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	165854
Client ID:	ZZZZZZ	Batch ID:	94794	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/19/2022	SeqNo:	4842180

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	126.563	0.50	100.0	32.15	94.4	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N052628-010B-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	165789
Client ID:	ZZZZZZ	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839358

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.063	0.10	10.00	1.092	89.7	80	120				

Sample ID	N052628-010B-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	165854
Client ID:	ZZZZZZ	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/19/2022	SeqNo:	4842251

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	48.105	1.0	10.00	40.90	72.0	80	120				S
Manganese	102.585	0.50	100.0	7.234	95.4	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

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P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement: Excel EDD; Geotracker; Labspec; Others ✓ Specify: RWQCB
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	QA/QC: RTNE; RWQCB ✓; CalTrans; LEVEL III ✓; LEVEL IV; Regulatory
Address: Roseville, CA 95678	Email: [redacted] dan.bush@arcadis.com	Address:	Sample Receipt Condition: 1. Chilled ✓; 2. Headspace; 3. Container Intact ✓; 4. Seal Present; 5. IR number 7
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	6. Method of Cooling: ICE
Submitted By:		Phone: 949-727-1400, ext 200 Fax:	Sample Temp: 3.1°C, 2.1°C
Title: Field Tech	Phone: 916-786-3302 Fax:	Global ID:	Specify State:
Signature: Date: 9.14.22	Sampled By: Nara Tay		Courier: ASSET
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for		Tracking No.:
Project Name: PG&E Topock - PCM	Signature:	Date: 9/14/22	
Project Number: 30121866.3Q22GW			

Matrix: Ground | X | Sediment; Potable | Soil; NPDES | Other Solid; Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrite, Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052606-01	TW-02D-0922	9/14/2022	8:48		X		X			X			X	E	6	P	BNS	
2	-02	TW-02S-0922	9/14/2022	8:14		X		X			X			X	E	6	P	BNS	
3	-03	TW-03D-0922	9/14/2022	9:24		X		X			X			X	E	6	P	BNS	
4	-04	EB-731-Q322	9/14/2022	12:50		X									E	6	P	BNS	
5	-05	MW-31-060-0922	9/14/2022	9:51		X		X			X			X	E	6	P	BNS	
6	-06	MW-31-135-0922	9/14/2022	10:41		X		X			X			X	E	6	P	BNS	
7	-07	MW-20-070-0922	9/14/2022	12:01		X		X			X			X	E	6	P	BNS	MS/MSD
8	-08	MW-20-100-0922	9/14/2022	13:38		X		X			X			X	E	6	P	BNS	
9	-09	MW-20-130-0922	9/14/2022	12:49		X		X			X			X	E	6	P	BNS	
10	-10	MW-36-090-0922	9/14/2022	8:03		X		X			X			X	E	6	P	BNS	
11	-11	MW-36-100-0922	9/14/2022	8:39		X		X			X			X	E	6	P	BNS	
12	-12	EB-732-Q322	9/14/2022	14:15		X									E	6	P	BNS	
13															E	6	P	BNS	
14															E	6	P	BNS	

Relinquished by (Signature and Printed Name):	Date/Time:	Received by (Signature and Printed Name):	Date/Time:
Nara Tay	9/14/22 1530	Dante Ortiz Dante Ortiz	9/14/22 15:30
Dante Ortiz	9/14/22 20:11	Dante Ortiz Dante Ortiz	9/14/22 20:11

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [X] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

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California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes		EDD Requirement		QA/QC	
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:		Excel EDD		RTNE	
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com daniel.moore@crittiven.com	Address:		Geotracker		RWQCB	✓
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com	P.O.#	Labspec		CalTrans	
Submitted By: Kevin A. Ashley		Phone: 949-727-1400. ext 200	Fax:	Others	✓	LEVEL III	
Title: O&M operators	Phone: 916-786-3302 Fax:			Specify: RWQCB		LEVEL IV	
Signature: Date: 9/14/22	Sampled By: Kevin Ashley			Global ID:		Regulatory	
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may					Specify State:	
Project Name: PG&E Topock - PCM	Signature: Date: 9/14/22						
Project Number: 30121866.3Q22GW							

Matrix: Ground X | Sediment | Potable | Soil | NPDES | Other Solid | Surface

Sample Receipt Condition

	Y	N
1. Chilled	✓	
2. Headspace		
3. Container Intact	✓	
4. Seal Present	✓	
5. IR number		

6. Method of Cooling: ICE
Sample Temp: 3.10C, 2.1C
Courier: ASET
Tracking No.:

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) Field Filtered (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) No filter (1 L poly)	Dissolved metals (SW6020) Field Filtered; HNO3 Iron, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); No filter; H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052606-13	IRZ-09-100-0922	9/14/22	11:15		X	X	X			X	X		E	7	P	BNS	
2	-14	IRZ-13D-210-0922	9/14/22	10:25		X	X	X			X	X		E	7	P	BNS	
3	-15	IRZ-13S-095-0922	9/14/22	10:10		X	X	X			X	X		E	7	P	BNS	
4	-16	IRZ-23-143-0922	9/14/22	9:30		X	X	X			X	X		E	7	P	BNS	
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
K. Ashley K. Ashley	9/14/22 1530	Dante Ortiz Dante Ortiz	9/14/22 15:30
Dante Ortiz Dante Ortiz	9/14/22 20:11	Dante Ortiz Dante Ortiz	9/14/22 20:11

Turn Around Time (TAT)

	A	< 24 Hrs or Same Day TAT
	B	= Next Workday
	C	= 2 Workdays
	D	= 3 Workdays
X	E	= Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

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2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis.
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology
7. Terms are net30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC_2	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B	(NH4)2SO4/NH4OH		M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	9/14/2022	Workorder:	N052606
Rep sample Temp (Deg C):	3.1 / 2.1	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☐	No ☑	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☑	No ☐	NA ☐
Was Client notified?	Yes ☑	No ☐	NA ☐

Comments: See Correspondence.

For:

Checklist Completed By: EF YRJ 9/15/2022

for:

Reviewed By: MBC 9/26/2022

Subject: RE: PG&E Topock - PCM, 30121866.3Q22GW (ASSET Labs No. N052606)
From: "Madsen, Laura" <Laura.Madsen@arcadis.com>
Date: 9/15/2022, 12:10 PM
To: Yoandra Rodriguez <yoandra@assetlaboratories.com>
CC: "maryann.balilu@assetlaboratoriesph.com" <maryann.balilu@assetlaboratoriesph.com>, "rustico.aquino@assetlaboratoriesph.com" <rustico.aquino@assetlaboratoriesph.com>

Hello,
The sample 12 ID should be EB-732-Q322

Thanks,
Laura

Laura Madsen PG
Project Geologist
Arcadis U.S., Inc.
M +1 303 653 5749

From: Yoandra Rodriguez <yoandra@assetlaboratories.com>
Sent: Thursday, September 15, 2022 2:09 PM
To: Madsen, Laura <Laura.Madsen@arcadis.com>
Cc: maryann.balilu@assetlaboratoriesph.com; rustico.aquino@assetlaboratoriesph.com
Subject: PG&E Topock - PCM, 30121866.3Q22GW (ASSET Labs No. N052606)

Hi Laura,

Please confirm correct ID for sample 12 on the attached COC:

- COC: EB-732-Q322

- Label: EB-732-0922

--
Thanks,

Yoandra Rodriguez
Project Manager

Nevada: 3151 W. Post Road, Las Vegas, NV 89118 | P: 702.307.2659 | F: 702.307.2691
California: 11110 Artesia Blvd., Ste. B, Cerritos, CA 90703 | P: 562.219.7435 | F: 562.219.7436

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Mary Ann Balilu

From: Yoandra Rodriguez <yoandra@assetlaboratories.com>
Sent: Tuesday, September 20, 2022 3:26 PM
To: maryann.balilu@assetlaboratoriesph.com; rustico.aquino@assetlaboratoriesph.com
Subject: Fwd: Topock - Duplicate IDs

-------- Forwarded Message --------
Subject: Topock - Duplicate IDs
Date: Tue, 20 Sep 2022 22:13:57 +0000
From: Tina Rice <Tina.Rice@locana.co>
To: Yoandra Rodriguez <yoandra@assetlaboratories.com>
CC: Nancy Sibucao <nancy@assetlaboratories.com>, Madsen, Laura <laura.madsen@arcadis.com>

Hi Yoandra,

Could you please update the following sample IDs?

WorkOrder	ClientSampID	New ClientSampID	DateCollected
N052565	EB-729-Q322	EB-729-Q322_20220913	9/13/2022 14:10
N052565	EB-730-Q322	EB-730-Q322_20220913	9/13/2022 13:30
N052606	EB-731-Q322	EB-731-Q322_20220914	9/14/2022 12:50
N052606	EB-732-Q322	EB-732-Q322_20220914	9/14/2022 14:15

Thank you,
Tina
--
Thanks,

Yoandra Rodriguez
Project Manager

Nevada: 3151 W. Post Road, Las Vegas, NV 89118 | P: 702.307.2659 | F: 702.307.2691
California: 11110 Artesia Blvd., Ste. B, Cerritos, CA 90703 | P: 562.219.7435 | F: 562.219.7436

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ASSET Laboratories

WORK ORDER Summary

27-Sep-22

WorkOrder: N052606

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/14/2022 8:11 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052606-001A	TW-02D-0922	9/14/2022 8:48:00 AM	9/28/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-001B			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-001C			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052606-001D			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-002A	TW-02S-0922	9/14/2022 8:14:00 AM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-002B			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-002C			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052606-002D			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-003A	TW-03D-0922	9/14/2022 9:24:00 AM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-003B			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-003C			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

27-Sep-22

WorkOrder: N052606

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/14/2022 8:11 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052606-003D	TW-03D-0922	9/14/2022 9:24:00 AM	9/28/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-004A	EB-731-Q322_20220914	9/14/2022 12:50:00 PM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-005A	MW-31-060-0922	9/14/2022 9:51:00 AM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-005B			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-005C			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052606-005D			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-006A	MW-31-135-0922	9/14/2022 10:41:00 AM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-006B			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-006C			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052606-006D			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-007A	MW-20-070-0922	9/14/2022 12:01:00 PM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-007B			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

27-Sep-22

WorkOrder: N052606

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/14/2022 8:11 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052606-007B	MW-20-070-0922	9/14/2022 12:01:00 PM	9/28/2022	Groundwater	EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-007C			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052606-007D			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-008A	MW-20-100-0922	9/14/2022 1:38:00 PM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-008B			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-008C			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052606-008D			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-009A	MW-20-130-0922	9/14/2022 12:49:00 PM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-009B			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-009C			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052606-009D			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-010A	MW-36-090-0922	9/14/2022 8:03:00 AM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

27-Sep-22

WorkOrder: N052606

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/14/2022 8:11 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052606-010B	MW-36-090-0922	9/14/2022 8:03:00 AM	9/28/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-010C			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052606-010D			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-011A	MW-36-100-0922	9/14/2022 8:39:00 AM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-011B			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-011C			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052606-011D			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-012A	EB-732-Q322_20220914	9/14/2022 2:15:00 PM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-013A	IRZ-09-100-0922	9/14/2022 11:15:00 AM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-013B			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-013C			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

27-Sep-22

WorkOrder: N052606

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/14/2022 8:11 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052606-013C	IRZ-09-100-0922	9/14/2022 11:15:00 AM	9/28/2022	Groundwater	EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-013D			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052606-013E			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	TOTAL METALS BY ICP	☐	☐	☐	WW
N052606-014A	IRZ-13D-210-0922	9/14/2022 10:25:00 AM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-014B			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-014C			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-014D			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052606-014E			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	TOTAL METALS BY ICP	☐	☐	☐	WW
N052606-015A	IRZ-13S-095-0922	9/14/2022 10:10:00 AM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-015B			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-015C			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-015D			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

27-Sep-22

WorkOrder: N052606

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/14/2022 8:11 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052606-015E	IRZ-13S-095-0922	9/14/2022 10:10:00 AM	9/28/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	TOTAL METALS BY ICP	☐	☐	☐	WW
N052606-016A	IRZ-23-143-0922	9/14/2022 9:30:00 AM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-016B			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-016C			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-016D			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052606-016E			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	TOTAL METALS BY ICP	☐	☐	☐	WW
N052606-017A	FOLDER	9/28/2022	9/28/2022		Folder	Folder	☐	☐	☐	LAB
			9/28/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/28/2022		Folder	Folder	☐	☐	☐	LAB

September 29, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052628

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on September 15, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Dilution was necessary for sample N052628-003 due to matrix interference. Sample was analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Sample was reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for EPA 6020_Dissolved:

Matrix Spike (MS) is outside recovery criteria for Barium in QC sample N052628-010BMS possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for SM 5310C:

Matrix Spike (MS) is outside recovery criteria in QC sample N052628-010CMS at several dilutions possibly due to matrix interference. QC samples were diluted and recovery passed criteria. Thus sample reference N052628-010 and MS/MSD were reported at 20x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052628
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052628-001A	MW-45-095a-0922	Groundwater	9/15/2022 10:14:00 AM	9/15/2022	9/29/2022
N052628-001B	MW-45-095a-0922	Groundwater	9/15/2022 10:14:00 AM	9/15/2022	9/29/2022
N052628-001C	MW-45-095a-0922	Groundwater	9/15/2022 10:14:00 AM	9/15/2022	9/29/2022
N052628-001D	MW-45-095a-0922	Groundwater	9/15/2022 10:14:00 AM	9/15/2022	9/29/2022
N052628-002A	MW-21-0922	Groundwater	9/15/2022 11:56:00 AM	9/15/2022	9/29/2022
N052628-002B	MW-21-0922	Groundwater	9/15/2022 11:56:00 AM	9/15/2022	9/29/2022
N052628-002C	MW-21-0922	Groundwater	9/15/2022 11:56:00 AM	9/15/2022	9/29/2022
N052628-002D	MW-21-0922	Groundwater	9/15/2022 11:56:00 AM	9/15/2022	9/29/2022
N052628-003A	MW-71-035-0922	Groundwater	9/15/2022 11:10:00 AM	9/15/2022	9/29/2022
N052628-003B	MW-71-035-0922	Groundwater	9/15/2022 11:10:00 AM	9/15/2022	9/29/2022
N052628-003C	MW-71-035-0922	Groundwater	9/15/2022 11:10:00 AM	9/15/2022	9/29/2022
N052628-003D	MW-71-035-0922	Groundwater	9/15/2022 11:10:00 AM	9/15/2022	9/29/2022
N052628-004A	MW-34-080-0922	Groundwater	9/15/2022 9:26:00 AM	9/15/2022	9/29/2022
N052628-004B	MW-34-080-0922	Groundwater	9/15/2022 9:26:00 AM	9/15/2022	9/29/2022
N052628-004C	MW-34-080-0922	Groundwater	9/15/2022 9:26:00 AM	9/15/2022	9/29/2022
N052628-004D	MW-34-080-0922	Groundwater	9/15/2022 9:26:00 AM	9/15/2022	9/29/2022
N052628-005A	EB-733-Q322	Groundwater	9/15/2022 1:55:00 PM	9/15/2022	9/29/2022
N052628-006A	MW-78-070-0922	Groundwater	9/15/2022 7:42:00 AM	9/15/2022	9/29/2022
N052628-006B	MW-78-070-0922	Groundwater	9/15/2022 7:42:00 AM	9/15/2022	9/29/2022
N052628-006C	MW-78-070-0922	Groundwater	9/15/2022 7:42:00 AM	9/15/2022	9/29/2022
N052628-006D	MW-78-070-0922	Groundwater	9/15/2022 7:42:00 AM	9/15/2022	9/29/2022
N052628-007A	MW-923-Q322	Groundwater	9/15/2022 7:46:00 AM	9/15/2022	9/29/2022
N052628-007B	MW-923-Q322	Groundwater	9/15/2022 7:46:00 AM	9/15/2022	9/29/2022
N052628-007C	MW-923-Q322	Groundwater	9/15/2022 7:46:00 AM	9/15/2022	9/29/2022
N052628-007D	MW-923-Q322	Groundwater	9/15/2022 7:46:00 AM	9/15/2022	9/29/2022
N052628-008A	MW-78-142-0922	Groundwater	9/15/2022 8:37:00 AM	9/15/2022	9/29/2022
N052628-008B	MW-78-142-0922	Groundwater	9/15/2022 8:37:00 AM	9/15/2022	9/29/2022
N052628-008C	MW-78-142-0922	Groundwater	9/15/2022 8:37:00 AM	9/15/2022	9/29/2022
N052628-008D	MW-78-142-0922	Groundwater	9/15/2022 8:37:00 AM	9/15/2022	9/29/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052628
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052628-009A	MW-79-058-0922	Groundwater	9/15/2022 1:40:00 PM	9/15/2022	9/29/2022
N052628-009B	MW-79-058-0922	Groundwater	9/15/2022 1:40:00 PM	9/15/2022	9/29/2022
N052628-009C	MW-79-058-0922	Groundwater	9/15/2022 1:40:00 PM	9/15/2022	9/29/2022
N052628-009D	MW-79-058-0922	Groundwater	9/15/2022 1:40:00 PM	9/15/2022	9/29/2022
N052628-010A	MW-79-102-0922	Groundwater	9/15/2022 1:00:00 PM	9/15/2022	9/29/2022
N052628-010B	MW-79-102-0922	Groundwater	9/15/2022 1:00:00 PM	9/15/2022	9/29/2022
N052628-010C	MW-79-102-0922	Groundwater	9/15/2022 1:00:00 PM	9/15/2022	9/29/2022
N052628-010D	MW-79-102-0922	Groundwater	9/15/2022 1:00:00 PM	9/15/2022	9/29/2022
N052628-011A	MW-80-057-0922	Groundwater	9/15/2022 9:45:00 AM	9/15/2022	9/29/2022
N052628-011B	MW-80-057-0922	Groundwater	9/15/2022 9:45:00 AM	9/15/2022	9/29/2022
N052628-011C	MW-80-057-0922	Groundwater	9/15/2022 9:45:00 AM	9/15/2022	9/29/2022
N052628-011D	MW-80-057-0922	Groundwater	9/15/2022 9:45:00 AM	9/15/2022	9/29/2022
N052628-012A	MW-924-Q322	Groundwater	9/15/2022 10:28:00 AM	9/15/2022	9/29/2022
N052628-012B	MW-924-Q322	Groundwater	9/15/2022 10:28:00 AM	9/15/2022	9/29/2022
N052628-012C	MW-924-Q322	Groundwater	9/15/2022 10:28:00 AM	9/15/2022	9/29/2022
N052628-012D	MW-924-Q322	Groundwater	9/15/2022 10:28:00 AM	9/15/2022	9/29/2022
N052628-013A	MW-80-082-0922	Groundwater	9/15/2022 10:23:00 AM	9/15/2022	9/29/2022
N052628-013B	MW-80-082-0922	Groundwater	9/15/2022 10:23:00 AM	9/15/2022	9/29/2022
N052628-013C	MW-80-082-0922	Groundwater	9/15/2022 10:23:00 AM	9/15/2022	9/29/2022
N052628-013D	MW-80-082-0922	Groundwater	9/15/2022 10:23:00 AM	9/15/2022	9/29/2022
N052628-014A	MW-21-EB-0922	Groundwater	9/15/2022 11:30:00 AM	9/15/2022	9/29/2022
N052628-015A	MW-51-0922	Groundwater	9/15/2022 12:54:00 PM	9/15/2022	9/29/2022
N052628-015B	MW-51-0922	Groundwater	9/15/2022 12:54:00 PM	9/15/2022	9/29/2022
N052628-015C	MW-51-0922	Groundwater	9/15/2022 12:54:00 PM	9/15/2022	9/29/2022
N052628-015D	MW-51-0922	Groundwater	9/15/2022 12:54:00 PM	9/15/2022	9/29/2022
N052628-016A	MW-26-0922	Groundwater	9/15/2022 11:42:00 AM	9/15/2022	9/29/2022
N052628-016B	MW-26-0922	Groundwater	9/15/2022 11:42:00 AM	9/15/2022	9/29/2022
N052628-016C	MW-26-0922	Groundwater	9/15/2022 11:42:00 AM	9/15/2022	9/29/2022
N052628-016D	MW-26-0922	Groundwater	9/15/2022 11:42:00 AM	9/15/2022	9/29/2022
N052628-017A	EB-734-Q322	Groundwater	9/15/2022 2:00:00 PM	9/15/2022	9/29/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-45-095a-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	0.23	0.025	0.20		µg/L	1	9/16/2022 11:58 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:56:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/16/2022 01:55 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-71-035-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	5.6	0.13	1.0		µg/L	5	9/16/2022 05:47 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-080-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 9:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/16/2022 12:17 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-733-Q322
Lab Order:	N052628	**Collection Date:**	9/15/2022 1:55:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/16/2022 04:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-070-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 7:42:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	110	0.50	4.0		µg/L	20	9/16/2022 02:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-923-Q322
Lab Order:	N052628	**Collection Date:**	9/15/2022 7:46:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	110	0.50	4.0		µg/L	20	9/16/2022 03:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-142-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 8:37:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	4600	25	200		µg/L	1000	9/16/2022 10:33 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-058-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 1:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	1200	2.5	20		µg/L	100	9/16/2022 10:14 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-102-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 1:00:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	880	2.5	20		µg/L	100	9/16/2022 10:03 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-057-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 9:45:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	880	2.5	20		µg/L	100	9/16/2022 10:23 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-924-Q322
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:28:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220923A**	QC Batch: **R165956**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	160	0.50	4.0		µg/L	20	9/23/2022 11:02 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-082-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:23:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	160	0.50	4.0		µg/L	20	9/16/2022 03:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-EB-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:30:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/16/2022 04:31 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-51-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 12:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	710	5.0	40		µg/L	200	9/16/2022 12:36 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-26-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:42:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	19	0.13	1.0		µg/L	5	9/16/2022 06:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-734-Q322
Lab Order:	N052628	**Collection Date:**	9/15/2022 2:00:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/16/2022 04:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	MB-R165800	SampType:	MBLK	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165800
Client ID:	PBW	Batch ID:	R165800	TestNo:	EPA 218.6			Analysis Date:	9/16/2022	SeqNo:	4839690

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID	LCS-R165800	SampType:	LCS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165800
Client ID:	LCSW	Batch ID:	R165800	TestNo:	EPA 218.6			Analysis Date:	9/16/2022	SeqNo:	4839691

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.996	0.20	5.000	0	99.9	90	110				

Sample ID	N052628-008ADUP	SampType:	DUP	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165800
Client ID:	ZZZZZZ	Batch ID:	R165800	TestNo:	EPA 218.6			Analysis Date:	9/16/2022	SeqNo:	4839696

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4547.500	200						4558	0.220	20	

Sample ID	N052628-008AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165800
Client ID:	ZZZZZZ	Batch ID:	R165800	TestNo:	EPA 218.6			Analysis Date:	9/16/2022	SeqNo:	4839697

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	9651.500	200	5000	4558	102	90	110				

Sample ID	N052628-010AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165800
Client ID:	ZZZZZZ	Batch ID:	R165800	TestNo:	EPA 218.6			Analysis Date:	9/16/2022	SeqNo:	4839701

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1358.330	20	500.0	877.0	96.3	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **N052628-010AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165800**
Client ID: **ZZZZZZ**	Batch ID: **R165800**	TestNo: **EPA 218.6**		Analysis Date: **9/16/2022**	SeqNo: **4839702**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1358.420	20	500.0	877.0	96.3	90	110	1358	0.00663	20	

Sample ID **N052628-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165800**
Client ID: **ZZZZZZ**	Batch ID: **R165800**	TestNo: **EPA 218.6**		Analysis Date: **9/16/2022**	SeqNo: **4839704**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.219	0.20	1.000	0.2259	99.4	90	110				

Sample ID **N052628-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165800**
Client ID: **ZZZZZZ**	Batch ID: **R165800**	TestNo: **EPA 218.6**		Analysis Date: **9/16/2022**	SeqNo: **4839706**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.013	0.20	1.000	0	101	90	110				

Sample ID **N052628-015AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165800**
Client ID: **ZZZZZZ**	Batch ID: **R165800**	TestNo: **EPA 218.6**		Analysis Date: **9/16/2022**	SeqNo: **4839708**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1733.940	40	1000	709.5	102	90	110				

Sample ID **N052628-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165800**
Client ID: **ZZZZZZ**	Batch ID: **R165800**	TestNo: **EPA 218.6**		Analysis Date: **9/16/2022**	SeqNo: **4839712**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.090	0.20	1.000	0	109	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **N052628-009AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165800**
Client ID: **ZZZZZZ**	Batch ID: **R165800**	TestNo: **EPA 218.6**		Analysis Date: **9/16/2022**	SeqNo: **4839713**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1652.010	20	500.0	1181	94.1	90	110				

Sample ID **N052628-011AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165800**
Client ID: **ZZZZZZ**	Batch ID: **R165800**	TestNo: **EPA 218.6**		Analysis Date: **9/16/2022**	SeqNo: **4839714**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1375.920	20	500.0	878.8	99.4	90	110				

Sample ID **N052628-006AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165800**
Client ID: **ZZZZZZ**	Batch ID: **R165800**	TestNo: **EPA 218.6**		Analysis Date: **9/16/2022**	SeqNo: **4839716**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	207.402	4.0	100.0	106.8	101	90	110				

Sample ID **N052628-007AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165800**
Client ID: **ZZZZZZ**	Batch ID: **R165800**	TestNo: **EPA 218.6**		Analysis Date: **9/16/2022**	SeqNo: **4839718**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	214.142	4.0	100.0	113.9	100	90	110				

Sample ID **N052628-013AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165800**
Client ID: **ZZZZZZ**	Batch ID: **R165800**	TestNo: **EPA 218.6**		Analysis Date: **9/16/2022**	SeqNo: **4839722**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	255.354	4.0	100.0	160.1	95.3	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052628-005AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165800
Client ID:	ZZZZZZ	Batch ID:	R165800	TestNo:	EPA 218.6			Analysis Date:	9/16/2022	SeqNo:	4839724

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.047	0.20	1.000	0	105	90	110				

Sample ID	N052628-014AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165800
Client ID:	ZZZZZZ	Batch ID:	R165800	TestNo:	EPA 218.6			Analysis Date:	9/16/2022	SeqNo:	4839726

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.019	0.20	1.000	0	102	90	110				

Sample ID	N052628-017AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165800
Client ID:	ZZZZZZ	Batch ID:	R165800	TestNo:	EPA 218.6			Analysis Date:	9/16/2022	SeqNo:	4839728

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.018	0.20	1.000	0	102	90	110				

Sample ID	N052628-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165800
Client ID:	ZZZZZZ	Batch ID:	R165800	TestNo:	EPA 218.6			Analysis Date:	9/16/2022	SeqNo:	4839734

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	10.713	1.0	5.000	5.630	102	90	110				

Sample ID	N052628-016AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165800
Client ID:	ZZZZZZ	Batch ID:	R165800	TestNo:	EPA 218.6			Analysis Date:	9/16/2022	SeqNo:	4839737

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	42.679	1.0	25.00	18.73	95.8	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	MB-R165956	SampType:	MBLK	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165956		
Client ID:	PBW	Batch ID:	R165956	TestNo:	EPA 218.6			Analysis Date:	9/23/2022	SeqNo:	4847432		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	ND	0.20											

Sample ID	LCS-R165956	SampType:	LCS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165956		
Client ID:	LCSW	Batch ID:	R165956	TestNo:	EPA 218.6			Analysis Date:	9/23/2022	SeqNo:	4847433		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	5.035	0.20	5.000	0	101	90	110						

Sample ID	N052628-012AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165956		
Client ID:	ZZZZZZ	Batch ID:	R165956	TestNo:	EPA 218.6			Analysis Date:	9/23/2022	SeqNo:	4847436		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	258.004	4.0	100.0	157.1	101	90	110						

Sample ID	N052628-012AMSD	SampType:	MSD	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165956		
Client ID:	ZZZZZZ	Batch ID:	R165956	TestNo:	EPA 218.6			Analysis Date:	9/23/2022	SeqNo:	4847437		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	260.342	4.0	100.0	157.1	103	90	110	258.0	0.902	20			

Sample ID	N052748-001BDUP	SampType:	DUP	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165956		
Client ID:	ZZZZZZ	Batch ID:	R165956	TestNo:	EPA 218.6			Analysis Date:	9/23/2022	SeqNo:	4847438		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	564.280	40						555.4	1.58	20			

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052748-001BMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165956
Client ID:	ZZZZZZ	Batch ID:	R165956	TestNo:	EPA 218.6			Analysis Date:	9/23/2022	SeqNo:	4847439

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1602.840	40	1000	555.4	105	90	110				

Sample ID	N052713-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165956
Client ID:	ZZZZZZ	Batch ID:	R165956	TestNo:	EPA 218.6			Analysis Date:	9/23/2022	SeqNo:	4847441

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.021	0.20	1.000	0	102	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-45-095a-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A** QC Batch: **R165764**				PrepDate:			Analyst: **RAB**
Sulfate	470	3.0	25		mg/L	50	9/16/2022 05:43 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A** QC Batch: **R165764**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/16/2022 10:50 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:56:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Sulfate	1500	12	100		mg/L	200	9/16/2022 03:40 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/16/2022 11:36 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-71-035-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Sulfate	1500	6.1	50		mg/L	100	9/16/2022 04:42 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.80	0.095	0.50		mg/L	10	9/16/2022 11:51 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-080-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 9:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A** QC Batch: **R165764**				PrepDate:			Analyst: **RAB**
Sulfate	620	3.0	25		mg/L	50	9/16/2022 05:58 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A** QC Batch: **R165764**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/16/2022 12:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-070-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 7:42:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Sulfate	540	3.0	25		mg/L	50	9/16/2022 06:13 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.54	0.095	0.50		mg/L	10	9/16/2022 10:04 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-923-Q322
Lab Order:	N052628	**Collection Date:**	9/15/2022 7:46:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
EPA 300.0							
RunID: **NV00922-IC8_220916A** QC Batch: **R165764** PrepDate: Analyst: **RAB**							
Sulfate	540	3.0	25		mg/L	50	9/16/2022 06:29 PM
ANIONS BY ION CHROMATOGRAPHY							
EPA 300.0							
RunID: **NV00922-IC8_220916A** QC Batch: **R165764** PrepDate: Analyst: **RAB**							
Nitrate as N	ND	0.095	0.50		mg/L	10	9/16/2022 12:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-142-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 8:37:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Sulfate	830	6.1	50		mg/L	100	9/16/2022 04:57 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Nitrate as N	7.4	0.095	0.50		mg/L	10	9/16/2022 12:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052628-009

Client Sample ID: MW-79-058-0922
Collection Date: 9/15/2022 1:40:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A** QC Batch: **R165764**				PrepDate:			Analyst: **RAB**
Sulfate	510	3.0	25		mg/L	50	9/16/2022 06:44 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A** QC Batch: **R165764**				PrepDate:			Analyst: **RAB**
Nitrate as N	4.2	0.095	0.50		mg/L	10	9/16/2022 12:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-102-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 1:00:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Sulfate	620	6.1	50		mg/L	100	9/16/2022 02:55 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Nitrate as N	1.5	0.095	0.50		mg/L	10	9/16/2022 09:18 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-057-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 9:45:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A** QC Batch: **R165764**				PrepDate:			Analyst: **RAB**
Sulfate	510	3.0	25		mg/L	50	9/16/2022 06:59 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A** QC Batch: **R165764**				PrepDate:			Analyst: **RAB**
Nitrate as N	11	0.095	0.50		mg/L	10	9/16/2022 01:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-924-Q322
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:28:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Sulfate	600	3.0	25		mg/L	50	9/16/2022 07:15 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.87	0.095	0.50		mg/L	10	9/16/2022 01:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-082-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:23:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Sulfate	610	3.0	25		mg/L	50	9/16/2022 07:30 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.81	0.095	0.50		mg/L	10	9/16/2022 01:38 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-51-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 12:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Sulfate	530	3.0	25		mg/L	50	9/16/2022 07:45 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Nitrate as N	2.6	0.095	0.50		mg/L	10	9/16/2022 01:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-26-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:42:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Sulfate	550	3.0	25		mg/L	50	9/16/2022 08:01 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/16/2022 02:39 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	LCS-R165764_SO4	SampType:	LCS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	LCSW	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838473

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	3.997	0.50	4.000	0	99.9	90	110				

Sample ID	MB-R165764_SO4	SampType:	MBLK	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	PBW	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838474

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.50									

Sample ID	N052628-010DMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	ZZZZZZ	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838480

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	1023.380	50	400.0	623.9	99.9	80	120				

Sample ID	N052628-010DMSD	SampType:	MSD	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	ZZZZZZ	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838481

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	1017.510	50	400.0	623.9	98.4	80	120	1023	0.575	20	

Sample ID	N052628-002DDUP	SampType:	DUP	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	ZZZZZZ	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838483

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	1519.600	100						1514	0.394	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	N052628-002DMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	ZZZZZZ	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838484

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	2332.900	100	800.0	1514	102	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	LCS-R165764_NO3	SampType:	LCS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	LCSW	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838441

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.229	0.050	1.250	0	98.3	90	110				

Sample ID	MB-R165764_NO3	SampType:	MBLK	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	PBW	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838442

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID	N052628-010DMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	ZZZZZZ	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838444

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	14.105	0.50	12.50	1.470	101	80	120				

Sample ID	N052628-010DMSD	SampType:	MSD	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	ZZZZZZ	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838445

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	14.031	0.50	12.50	1.470	100	80	120	14.10	0.526	20	

Sample ID	N052628-006DDUP	SampType:	DUP	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	ZZZZZZ	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838447

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	0.534	0.50						0.5370	0.560	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	N052628-006DMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	ZZZZZZ	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838448

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.694	0.50	12.50	0.5370	97.3	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-45-095a-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 07:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:56:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 07:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-71-035-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 03:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-080-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 9:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 04:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-070-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 7:42:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 04:16 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-923-Q322
Lab Order:	N052628	**Collection Date:**	9/15/2022 7:46:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 04:32 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-142-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 8:37:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 04:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-058-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 1:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 05:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-102-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 1:00:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	2.7	20		mg/L	20	9/16/2022 01:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-057-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 9:45:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 05:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-924-Q322
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:28:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 06:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-082-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:23:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 06:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-51-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 12:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 06:36 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-26-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:42:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 06:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID **MB-R165755**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165755**
Client ID: **PBW**	Batch ID: **R165755**	TestNo: **SM 5310C**		Analysis Date: **9/16/2022**	SeqNo: **4837063**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID **LCS-R165755**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165755**
Client ID: **LCSW**	Batch ID: **R165755**	TestNo: **SM 5310C**		Analysis Date: **9/16/2022**	SeqNo: **4837064**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	4.873	1.0	5.000	0	97.5	85	115				

Sample ID **N052628-010CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165755**
Client ID: **ZZZZZZ**	Batch ID: **R165755**	TestNo: **SM 5310C**		Analysis Date: **9/16/2022**	SeqNo: **4837070**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	80.822	20	100.0	0	80.8	75	125				

Sample ID **N052628-010CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165755**
Client ID: **ZZZZZZ**	Batch ID: **R165755**	TestNo: **SM 5310C**		Analysis Date: **9/16/2022**	SeqNo: **4837075**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	80.406	20	100.0	0	80.4	75	125	80.82	0.516	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-45-095a-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94834**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/21/2022 12:21 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:56:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94834**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	130	13	20		µg/L	1	9/21/2022 12:26 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-71-035-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94834**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/21/2022 12:32 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-080-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 9:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94834**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	410	13	20		µg/L	1	9/21/2022 12:37 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-070-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 7:42:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94834**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/21/2022 12:42 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-923-Q322
Lab Order:	N052628	**Collection Date:**	9/15/2022 7:46:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94834**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/21/2022 01:17 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-142-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 8:37:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94834**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/21/2022 01:22 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-058-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 1:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94834**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/21/2022 01:27 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-102-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 1:00:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94834**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/21/2022 01:32 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-057-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 9:45:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94834**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/21/2022 02:08 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-924-Q322
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:28:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94834**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/21/2022 02:13 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-082-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:23:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94834**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/21/2022 02:19 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-51-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 12:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94834**			PrepDate:	**9/20/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/21/2022 02:24 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-26-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:42:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220928B**	QC Batch: **94834**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	38	13	20		µg/L	1	9/28/2022 03:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	MB-94834	SampType:	MBLK	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	9/20/2022	RunNo:	165864
Client ID:	PBW	Batch ID:	94834	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/21/2022	SeqNo:	4843301

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID	LCS-94834	SampType:	LCS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	9/20/2022	RunNo:	165864
Client ID:	LCSW	Batch ID:	94834	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/21/2022	SeqNo:	4843302

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	93.168	20	100.0	0	93.2	85	115				

Sample ID	N052628-010BMS	SampType:	MS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	9/20/2022	RunNo:	165864
Client ID:	ZZZZZZ	Batch ID:	94834	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/21/2022	SeqNo:	4843318

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	105.486	20	100.0	13.82	91.7	75	125				

Sample ID	N052628-010BMSD	SampType:	MSD	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	9/20/2022	RunNo:	165864
Client ID:	ZZZZZZ	Batch ID:	94834	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/21/2022	SeqNo:	4843319

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	107.966	20	100.0	13.82	94.2	75	125	105.5	2.32	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-45-095a-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 09:50 AM
Barium	27	0.083	1.0		µg/L	1	9/19/2022 08:58 PM
Manganese	180	0.026	0.50		µg/L	1	9/20/2022 06:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:56:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	12	0.050	0.10		µg/L	1	9/18/2022 09:56 AM
Barium	24	0.083	1.0		µg/L	1	9/19/2022 09:04 PM
Manganese	260	0.13	2.5		µg/L	5	9/20/2022 07:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-71-035-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 10:02 AM
Barium	41	0.083	1.0		µg/L	1	9/19/2022 09:28 PM
Manganese	440	0.13	2.5		µg/L	5	9/20/2022 07:18 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-080-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 9:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 10:20 AM
Barium	36	0.083	1.0		µg/L	1	9/19/2022 09:40 PM
Manganese	140	0.026	0.50		µg/L	1	9/20/2022 07:24 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-070-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 7:42:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 10:26 AM
Barium	180	0.083	1.0		µg/L	1	9/19/2022 09:46 PM
Manganese	120	0.026	0.50		µg/L	1	9/20/2022 07:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-923-Q322
Lab Order:	N052628	**Collection Date:**	9/15/2022 7:46:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 10:32 AM
Barium	200	0.42	5.0		µg/L	5	9/19/2022 09:58 PM
Manganese	120	0.026	0.50		µg/L	1	9/20/2022 07:36 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-142-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 8:37:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220919C**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	1.9	0.050	0.10		µg/L	1	9/19/2022 10:04 PM
Barium	27	0.083	1.0		µg/L	1	9/19/2022 10:04 PM
Manganese	3.7	0.026	0.50		µg/L	1	9/20/2022 07:47 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-058-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 1:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 10:50 AM
Barium	210	0.42	5.0		µg/L	5	9/19/2022 10:45 PM
Manganese	5.2	0.026	0.50		µg/L	1	9/20/2022 07:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-102-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 1:00:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	1.1	0.050	0.10		µg/L	1	9/18/2022 10:56 AM
Barium	41	0.083	1.0		µg/L	1	9/19/2022 10:51 PM
Manganese	7.2	0.026	0.50		µg/L	1	9/19/2022 10:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-057-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 9:45:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220919C**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	0.61	0.050	0.10		µg/L	1	9/19/2022 11:21 PM
Barium	65	0.083	1.0		µg/L	1	9/18/2022 11:37 AM
Manganese	9.9	0.026	0.50		µg/L	1	9/19/2022 11:21 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-924-Q322
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:28:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	1.8	0.050	0.10		µg/L	1	9/18/2022 11:43 AM
Barium	44	0.083	1.0		µg/L	1	9/18/2022 11:43 AM
Manganese	5.1	0.026	0.50		µg/L	1	9/19/2022 11:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-082-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:23:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	1.8	0.050	0.10		µg/L	1	9/18/2022 11:49 AM
Barium	42	0.083	1.0		µg/L	1	9/18/2022 11:49 AM
Manganese	3.4	0.026	0.50		µg/L	1	9/19/2022 11:33 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-51-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 12:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220919C**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	1.3	0.050	0.10		µg/L	1	9/19/2022 11:39 PM
Barium	84	0.083	1.0		µg/L	1	9/18/2022 11:55 AM
Manganese	17	0.026	0.50		µg/L	1	9/19/2022 11:39 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-26-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:42:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 12:01 PM
Barium	73	0.083	1.0		µg/L	1	9/18/2022 12:01 PM
Manganese	770	0.13	2.5		µg/L	5	9/20/2022 12:03 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	MB-94795	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165789
Client ID:	PBW	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839336

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									

Sample ID	LCS-94795	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165789
Client ID:	LCSW	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839337

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.323	0.10	10.00	0	93.2	85	115				

Sample ID	N052628-010BMS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165789
Client ID:	ZZZZZZ	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839359

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.690	0.10	10.00	1.092	86.0	75	125				

Sample ID	N052628-010BMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165789
Client ID:	ZZZZZZ	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839360

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.070	0.10	10.00	1.092	89.8	75	125	9.690	3.85	20	

Sample ID	N052628-010BMS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165854
Client ID:	ZZZZZZ	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/19/2022	SeqNo:	4842252

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	47.209	1.0	10.00	40.90	63.1	75	125				S
Manganese	103.705	0.50	100.0	7.234	96.5	75	125				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N052628-010BMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165854
Client ID:	ZZZZZZ	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/19/2022	SeqNo:	4842253

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	50.188	1.0	10.00	40.90	92.9	75	125	47.21	6.12	20	
Manganese	105.952	0.50	100.0	7.234	98.7	75	125	103.7	2.14	20	

Sample ID	MB-94795	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165884
Client ID:	PBW	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/20/2022	SeqNo:	4843861

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID	LCS-94795	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165884
Client ID:	LCSW	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/20/2022	SeqNo:	4843862

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	9.245	1.0	10.00	0	92.4	85	115				
Manganese	97.617	0.50	100.0	0	97.6	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N052628-010B-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	165789
Client ID:	ZZZZZZ	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839358

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.063	0.10	10.00	1.092	89.7	80	120				

Sample ID	N052628-010B-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	165854
Client ID:	ZZZZZZ	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/19/2022	SeqNo:	4842251

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	48.105	1.0	10.00	40.90	72.0	80	120				S
Manganese	102.585	0.50	100.0	7.234	95.4	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement	QA/QC	Sample Receipt Condition	Y	N
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD	RTNE	1. Chilled	✓	
Address: Roseville, CA 95678	Email: daniel.moore@arcadis.com	Address:	Geotracker	RWQCB ✓	2. Headspace		
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Labspec	CalTrans	3. Container Intact	✓	
Submitted By:		Phone: 949-727-1400, ext 200 Fax:	Others ✓	LEVEL III	4. Seal Present	✓	
Title: Field Tech	Phone: 916-786-3302 Fax:		Specify: RWQCB	LEVEL IV	5. IR number	3	
Signature: Date: Scott Morgan 9.15.22	Sampled By: Nana Tey		Global ID:	Regulatory	6. Method of Cooling: ICE		
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for			Specify State:	Sample Temp: 2.8°C, 3.4°C		
Project Name: PG&E Topock - PCM	Signature: Date: 9/15/22	Matrix: Ground X Sediment; Potable Soil; NPDES Other Solid; Surface					

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrite, Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter, HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052628-01	MW-45-095a-0922	9/15/2022	10:14		X		X			X			X	E	6	P	BNS	
2	-02	MW-21-0922	9/15/2022	11:56		X		X			X			X	E	6	P	BNS	
3	-03	MW-71-035-0922	9/15/2022	11:10		X		X			X			X	E	6	P	BNS	
4	-04	MW-34-080-0922	9/15/2022	9:26		X		X			X			X	E	6	P	BNS	
5	-05	EB-733-Q322	9/15/2022	13:55		X									E	1	P	BNS	
6	-06	MW-78-070-0922	9/15/2022	7:42		X		X			X			X	E	6	P	BNS	
7	-07	MW-923-Q322	9/15/2022	7:46		X		X			X			X	E	6	P	BNS	
8	-08	MW-78-142-0922	9/15/2022	8:37		X		X			X			X	E	6	P	BNS	
9	-09	MW-79-058-0922	9/15/2022	13:40		X		X			X			X	E	6	P	BNS	
10	-10	MW-79-102-0922	9/15/2022	13:00		X		X			X			X	E	9	P	BNS	MS/MSD
11	-11	MW-80-057-0922	9/15/2022	9:45		X		X			X			X	E	6	P	BNS	
12	-12	MW-924-Q322	9/15/2022	10:28		X		X			X			X	E	6	P	BNS	
13	-13	MW-80-082-0922	9/15/2022	10:23		X		X			X			X	E	6	P	BNS	
14	-14	MW-21-EB-0922	9/15/2022	11:30		X									E	1	P	BNS	

Courier:
Tracking No.:

Relinquished by (Signature and Printed Name): Nana Tey	Date/Time: 9/15/22 1520	Reliquished by (Signature and Printed Name): Dante Ortiz	Date/Time: 9/15/22 Bonde cmz 15:20
Reliquished by (Signature and Printed Name): Dante Ortiz Bonde cmz 9/15/22	Date/Time:	Reliquished by (Signature and Printed Name): Bonde cmz ← 18:57 Dante Ortiz cmz	Date/Time: 18:57 9/15/22
Reliquished by (Signature and Printed Name):	Date/Time:	Reliquished by (Signature and Printed Name):	Date/Time:

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [X] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

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California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement	QA/QC	Sample Receipt Condition
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD	RTNE	Y N
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com daniel.monroe@critigen.com	Address:	Geotracker	RWQCB ✓	1. Chilled ✓
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Labspec	CalTrans	2. Headspace
Submitted By:		Phone: 949-727-1400, ext 200 Fax:	Others ✓	LEVEL III	3. Container Intact ✓
Title:	Phone: 916-786-3302 Fax:		Specify: RWQCB	LEVEL IV	4. Seal Present
Signature: Date:	Sampled By: Nara Ty		Global ID:	Regulatory	5. IR number 3
I hereby authorize ASSET Labs to perform the tests indicated below.	*I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for*			Specify State:	6. Method of Cooling: ICE
Project Name: PG&E Topock - PCM	Signature:	Date: 9/15/22			Sample Temp: 2.8°C, 3.4°C
Project Number: 30121886.3Q22GW					Courier:
					Tracking No.:

Matrix: Ground X Sediment; Potable; Soil; NPDES; Other Solid; Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH 250 mL poly	Nitrite, Nitrate, sulfate (EPA 300.0) 1 L poly	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese 500mL poly	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, 500mL poly	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium 500mL poly	Total Organic Carbon (SM5310C); H2SO4 3x40 mL VOA	Total metals (SW6010) No filter, HNO3 Total Iron 500mL poly	Ammonia as Nitrogen (SM4500NH3); H2SO4 1 L poly	Nitrate, sulfate (EPA 300.0) 1 L poly	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052628-15	MW-51-0922	9/15/2022	12:54		X		X			X			X	E	6	P	BNS	
2	-16	MW-26-0922	9/15/2022	11:42		X		X			X			X	E	6	P	BNS	
3	-17	EB-734-Q322	9/15/2022	14:00		X									E	1	P	BNS	
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Nara Ty	9/15/22 1520	Dante Ortiz Dante Ortiz	9/15/22 15:20
Dante Ortiz Dante Ortiz	9/15/22 18:57	Dante Ortiz	9/15/22 18:57

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [X] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B	(NH4)2SO4/NH4OH		M=Metal	M=Metal	C=Can

White=Laboratory Copy

Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	9/15/2022	Workorder:	N052628
Rep sample Temp (Deg C):	2.8 / 3.4	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For:

Checklist Completed By: EF YRJ 9/16/2022

for:

Reviewed By: MBC 9/16/2022

ASSET Laboratories

WORK ORDER Summary

16-Sep-22

WorkOrder: N052628

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/15/2022 6:57 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052628-001A	MW-45-095a-0922	9/15/2022 10:14:00 AM	9/29/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-001B			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052628-001C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052628-001D			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052628-002A	MW-21-0922	9/15/2022 11:56:00 AM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-002B			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052628-002C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052628-002D			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052628-003A	MW-71-035-0922	9/15/2022 11:10:00 AM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-003B			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052628-003C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

16-Sep-22

WorkOrder: N052628

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/15/2022 6:57 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052628-003D	MW-71-035-0922	9/15/2022 11:10:00 AM	9/29/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052628-004A	MW-34-080-0922	9/15/2022 9:26:00 AM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-004B			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052628-004C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052628-004D			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052628-005A	EB-733-Q322	9/15/2022 1:55:00 PM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-006A	MW-78-070-0922	9/15/2022 7:42:00 AM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-006B			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052628-006C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052628-006D			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052628-007A	MW-923-Q322	9/15/2022 7:46:00 AM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-007B			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

16-Sep-22

WorkOrder: N052628

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/15/2022 6:57 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052628-007B	MW-923-Q322	9/15/2022 7:46:00 AM	9/29/2022	Groundwater	EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052628-007C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052628-007D			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052628-008A	MW-78-142-0922	9/15/2022 8:37:00 AM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-008B			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052628-008C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052628-008D			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052628-009A	MW-79-058-0922	9/15/2022 1:40:00 PM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-009B			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052628-009C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052628-009D			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052628-010A	MW-79-102-0922	9/15/2022 1:00:00 PM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☑	☐	WW

ASSET Laboratories

WORK ORDER Summary

16-Sep-22

WorkOrder: N052628

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/15/2022 6:57 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052628-010B	MW-79-102-0922	9/15/2022 1:00:00 PM	9/29/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			9/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☑	☐	WW
			9/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☑	☐	WW
N052628-010C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☑	☐	VW
N052628-010D			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
N052628-011A	MW-80-057-0922	9/15/2022 9:45:00 AM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-011B			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052628-011C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052628-011D			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052628-012A	MW-924-Q322	9/15/2022 10:28:00 AM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-012B			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052628-012C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052628-012D			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

16-Sep-22

WorkOrder: N052628

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/15/2022 6:57 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052628-012D	MW-924-Q322	9/15/2022 10:28:00 AM	9/29/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052628-013A	MW-80-082-0922	9/15/2022 10:23:00 AM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-013B			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052628-013C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052628-013D			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052628-014A	MW-21-EB-0922	9/15/2022 11:30:00 AM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-015A	MW-51-0922	9/15/2022 12:54:00 PM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-015B			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052628-015C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052628-015D			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052628-016A	MW-26-0922	9/15/2022 11:42:00 AM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-016B			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

16-Sep-22

WorkOrder: N052628

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/15/2022 6:57 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052628-016B	MW-26-0922	9/15/2022 11:42:00 AM	9/29/2022	Groundwater	EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052628-016C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052628-016D			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052628-017A	EB-734-Q322	9/15/2022 2:00:00 PM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-018A	FOLDER	9/29/2022	9/29/2022		Folder	Folder	☐	☐	☐	LAB
			9/29/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/29/2022		Folder	Folder	☐	☐	☐	LAB

October 11, 2022

Brian Prowd
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052819

RE: PG&E Topock - OMM TCS PWTF, 30106892

Attention: Brian Prowd

Enclosed are the results for sample(s) received on September 27, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

ASSET Laboratories

Date: *11-Oct-22*

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - OMM TCS PWTF, 30106892
Lab Order: N052819
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052819-001A	Backwash Pre-filter-092722	Water	9/27/2022 8:15:00 AM	9/27/2022	10/11/2022
N052819-001B	Backwash Pre-filter-092722	Water	9/27/2022 8:15:00 AM	9/27/2022	10/11/2022
N052819-001C	Backwash Pre-filter-092722	Water	9/27/2022 8:15:00 AM	9/27/2022	10/11/2022
N052819-002A	Backwash Post-filter-092722	Water	9/27/2022 8:30:00 AM	9/27/2022	10/11/2022
N052819-002B	Backwash Post-filter-092722	Water	9/27/2022 8:30:00 AM	9/27/2022	10/11/2022
N052819-002C	Backwash Post-filter-092722	Water	9/27/2022 8:30:00 AM	9/27/2022	10/11/2022

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052819
Project: PG&E Topock - OMM TCS PWTF, 30106892
Lab ID: N052819-001

Client Sample ID: Backwash Pre-filter-092722
Collection Date: 9/27/2022 8:15:00 AM
Matrix: WATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220930A**	QC Batch: **R166109**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	410	1.3	10		µg/L	50	9/30/2022 10:00 AM
TOTAL METALS BY ICPMS							
		EPA 3010A		**EPA 6020**			
RunID: **NV00922-ICP8_221004B**	QC Batch: **95010**			PrepDate:	**10/3/2022**		Analyst: **DJ**
Chromium	430	0.18	5.0		µg/L	5	10/4/2022 03:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052819
Project: PG&E Topock - OMM TCS PWTF, 30106892
Lab ID: N052819-002

Client Sample ID: Backwash Post-filter-092722
Collection Date: 9/27/2022 8:30:00 AM
Matrix: WATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220930A**	QC Batch: **R166109**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	400	1.3	10		µg/L	50	9/30/2022 10:10 AM
TOTAL METALS BY ICPMS							
		EPA 3010A		**EPA 6020**			
RunID: **NV00922-ICP8_221004B**	QC Batch: **95010**			PrepDate:	**10/3/2022**		Analyst: **DJ**
Chromium	430	0.18	5.0		µg/L	5	10/4/2022 03:36 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052819
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R166109**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **PBW**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854258**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R166109**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **LCSW**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854259**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.134	0.20	5.000	0	103	90	110				

Sample ID: **N052841-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854265**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2015.520	40	1000	1016	100	90	110				

Sample ID: **N052841-001AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854266**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2007.380	40	1000	1016	99.2	90	110	2016	0.405	20	

Sample ID: **N052841-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854270**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2624.420	40	1000	1572	105	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052819
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052841-002ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854271**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1611.560	40						1572	2.49	20	

Sample ID: **N052843-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854273**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	3094.300	40	1000	2089	101	90	110				

Sample ID: **N052843-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854275**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.897	0.20	1.000	0.9642	93.3	90	110				

Sample ID: **N052819-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854276**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	676.255	10	250.0	413.1	105	90	110				

Sample ID: **N052819-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854277**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	669.895	10	250.0	404.0	106	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052819
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052822-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854278**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	715.705	10	250.0	456.4	104	90	110				

Sample ID: **N052822-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854279**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	710.010	10	250.0	455.9	102	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052819
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_W_CRPGE_TPK

Sample ID: **MB-95010**	SampType: **MBLK**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166195**
Client ID: **PBW**	Batch ID: **95010**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/3/2022**	SeqNo: **4857708**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									

Sample ID: **LCS-95010**	SampType: **LCS**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166195**
Client ID: **LCSW**	Batch ID: **95010**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/3/2022**	SeqNo: **4857709**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10.209	1.0	10.00	0	102	85	115				

Sample ID: **N052843-001F-MS**	SampType: **MS**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166195**
Client ID: **ZZZZZZ**	Batch ID: **95010**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/3/2022**	SeqNo: **4857731**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	2287.928	25	250.0	2007	112	75	125				

Sample ID: **N052843-001F-MSD**	SampType: **MSD**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166195**
Client ID: **ZZZZZZ**	Batch ID: **95010**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/3/2022**	SeqNo: **4857732**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	2302.251	25	250.0	2007	118	75	125	2288	0.624	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Pre-filter-092722
Lab Order:	N052819	**Collection Date:**	9/27/2022 8:15:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052819-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_221005B**	QC Batch: **95023**				PrepDate:	**10/4/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	10/5/2022 02:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Post-filter-092722
Lab Order:	N052819	**Collection Date:**	9/27/2022 8:30:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052819-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_221005B**	QC Batch: **95023**				PrepDate:	**10/4/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	10/5/2022 02:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052819
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-95023**	SampType: **MBLK**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **10/4/2022**	RunNo: **166225**
Client ID: **PBW**	Batch ID: **95023**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **10/5/2022**	SeqNo: **4858803**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS1-95023**	SampType: **LCS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **10/4/2022**	RunNo: **166225**
Client ID: **LCSW**	Batch ID: **95023**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **10/5/2022**	SeqNo: **4858804**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	90.909	20	100.0	0	90.9	85	115				

Sample ID: **N052843-001E-MS1**	SampType: **MS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **10/4/2022**	RunNo: **166225**
Client ID: **ZZZZZZ**	Batch ID: **95023**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **10/5/2022**	SeqNo: **4858814**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	98.139	20	100.0	0	98.1	75	125				

Sample ID: **N052843-001E-MSD**	SampType: **MSD**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **10/4/2022**	RunNo: **166225**
Client ID: **ZZZZZZ**	Batch ID: **95023**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **10/5/2022**	SeqNo: **4858815**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	98.093	20	100.0	0	98.1	75	125	98.14	0.0472	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Pre-filter-092722
Lab Order:	N052819	**Collection Date:**	9/27/2022 8:15:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052819-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_221004A**	QC Batch: **95009**			PrepDate:	**10/3/2022**		Analyst: **DJ**
Manganese	ND	0.026	0.50		µg/L	1	10/4/2022 01:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Post-filter-092722
Lab Order:	N052819	**Collection Date:**	9/27/2022 8:30:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052819-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_221004A**	QC Batch: **95009**			PrepDate:		**10/3/2022**	Analyst: **DJ**
Manganese	1.5	0.026	0.50		µg/L	1	10/4/2022 01:26 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052819
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-95009**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166205**
Client ID: **PBW**	Batch ID: **95009**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/4/2022**	SeqNo: **4858023**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	ND	0.50									

Sample ID: **LCS-95009**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166205**
Client ID: **LCSW**	Batch ID: **95009**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/4/2022**	SeqNo: **4858024**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	94.414	0.50	100.0	0	94.4	85	115				

Sample ID: **N052843-001E-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166205**
Client ID: **ZZZZZZ**	Batch ID: **95009**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/4/2022**	SeqNo: **4858043**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	2938.966	12	2500	675.3	90.5	75	125				

Sample ID: **N052843-001E-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166205**
Client ID: **ZZZZZZ**	Batch ID: **95009**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/4/2022**	SeqNo: **4858044**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	2928.119	12	2500	675.3	90.1	75	125	2939	0.370	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Brian Prowd	Bill to: Marty Bloes	EDD Requirement		QA/QC		Sample Receipt Condition
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD		RTNE		Y N
Address: Roseville, CA 95678	Email: brian.prowd@arcadis.com; daniel.moore@crtiseen.com	Address:	Geotracker		RWQCB	✓	1. Chilled /
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.# SWA-ASSET-C9817-051	Labspec		CalTrans		2. Headspace /
Submitted By: Kevin Ashley		Phone: 949-727-1400. ext 200 Fax:	Others	✓	LEVEL III		3. Container Intact /
Title: O&M Operator	Phone: 916-786-3302 Fax:		Specify: RWQCB		LEVEL IV		4. Seal Present 3 /
Signature: Date: 9/27/22	Sampled By: Kevin A.		Global ID:		Regulatory		5. IR number
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may				Specify State:		6. Method of Cooling: Ice
Project Name: PG&E Topock - OMM TCS PWTF	Signature: Date: 9-27-22	Matrix: Ground / Sediment; Potable / Soil; NPDES / Other Solid; Surface / Water X					Sample Temp: 4.7°C
Project Number: 30108882							Courier: ASSET
							Tracking No.:

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH, Filtered (250 mL poly)	Dissolved metals Iron, Manganese (SW6020) FF; HNO3; Filtered (500mL poly)	Total chromium (SW6020) No filter; HNO3 (500mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052819-01	Backwash Pre-filter-092722	9/27/22	815A		X	X	X	E	3	PV	BNS	
2	-02	Backwash Post-filter-092722	9/27/22	830A		X	X	X	E	3	PV	BNS	
3													
4													
5													
7													
8													
9													
10													
11													
12													
13													
14													

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Kevin Ashley	9/27/22 19:45	Dante Ortiz Dante Ortiz	9/27/22 14:45
Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Dante Ortiz Dante Ortiz	9/27/22 18:08	Yoandra Rodriguez	9/27/22 1808
Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms

1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
   Less than 24 Hrs.=200% NextDay=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 5% of the total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:

H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		
Others/Specify:	B	(NH4)2SO4/NH4OH		

Container Type:

T=Tube	V=VOA	P=Pint
J=Jar	B=Tedlar	G=Glass
M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	9/27/2022	Workorder:	N052819
Rep sample Temp (Deg C):	4.7	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For:

Checklist Completed By: YR EFanegoF 9/28/2022

for:

Reviewed By: MBC 9/29/2022

ASSET Laboratories

WORK ORDER Summary

28-Sep-22

WorkOrder: N052819

Client ID: ARCUS02

Project: PG&E Topock - OMM TCS PWTF, 30106892 **QC Level:** Level IV **Date Received:** 9/27/2022 6:08 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052819-001A	Backwash Pre-filter-092722	9/27/2022 8:15:00 AM	10/12/2022	Water	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052819-001B			10/12/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			10/12/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			10/12/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			10/12/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052819-001C			10/12/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			10/12/2022		EPA 6020	TOTAL METALS BY ICPMS	☐	☐	☐	WW
N052819-002A	Backwash Post-filter-092722	9/27/2022 8:30:00 AM	10/12/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052819-002B			10/12/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			10/12/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			10/12/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			10/12/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052819-002C			10/12/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			10/12/2022		EPA 6020	TOTAL METALS BY ICPMS	☐	☐	☐	WW
N052819-003A	FOLDER	10/12/2022	10/12/2022		Folder	Folder	☐	☐	☐	LAB
			10/12/2022		Folder	Level IV Report	☐	☐	☐	LAB
			10/12/2022		Folder	Folder	☐	☐	☐	LAB

October 11, 2022

Brian Prowd
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052822

RE: PG&E Topock - OMM TCS PWTF, 30106892

Attention: Brian Prowd

Enclosed are the results for sample(s) received on September 27, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - OMM TCS PWTF, 30106892
Lab Order: N052822
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052822-001A	Backwash Pre-filter-092122	Water	9/21/2022 9:05:00 AM	9/27/2022	10/11/2022
N052822-001B	Backwash Pre-filter-092122	Water	9/21/2022 9:05:00 AM	9/27/2022	10/11/2022
N052822-001C	Backwash Pre-filter-092122	Water	9/21/2022 9:05:00 AM	9/27/2022	10/11/2022
N052822-002A	Backwash Post-filter-092122	Water	9/21/2022 9:15:00 AM	9/27/2022	10/11/2022
N052822-002B	Backwash Post-filter-092122	Water	9/21/2022 9:15:00 AM	9/27/2022	10/11/2022
N052822-002C	Backwash Post-filter-092122	Water	9/21/2022 9:15:00 AM	9/27/2022	10/11/2022

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052822
Project: PG&E Topock - OMM TCS PWTF, 30106892
Lab ID: N052822-001

Client Sample ID: Backwash Pre-filter-092122
Collection Date: 9/21/2022 9:05:00 AM
Matrix: WATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220930A**	QC Batch: **R166109**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	460	1.3	10		µg/L	50	9/30/2022 10:19 AM
TOTAL METALS BY ICPMS							
			EPA 3010A		**EPA 6020**		
RunID: **NV00922-ICP8_221004B**	QC Batch: **95010**			PrepDate:	**10/3/2022**		Analyst: **DJ**
Chromium	440	0.18	5.0		µg/L	5	10/4/2022 03:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Post-filter-092122
Lab Order:	N052822	**Collection Date:**	9/21/2022 9:15:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052822-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220930A**	QC Batch: **R166109**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	460	1.3	10		µg/L	50	9/30/2022 10:29 AM
TOTAL METALS BY ICPMS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_221004B**	QC Batch: **95010**			PrepDate:	**10/3/2022**		Analyst: **DJ**
Chromium	440	0.18	5.0		µg/L	5	10/4/2022 03:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052822
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R166109**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **PBW**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854258**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R166109**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **LCSW**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854259**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.134	0.20	5.000	0	103	90	110				

Sample ID: **N052841-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854265**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2015.520	40	1000	1016	100	90	110				

Sample ID: **N052841-001AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854266**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2007.380	40	1000	1016	99.2	90	110	2016	0.405	20	

Sample ID: **N052841-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854270**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2624.420	40	1000	1572	105	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052822
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052841-002ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854271**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1611.560	40						1572	2.49	20	

Sample ID: **N052843-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854273**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	3094.300	40	1000	2089	101	90	110				

Sample ID: **N052843-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854275**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.897	0.20	1.000	0.9642	93.3	90	110				

Sample ID: **N052819-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854276**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	676.255	10	250.0	413.1	105	90	110				

Sample ID: **N052819-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854277**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	669.895	10	250.0	404.0	106	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052822
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052822-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854278**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	715.705	10	250.0	456.4	104	90	110				

Sample ID: **N052822-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854279**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	710.010	10	250.0	455.9	102	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052822
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_W_CRPGE_TPK

Sample ID: **MB-95010**	SampType: **MBLK**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166195**
Client ID: **PBW**	Batch ID: **95010**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/3/2022**	SeqNo: **4857708**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									

Sample ID: **LCS-95010**	SampType: **LCS**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166195**
Client ID: **LCSW**	Batch ID: **95010**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/3/2022**	SeqNo: **4857709**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10.209	1.0	10.00	0	102	85	115				

Sample ID: **N052843-001F-MS**	SampType: **MS**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166195**
Client ID: **ZZZZZZ**	Batch ID: **95010**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/3/2022**	SeqNo: **4857731**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	2287.928	25	250.0	2007	112	75	125				

Sample ID: **N052843-001F-MSD**	SampType: **MSD**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166195**
Client ID: **ZZZZZZ**	Batch ID: **95010**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/3/2022**	SeqNo: **4857732**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	2302.251	25	250.0	2007	118	75	125	2288	0.624	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- Calculations are based on raw values

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Pre-filter-092122
Lab Order:	N052822	**Collection Date:**	9/21/2022 9:05:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052822-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_221005B**	QC Batch: **95023**				PrepDate:	**10/4/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	10/5/2022 03:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Post-filter-092122
Lab Order:	N052822	**Collection Date:**	9/21/2022 9:15:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052822-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_221005B**	QC Batch: **95023**				PrepDate:	**10/4/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	10/5/2022 03:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052822
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-95023**	SampType: **MBLK**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **10/4/2022**	RunNo: **166225**
Client ID: **PBW**	Batch ID: **95023**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **10/5/2022**	SeqNo: **4858803**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS1-95023**	SampType: **LCS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **10/4/2022**	RunNo: **166225**
Client ID: **LCSW**	Batch ID: **95023**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **10/5/2022**	SeqNo: **4858804**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	90.909	20	100.0	0	90.9	85	115				

Sample ID: **N052843-001E-MS1**	SampType: **MS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **10/4/2022**	RunNo: **166225**
Client ID: **ZZZZZZ**	Batch ID: **95023**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **10/5/2022**	SeqNo: **4858814**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	98.139	20	100.0	0	98.1	75	125				

Sample ID: **N052843-001E-MSD**	SampType: **MSD**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **10/4/2022**	RunNo: **166225**
Client ID: **ZZZZZZ**	Batch ID: **95023**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **10/5/2022**	SeqNo: **4858815**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	98.093	20	100.0	0	98.1	75	125	98.14	0.0472	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Pre-filter-092122
Lab Order:	N052822	**Collection Date:**	9/21/2022 9:05:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052822-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_221004A**	QC Batch: **95009**			PrepDate:	**10/3/2022**		Analyst: **DJ**
Manganese	2.2	0.026	0.50		µg/L	1	10/4/2022 01:32 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Post-filter-092122
Lab Order:	N052822	**Collection Date:**	9/21/2022 9:15:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052822-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_221004A**	QC Batch: **95009**			PrepDate:	**10/3/2022**		Analyst: **DJ**
Manganese	2.3	0.026	0.50		µg/L	1	10/4/2022 01:38 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052822
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-95009**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166205**
Client ID: **PBW**	Batch ID: **95009**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/4/2022**	SeqNo: **4858023**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	ND	0.50									

Sample ID: **LCS-95009**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166205**
Client ID: **LCSW**	Batch ID: **95009**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/4/2022**	SeqNo: **4858024**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	94.414	0.50	100.0	0	94.4	85	115				

Sample ID: **N052843-001E-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166205**
Client ID: **ZZZZZZ**	Batch ID: **95009**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/4/2022**	SeqNo: **4858043**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	2938.966	12	2500	675.3	90.5	75	125				

Sample ID: **N052843-001E-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166205**
Client ID: **ZZZZZZ**	Batch ID: **95009**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/4/2022**	SeqNo: **4858044**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	2928.119	12	2500	675.3	90.1	75	125	2939	0.370	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

ASSET LABORATORIES

ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

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California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
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Page 1 of 1

Client: Arcadis	Report to: Brian Prowd	Bill to: Marty Bloes	EDD Requirement: Excel EDD; Geotracker; Labspec; Others ✓; Specify: RWQCB; Global ID:
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	QA/QC: RTNE; RWQCB ✓; CalTrans; LEVEL III; LEVEL IV; Regulatory; Specify State:
Address: Roseville, CA 95678	Email: brian.prowd@arcadis.com; daniel.moore@citigen.com	Address:	Sample Receipt Condition: 1. Chilled Y; 2. Headspace; 3. Container Intact Y; 4. Seal Present Y; 5. IR number 3; 6. Method of Cooling: Ice
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.# SWA-ASSET-C9817-051	Sample Temp: 4.7°C
Submitted By: Mark Galloway	Phone: 916-786-3302 Fax:	Phone: 949-727-1400. ext 200 Fax:	Courier: ASSET
Title: O&M OPERATOR			Tracking No.:
Signature: Date: 9/21/22	Sampled By: KEVIN ASHLEY		
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may		
Project Name: PG&E Topock - OMM TCS PWTF	Signature: Date: 9/21/22		
Project Number: 30106892			

Matrix: Ground; Sediment; Potable; Soil; NPDES; Other Solid; Surface; Water X

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH, Filtered (250 mL poly)	Dissolved metals Iron, Manganese (SW6020) FF; HNO3; Filtered (500mL poly)	Total chromium (SW6020) No filter; HNO3 (500mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052822-01	Backwash Pre-filter-092122	9/21/22	905		X	X	X	E	3	PV	BNS	
2	-02	Backwash Post-filter-092122	9/21/22	915		X	X	X	E	3	PV	BNS	
3													
4													
5													
7													
8													
9													
10													
11													
12													
13													
14													

Relinquished by (Signature and Printed Name): Mark Galloway Date/Time: 9/21/22 14:45	Relinquished by (Signature and Printed Name): Santa Cruz Parte Ortiz Date/Time: 9/21/22 14:45
Relinquished by (Signature and Printed Name): Santa Cruz Parte Ortiz Date/Time: 9/21/22 18:08	Relinquished by (Signature and Printed Name): Yoandra Rodriguez Date/Time: 9/21/22 1808
Relinquished by (Signature and Printed Name): Date/Time:	Relinquished by (Signature and Printed Name): Date/Time:

Turn Around Time (TAT)

	A	< 24 Hrs or Same Day TAT
	B	= Next Workday
	C	= 2 Workdays
	D	= 3 Workdays
X	E	= Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs =200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
5. Trip Blanks and Equipment Blanks are billable sample
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of reports needed.
9. For subcontracted analysis, TAT and Surcharges will vary.

White=Laboratory Copy

Preservatives:

H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$		
Others/Specify:	B	(NH4)2SO4/NH4OH		

Container Type:

T=Tube	V=VOA	P=Pint
J=Jar	B=Tedlar	G=Glass
M=Metal	M=Metal	C=Can

Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On: 9/27/2022 Workorder: N052822

Rep sample Temp (Deg C): 4.7 IR Gun ID: 3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For:

Checklist Completed By: YR EFanegoF 9/28/2022

Reviewed By: for: MBC 9/29/2022

ASSET Laboratories

WORK ORDER Summary

29-Sep-22

WorkOrder: N052822

Client ID: ARCUS02

Project: PG&E Topock - OMM TCS PWTF, 30106892 **QC Level:** Level IV **Date Received:** 9/27/2022 6:08 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052822-001A	Backwash Pre-filter-092122	9/21/2022 9:05:00 AM	10/12/2022	Water	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052822-001B			10/12/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			10/12/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			10/12/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			10/12/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052822-001C			10/12/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			10/12/2022		EPA 6020	TOTAL METALS BY ICPMS	☐	☐	☐	WW
N052822-002A	Backwash Post-filter-092122	9/21/2022 9:15:00 AM	10/12/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052822-002B			10/12/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			10/12/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			10/12/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			10/12/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052822-002C			10/12/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			10/12/2022		EPA 6020	TOTAL METALS BY ICPMS	☐	☐	☐	WW
N052822-003A	FOLDER	10/12/2022	10/12/2022		Folder	Folder	☐	☐	☐	LAB
			10/12/2022		Folder	Level IV Report	☐	☐	☐	LAB
			10/12/2022		Folder	Folder	☐	☐	☐	LAB

July 27, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N051580

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on July 11, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Dilution was necessary for sample N051580-002 due to matrix interference. Sample was analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Sample was reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for EPA 6020_Dissolved:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Manganese in QC samples N051585-001CMS and N051585-001CMSD since the analyte concentration in the sample is disproportionate to the spike level. Post Spike (PS) passed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for SM 5310C:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria in QC samples N051569-014CMS and N051569-014CMSD at lower dilution possibly due to matrix interference. QC samples were diluted and recovery passed criteria. Thus sample reference N051569-014 and MS/MSD were reported at 5x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N051580
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N051580-001A	MW-76-039-0722	Groundwater	7/11/2022 3:37:00 PM	7/11/2022	7/27/2022
N051580-001B	MW-76-039-0722	Groundwater	7/11/2022 3:37:00 PM	7/11/2022	7/27/2022
N051580-001C	MW-76-039-0722	Groundwater	7/11/2022 3:37:00 PM	7/11/2022	7/27/2022
N051580-001D	MW-76-039-0722	Groundwater	7/11/2022 3:37:00 PM	7/11/2022	7/27/2022
N051580-002A	MW-76-156-0722	Groundwater	7/11/2022 2:54:00 PM	7/11/2022	7/27/2022
N051580-002B	MW-76-156-0722	Groundwater	7/11/2022 2:54:00 PM	7/11/2022	7/27/2022
N051580-002C	MW-76-156-0722	Groundwater	7/11/2022 2:54:00 PM	7/11/2022	7/27/2022
N051580-002D	MW-76-156-0722	Groundwater	7/11/2022 2:54:00 PM	7/11/2022	7/27/2022
N051580-003A	MW-76-181-0722	Groundwater	7/11/2022 3:41:00 PM	7/11/2022	7/27/2022
N051580-003B	MW-76-181-0722	Groundwater	7/11/2022 3:41:00 PM	7/11/2022	7/27/2022
N051580-003C	MW-76-181-0722	Groundwater	7/11/2022 3:41:00 PM	7/11/2022	7/27/2022
N051580-003D	MW-76-181-0722	Groundwater	7/11/2022 3:41:00 PM	7/11/2022	7/27/2022
N051580-004A	MW-76-218-0722	Groundwater	7/11/2022 2:51:00 PM	7/11/2022	7/27/2022
N051580-004B	MW-76-218-0722	Groundwater	7/11/2022 2:51:00 PM	7/11/2022	7/27/2022
N051580-004C	MW-76-218-0722	Groundwater	7/11/2022 2:51:00 PM	7/11/2022	7/27/2022
N051580-004D	MW-76-218-0722	Groundwater	7/11/2022 2:51:00 PM	7/11/2022	7/27/2022
N051580-005A	EB-701-Q322	Groundwater	7/11/2022 4:00:00 PM	7/11/2022	7/27/2022
N051580-006A	MW-77-046-0722	Groundwater	7/11/2022 1:19:00 PM	7/11/2022	7/27/2022
N051580-006B	MW-77-046-0722	Groundwater	7/11/2022 1:19:00 PM	7/11/2022	7/27/2022
N051580-006C	MW-77-046-0722	Groundwater	7/11/2022 1:19:00 PM	7/11/2022	7/27/2022
N051580-006D	MW-77-046-0722	Groundwater	7/11/2022 1:19:00 PM	7/11/2022	7/27/2022
N051580-007A	MW-77-102-0722	Groundwater	7/11/2022 1:27:00 PM	7/11/2022	7/27/2022
N051580-007B	MW-77-102-0722	Groundwater	7/11/2022 1:27:00 PM	7/11/2022	7/27/2022
N051580-007C	MW-77-102-0722	Groundwater	7/11/2022 1:27:00 PM	7/11/2022	7/27/2022
N051580-007D	MW-77-102-0722	Groundwater	7/11/2022 1:27:00 PM	7/11/2022	7/27/2022
N051580-008A	MW-77-158-0722	Groundwater	7/11/2022 2:19:00 PM	7/11/2022	7/27/2022
N051580-008B	MW-77-158-0722	Groundwater	7/11/2022 2:19:00 PM	7/11/2022	7/27/2022
N051580-008C	MW-77-158-0722	Groundwater	7/11/2022 2:19:00 PM	7/11/2022	7/27/2022
N051580-008D	MW-77-158-0722	Groundwater	7/11/2022 2:19:00 PM	7/11/2022	7/27/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N051580
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N051580-009A	MW-77-187-0722	Groundwater	7/11/2022 1:56:00 PM	7/11/2022	7/27/2022
N051580-009B	MW-77-187-0722	Groundwater	7/11/2022 1:56:00 PM	7/11/2022	7/27/2022
N051580-009C	MW-77-187-0722	Groundwater	7/11/2022 1:56:00 PM	7/11/2022	7/27/2022
N051580-009D	MW-77-187-0722	Groundwater	7/11/2022 1:56:00 PM	7/11/2022	7/27/2022
N051580-010A	EB-702-Q322	Groundwater	7/11/2022 3:55:00 PM	7/11/2022	7/27/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 3:37:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220713B**	QC Batch: **R163929**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	140	0.50	4.0		µg/L	20	7/14/2022 01:14 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714B**	QC Batch: **R163962**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	7/15/2022 12:17 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-181-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 3:41:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220713B**	QC Batch: **R163929**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	1700	5.0	40		µg/L	200	7/13/2022 06:16 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-218-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:51:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220713B**	QC Batch: **R163929**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	36	0.50	4.0		µg/L	20	7/13/2022 09:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-701-Q322
Lab Order:	N051580	**Collection Date:**	7/11/2022 4:00:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220713B**	QC Batch: **R163929**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/13/2022 11:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220713B**	QC Batch: **R163929**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/13/2022 10:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:27:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220713B**	QC Batch: **R163929**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/13/2022 10:24 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220713B**	QC Batch: **R163929**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/13/2022 10:43 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:56:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
EPA 218.6							
RunID: **NV00922-IC7_220713B** QC Batch: **R163929** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	40	0.13	1.0		µg/L	5	7/13/2022 09:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-702-Q322
Lab Order:	N051580	**Collection Date:**	7/11/2022 3:55:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220713B**	QC Batch: **R163929**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/13/2022 11:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	LCS-R163929	SampType:	LCS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	LCSW	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4720885

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.258	0.20	5.000	0	105	90	110				

Sample ID	MB-R163929	SampType:	MBLK	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	PBW	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4720888

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID	N051580-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4720890

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2743.000	40	1000	1665	108	90	110				

Sample ID	N051580-003AMSD	SampType:	MSD	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4720891

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2718.320	40	1000	1665	105	90	110	2743	0.904	20	

Sample ID	N051590-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4720894

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.197	0.20	1.000	1.182	102	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051590-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4720896

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.894	0.20	1.000	1.859	103	90	110				

Sample ID	N051590-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4720900

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	3.127	0.20	1.000	2.058	107	90	110				

Sample ID	N051580-004AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4720904

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	137.962	4.0	100.0	36.04	102	90	110				

Sample ID	N051580-009AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4720906

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	64.120	1.0	25.00	39.50	98.5	90	110				

Sample ID	N051580-006AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4720910

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.029	0.20	1.000	0	103	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051580-007AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4720912

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.061	0.20	1.000	0	106	90	110				

Sample ID	N051580-005AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4720914

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.010	0.20	1.000	0	101	90	110				

Sample ID	N051580-010AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4720916

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.052	0.20	1.000	0	105	90	110				

Sample ID	N051580-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4720925

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	241.446	4.0	100.0	137.1	104	90	110				

Sample ID	N051566-001ADUP	SampType:	DUP	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4721089

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	44.303	1.0						44.68	0.851	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051580-008AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163929
Client ID:	ZZZZZZ	Batch ID:	R163929	TestNo:	EPA 218.6			Analysis Date:	7/13/2022	SeqNo:	4722816

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.139	0.20	1.000	0.09830	104	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	LCS-R163962	SampType:	LCS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163962		
Client ID:	LCSW	Batch ID:	R163962	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722449		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	5.205	0.20	5.000	0	104	90	110						

Sample ID	MB-R163962	SampType:	MBLK	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163962		
Client ID:	PBW	Batch ID:	R163962	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722450		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	ND	0.20											

Sample ID	N051611-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163962		
Client ID:	ZZZZZZ	Batch ID:	R163962	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722452		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	9.280	0.20	5.000	4.097	104	90	110						

Sample ID	N051611-002AMSD	SampType:	MSD	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163962		
Client ID:	ZZZZZZ	Batch ID:	R163962	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722453		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	9.396	0.20	5.000	4.097	106	90	110	9.280	1.25	20			

Sample ID	N051610-001ADUP	SampType:	DUP	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163962		
Client ID:	ZZZZZZ	Batch ID:	R163962	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722455		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	1.353	0.20						1.357	0.288	20			

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051610-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163962
Client ID:	ZZZZZZ	Batch ID:	R163962	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722456

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.386	0.20	1.000	1.357	103	90	110				

Sample ID	N051610-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163962
Client ID:	ZZZZZZ	Batch ID:	R163962	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722460

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.167	0.20	1.000	0.08050	109	90	110				

Sample ID	N051610-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163962
Client ID:	ZZZZZZ	Batch ID:	R163962	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722462

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.654	0.20	1.000	0.6166	104	90	110				

Sample ID	N051610-004AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163962
Client ID:	ZZZZZZ	Batch ID:	R163962	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722464

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.951	0.20	1.000	0.8887	106	90	110				

Sample ID	N051610-005AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163962
Client ID:	ZZZZZZ	Batch ID:	R163962	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722466

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.213	0.20	1.000	1.216	99.7	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **N051610-006AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163962**
Client ID: **ZZZZZZ**	Batch ID: **R163962**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722468**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.898	0.20	1.000	1.824	107	90	110				

Sample ID **N051610-007AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163962**
Client ID: **ZZZZZZ**	Batch ID: **R163962**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722472**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.156	0.20	1.000	1.086	107	90	110				

Sample ID **N051610-008AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163962**
Client ID: **ZZZZZZ**	Batch ID: **R163962**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722474**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.547	0.20	1.000	1.514	103	90	110				

Sample ID **N051580-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163962**
Client ID: **ZZZZZZ**	Batch ID: **R163962**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4722479**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.859	1.0	5.000	0	97.2	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 3:37:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	280	3.0	25		mg/L	50	7/18/2022 01:42 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712B**	QC Batch: **R163861**			PrepDate:			Analyst: **RAB**
Nitrate as N	2.5	0.048	0.25		mg/L	5	7/12/2022 11:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	720	6.1	50		mg/L	100	7/18/2022 03:36 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712B**	QC Batch: **R163861**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/13/2022 12:24 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051580-003

Client Sample ID: MW-76-181-0722
Collection Date: 7/11/2022 3:41:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	900	6.1	50		mg/L	100	7/18/2022 03:53 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712B**	QC Batch: **R163861**			PrepDate:			Analyst: **RAB**
Nitrate as N	2.5	0.095	0.50		mg/L	10	7/13/2022 12:57 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051580-004

Client Sample ID: MW-76-218-0722
Collection Date: 7/11/2022 2:51:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	680	6.1	50		mg/L	100	7/18/2022 04:09 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712B**	QC Batch: **R163861**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.69	0.095	0.50		mg/L	10	7/13/2022 01:14 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	370	3.0	25		mg/L	50	7/18/2022 02:31 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712B**	QC Batch: **R163861**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/13/2022 01:31 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:27:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	710	6.1	50		mg/L	100	7/18/2022 09:27 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712B**	QC Batch: **R163861**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.93	0.095	0.50		mg/L	10	7/13/2022 01:48 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	540	3.0	25		mg/L	50	7/18/2022 02:47 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712B**	QC Batch: **R163861**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/13/2022 02:05 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:56:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	880	6.1	50		mg/L	100	7/18/2022 09:44 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712B**	QC Batch: **R163861**			PrepDate:			Analyst: **RAB**
Nitrate as N	1.2	0.095	0.50		mg/L	10	7/13/2022 02:21 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	MB-R164035_SO4	SampType:	MBLK	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164035
Client ID:	PBW	Batch ID:	R164035	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4730575

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.50									

Sample ID	LCS-R164035_SO4	SampType:	LCS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164035
Client ID:	LCSW	Batch ID:	R164035	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4730576

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	4.003	0.50	4.000	0	100	90	110				

Sample ID	N051585-001BMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164035
Client ID:	ZZZZZZ	Batch ID:	R164035	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4730578

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	283.296	10	80.00	199.3	105	80	120				

Sample ID	N051585-001BMSD	SampType:	MSD	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164035
Client ID:	ZZZZZZ	Batch ID:	R164035	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4730579

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	283.230	10	80.00	199.3	105	80	120	283.3	0.0233	20	

Sample ID	N051580-001BDUP	SampType:	DUP	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164035
Client ID:	ZZZZZZ	Batch ID:	R164035	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4730581

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	281.510	25						283.8	0.805	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	N051580-001BMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164035
Client ID:	ZZZZZZ	Batch ID:	R164035	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4730582

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	479.655	25	200.0	283.8	97.9	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	LCS-R163861_NO3	SampType:	LCS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163861
Client ID:	LCSW	Batch ID:	R163861	TestNo:	EPA 300.0			Analysis Date:	7/12/2022	SeqNo:	4719454

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.225	0.050	1.250	0	98.0	90	110				

Sample ID	MB-R163861_NO3	SampType:	MBLK	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163861
Client ID:	PBW	Batch ID:	R163861	TestNo:	EPA 300.0			Analysis Date:	7/12/2022	SeqNo:	4719455

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID	N051569-014BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163861
Client ID:	ZZZZZZ	Batch ID:	R163861	TestNo:	EPA 300.0			Analysis Date:	7/12/2022	SeqNo:	4719461

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	19.932	0.50	12.50	7.443	99.9	80	120				

Sample ID	N051569-014BMSD	SampType:	MSD	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163861
Client ID:	ZZZZZZ	Batch ID:	R163861	TestNo:	EPA 300.0			Analysis Date:	7/12/2022	SeqNo:	4719462

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	19.864	0.50	12.50	7.443	99.4	80	120	19.93	0.342	20	

Sample ID	N051580-001BDUP	SampType:	DUP	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163861
Client ID:	ZZZZZZ	Batch ID:	R163861	TestNo:	EPA 300.0			Analysis Date:	7/13/2022	SeqNo:	4719466

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	2.440	0.25						2.456	0.694	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	N051580-002BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163861
Client ID:	ZZZZZZ	Batch ID:	R163861	TestNo:	EPA 300.0			Analysis Date:	7/13/2022	SeqNo:	4719468

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.020	0.50	12.50	0.1910	94.6	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 3:37:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220712B**	QC Batch: **R163890**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/12/2022 10:13 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220712B**	QC Batch: **R163890**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/12/2022 10:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-181-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 3:41:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220712B**	QC Batch: **R163890**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/12/2022 10:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-218-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:51:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220712B**	QC Batch: **R163890**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/12/2022 10:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220712B**	QC Batch: **R163890**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/12/2022 11:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:27:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220712B**	QC Batch: **R163890**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/12/2022 11:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220712B**	QC Batch: **R163890**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/12/2022 11:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:56:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220712B**	QC Batch: **R163890**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/13/2022 12:01 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID **LCS-R163890**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163890**
Client ID: **LCSW**	Batch ID: **R163890**	TestNo: **SM 5310C**		Analysis Date: **7/12/2022**	SeqNo: **4719734**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.186	1.0	5.000	0	104	85	115				

Sample ID **MB-R163890**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163890**
Client ID: **PBW**	Batch ID: **R163890**	TestNo: **SM 5310C**		Analysis Date: **7/12/2022**	SeqNo: **4719735**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID **N051569-014CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163890**
Client ID: **ZZZZZZ**	Batch ID: **R163890**	TestNo: **SM 5310C**		Analysis Date: **7/12/2022**	SeqNo: **4719743**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	23.129	5.0	25.00	0	92.5	75	125				

Sample ID **N051569-014CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163890**
Client ID: **ZZZZZZ**	Batch ID: **R163890**	TestNo: **SM 5310C**		Analysis Date: **7/12/2022**	SeqNo: **4719744**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	23.169	5.0	25.00	0	92.7	75	125	23.13	0.171	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 3:37:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220716A**	QC Batch: **93727**				PrepDate:	**7/13/2022**	Analyst: **DJ**
Iron	110	13	20		µg/L	1	7/16/2022 01:24 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220716A**	QC Batch: **93727**				PrepDate:	**7/13/2022**	Analyst: **DJ**
Iron	200	13	20		µg/L	1	7/16/2022 01:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-181-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 3:41:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93727**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Iron	32	13	20		µg/L	1	7/16/2022 02:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-218-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:51:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93727**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Iron	44	13	20		µg/L	1	7/16/2022 02:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93727**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Iron	130	13	20		µg/L	1	7/16/2022 02:14 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:27:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93727**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Iron	260	13	20		µg/L	1	7/16/2022 02:19 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93727**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Iron	360	13	20		µg/L	1	7/16/2022 02:25 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:56:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93727**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Iron	330	13	20		µg/L	1	7/16/2022 02:31 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-93727**	SampType: **MBLK**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **7/13/2022**	RunNo: **163995**
Client ID: **PBW**	Batch ID: **93727**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4724311**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-93727**	SampType: **LCS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **7/13/2022**	RunNo: **163995**
Client ID: **LCSW**	Batch ID: **93727**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4724312**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	90.215	20	100.0	0	90.2	85	115				

Sample ID: **N051569-014DMS**	SampType: **MS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **7/13/2022**	RunNo: **163995**
Client ID: **ZZZZZZ**	Batch ID: **93727**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4724318**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	93.229	20	100.0	0	93.2	75	125				

Sample ID: **N051569-015D-MS**	SampType: **MS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **7/13/2022**	RunNo: **163995**
Client ID: **ZZZZZZ**	Batch ID: **93727**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4724323**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	99.723	20	100.0	0	99.7	75	125				

Sample ID: **N051569-015D-MSD**	SampType: **MSD**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **7/13/2022**	RunNo: **163995**
Client ID: **ZZZZZZ**	Batch ID: **93727**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4724324**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	100.325	20	100.0	0	100	75	125	99.72	0.602	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **N051569-014DMSD** SampType: **MSD** TestCode: **6010_WDPG** Units: **µg/L** Prep Date: **7/13/2022** RunNo: **164336**
Client ID: **ZZZZZZ** Batch ID: **93727** TestNo: **EPA 6010B** **EPA 3010A** Analysis Date: **7/26/2022** SeqNo: **4750419**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	93.940	20	100.0	0	93.9	75	125	93.23	0.760	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 3:37:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/15/2022 06:27 AM
Barium	74	0.083	1.0		µg/L	1	7/16/2022 05:58 AM
Manganese	12	0.026	0.50		µg/L	1	7/15/2022 06:27 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/15/2022 06:33 AM
Barium	91	0.083	1.0		µg/L	1	7/16/2022 06:04 AM
Manganese	1400	0.66	12		µg/L	25	7/15/2022 10:53 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-181-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 3:41:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:		**7/13/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/15/2022 06:39 AM
Barium	68	0.083	1.0		µg/L	1	7/16/2022 06:10 AM
Manganese	0.74	0.026	0.50		µg/L	1	7/16/2022 06:10 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-218-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:51:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/15/2022 06:45 AM
Barium	87	0.083	1.0		µg/L	1	7/16/2022 06:16 AM
Manganese	240	0.13	2.5		µg/L	5	7/15/2022 11:16 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:		**7/13/2022**	Analyst: **DJ**
Arsenic	1.2	0.050	0.10		µg/L	1	7/15/2022 06:51 AM
Barium	55	0.083	1.0		µg/L	1	7/16/2022 06:22 AM
Manganese	480	0.13	2.5		µg/L	5	7/15/2022 11:22 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:27:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:		**7/13/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/15/2022 06:57 AM
Barium	59	0.083	1.0		µg/L	1	7/16/2022 06:28 AM
Manganese	110	0.026	0.50		µg/L	1	7/15/2022 06:57 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 2:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/15/2022 07:03 AM
Barium	30	0.083	1.0		µg/L	1	7/16/2022 06:34 AM
Manganese	19	0.026	0.50		µg/L	1	7/15/2022 07:03 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-0722
Lab Order:	N051580	**Collection Date:**	7/11/2022 1:56:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051580-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/15/2022 07:09 AM
Barium	32	0.083	1.0		µg/L	1	7/16/2022 06:40 AM
Manganese	17	0.026	0.50		µg/L	1	7/15/2022 07:09 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID **MB-93751**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/13/2022**	RunNo: **163938**
Client ID: **PBW**	Batch ID: **93751**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/15/2022**	SeqNo: **4724025**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Manganese	ND	0.50									

Sample ID **LCS-93751**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/13/2022**	RunNo: **163938**
Client ID: **LCSW**	Batch ID: **93751**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/15/2022**	SeqNo: **4724026**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.177	0.10	10.00	0	91.8	85	115				
Manganese	102.233	0.50	100.0	0	102	85	115				

Sample ID **N051585-001CMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/13/2022**	RunNo: **163938**
Client ID: **ZZZZZZ**	Batch ID: **93751**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/15/2022**	SeqNo: **4724042**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.270	0.10	10.00	2.174	101	75	125				

Sample ID **N051585-001CMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/13/2022**	RunNo: **163938**
Client ID: **ZZZZZZ**	Batch ID: **93751**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/15/2022**	SeqNo: **4724043**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.007	0.10	10.00	2.174	98.3	75	125	12.27	2.17	20	

Sample ID **N051585-001CMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/13/2022**	RunNo: **163938**
Client ID: **ZZZZZZ**	Batch ID: **93751**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/15/2022**	SeqNo: **4724077**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	551.450	2.5	100.0	503.7	47.8	75	125				S

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N051585-001CMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	163938
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/15/2022	SeqNo:	4724078

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	548.074	2.5	100.0	503.7	44.4	75	125	551.4	0.614	20	S

Sample ID	MB-93751	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	164015
Client ID:	PBW	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727218

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	ND	1.0									

Sample ID	LCS-93751	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	164015
Client ID:	LCSW	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727219

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	10.019	1.0	10.00	0	100	85	115				

Sample ID	N051585-001CMS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	164015
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727235

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	30.736	1.0	10.00	22.41	83.3	75	125				

Sample ID	N051585-001CMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	164015
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727236

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	30.097	1.0	10.00	22.41	76.9	75	125	30.74	2.10	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051580
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N051585-001C-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	163938
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/15/2022	SeqNo:	4724041

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.029	0.10	10.00	2.174	98.6	80	120				

Sample ID	N051585-001C-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	163938
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/15/2022	SeqNo:	4724076

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	615.078	2.5	100.0	503.7	111	80	120				

Sample ID	N051585-001C-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	164015
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727234

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	30.947	1.0	10.00	22.41	85.4	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ASSET LABORATORIES

ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

Page 1 of 1

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement: Excel EDD; Geotracker; Labspec; Others ✓; Specify: RWQCB
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	QA/QC: RTNE; RWQCB ✓; CalTrans; LEVEL III; LEVEL IV; Regulatory; Specify State:
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Sample Receipt Condition: Y / N
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	1. Chilled: Y
Submitted By: Riggie Tap	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	2. Headspace: N
Title: Field Tech		Global ID:	3. Container Intact: Y
Signature: Date: 7/11/22	Sampled By: Riggie Tap		4. Seal Present: N
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.		5. IR number: 3
Project Name: PG&E Topock - PCM	Signature:	Date: 7/11/22	6. Method of Cooling: ICE
Project Number: 30121866.3Q22GW			Sample Temp: 2.4°C

Matrix: Ground; X Sediment; Potable; Soil; NPDES; Other Solid; Surface

Courier: ASSET

Tracking No.:

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	TRUE	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N051580-01	MW-76-039-0722	7/11/2022	1537		X	X	X			X				E	6	P	BNS	
2	-02	MW-76-156-0722	7/11/2022	1454		X	X	X			X				E	6	P	BNS	
3	-03	MW-76-181-0722	7/11/2022	[redacted]	1541	X	X	X			X				E	6	P	BNS	
4	-04	MW-76-218-0722	7/11/2022	1451		X	X	X			X				E	6	P	BNS	
5	-05	EB-701-Q322	7/11/2022	1600		X									E	1	P	BNS	
6	-06	MW-77-046-0722	7/11/2022	1319		X	X	X			X				E	6	P	BNS	
7	-07	MW-77-102-0722	7/11/2022	1327		X	X	X			X				E	6	P	BNS	
8	-08	MW-77-158-0722	7/11/2022	1419		X	X	X			X				E	6	P	BNS	
9	-09	MW-77-187-0722	7/11/2022	1356		X	X	X			X				E	6	P	BNS	
10	-10	EB-702-Q322	7/11/2022	1555		X									E	1	P	BNS	
11																			
12																			
13																			
14																			

Relinquished by (Signature and Printed Name):	Date/Time:	Received by (Signature and Printed Name):	Date/Time:
Riggie Tap 7/11/22	1645	MBCARTIN	7/11/22 @ 1645
REL/REC: MBCARTIN			7/11/22 @ 1900

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [X] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives: H=HCL; N=HNO_3; S=H_2SO_4; C=4°C; Z=$Zn(AC)_2$; O=NaOH; T=$Na_2S_2O_3$; Others/Specify: B (NH4)2SO4/NH4OH

Container Type: T=Tube; V=VOA; P=Pint; J=Jar; B=Tedlar; G=Glass; M=Metal; M=Metal; C=Can

White=Laboratory Copy

Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	7/11/2022	Workorder:	N051580
Rep sample Temp (Deg C):	2.4	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For:

Checklist Completed By: GGJ GGarcia 7/12/2022

Reviewed By: MBC 7/20/2022

ASSET Laboratories

WORK ORDER Summary

20-Jul-22

WorkOrder: N051580

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/11/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051580-001A	MW-76-039-0722	7/11/2022 3:37:00 PM	7/25/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051580-001B			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051580-001C			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051580-001D			7/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051580-002A	MW-76-156-0722	7/11/2022 2:54:00 PM	7/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051580-002B			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051580-002C			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051580-002D			7/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051580-003A	MW-76-181-0722	7/11/2022 3:41:00 PM	7/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051580-003B			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051580-003C			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

20-Jul-22

WorkOrder: N051580

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/11/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051580-003C	MW-76-181-0722	7/11/2022 3:41:00 PM	7/25/2022	Groundwater	EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051580-003D			7/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051580-004A	MW-76-218-0722	7/11/2022 2:51:00 PM	7/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051580-004B			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051580-004C			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051580-004D			7/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051580-005A	EB-701-Q322	7/11/2022 4:00:00 PM	7/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051580-006A	MW-77-046-0722	7/11/2022 1:19:00 PM	7/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051580-006B			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051580-006C			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051580-006D			7/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051580-007A	MW-77-102-0722	7/11/2022 1:27:00 PM	7/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051580-007B			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

20-Jul-22

WorkOrder: N051580

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/11/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051580-007C	MW-77-102-0722	7/11/2022 1:27:00 PM	7/25/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051580-007D			7/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051580-008A	MW-77-158-0722	7/11/2022 2:19:00 PM	7/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051580-008B			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051580-008C			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051580-008D			7/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051580-009A	MW-77-187-0722	7/11/2022 1:56:00 PM	7/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051580-009B			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051580-009C			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051580-009D			7/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051580-010A	EB-702-Q322	7/11/2022 3:55:00 PM	7/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

20-Jul-22

WorkOrder: N051580

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/11/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051580-011A	FOLDER	7/25/2022	7/25/2022		Folder	Folder	☐	☐	☐	LAB
			7/25/2022		Folder	Level IV Report	☐	☐	☐	LAB
			7/25/2022			QA Review	☐	☐	☐	LAB
			7/25/2022		Folder	Folder	☐	☐	☐	LAB

July 27, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N051585

RE: PG&E Topock - PCM, 30121866.3Q22GW

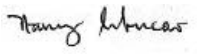
Attention: Dan Bush

Enclosed are the results for sample(s) received on July 12, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,



Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Dilution was necessary for some samples due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for EPA 6010B_Dissolved:

Matrix Spike Duplicate (MSD) is outside recovery criteria for Iron in QC samples N051585-001CMSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020_Dissolved:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Manganese in QC samples N051585-001CMS and N051585-001CMSD since the analyte concentration in the sample is disproportionate to the spike level. Post Spike (PS) passed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for SM 5310C:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria in QC samples N051585-001DMS and N051585-001DMSD at 1x dilution possibly due to matrix interference. QC samples were diluted and recovery passed criteria. Thus sample reference N051585-001 and MS/MSD were reported at 5x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Matrix Spike (MS) is outside recovery criteria in QC sample N051569-015CMS at lower dilution possibly due to matrix interference. QC sample was diluted and recovery passed criteria. Thus sample reference N051569-015 and MS/MSD were reported at 5x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

% RSD of N051585-005 at 1x dilution failed possibly due to matrix. Sample at 5x dilution was analyzed for several runs and result is comparable thus, sample was reported at 5x dilution.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N051585
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N051585-001A	MW-30-050-0722	Groundwater	7/12/2022 8:22:00 AM	7/12/2022	7/27/2022
N051585-001B	MW-30-050-0722	Groundwater	7/12/2022 8:22:00 AM	7/12/2022	7/27/2022
N051585-001C	MW-30-050-0722	Groundwater	7/12/2022 8:22:00 AM	7/12/2022	7/27/2022
N051585-001D	MW-30-050-0722	Groundwater	7/12/2022 8:22:00 AM	7/12/2022	7/27/2022
N051585-002A	EB-704-Q322	Groundwater	7/12/2022 1:40:00 PM	7/12/2022	7/27/2022
N051585-003A	MW-81-043-0722	Groundwater	7/12/2022 12:54:00 PM	7/12/2022	7/27/2022
N051585-003B	MW-81-043-0722	Groundwater	7/12/2022 12:54:00 PM	7/12/2022	7/27/2022
N051585-003C	MW-81-043-0722	Groundwater	7/12/2022 12:54:00 PM	7/12/2022	7/27/2022
N051585-003D	MW-81-043-0722	Groundwater	7/12/2022 12:54:00 PM	7/12/2022	7/27/2022
N051585-004A	MW-81-098-0722	Groundwater	7/12/2022 1:22:00 PM	7/12/2022	7/27/2022
N051585-004B	MW-81-098-0722	Groundwater	7/12/2022 1:22:00 PM	7/12/2022	7/27/2022
N051585-004C	MW-81-098-0722	Groundwater	7/12/2022 1:22:00 PM	7/12/2022	7/27/2022
N051585-004D	MW-81-098-0722	Groundwater	7/12/2022 1:22:00 PM	7/12/2022	7/27/2022
N051585-005A	MW-82-046-0722	Groundwater	7/12/2022 8:44:00 AM	7/12/2022	7/27/2022
N051585-005B	MW-82-046-0722	Groundwater	7/12/2022 8:44:00 AM	7/12/2022	7/27/2022
N051585-005C	MW-82-046-0722	Groundwater	7/12/2022 8:44:00 AM	7/12/2022	7/27/2022
N051585-005D	MW-82-046-0722	Groundwater	7/12/2022 8:44:00 AM	7/12/2022	7/27/2022
N051585-006A	MW-82-112-0722	Groundwater	7/12/2022 9:27:00 AM	7/12/2022	7/27/2022
N051585-006B	MW-82-112-0722	Groundwater	7/12/2022 9:27:00 AM	7/12/2022	7/27/2022
N051585-006C	MW-82-112-0722	Groundwater	7/12/2022 9:27:00 AM	7/12/2022	7/27/2022
N051585-006D	MW-82-112-0722	Groundwater	7/12/2022 9:27:00 AM	7/12/2022	7/27/2022
N051585-007A	MW-82-168-0722	Groundwater	7/12/2022 10:14:00 AM	7/12/2022	7/27/2022
N051585-007B	MW-82-168-0722	Groundwater	7/12/2022 10:14:00 AM	7/12/2022	7/27/2022
N051585-007C	MW-82-168-0722	Groundwater	7/12/2022 10:14:00 AM	7/12/2022	7/27/2022
N051585-007D	MW-82-168-0722	Groundwater	7/12/2022 10:14:00 AM	7/12/2022	7/27/2022
N051585-008A	MW-908-Q322	Groundwater	7/12/2022 10:24:00 AM	7/12/2022	7/27/2022
N051585-008B	MW-908-Q322	Groundwater	7/12/2022 10:24:00 AM	7/12/2022	7/27/2022
N051585-008C	MW-908-Q322	Groundwater	7/12/2022 10:24:00 AM	7/12/2022	7/27/2022
N051585-008D	MW-908-Q322	Groundwater	7/12/2022 10:24:00 AM	7/12/2022	7/27/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N051585
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N051585-009A	MW-82-198-0722	Groundwater	7/12/2022 11:11:00 AM	7/12/2022	7/27/2022
N051585-009B	MW-82-198-0722	Groundwater	7/12/2022 11:11:00 AM	7/12/2022	7/27/2022
N051585-009C	MW-82-198-0722	Groundwater	7/12/2022 11:11:00 AM	7/12/2022	7/27/2022
N051585-009D	MW-82-198-0722	Groundwater	7/12/2022 11:11:00 AM	7/12/2022	7/27/2022
N051585-010A	EB-703-Q322	Groundwater	7/12/2022 1:30:00 PM	7/12/2022	7/27/2022
N051585-011A	MW-39-040-0722	Groundwater	7/12/2022 9:22:00 AM	7/12/2022	7/27/2022
N051585-011B	MW-39-040-0722	Groundwater	7/12/2022 9:22:00 AM	7/12/2022	7/27/2022
N051585-011C	MW-39-040-0722	Groundwater	7/12/2022 9:22:00 AM	7/12/2022	7/27/2022
N051585-011D	MW-39-040-0722	Groundwater	7/12/2022 9:22:00 AM	7/12/2022	7/27/2022
N051585-012A	MW-39-050-0722	Groundwater	7/12/2022 11:13:00 AM	7/12/2022	7/27/2022
N051585-012B	MW-39-050-0722	Groundwater	7/12/2022 11:13:00 AM	7/12/2022	7/27/2022
N051585-012C	MW-39-050-0722	Groundwater	7/12/2022 11:13:00 AM	7/12/2022	7/27/2022
N051585-012D	MW-39-050-0722	Groundwater	7/12/2022 11:13:00 AM	7/12/2022	7/27/2022
N051585-013A	MW-39-060-0722	Groundwater	7/12/2022 12:55:00 PM	7/12/2022	7/27/2022
N051585-013B	MW-39-060-0722	Groundwater	7/12/2022 12:55:00 PM	7/12/2022	7/27/2022
N051585-013C	MW-39-060-0722	Groundwater	7/12/2022 12:55:00 PM	7/12/2022	7/27/2022
N051585-013D	MW-39-060-0722	Groundwater	7/12/2022 12:55:00 PM	7/12/2022	7/27/2022
N051585-014A	MW-39-070-0722	Groundwater	7/12/2022 10:03:00 AM	7/12/2022	7/27/2022
N051585-014B	MW-39-070-0722	Groundwater	7/12/2022 10:03:00 AM	7/12/2022	7/27/2022
N051585-014C	MW-39-070-0722	Groundwater	7/12/2022 10:03:00 AM	7/12/2022	7/27/2022
N051585-014D	MW-39-070-0722	Groundwater	7/12/2022 10:03:00 AM	7/12/2022	7/27/2022
N051585-015A	MW-39-080-0722	Groundwater	7/12/2022 11:53:00 AM	7/12/2022	7/27/2022
N051585-015B	MW-39-080-0722	Groundwater	7/12/2022 11:53:00 AM	7/12/2022	7/27/2022
N051585-015C	MW-39-080-0722	Groundwater	7/12/2022 11:53:00 AM	7/12/2022	7/27/2022
N051585-015D	MW-39-080-0722	Groundwater	7/12/2022 11:53:00 AM	7/12/2022	7/27/2022
N051585-016A	MW-39-100-0722	Groundwater	7/12/2022 1:32:00 PM	7/12/2022	7/27/2022
N051585-016B	MW-39-100-0722	Groundwater	7/12/2022 1:32:00 PM	7/12/2022	7/27/2022
N051585-016C	MW-39-100-0722	Groundwater	7/12/2022 1:32:00 PM	7/12/2022	7/27/2022
N051585-016D	MW-39-100-0722	Groundwater	7/12/2022 1:32:00 PM	7/12/2022	7/27/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-050-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 8:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/14/2022 09:49 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-704-Q322
Lab Order:	N051585	**Collection Date:**	7/12/2022 1:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/14/2022 05:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-043-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 12:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	6.4	0.025	0.20		µg/L	1	7/14/2022 10:08 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-098-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 1:22:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	1.3	0.13	1.0		µg/L	5	7/14/2022 04:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-046-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 8:44:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	7/14/2022 10:27 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-112-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 9:27:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/14/2022 11:04 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-168-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	0.28	0.025	0.20		µg/L	1	7/14/2022 11:23 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-908-Q322
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	7/14/2022 06:21 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-198-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:11:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	3.1	0.13	1.0		µg/L	5	7/14/2022 03:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-703-Q322
Lab Order:	N051585	**Collection Date:**	7/12/2022 1:30:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/14/2022 05:41 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-040-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 9:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/14/2022 12:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:13:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/14/2022 12:58 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-060-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 12:55:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/14/2022 02:14 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-070-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:03:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/14/2022 02:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	13	0.13	1.0		µg/L	5	7/14/2022 06:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 1:32:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	240	0.50	4.0		µg/L	20	7/14/2022 01:55 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	MB-R163961	SampType:	MBLK	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	PBW	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722387

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID	LCS-R163961	SampType:	LCS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	LCSW	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722388

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.176	0.20	5.000	0	104	90	110				

Sample ID	N051585-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722390

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.040	0.20	1.000	0	104	90	110				

Sample ID	N051585-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722392

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	11.629	0.20	5.000	6.426	104	90	110				

Sample ID	N051585-005AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722394

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.078	1.0	5.000	0	102	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051585-006AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722398

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.078	0.20	1.000	0	108	90	110				

Sample ID	N051585-007AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722400

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.364	0.20	1.000	0.2778	109	90	110				

Sample ID	N051585-011AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722402

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.102	0.20	1.000	0.05030	105	90	110				

Sample ID	N051585-012AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722406

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.092	0.20	1.000	0	109	90	110				

Sample ID	N051609-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722408

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	450.275	10	250.0	192.3	103	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051609-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722410

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	48.862	1.0	25.00	22.90	104	90	110				

Sample ID	N051585-016AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722412

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	346.638	4.0	100.0	240.2	106	90	110				

Sample ID	N051585-013AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722414

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.070	0.20	1.000	0	107	90	110				

Sample ID	N051585-014AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722418

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.027	0.20	1.000	0	103	90	110				

Sample ID	N051585-016AMSD	SampType:	MSD	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722419

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	342.342	4.0	100.0	240.2	102	90	110	346.6	1.25	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051609-001ADUP	SampType:	DUP	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722420

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	189.770	10						192.3	1.32	20	

Sample ID	N051585-009AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722422

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	8.210	1.0	5.000	3.120	102	90	110				

Sample ID	N051585-004AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722424

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	6.065	1.0	5.000	1.253	96.2	90	110				

Sample ID	N051585-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722428

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.049	0.20	1.000	0	105	90	110				

Sample ID	N051585-010AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722430

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.050	0.20	1.000	0	105	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051585-008AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722432

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.335	1.0	5.000	0	107	90	110				

Sample ID	N051585-015AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163961
Client ID:	ZZZZZZ	Batch ID:	R163961	TestNo:	EPA 218.6			Analysis Date:	7/14/2022	SeqNo:	4722436

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	38.852	1.0	25.00	12.77	104	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051585-001

Client Sample ID: MW-30-050-0722
Collection Date: 7/12/2022 8:22:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	200	1.2	10		mg/L	20	7/18/2022 12:53 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712C**	QC Batch: **R163862**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/13/2022 12:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-043-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 12:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	350	3.0	25		mg/L	50	7/18/2022 05:55 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712B**	QC Batch: **R163861**			PrepDate:			Analyst: **RAB**
Nitrate as N	1.2	0.095	0.50		mg/L	10	7/13/2022 03:29 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051585-004

Client Sample ID: MW-81-098-0722
Collection Date: 7/12/2022 1:22:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	680	6.1	50		mg/L	100	7/18/2022 06:12 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712B**	QC Batch: **R163861**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.82	0.095	0.50		mg/L	10	7/13/2022 03:45 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-046-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 8:44:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	1600	12	100		mg/L	200	7/18/2022 06:28 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712C**	QC Batch: **R163862**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/13/2022 07:07 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051585-006

Client Sample ID: MW-82-112-0722
Collection Date: 7/12/2022 9:27:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	710	6.1	50		mg/L	100	7/18/2022 06:44 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712C**	QC Batch: **R163862**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.91	0.095	0.50		mg/L	10	7/13/2022 07:24 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-168-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	550	3.0	25		mg/L	50	7/18/2022 07:01 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712C**	QC Batch: **R163862**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/13/2022 04:53 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-908-Q322
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	550	3.0	25		mg/L	50	7/18/2022 07:50 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712C**	QC Batch: **R163862**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/13/2022 10:36 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051585-009

Client Sample ID: MW-82-198-0722
Collection Date: 7/12/2022 11:11:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220719B**	QC Batch: **R164142**			PrepDate:			Analyst: **RAB**
Sulfate	990	6.1	50		mg/L	100	7/20/2022 03:21 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712C**	QC Batch: **R163862**			PrepDate:			Analyst: **RAB**
Nitrate as N	1.3	0.095	0.50		mg/L	10	7/13/2022 10:52 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-040-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 9:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	130	0.61	5.0		mg/L	10	7/18/2022 08:22 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712C**	QC Batch: **R163862**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	7/13/2022 11:09 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:13:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	190	1.2	10		mg/L	20	7/18/2022 08:39 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712C**	QC Batch: **R163862**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	7/13/2022 05:09 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-060-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 12:55:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	200	1.2	10		mg/L	20	7/18/2022 08:55 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712C**	QC Batch: **R163862**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	7/13/2022 11:26 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051585-014

Client Sample ID: MW-39-070-0722
Collection Date: 7/12/2022 10:03:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718A**	QC Batch: **R164035**			PrepDate:			Analyst: **RAB**
Sulfate	280	3.0	25		mg/L	50	7/18/2022 09:11 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712C**	QC Batch: **R163862**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	7/13/2022 11:43 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718B**	QC Batch: **R164036**			PrepDate:			Analyst: **RAB**
Sulfate	510	3.0	25		mg/L	50	7/19/2022 04:48 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712C**	QC Batch: **R163862**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/13/2022 09:12 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 1:32:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718B**	QC Batch: **R164036**			PrepDate:			Analyst: **RAB**
Sulfate	960	6.1	50		mg/L	100	7/19/2022 05:36 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220712C**	QC Batch: **R163862**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/13/2022 10:19 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	MB-R164035_SO4	SampType:	MBLK	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164035		
Client ID:	PBW	Batch ID:	R164035	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4730575		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Sulfate	ND	0.50											

Sample ID	LCS-R164035_SO4	SampType:	LCS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164035		
Client ID:	LCSW	Batch ID:	R164035	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4730576		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Sulfate	4.003	0.50	4.000	0	100	90	110						

Sample ID	N051585-001BMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164035		
Client ID:	ZZZZZZ	Batch ID:	R164035	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4730578		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Sulfate	283.296	10	80.00	199.3	105	80	120						

Sample ID	N051585-001BMSD	SampType:	MSD	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164035		
Client ID:	ZZZZZZ	Batch ID:	R164035	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4730579		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Sulfate	283.230	10	80.00	199.3	105	80	120	283.3	0.0233	20			

Sample ID	N051580-001BDUP	SampType:	DUP	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164035		
Client ID:	ZZZZZZ	Batch ID:	R164035	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4730581		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Sulfate	281.510	25						283.8	0.805	20			

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	N051580-001BMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164035
Client ID:	ZZZZZZ	Batch ID:	R164035	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4730582

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	479.655	25	200.0	283.8	97.9	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	LCS-R164036_SO4	SampType:	LCS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164036	
Client ID:	LCSW	Batch ID:	R164036	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4732105	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Sulfate	3.946	0.50	4.000	0	98.6	90	110					

Sample ID	MB-R164036_SO4	SampType:	MBLK	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164036	
Client ID:	PBW	Batch ID:	R164036	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4732106	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Sulfate	ND	0.50										

Sample ID	N051677-007BMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164036	
Client ID:	ZZZZZZ	Batch ID:	R164036	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4732110	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Sulfate	22.103	1.0	8.000	14.14	99.6	80	120					

Sample ID	N051677-007BMSD	SampType:	MSD	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164036	
Client ID:	ZZZZZZ	Batch ID:	R164036	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4732111	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Sulfate	22.172	1.0	8.000	14.14	100	80	120	22.10	0.315	20		

Sample ID	N051615-001BDUP	SampType:	DUP	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164036	
Client ID:	ZZZZZZ	Batch ID:	R164036	TestNo:	EPA 300.0			Analysis Date:	7/19/2022	SeqNo:	4732113	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Sulfate	715.300	50						720.8	0.763	20		

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	N051615-001BMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164036
Client ID:	ZZZZZZ	Batch ID:	R164036	TestNo:	EPA 300.0			Analysis Date:	7/19/2022	SeqNo:	4732114

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	1124.740	50	400.0	720.8	101	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	LCS-R164142_SO4	SampType:	LCS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164142
Client ID:	LCSW	Batch ID:	R164142	TestNo:	EPA 300.0			Analysis Date:	7/19/2022	SeqNo:	4735310

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	3.972	0.50	4.000	0	99.3	90	110				

Sample ID	MB-R164142_SO4	SampType:	MBLK	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164142
Client ID:	PBW	Batch ID:	R164142	TestNo:	EPA 300.0			Analysis Date:	7/19/2022	SeqNo:	4735311

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.50									

Sample ID	N051635-004BMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164142
Client ID:	ZZZZZZ	Batch ID:	R164142	TestNo:	EPA 300.0			Analysis Date:	7/20/2022	SeqNo:	4735317

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	700.935	25	200.0	485.6	108	80	120				

Sample ID	N051635-004BMSD	SampType:	MSD	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164142
Client ID:	ZZZZZZ	Batch ID:	R164142	TestNo:	EPA 300.0			Analysis Date:	7/20/2022	SeqNo:	4735318

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	691.695	25	200.0	485.6	103	80	120	700.9	1.33	20	

Sample ID	N051635-005BDUP	SampType:	DUP	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164142
Client ID:	ZZZZZZ	Batch ID:	R164142	TestNo:	EPA 300.0			Analysis Date:	7/20/2022	SeqNo:	4735320

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	489.280	25						487.9	0.281	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	LCS-R163861_NO3	SampType:	LCS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163861
Client ID:	LCSW	Batch ID:	R163861	TestNo:	EPA 300.0			Analysis Date:	7/12/2022	SeqNo:	4719454

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.225	0.050	1.250	0	98.0	90	110				

Sample ID	MB-R163861_NO3	SampType:	MBLK	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163861
Client ID:	PBW	Batch ID:	R163861	TestNo:	EPA 300.0			Analysis Date:	7/12/2022	SeqNo:	4719455

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID	N051569-014BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163861
Client ID:	ZZZZZZ	Batch ID:	R163861	TestNo:	EPA 300.0			Analysis Date:	7/12/2022	SeqNo:	4719461

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	19.932	0.50	12.50	7.443	99.9	80	120				

Sample ID	N051569-014BMSD	SampType:	MSD	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163861
Client ID:	ZZZZZZ	Batch ID:	R163861	TestNo:	EPA 300.0			Analysis Date:	7/12/2022	SeqNo:	4719462

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	19.864	0.50	12.50	7.443	99.4	80	120	19.93	0.342	20	

Sample ID	N051580-001BDUP	SampType:	DUP	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163861
Client ID:	ZZZZZZ	Batch ID:	R163861	TestNo:	EPA 300.0			Analysis Date:	7/13/2022	SeqNo:	4719466

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	2.440	0.25						2.456	0.694	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	N051580-002BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163861
Client ID:	ZZZZZZ	Batch ID:	R163861	TestNo:	EPA 300.0			Analysis Date:	7/13/2022	SeqNo:	4719468

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.020	0.50	12.50	0.1910	94.6	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	MB-R163862_NO3	SampType:	MBLK	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163862
Client ID:	PBW	Batch ID:	R163862	TestNo:	EPA 300.0			Analysis Date:	7/13/2022	SeqNo:	4719486

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	0.018	0.050									

Sample ID	LCS-R163862_NO3	SampType:	LCS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163862
Client ID:	LCSW	Batch ID:	R163862	TestNo:	EPA 300.0			Analysis Date:	7/13/2022	SeqNo:	4719487

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.203	0.050	1.250	0	96.2	90	110				

Sample ID	N051585-007BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163862
Client ID:	ZZZZZZ	Batch ID:	R163862	TestNo:	EPA 300.0			Analysis Date:	7/13/2022	SeqNo:	4719490

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.010	0.50	12.50	0.1890	94.6	80	120				

Sample ID	N051585-007BMSD	SampType:	MSD	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163862
Client ID:	ZZZZZZ	Batch ID:	R163862	TestNo:	EPA 300.0			Analysis Date:	7/13/2022	SeqNo:	4719491

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.137	0.50	12.50	0.1890	95.6	80	120	12.01	1.05	20	

Sample ID	N051585-012BDUP	SampType:	DUP	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163862
Client ID:	ZZZZZZ	Batch ID:	R163862	TestNo:	EPA 300.0			Analysis Date:	7/13/2022	SeqNo:	4719494

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.25						0	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	N051585-012BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163862
Client ID:	ZZZZZZ	Batch ID:	R163862	TestNo:	EPA 300.0			Analysis Date:	7/13/2022	SeqNo:	4719495

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.058	0.25	6.250	0	96.9	80	120				

Sample ID	N051585-001BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163862
Client ID:	ZZZZZZ	Batch ID:	R163862	TestNo:	EPA 300.0			Analysis Date:	7/13/2022	SeqNo:	4719513

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.169	0.50	12.50	0.2180	95.6	80	120				

Sample ID	N051585-001BMSD	SampType:	MSD	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163862
Client ID:	ZZZZZZ	Batch ID:	R163862	TestNo:	EPA 300.0			Analysis Date:	7/13/2022	SeqNo:	4719514

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.216	0.50	12.50	0.2180	96.0	80	120	12.17	0.385	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-050-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 8:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220714A**	QC Batch: **R163951**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.68	5.0		mg/L	5	7/14/2022 11:31 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-043-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 12:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220713A**	QC Batch: **R163913**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/13/2022 11:04 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-098-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 1:22:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220713A**	QC Batch: **R163913**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/13/2022 12:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-046-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 8:44:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220726A**	QC Batch: **R164330**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	7.0	0.68	5.0		mg/L	5	7/26/2022 07:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-112-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 9:27:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220713A**	QC Batch: **R163913**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/13/2022 01:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-168-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220713A**	QC Batch: **R163913**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/13/2022 01:24 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-908-Q322
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220713A**	QC Batch: **R163913**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/13/2022 01:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-198-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:11:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220713A**	QC Batch: **R163913**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/13/2022 01:55 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-040-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 9:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220713A**	QC Batch: **R163913**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	2.2	0.14	1.0		mg/L	1	7/13/2022 02:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:13:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220713A**	QC Batch: **R163913**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/13/2022 02:26 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-060-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 12:55:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220713A**	QC Batch: **R163913**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/13/2022 02:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-070-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:03:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220713A**	QC Batch: **R163913**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/13/2022 02:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220713A**	QC Batch: **R163913**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/13/2022 03:13 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 1:32:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220713A**	QC Batch: **R163913**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/13/2022 04:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID **MB-R163913**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163913**
Client ID: **PBW**	Batch ID: **R163913**	TestNo: **SM 5310C**		Analysis Date: **7/13/2022**	SeqNo: **4720404**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID **LCS-R163913**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163913**
Client ID: **LCSW**	Batch ID: **R163913**	TestNo: **SM 5310C**		Analysis Date: **7/13/2022**	SeqNo: **4720405**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.066	1.0	5.000	0	101	85	115				

Sample ID **N051569-015CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163913**
Client ID: **ZZZZZZ**	Batch ID: **R163913**	TestNo: **SM 5310C**		Analysis Date: **7/13/2022**	SeqNo: **4720410**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	24.269	5.0	25.00	0	97.1	75	125				

Sample ID **N051569-015CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163913**
Client ID: **ZZZZZZ**	Batch ID: **R163913**	TestNo: **SM 5310C**		Analysis Date: **7/13/2022**	SeqNo: **4720411**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	24.286	5.0	25.00	0	97.1	75	125	24.27	0.0700	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID	MB-R163951	SampType:	MBLK	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	163951
Client ID:	PBW	Batch ID:	R163951	TestNo:	SM 5310C			Analysis Date:	7/14/2022	SeqNo:	4722045

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID	LCS-R163951	SampType:	LCS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	163951
Client ID:	LCSW	Batch ID:	R163951	TestNo:	SM 5310C			Analysis Date:	7/14/2022	SeqNo:	4722046

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	4.926	1.0	5.000	0	98.5	85	115				

Sample ID	N051585-001DMS	SampType:	MS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	163951
Client ID:	ZZZZZZ	Batch ID:	R163951	TestNo:	SM 5310C			Analysis Date:	7/14/2022	SeqNo:	4722052

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	26.929	5.0	25.00	1.370	102	75	125				

Sample ID	N051585-001DMSD	SampType:	MSD	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	163951
Client ID:	ZZZZZZ	Batch ID:	R163951	TestNo:	SM 5310C			Analysis Date:	7/14/2022	SeqNo:	4722053

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	26.991	5.0	25.00	1.370	102	75	125	26.93	0.230	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID **MB-R164330**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164330**
Client ID: **PBW**	Batch ID: **R164330**	TestNo: **SM 5310C**		Analysis Date: **7/26/2022**	SeqNo: **4749997**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID **LCS-R164330**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164330**
Client ID: **LCSW**	Batch ID: **R164330**	TestNo: **SM 5310C**		Analysis Date: **7/26/2022**	SeqNo: **4749998**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.206	1.0	5.000	0	104	85	115				

Sample ID **N051794-001CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164330**
Client ID: **ZZZZZZ**	Batch ID: **R164330**	TestNo: **SM 5310C**		Analysis Date: **7/26/2022**	SeqNo: **4750000**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	4.623	1.0	5.000	0.4723	83.0	75	125				

Sample ID **N051794-001CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164330**
Client ID: **ZZZZZZ**	Batch ID: **R164330**	TestNo: **SM 5310C**		Analysis Date: **7/26/2022**	SeqNo: **4750003**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	4.594	1.0	5.000	0.4723	82.4	75	125	4.623	0.623	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-050-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 8:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**			PrepDate:	**7/14/2022**		Analyst: **DJ**
Iron	34	13	20		µg/L	1	7/16/2022 02:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-043-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 12:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**				PrepDate:	**7/14/2022**	Analyst: **DJ**
Iron	160	13	20		µg/L	1	7/16/2022 03:17 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-098-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 1:22:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**			PrepDate:	**7/14/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/16/2022 03:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-046-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 8:44:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**				PrepDate:	**7/14/2022**	Analyst: **DJ**
Iron	7300	13	20		µg/L	1	7/16/2022 03:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-112-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 9:27:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**				PrepDate:	**7/14/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/16/2022 03:34 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-168-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**			PrepDate:	**7/14/2022**		Analyst: **DJ**
Iron	54	13	20		µg/L	1	7/16/2022 03:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-908-Q322
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**			PrepDate:	**7/14/2022**		Analyst: **DJ**
Iron	33	13	20		µg/L	1	7/16/2022 03:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-198-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:11:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**			PrepDate:	**7/14/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/16/2022 03:58 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-040-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 9:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**				PrepDate:	**7/14/2022**	Analyst: **DJ**
Iron	290	13	20		µg/L	1	7/16/2022 04:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:13:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**			PrepDate:	**7/14/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/16/2022 04:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-060-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 12:55:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**			PrepDate:	**7/14/2022**		Analyst: **DJ**
Iron	36	13	20		µg/L	1	7/16/2022 04:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-070-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:03:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**				PrepDate:	**7/14/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/16/2022 04:14 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**			PrepDate:	**7/14/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/16/2022 04:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 1:32:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220716A**	QC Batch: **93748**			PrepDate:	**7/14/2022**		Analyst: **DJ**
Iron	25	13	20		µg/L	1	7/16/2022 04:25 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	MB-93748	SampType:	MBLK	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	7/14/2022	RunNo:	163995
Client ID:	PBW	Batch ID:	93748	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4724349

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID	N051585-001CMS	SampType:	MS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	7/14/2022	RunNo:	163995
Client ID:	ZZZZZZ	Batch ID:	93748	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4724356

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	112.986	20	100.0	34.39	78.6	75	125				

Sample ID	N051585-001CMSD	SampType:	MSD	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	7/14/2022	RunNo:	163995
Client ID:	ZZZZZZ	Batch ID:	93748	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4724357

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	96.093	20	100.0	34.39	61.7	75	125	113.0	16.2	20	S

Sample ID	LCS-93748	SampType:	LCS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	7/14/2022	RunNo:	163995
Client ID:	LCSW	Batch ID:	93748	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4724823

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	85.434	20	100.0	0	85.4	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID **N051585-001C-PS**	SampType: **PS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date:					RunNo: **163995**	
Client ID: **ZZZZZZ**	Batch ID: **93748**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/16/2022**					SeqNo: **4724355**	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	102.041	20	100.0	34.39	67.7	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-050-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 8:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Arsenic	2.2	0.050	0.10		µg/L	1	7/15/2022 07:15 AM
Barium	22	0.083	1.0		µg/L	1	7/16/2022 06:46 AM
Manganese	500	0.13	2.5		µg/L	5	7/15/2022 07:39 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-043-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 12:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Arsenic	3.1	0.050	0.10		µg/L	1	7/15/2022 08:02 AM
Barium	77	0.083	1.0		µg/L	1	7/16/2022 07:33 AM
Manganese	140	0.026	0.50		µg/L	1	7/15/2022 08:02 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-098-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 1:22:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/15/2022 08:08 AM
Barium	67	0.083	1.0		µg/L	1	7/16/2022 07:39 AM
Manganese	220	0.13	2.5		µg/L	5	7/15/2022 11:52 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051585-005

Client Sample ID: MW-82-046-0722
Collection Date: 7/12/2022 8:44:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:		**7/13/2022**	Analyst: **DJ**
Arsenic	24	0.050	0.10		µg/L	1	7/15/2022 08:14 AM
Barium	73	0.083	1.0		µg/L	1	7/16/2022 07:45 AM
Manganese	360	0.13	2.5		µg/L	5	7/15/2022 11:58 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-112-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 9:27:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/15/2022 08:20 AM
Barium	57	0.083	1.0		µg/L	1	7/16/2022 07:51 AM
Manganese	140	0.026	0.50		µg/L	1	7/15/2022 08:20 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-168-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:		**7/13/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/15/2022 08:26 AM
Barium	41	0.083	1.0		µg/L	1	7/16/2022 07:57 AM
Manganese	43	0.026	0.50		µg/L	1	7/15/2022 08:26 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-908-Q322
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/15/2022 09:02 AM
Barium	41	0.083	1.0		µg/L	1	7/16/2022 08:21 AM
Manganese	45	0.026	0.50		µg/L	1	7/15/2022 09:02 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-198-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:11:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:		**7/13/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/15/2022 09:08 AM
Barium	46	0.083	1.0		µg/L	1	7/16/2022 08:27 AM
Manganese	100	0.026	0.50		µg/L	1	7/15/2022 09:08 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-040-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 9:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:		**7/13/2022**	Analyst: **DJ**
Arsenic	14	0.050	0.10		µg/L	1	7/15/2022 09:14 AM
Barium	69	0.083	1.0		µg/L	1	7/16/2022 08:33 AM
Manganese	110	0.026	0.50		µg/L	1	7/15/2022 09:14 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:13:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Arsenic	1.6	0.050	0.10		µg/L	1	7/15/2022 09:20 AM
Barium	38	0.083	1.0		µg/L	1	7/16/2022 08:38 AM
Manganese	210	0.13	2.5		µg/L	5	7/15/2022 12:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-060-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 12:55:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220714A**	QC Batch: **93751**			PrepDate:	**7/13/2022**		Analyst: **DJ**
Arsenic	2.1	0.050	0.10		µg/L	1	7/15/2022 09:26 AM
Barium	24	0.083	1.0		µg/L	1	7/16/2022 08:44 AM
Manganese	130	0.026	0.50		µg/L	1	7/15/2022 09:26 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-070-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 10:03:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220720C**	QC Batch: **93751**			PrepDate:		**7/13/2022**	Analyst: **DJ**
Arsenic	0.71	0.050	0.10		µg/L	1	7/20/2022 04:31 PM
Barium	50	0.083	1.0		µg/L	1	7/16/2022 08:50 AM
Manganese	15	0.026	0.50		µg/L	1	7/15/2022 09:32 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 11:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E**	QC Batch: **93772**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/16/2022 01:36 AM
Barium	24	0.083	1.0		µg/L	1	7/16/2022 01:36 AM
Manganese	4.8	0.026	0.50		µg/L	1	7/16/2022 01:36 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-0722
Lab Order:	N051585	**Collection Date:**	7/12/2022 1:32:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051585-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E**	QC Batch: **93772**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/16/2022 02:48 AM
Barium	29	0.083	1.0		µg/L	1	7/16/2022 02:48 AM
Manganese	8.4	0.026	0.50		µg/L	1	7/16/2022 02:48 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	MB-93751	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	163938
Client ID:	PBW	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/15/2022	SeqNo:	4724025

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Manganese	ND	0.50									

Sample ID	LCS-93751	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	163938
Client ID:	LCSW	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/15/2022	SeqNo:	4724026

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.177	0.10	10.00	0	91.8	85	115				
Manganese	102.233	0.50	100.0	0	102	85	115				

Sample ID	N051585-001CMS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	163938
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/15/2022	SeqNo:	4724042

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.270	0.10	10.00	2.174	101	75	125				

Sample ID	N051585-001CMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	163938
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/15/2022	SeqNo:	4724043

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.007	0.10	10.00	2.174	98.3	75	125	12.27	2.17	20	

Sample ID	N051585-001CMS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	163938
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/15/2022	SeqNo:	4724077

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	551.450	2.5	100.0	503.7	47.8	75	125				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N051585-001CMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	163938
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/15/2022	SeqNo:	4724078

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	548.074	2.5	100.0	503.7	44.4	75	125	551.4	0.614	20	S

Sample ID	MB-93751	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	164015
Client ID:	PBW	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727218

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	ND	1.0									

Sample ID	LCS-93751	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	164015
Client ID:	LCSW	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727219

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	10.019	1.0	10.00	0	100	85	115				

Sample ID	N051585-001CMS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	164015
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727235

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	30.736	1.0	10.00	22.41	83.3	75	125				

Sample ID	N051585-001CMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/13/2022	RunNo:	164015
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727236

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	30.097	1.0	10.00	22.41	76.9	75	125	30.74	2.10	20	

Qualifiers:

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- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	MB-93772	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164015
Client ID:	PBW	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727180

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID	LCS-93772	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164015
Client ID:	LCSW	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727181

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.193	0.10	10.00	0	91.9	85	115				
Barium	9.863	1.0	10.00	0	98.6	85	115				
Manganese	100.071	0.50	100.0	0	100	85	115				

Sample ID	N051585-015C-MS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164015
Client ID:	ZZZZZZ	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727189

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	8.678	0.10	10.00	0	86.8	75	125				
Barium	34.295	1.0	10.00	24.49	98.0	75	125				
Manganese	96.551	0.50	100.0	4.777	91.8	75	125				

Sample ID	N051585-015C-MSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164015
Client ID:	ZZZZZZ	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727191

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	8.623	0.10	10.00	0	86.2	75	125	8.678	0.632	20	
Barium	33.444	1.0	10.00	24.49	89.5	75	125	34.29	2.51	20	
Manganese	95.077	0.50	100.0	4.777	90.3	75	125	96.55	1.54	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N051585-001C-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	163938
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/15/2022	SeqNo:	4724041

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.029	0.10	10.00	2.174	98.6	80	120				

Sample ID	N051585-001C-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	163938
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/15/2022	SeqNo:	4724076

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	615.078	2.5	100.0	503.7	111	80	120				

Sample ID	N051585-001C-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	164015
Client ID:	ZZZZZZ	Batch ID:	93751	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727234

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	30.947	1.0	10.00	22.41	85.4	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051585
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N051585-015C-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	164015
Client ID:	ZZZZZZ	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727187

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	8.583	0.10	10.00	0	85.8	80	120				
Barium	34.337	1.0	10.00	24.49	98.5	80	120				
Manganese	96.369	0.50	100.0	4.777	91.6	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

N051585

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

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Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement	QA/QC	Sample Receipt Condition
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD	RTNE	Y N
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker	RWQCB ✓	1. Chilled X
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Labspec	CalTrans	2. Headspace
Submitted By: Riggie Tep			Others ✓	LEVEL III	3. Container Intact X
Title: Field Tech	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	Specify: RWQCB	LEVEL IV	4. Seal Present
Signature: Date: 7/12/22	Sampled By: Riggie Tep		Global ID:	Regulatory	5. IR number 3
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for			Specify State:	6. Method of Cooling: ICE
Project Name: PG&E Topock - PCM	Signature: Date: 7/12/22	Matrix: Ground X Sediment; Potable Soil; NPDES Other Solid; Surface			Sample Temp: 1.1 °C / 1.4 °C
Project Number: 30121866.3Q22GW					Courier: ASSET; Tracking No.:

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N051585-03	MW-81-043-0722	7/12/2022	12:54		X	X	X			X			E	6	P	BNS	
2	-04	MW-81-098-0722	7/12/2022	13:22		X	X	X			X			E	6	P	BNS	
3	-05	MW-82-046-0722	7/12/2022	8:44		X	X	X			X			E	6	P	BNS	
4	-06	MW-82-112-0722	7/12/2022	9:27		X	X	X			X			E	6	P	BNS	
5	-07	MW-82-168-0722	7/12/2022	10:14		X	X	X			X			E	6	P	BNS	
6	-08	MW-908-Q322	7/12/2022	10:24		X	X	X			X			E	6	P	BNS	
7	-09	MW-82-198-0722	7/12/2022	11:11		X	X	X			X			E	6	P	BNS	
8	-10	EB-703-Q322	7/12/2022	13:30		X								E	1	P	BNS	
9	-11	MW-39-040-0722	7/12/2022	9:22		X	X	X			X			E	6	P	BNS	
10	-12	MW-39-050-0722 1113	7/12/2022	~~11:13~~	~~1305~~	X	X	X			X			E	6	P	BNS	
11	-13	MW-39-060-0722 1255	7/12/2022	~~12:55~~	~~1115~~	X	X	X			X			E	6	P	BNS	
12	-14	MW-39-070-0722	7/12/2022	10:03		X	X	X			X			E	6	P	BNS	
13	-15	MW-39-080-0722	7/12/2022	11:53		X	X	X			X			E	6	P	BNS	
14	-16	MW-39-100-0722	7/12/2022	13:32		X	X	X			X			E	6	P	BNS	

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Riggie Tep	7/12/22 1540	MBOWMAN	7/12/22 @1540
Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
REL/REC: MBOWMAN			7/12/22@1757
Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [X] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
   Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
6. Trip Blanks and Equipment Blanks are billable sample.
8. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy

Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	7/12/2022	Workorder:	N051585
Rep sample Temp (Deg C):	1.1/1.4	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For:

Checklist Completed By: MBC YRJ 7/13/2022

For:

Reviewed By: MBC 7/22/2022

ASSET Laboratories

WORK ORDER Summary

22-Jul-22

WorkOrder: N051585

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/12/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051585-001A	MW-30-050-0722	7/12/2022 8:22:00 AM	7/26/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☑	☐	WW
N051585-001B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
N051585-001C			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			7/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☑	☐	WW
			7/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☑	☐	WW
N051585-001D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☑	☐	VW
N051585-002A	EB-704-Q322	7/12/2022 1:40:00 PM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-003A	MW-81-043-0722	7/12/2022 12:54:00 PM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-003B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051585-003C			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051585-003D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051585-004A	MW-81-098-0722	7/12/2022 1:22:00 PM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-004B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051585-004C			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

22-Jul-22

WorkOrder: N051585

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/12/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051585-004C	MW-81-098-0722	7/12/2022 1:22:00 PM	7/26/2022	Groundwater	EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051585-004D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051585-005A	MW-82-046-0722	7/12/2022 8:44:00 AM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-005B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051585-005C			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051585-005D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051585-006A	MW-82-112-0722	7/12/2022 9:27:00 AM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-006B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051585-006C			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051585-006D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051585-007A	MW-82-168-0722	7/12/2022 10:14:00 AM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-007B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

22-Jul-22

WorkOrder: N051585

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/12/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051585-007C	MW-82-168-0722	7/12/2022 10:14:00 AM	7/26/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051585-007D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051585-008A	MW-908-Q322	7/12/2022 10:24:00 AM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-008B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051585-008C			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051585-008D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051585-009A	MW-82-198-0722	7/12/2022 11:11:00 AM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-009B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051585-009C			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051585-009D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051585-010A	EB-703-Q322	7/12/2022 1:30:00 PM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

22-Jul-22

WorkOrder: N051585

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/12/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051585-011A	MW-39-040-0722	7/12/2022 9:22:00 AM	7/26/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-011B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051585-011C			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051585-011D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051585-012A	MW-39-050-0722	7/12/2022 11:13:00 AM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-012B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051585-012C			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051585-012D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051585-013A	MW-39-060-0722	7/12/2022 12:55:00 PM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-013B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051585-013C			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

22-Jul-22

WorkOrder: N051585

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/12/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051585-013C	MW-39-060-0722	7/12/2022 12:55:00 PM	7/26/2022	Groundwater	EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051585-013D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051585-014A	MW-39-070-0722	7/12/2022 10:03:00 AM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-014B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051585-014C			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051585-014D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051585-015A	MW-39-080-0722	7/12/2022 11:53:00 AM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-015B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051585-015C			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051585-015D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051585-016A	MW-39-100-0722	7/12/2022 1:32:00 PM	7/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051585-016B			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051585-016C			7/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

22-Jul-22

WorkOrder: N051585

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/12/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051585-016C	MW-39-100-0722	7/12/2022 1:32:00 PM	7/26/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051585-016D			7/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051585-017A	FOLDER	7/26/2022	7/26/2022		Folder	Folder	☐	☐	☐	LAB
			7/26/2022		Folder	Level IV Report	☐	☐	☐	LAB
			7/26/2022		Folder	Folder	☐	☐	☐	LAB

July 27, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N051608

RE: PG&E Topock - RCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on July 13, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Because the results for total dissolved chromium (37 ug/L) and hexavalent chromium (0 ug/L) for sample N051608-001 (MW-67-185-0722) are discrepant, sample re-analysis and Matrix Spike protocol were performed and result confirmed initial analysis.

Dilution was necessary due to matrix. Samples are colored.

Analytical Comments for EPA 300.0:

Dilution was necessary due to matrix. Sample is colored.

Analytical Comments for EPA 6020_Dissolved:

Because the results for total dissolved chromium (37 ug/L) and hexavalent chromium (0 ug/L) for sample N051608-001 (MW-67-185-0722) are discrepant, sample from both the total dissolved chromium and hexavalent chromium containers were redigested and analyzed for total dissolved chromium. The results from the redigested samples were 43 and 30 ug/L, respectively. Since these data confirmed the original result for total dissolved chromium, the original result is reported.

Dilution was necessary due to matrix. Samples are colored.

ASSET Laboratories

Date: *27-Jul-22*

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab Order: N051608
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N051608-001A	MW-67-185-0722	Groundwater	7/13/2022 11:55:00 AM	7/13/2022	7/27/2022
N051608-001B	MW-67-185-0722	Groundwater	7/13/2022 11:55:00 AM	7/13/2022	7/27/2022
N051608-001C	MW-67-185-0722	Groundwater	7/13/2022 11:55:00 AM	7/13/2022	7/27/2022
N051608-002A	MW-68-180-0722	Groundwater	7/13/2022 12:52:00 PM	7/13/2022	7/27/2022
N051608-002B	MW-68-180-0722	Groundwater	7/13/2022 12:52:00 PM	7/13/2022	7/27/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-67-185-0722
Lab Order:	N051608	**Collection Date:**	7/13/2022 11:55:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051608-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A** QC Batch: **R163973**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	10	80		µg/L	400	7/15/2022 10:40 AM
DISSOLVED METALS BY ICP-MS							
		EPA 3010A			**EPA 6020**		
RunID: **NV00922-ICP8_220715F** QC Batch: **93772**				PrepDate:	**7/15/2022**		Analyst: **DJ**
Chromium	37	0.18	5.0		µg/L	5	7/16/2022 03:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-68-180-0722
Lab Order:	N051608	**Collection Date:**	7/13/2022 12:52:00 PM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051608-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A**	QC Batch: **R163973**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	5000	13	100		µg/L	500	7/15/2022 10:59 AM
DISSOLVED METALS BY ICP-MS							
		EPA 3010A		**EPA 6020**			
RunID: **NV00922-ICP8_220717B**	QC Batch: **93772**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Chromium	4900	1.8	50		µg/L	50	7/18/2022 02:23 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051608
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	LCS-R163973	SampType:	LCS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	LCSW	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723141

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.961	0.20	5.000	0	99.2	90	110				

Sample ID	MB-R163973	SampType:	MBLK	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	PBW	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723142

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID	N051608-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723144

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	423.400	80	400.0	0	106	90	110				

Sample ID	N051608-002ADUP	SampType:	DUP	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723146

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4947.250	100						4974	0.543	20	

Sample ID	N051608-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723147

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	7486.500	100	2500	4974	100	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051608
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051617-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723151

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	646.045	10	250.0	390.0	102	90	110				

Sample ID	N051617-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723153

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	637.595	10	250.0	391.8	98.3	90	110				

Sample ID	N051648-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723155

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.436	0.20	1.000	0.4452	99.1	90	110				

Sample ID	N051648-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723157

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.531	0.20	1.000	1.532	99.9	90	110				

Sample ID	N051648-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723159

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.506	0.20	1.000	0.4480	106	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051608
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **N051648-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723163**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.524	0.20	1.000	1.468	106	90	110				

Sample ID **N051648-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723165**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.975	0.20	1.000	1.942	103	90	110				

Sample ID **N051648-001AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723166**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.515	0.20	1.000	0.4452	107	90	110	1.436	5.30	20	

Sample ID **N051615-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723177**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.044	0.20	1.000	0	104	90	110				

Sample ID **N051615-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723179**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.025	0.20	1.000	0	102	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051608
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051634-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723180

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1801.640	40	1000	749.4	105	90	110				

Sample ID	N051634-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723184

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	215.744	4.0	100.0	115.5	100	90	110				

Sample ID	N051634-004AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723185

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2069.380	40	1000	1037	103	90	110				

Sample ID	N051634-005AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723186

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.034	0.20	1.000	0	103	90	110				

Sample ID	N051634-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723188

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4781.050	100	2500	2240	102	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051608
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051615-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723189

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1022.160	20	500.0	486.8	107	90	110				

Sample ID	N051615-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723190

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	209.200	4.0	100.0	102.5	107	90	110				

Sample ID	N051615-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723191

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1048.670	20	500.0	517.4	106	90	110				

Sample ID	N051615-006AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723195

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.490	1.0	5.000	0	110	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051608
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020DIS_CrPGE_TPK

Sample ID	MB-93772	SampType:	MBLK	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164016
Client ID:	PBW	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727664

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									

Sample ID	LCS-93772	SampType:	LCS	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164016
Client ID:	LCSW	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727665

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.717	1.0	10.00	0	97.2	85	115				

Sample ID	N051585-015C-MS	SampType:	MS	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164016
Client ID:	ZZZZZZ	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727673

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	21.420	1.0	10.00	11.86	95.6	75	125				

Sample ID	N051585-015C-MSD	SampType:	MSD	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164016
Client ID:	ZZZZZZ	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727675

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	21.049	1.0	10.00	11.86	91.8	75	125	21.42	1.75	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-67-185-0722
Lab Order:	N051608	**Collection Date:**	7/13/2022 11:55:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051608-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B**	QC Batch: **R163932**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	3.8	20		mg/L	400	7/15/2022 03:42 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051608
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	LCS-R163932_NO3	SampType:	LCS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163932
Client ID:	LCSW	Batch ID:	R163932	TestNo:	EPA 300.0			Analysis Date:	7/14/2022	SeqNo:	4722261

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.219	0.050	1.250	0	97.5	90	110				

Sample ID	MB-R163932_NO3	SampType:	MBLK	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163932
Client ID:	PBW	Batch ID:	R163932	TestNo:	EPA 300.0			Analysis Date:	7/14/2022	SeqNo:	4722262

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID	N051615-002BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163932
Client ID:	ZZZZZZ	Batch ID:	R163932	TestNo:	EPA 300.0			Analysis Date:	7/14/2022	SeqNo:	4722271

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	14.750	0.50	12.50	2.773	95.8	80	120				

Sample ID	N051615-002BMSD	SampType:	MSD	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163932
Client ID:	ZZZZZZ	Batch ID:	R163932	TestNo:	EPA 300.0			Analysis Date:	7/14/2022	SeqNo:	4722272

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	14.978	0.50	12.50	2.773	97.6	80	120	14.75	1.53	20	

Sample ID	N051609-001BDUP	SampType:	DUP	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163932
Client ID:	ZZZZZZ	Batch ID:	R163932	TestNo:	EPA 300.0			Analysis Date:	7/14/2022	SeqNo:	4722275

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	0.505	0.50						0.4900	3.02	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051608
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	N051609-001BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163932
Client ID:	ZZZZZZ	Batch ID:	R163932	TestNo:	EPA 300.0			Analysis Date:	7/14/2022	SeqNo:	4722276

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.388	0.50	12.50	0.4900	95.2	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-67-185-0722
Lab Order:	N051608	**Collection Date:**	7/13/2022 11:55:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051608-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E**	QC Batch: **93772**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Manganese	1100	0.66	12		µg/L	25	7/16/2022 03:23 AM
Molybdenum	34	0.60	2.5		µg/L	5	7/16/2022 03:00 AM
Selenium	94	0.22	2.5		µg/L	5	7/21/2022 02:18 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-68-180-0722
Lab Order:	N051608	**Collection Date:**	7/13/2022 12:52:00 PM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051608-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E** QC Batch: **93772**				PrepDate:	**7/15/2022**		Analyst: **DJ**
Molybdenum	45	0.60	2.5		µg/L	5	7/16/2022 03:35 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051608
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	MB-93772	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164015
Client ID:	PBW	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727180

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	ND	0.50									
Molybdenum	ND	0.50									

Sample ID	LCS-93772	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164015
Client ID:	LCSW	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727181

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	100.071	0.50	100.0	0	100	85	115				
Molybdenum	10.240	0.50	10.00	0	102	85	115				

Sample ID	N051585-015C-MS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164015
Client ID:	ZZZZZZ	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727189

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	96.551	0.50	100.0	4.777	91.8	75	125				
Molybdenum	26.819	0.50	10.00	15.39	114	75	125				

Sample ID	N051585-015C-MSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164015
Client ID:	ZZZZZZ	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/16/2022	SeqNo:	4727191

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	95.077	0.50	100.0	4.777	90.3	75	125	96.55	1.54	20	
Molybdenum	26.674	0.50	10.00	15.39	113	75	125	26.82	0.544	20	

Sample ID	MB-93772	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164171
Client ID:	PBW	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/21/2022	SeqNo:	4736008

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051608
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	MB-93772	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164171
Client ID:	PBW	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/21/2022	SeqNo:	4736008

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	ND	0.50									

Sample ID	LCS-93772	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164171
Client ID:	LCSW	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/21/2022	SeqNo:	4736009

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	9.072	0.50	10.00	0	90.7	85	115				

Sample ID	N051585-015C-MS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164171
Client ID:	ZZZZZZ	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/21/2022	SeqNo:	4736013

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	9.280	0.50	10.00	0.09425	91.9	75	125				

Sample ID	N051585-015C-MSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164171
Client ID:	ZZZZZZ	Batch ID:	93772	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/21/2022	SeqNo:	4736014

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	9.531	0.50	10.00	0.09425	94.4	75	125	9.280	2.66	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

N051608

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement	QA/QC	Sample Receipt Condition	Y N
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	Excel EDD	RTNE	1. Chilled	X
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com daniel.moore@critigen.com	Address:	Geotracker	RWQCB ✓	2. Headspace	
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	Labspec	CalTrans	3. Container Intact	X
Submitted By: Riggie Top		Phone: 949-727-1400, ext 200 Fax:	Others ✓	LEVEL III	4. Seal Present	
Title: Field Tech	Phone: 916-786-3302 Fax:		Specify: RWQCB	LEVEL IV	5. IR number 3	
Signature: Date: 7/13/22	Sampled By: Riggie Top		Global ID:	Regulatory	6. Method of Cooling: ICE	
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for			Specify State:	Sample Temp: 29°C	
Project Name: PG&E Topock - RCM	Signature: Date: 7/13/22	Matrix: Ground X, Sediment; Potable, Soil; NPDES, Other Solid; Surface			Courier: ASSET	
Project Number: 30121866.3Q22GW					Tracking No.:	

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Manganese, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Selenium (500mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N051608-01	MW-67-185-0722	7/13/2022	11:55		X	X	X	X	X	X	E	3	P	BNS	
2	-02	MW-68-180-0722	7/13/2022	12:52		X			X	X		2 E		P	BNS	
3																
4																
5																
7																
8																
9																
10																
11																
12																
13																
14																

Relinquished by (Signature and Printed Name):	Date/Time:	Received by (Signature and Printed Name):	Date/Time:
Riggie Top	7/13/22 1557		7/13/22 @1557
MBCARTIN REL/REC: MBCARTIN		MBCARTIN	7/13/22 @1850

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B	(NH4)2SO4/NH4OH		M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	7/13/2022	Workorder:	N051608
Rep sample Temp (Deg C):	2.9	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For:

Checklist Completed By: MBC YRJ 7/15/2022

For:

Reviewed By: MBC 7/16/2022

ASSET Laboratories

WORK ORDER Summary

16-Jul-22

WorkOrder: N051608

Client ID: ARCUS02

Project: PG&E Topock - RCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/13/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051608-001A	MW-67-185-0722	7/13/2022 11:55:00 AM	7/27/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051608-001B			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051608-001C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051608-002A	MW-68-180-0722	7/13/2022 12:52:00 PM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051608-002B			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051608-003A	FOLDER	7/27/2022	7/27/2022		Folder	Folder	☐	☐	☐	LAB
			7/27/2022		Folder	Level IV Report	☐	☐	☐	LAB
			7/27/2022		Folder	Folder	☐	☐	☐	LAB

July 18, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N051609

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on July 13, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N051609

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 300:

Dilution was necessary for sample N051609-001B due to precipitation upon addition of eluent.

Analytical Comments for EPA 6010B:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Iron in QC samples N051609-001C-MS and N051609-001C-MSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Arsenic in QC samples N051609-002C-MS and N051609-002C-MSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for SM 5310C:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria in QC samples N051585-001DMS and N051585-001DMSD at 1x dilution possibly due to matrix interference. QC samples were diluted and recovery passed criteria. Thus sample reference N051585-001 and MS/MSD were reported at 5x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N051609
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N051609-001A	MW-31-060-0722	Groundwater	7/13/2022 12:40:00 PM	7/13/2022	7/18/2022
N051609-001B	MW-31-060-0722	Groundwater	7/13/2022 12:40:00 PM	7/13/2022	7/18/2022
N051609-001C	MW-31-060-0722	Groundwater	7/13/2022 12:40:00 PM	7/13/2022	7/18/2022
N051609-001D	MW-31-060-0722	Groundwater	7/13/2022 12:40:00 PM	7/13/2022	7/18/2022
N051609-002A	MW-31-135-0722	Groundwater	7/13/2022 1:32:00 PM	7/13/2022	7/18/2022
N051609-002B	MW-31-135-0722	Groundwater	7/13/2022 1:32:00 PM	7/13/2022	7/18/2022
N051609-002C	MW-31-135-0722	Groundwater	7/13/2022 1:32:00 PM	7/13/2022	7/18/2022
N051609-002D	MW-31-135-0722	Groundwater	7/13/2022 1:32:00 PM	7/13/2022	7/18/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-060-0722
Lab Order:	N051609	**Collection Date:**	7/13/2022 12:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051609-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	190	1.3	10		µg/L	50	7/14/2022 01:17 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051609-002

Client Sample ID: MW-31-135-0722
Collection Date: 7/13/2022 1:32:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220714A**	QC Batch: **R163961**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	23	0.13	1.0		µg/L	5	7/14/2022 01:36 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R163961**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163961**
Client ID: **PBW**	Batch ID: **R163961**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722387**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R163961**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163961**
Client ID: **LCSW**	Batch ID: **R163961**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722388**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.176	0.20	5.000	0	104	90	110				

Sample ID: **N051585-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163961**
Client ID: **ZZZZZZ**	Batch ID: **R163961**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722390**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.040	0.20	1.000	0	104	90	110				

Sample ID: **N051585-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163961**
Client ID: **ZZZZZZ**	Batch ID: **R163961**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722392**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	11.629	0.20	5.000	6.426	104	90	110				

Sample ID: **N051585-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163961**
Client ID: **ZZZZZZ**	Batch ID: **R163961**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722394**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.078	1.0	5.000	0	102	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N051585-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163961**
Client ID: **ZZZZZZ** Batch ID: **R163961** TestNo: **EPA 218.6** Analysis Date: **7/14/2022** SeqNo: **4722398**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.078	0.20	1.000	0	108	90	110				

Sample ID: **N051585-007AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163961**
Client ID: **ZZZZZZ** Batch ID: **R163961** TestNo: **EPA 218.6** Analysis Date: **7/14/2022** SeqNo: **4722400**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.364	0.20	1.000	0.2778	109	90	110				

Sample ID: **N051585-011AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163961**
Client ID: **ZZZZZZ** Batch ID: **R163961** TestNo: **EPA 218.6** Analysis Date: **7/14/2022** SeqNo: **4722402**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.102	0.20	1.000	0.05030	105	90	110				

Sample ID: **N051585-012AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163961**
Client ID: **ZZZZZZ** Batch ID: **R163961** TestNo: **EPA 218.6** Analysis Date: **7/14/2022** SeqNo: **4722406**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.092	0.20	1.000	0	109	90	110				

Sample ID: **N051609-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163961**
Client ID: **ZZZZZZ** Batch ID: **R163961** TestNo: **EPA 218.6** Analysis Date: **7/14/2022** SeqNo: **4722408**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	450.275	10	250.0	192.3	103	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N051609-002AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163961**
Client ID: **ZZZZZZ** Batch ID: **R163961** TestNo: **EPA 218.6** Analysis Date: **7/14/2022** SeqNo: **4722410**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	48.862	1.0	25.00	22.90	104	90	110				

Sample ID: **N051585-016AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163961**
Client ID: **ZZZZZZ** Batch ID: **R163961** TestNo: **EPA 218.6** Analysis Date: **7/14/2022** SeqNo: **4722412**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	346.638	4.0	100.0	240.2	106	90	110				

Sample ID: **N051585-013AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163961**
Client ID: **ZZZZZZ** Batch ID: **R163961** TestNo: **EPA 218.6** Analysis Date: **7/14/2022** SeqNo: **4722414**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.070	0.20	1.000	0	107	90	110				

Sample ID: **N051585-014AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163961**
Client ID: **ZZZZZZ** Batch ID: **R163961** TestNo: **EPA 218.6** Analysis Date: **7/14/2022** SeqNo: **4722418**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.027	0.20	1.000	0	103	90	110				

Sample ID: **N051585-016AMSD** SampType: **MSD** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163961**
Client ID: **ZZZZZZ** Batch ID: **R163961** TestNo: **EPA 218.6** Analysis Date: **7/14/2022** SeqNo: **4722419**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	342.342	4.0	100.0	240.2	102	90	110	346.6	1.25	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N051609-001ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163961**
Client ID: **ZZZZZZ**	Batch ID: **R163961**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722420**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	189.770	10						192.3	1.32	20	

Sample ID: **N051585-009AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163961**
Client ID: **ZZZZZZ**	Batch ID: **R163961**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722422**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	8.210	1.0	5.000	3.120	102	90	110				

Sample ID: **N051585-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163961**
Client ID: **ZZZZZZ**	Batch ID: **R163961**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722424**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	6.065	1.0	5.000	1.253	96.2	90	110				

Sample ID: **N051585-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163961**
Client ID: **ZZZZZZ**	Batch ID: **R163961**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722428**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.049	0.20	1.000	0	105	90	110				

Sample ID: **N051585-010AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163961**
Client ID: **ZZZZZZ**	Batch ID: **R163961**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722430**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.050	0.20	1.000	0	105	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N051585-008AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163961**
Client ID: **ZZZZZZ**	Batch ID: **R163961**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722432**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.335	1.0	5.000	0	107	90	110				

Sample ID: **N051585-015AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163961**
Client ID: **ZZZZZZ**	Batch ID: **R163961**	TestNo: **EPA 218.6**		Analysis Date: **7/14/2022**	SeqNo: **4722436**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	38.852	1.0	25.00	12.77	104	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051609-001

Client Sample ID: MW-31-060-0722
Collection Date: 7/13/2022 12:40:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B** QC Batch: **R163932**				PrepDate:			Analyst: **RAB**
Sulfate	560	6.1	50		mg/L	100	7/15/2022 03:58 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B** QC Batch: **R163932**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/14/2022 10:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051609-002

Client Sample ID: MW-31-135-0722
Collection Date: 7/13/2022 1:32:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B** QC Batch: **R163932**				PrepDate:			Analyst: **RAB**
Sulfate	670	6.1	50		mg/L	100	7/15/2022 05:06 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B** QC Batch: **R163932**				PrepDate:			Analyst: **RAB**
Nitrate as N	1.1	0.095	0.50		mg/L	10	7/15/2022 12:03 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **LCS-R163932_SO4**	SampType: **LCS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **163932**
Client ID: **LCSW**	Batch ID: **R163932**	TestNo: **EPA 300.0**		Analysis Date: **7/14/2022**	SeqNo: **4722301**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	4.009	0.50	4.000	0	100	90	110				

Sample ID: **MB-R163932_SO4**	SampType: **MBLK**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **163932**
Client ID: **PBW**	Batch ID: **R163932**	TestNo: **EPA 300.0**		Analysis Date: **7/14/2022**	SeqNo: **4722302**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.50									

Sample ID: **N051609-001BDUP**	SampType: **DUP**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **163932**
Client ID: **ZZZZZZ**	Batch ID: **R163932**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722310**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	563.450	50						557.9	0.997	20	

Sample ID: **N051609-001BMS**	SampType: **MS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **163932**
Client ID: **ZZZZZZ**	Batch ID: **R163932**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722311**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	947.440	50	400.0	557.9	97.4	80	120				

Sample ID: **N051609-001BMSD**	SampType: **MSD**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **163932**
Client ID: **ZZZZZZ**	Batch ID: **R163932**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722312**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	956.520	50	400.0	557.9	99.7	80	120	947.4	0.954	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **LCS-R163932_NO3** SampType: **LCS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **163932**
Client ID: **LCSW** Batch ID: **R163932** TestNo: **EPA 300.0** Analysis Date: **7/14/2022** SeqNo: **4722261**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.219	0.050	1.250	0	97.5	90	110				

Sample ID: **MB-R163932_NO3** SampType: **MBLK** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **163932**
Client ID: **PBW** Batch ID: **R163932** TestNo: **EPA 300.0** Analysis Date: **7/14/2022** SeqNo: **4722262**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **N051615-002BMS** SampType: **MS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **163932**
Client ID: **ZZZZZZ** Batch ID: **R163932** TestNo: **EPA 300.0** Analysis Date: **7/14/2022** SeqNo: **4722271**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	14.750	0.50	12.50	2.773	95.8	80	120				

Sample ID: **N051615-002BMSD** SampType: **MSD** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **163932**
Client ID: **ZZZZZZ** Batch ID: **R163932** TestNo: **EPA 300.0** Analysis Date: **7/14/2022** SeqNo: **4722272**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	14.978	0.50	12.50	2.773	97.6	80	120	14.75	1.53	20	

Sample ID: **N051609-001BDUP** SampType: **DUP** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **163932**
Client ID: **ZZZZZZ** Batch ID: **R163932** TestNo: **EPA 300.0** Analysis Date: **7/14/2022** SeqNo: **4722275**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	0.505	0.50						0.4900	3.02	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **N051609-001BMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163932**
Client ID: **ZZZZZZ**	Batch ID: **R163932**	TestNo: **EPA 300.0**		Analysis Date: **7/14/2022**	SeqNo: **4722276**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.388	0.50	12.50	0.4900	95.2	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-060-0722
Lab Order:	N051609	**Collection Date:**	7/13/2022 12:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051609-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220714A**	QC Batch: **R163951**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/14/2022 11:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-135-0722
Lab Order:	N051609	**Collection Date:**	7/13/2022 1:32:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051609-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220714A**	QC Batch: **R163951**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/14/2022 11:15 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R163951**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163951**
Client ID: **PBW**	Batch ID: **R163951**	TestNo: **SM 5310C**		Analysis Date: **7/14/2022**	SeqNo: **4722045**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R163951**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163951**
Client ID: **LCSW**	Batch ID: **R163951**	TestNo: **SM 5310C**		Analysis Date: **7/14/2022**	SeqNo: **4722046**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	4.926	1.0	5.000	0	98.5	85	115				

Sample ID: **N051585-001DMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163951**
Client ID: **ZZZZZZ**	Batch ID: **R163951**	TestNo: **SM 5310C**		Analysis Date: **7/14/2022**	SeqNo: **4722052**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	26.929	5.0	25.00	1.370	102	75	125				

Sample ID: **N051585-001DMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163951**
Client ID: **ZZZZZZ**	Batch ID: **R163951**	TestNo: **SM 5310C**		Analysis Date: **7/14/2022**	SeqNo: **4722053**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	26.991	5.0	25.00	1.370	102	75	125	26.93	0.230	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051609-001

Client Sample ID: MW-31-060-0722
Collection Date: 7/13/2022 12:40:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220716A**	QC Batch: **93764**			PrepDate:	**7/14/2022**		Analyst: **DJ**
Iron	43	13	20		µg/L	1	7/16/2022 08:23 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051609-002

Client Sample ID: MW-31-135-0722
Collection Date: 7/13/2022 1:32:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220716A**	QC Batch: **93764**			PrepDate:	**7/14/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/16/2022 08:10 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-93764**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **7/14/2022**	RunNo: **163995**
Client ID: **PBW**	Batch ID: **93764**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4724270**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-93764**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **7/14/2022**	RunNo: **163995**
Client ID: **LCSW**	Batch ID: **93764**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4724271**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	92.734	20	100.0	0	92.7	85	115				

Sample ID: **N051609-001C-MS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **7/14/2022**	RunNo: **163995**
Client ID: **ZZZZZZ**	Batch ID: **93764**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4724275**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	96.607	20	100.0	42.87	53.7	75	125				S

Sample ID: **N051609-001C-MSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **7/14/2022**	RunNo: **163995**
Client ID: **ZZZZZZ**	Batch ID: **93764**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4724276**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	91.025	20	100.0	42.87	48.2	75	125	96.61	5.95	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **N051606-001C-PS** SampType: **PS** TestCode: **6010_WDPGE** Units: **µg/L** Prep Date: RunNo: **163995**
Client ID: **ZZZZZZ** Batch ID: **93764** TestNo: **EPA 6010B** **EPA 3010A** Analysis Date: **7/16/2022** SeqNo: **4724274**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	94.630	20	100.0	42.87	51.8	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051609-001

Client Sample ID: MW-31-060-0722
Collection Date: 7/13/2022 12:40:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220714A**	QC Batch: **93765**			PrepDate:		**7/14/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/14/2022 05:10 PM
Barium	67	0.083	1.0		µg/L	1	7/14/2022 05:10 PM
Manganese	120	0.026	0.50		µg/L	1	7/14/2022 05:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051609-002

Client Sample ID: MW-31-135-0722
Collection Date: 7/13/2022 1:32:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220714A**	QC Batch: **93765**			PrepDate:		**7/14/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/14/2022 05:22 PM
Barium	44	0.083	1.0		µg/L	1	7/14/2022 05:22 PM
Manganese	13	0.026	0.50		µg/L	1	7/14/2022 05:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-93765**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/14/2022**	RunNo: **163938**
Client ID: **PBW**	Batch ID: **93765**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/14/2022**	SeqNo: **4721303**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID: **LCS-93765**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/14/2022**	RunNo: **163938**
Client ID: **LCSW**	Batch ID: **93765**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/14/2022**	SeqNo: **4721304**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.589	0.10	10.00	0	95.9	85	115				
Barium	9.664	1.0	10.00	0	96.6	85	115				
Manganese	97.682	0.50	100.0	0	97.7	85	115				

Sample ID: **N051609-002C-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/14/2022**	RunNo: **163938**
Client ID: **ZZZZZZ**	Batch ID: **93765**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/14/2022**	SeqNo: **4721313**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	6.108	0.10	10.00	0	61.1	75	125				S
Barium	53.823	1.0	10.00	43.67	102	75	125				
Manganese	95.857	0.50	100.0	13.06	82.8	75	125				

Sample ID: **N051609-002C-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/14/2022**	RunNo: **163938**
Client ID: **ZZZZZZ**	Batch ID: **93765**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/14/2022**	SeqNo: **4721314**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	6.833	0.10	10.00	0	68.3	75	125	6.108	11.2	20	S
Barium	52.393	1.0	10.00	43.67	87.2	75	125	53.82	2.69	20	
Manganese	96.005	0.50	100.0	13.06	82.9	75	125	95.86	0.155	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051609
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N051609-002C-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **163938**
Client ID: **ZZZZZZ** Batch ID: **93765** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **7/14/2022** SeqNo: **4721310**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	6.626	0.10	10.00	0	66.3	80	120				S
Barium	52.993	1.0	10.00	43.67	93.2	80	120				
Manganese	97.173	0.50	100.0	13.06	84.1	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

N051609

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement		QA/QC		Sample Receipt Condition	Y	N
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD		RTNE		1. Chilled	X	
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker		RWQCB	✓	2. Headspace		
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Labspec		CalTrans		3. Container Intact	X	
Submitted By: Riggie Tip			Others	✓	LEVEL III		4. Seal Present		
Title: Field Tech	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	Specify: RWQCB		LEVEL IV		5. IR number 3		
Signature: Date: 7/13/22	Sampled By: Riggie Tip		Global ID:		Regulatory		6. Method of Cooling: ICE		
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for				Specify State:		Sample Temp: 3.1°C / 2.9°C		
Project Name: PG&E Topock - PCM	Signature: Date: 7/13/22	Matrix: Ground X, Sediment; Potable, Soil; NPDES, Other Solid; Surface					Courier: ASSET		
Project Number: 30121866.3Q22GW							Tracking No.:		

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N051609-01	MW-31-060-0722	7/13/2022	12:40		X	X	X			X			C	6	P	BNS	
2	-02	MW-31-135-0722	7/13/2022	13:32		X	X	X			X			C	6	P	BNS	
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		

Relinquished by (Signature and Printed Name):	Date/Time:	Received by (Signature and Printed Name):	Date/Time:
Riggie Tip	7/13/22 1557		7/13/22 @1557
Relinquished by (Signature and Printed Name):	Date/Time:	Received by (Signature and Printed Name):	Date/Time:
REL/REC: MBCARTIN			7/13/22 @18 50
Relinquished by (Signature and Printed Name):	Date/Time:	Received by (Signature and Printed Name):	Date/Time:

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [X] C = 2 Workdays
- [ ] D = 3 Workdays
- [ ] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	7/13/2022	Workorder:	N051609
Rep sample Temp (Deg C):	3.1/2.9	IR Gun ID:	3
Temp Blank:	☑ Yes ☐ No		
Carrier name:	ASSET		
Last 4 digits of Tracking No.:	NA	Packing Material Used:	None
Cooling process:	☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None		

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: For: MBC YRJ 7/14/2022

Reviewed By: For: MBC 7/15/2022

ASSET Laboratories

WORK ORDER Summary

16-Jul-22

WorkOrder: N051609

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/13/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051609-001A	MW-31-060-0722	7/13/2022 12:40:00 PM	7/15/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051609-001B			7/15/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/15/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051609-001C			7/15/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/15/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/15/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/15/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051609-001D			7/15/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051609-002A	MW-31-135-0722	7/13/2022 1:32:00 PM	7/15/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051609-002B			7/15/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/15/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051609-002C			7/15/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/15/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/15/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/15/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051609-002D			7/15/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051609-003A	FOLDER	7/15/2022	7/15/2022		Folder	Folder	☐	☐	☐	LAB
			7/15/2022		Folder	Level IV Report	☐	☐	☐	LAB
			7/15/2022		Folder	Folder	☐	☐	☐	LAB

July 27, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N051615

RE: PG&E Topock - PCM, 30121866.3Q22GW

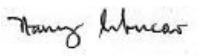
Attention: Dan Bush

Enclosed are the results for sample(s) received on July 13, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,



Nancy Sibucao
Laboratory Director

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CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N051615

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Dilution was necessary for sample N051615-006 due to matrix interference. Sample was analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Sample was reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for SM 5310C:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria in QC samples N051611-002DMS and N051611-002DMSD at several dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N051611-002D and MS/MSD were reported at 20x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N051615
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N051615-001A	TW-02D-0722	Groundwater	7/13/2022 8:52:00 AM	7/13/2022	7/27/2022
N051615-001B	TW-02D-0722	Groundwater	7/13/2022 8:52:00 AM	7/13/2022	7/27/2022
N051615-001C	TW-02D-0722	Groundwater	7/13/2022 8:52:00 AM	7/13/2022	7/27/2022
N051615-001D	TW-02D-0722	Groundwater	7/13/2022 8:52:00 AM	7/13/2022	7/27/2022
N051615-002A	TW-02S-0722	Groundwater	7/13/2022 8:19:00 AM	7/13/2022	7/27/2022
N051615-002B	TW-02S-0722	Groundwater	7/13/2022 8:19:00 AM	7/13/2022	7/27/2022
N051615-002C	TW-02S-0722	Groundwater	7/13/2022 8:19:00 AM	7/13/2022	7/27/2022
N051615-002D	TW-02S-0722	Groundwater	7/13/2022 8:19:00 AM	7/13/2022	7/27/2022
N051615-003A	TW-03D-0722	Groundwater	7/13/2022 9:24:00 AM	7/13/2022	7/27/2022
N051615-003B	TW-03D-0722	Groundwater	7/13/2022 9:24:00 AM	7/13/2022	7/27/2022
N051615-003C	TW-03D-0722	Groundwater	7/13/2022 9:24:00 AM	7/13/2022	7/27/2022
N051615-003D	TW-03D-0722	Groundwater	7/13/2022 9:24:00 AM	7/13/2022	7/27/2022
N051615-004A	MW-21-0722	Groundwater	7/13/2022 10:10:00 AM	7/13/2022	7/27/2022
N051615-004B	MW-21-0722	Groundwater	7/13/2022 10:10:00 AM	7/13/2022	7/27/2022
N051615-004C	MW-21-0722	Groundwater	7/13/2022 10:10:00 AM	7/13/2022	7/27/2022
N051615-004D	MW-21-0722	Groundwater	7/13/2022 10:10:00 AM	7/13/2022	7/27/2022
N051615-005A	MW-21-EB-0722	Groundwater	7/13/2022 9:44:00 AM	7/13/2022	7/27/2022
N051615-006A	MW-71-035-0722	Groundwater	7/13/2022 10:46:00 AM	7/13/2022	7/27/2022
N051615-006B	MW-71-035-0722	Groundwater	7/13/2022 10:46:00 AM	7/13/2022	7/27/2022
N051615-006C	MW-71-035-0722	Groundwater	7/13/2022 10:46:00 AM	7/13/2022	7/27/2022
N051615-006D	MW-71-035-0722	Groundwater	7/13/2022 10:46:00 AM	7/13/2022	7/27/2022
N051615-007A	EB-705-Q322	Groundwater	7/13/2022 1:02:00 PM	7/13/2022	7/27/2022
N051615-008A	MW-26-0722	Groundwater	7/13/2022 2:29:00 PM	7/13/2022	7/27/2022
N051615-008B	MW-26-0722	Groundwater	7/13/2022 2:29:00 PM	7/13/2022	7/27/2022
N051615-008C	MW-26-0722	Groundwater	7/13/2022 2:29:00 PM	7/13/2022	7/27/2022
N051615-008D	MW-26-0722	Groundwater	7/13/2022 2:29:00 PM	7/13/2022	7/27/2022
N051615-009A	MW-51-0722	Groundwater	7/13/2022 2:26:00 PM	7/13/2022	7/27/2022
N051615-009B	MW-51-0722	Groundwater	7/13/2022 2:26:00 PM	7/13/2022	7/27/2022
N051615-009C	MW-51-0722	Groundwater	7/13/2022 2:26:00 PM	7/13/2022	7/27/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N051615
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N051615-009D	MW-51-0722	Groundwater	7/13/2022 2:26:00 PM	7/13/2022	7/27/2022
N051615-010A	MW-20-070-0722	Groundwater	7/13/2022 9:17:00 AM	7/13/2022	7/27/2022
N051615-010B	MW-20-070-0722	Groundwater	7/13/2022 9:17:00 AM	7/13/2022	7/27/2022
N051615-010C	MW-20-070-0722	Groundwater	7/13/2022 9:17:00 AM	7/13/2022	7/27/2022
N051615-010D	MW-20-070-0722	Groundwater	7/13/2022 9:17:00 AM	7/13/2022	7/27/2022
N051615-011A	MW-20-100-0722	Groundwater	7/13/2022 11:05:00 AM	7/13/2022	7/27/2022
N051615-011B	MW-20-100-0722	Groundwater	7/13/2022 11:05:00 AM	7/13/2022	7/27/2022
N051615-011C	MW-20-100-0722	Groundwater	7/13/2022 11:05:00 AM	7/13/2022	7/27/2022
N051615-011D	MW-20-100-0722	Groundwater	7/13/2022 11:05:00 AM	7/13/2022	7/27/2022
N051615-012A	MW-904-Q322	Groundwater	7/13/2022 11:15:00 AM	7/13/2022	7/27/2022
N051615-012B	MW-904-Q322	Groundwater	7/13/2022 11:15:00 AM	7/13/2022	7/27/2022
N051615-012C	MW-904-Q322	Groundwater	7/13/2022 11:15:00 AM	7/13/2022	7/27/2022
N051615-012D	MW-904-Q322	Groundwater	7/13/2022 11:15:00 AM	7/13/2022	7/27/2022
N051615-013A	MW-20-130-0722	Groundwater	7/13/2022 10:18:00 AM	7/13/2022	7/27/2022
N051615-013B	MW-20-130-0722	Groundwater	7/13/2022 10:18:00 AM	7/13/2022	7/27/2022
N051615-013C	MW-20-130-0722	Groundwater	7/13/2022 10:18:00 AM	7/13/2022	7/27/2022
N051615-013D	MW-20-130-0722	Groundwater	7/13/2022 10:18:00 AM	7/13/2022	7/27/2022
N051615-014A	EB-706-Q322	Groundwater	7/13/2022 2:45:00 PM	7/13/2022	7/27/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02D-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 8:52:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A**	QC Batch: **R163973**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	490	2.5	20		µg/L	100	7/15/2022 03:33 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02S-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 8:19:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A**	QC Batch: **R163973**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	100	0.50	4.0		µg/L	20	7/15/2022 03:43 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-03D-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A**	QC Batch: **R163973**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	520	2.5	20		µg/L	100	7/15/2022 03:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A**	QC Batch: **R163973**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/15/2022 04:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-EB-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 9:44:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A**	QC Batch: **R163973**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/15/2022 04:21 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-71-035-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:46:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A**	QC Batch: **R163973**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	7/15/2022 07:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-705-Q322
Lab Order:	N051615	**Collection Date:**	7/13/2022 1:02:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220718A**	QC Batch: **R164029**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/18/2022 12:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-26-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 2:29:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220718A**	QC Batch: **R164029**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	110	0.50	4.0		µg/L	20	7/18/2022 10:22 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-51-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 2:26:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220718A**	QC Batch: **R164029**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	490	2.5	20		µg/L	100	7/18/2022 10:34 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-070-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 9:17:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220718A**	QC Batch: **R164029**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	1200	5.0	40		µg/L	200	7/18/2022 11:49 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-100-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 11:05:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220718A**	QC Batch: **R164029**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	920	5.0	40		µg/L	200	7/18/2022 10:43 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-904-Q322
Lab Order:	N051615	**Collection Date:**	7/13/2022 11:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220718A**	QC Batch: **R164029**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	930	5.0	40		µg/L	200	7/18/2022 10:53 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-130-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:18:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220718A**	QC Batch: **R164029**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	1800	13	100		µg/L	500	7/18/2022 11:02 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-706-Q322
Lab Order:	N051615	**Collection Date:**	7/13/2022 2:45:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220718A**	QC Batch: **R164029**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/18/2022 01:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **LCS-R163973**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **LCSW**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723141**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.961	0.20	5.000	0	99.2	90	110				

Sample ID **MB-R163973**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **PBW**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723142**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID **N051608-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723144**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	423.400	80	400.0	0	106	90	110				

Sample ID **N051608-002ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723146**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4947.250	100						4974	0.543	20	

Sample ID **N051608-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723147**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	7486.500	100	2500	4974	100	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **N051617-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723151**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	646.045	10	250.0	390.0	102	90	110				

Sample ID **N051617-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723153**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	637.595	10	250.0	391.8	98.3	90	110				

Sample ID **N051648-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723155**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.436	0.20	1.000	0.4452	99.1	90	110				

Sample ID **N051648-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723157**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.531	0.20	1.000	1.532	99.9	90	110				

Sample ID **N051648-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723159**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.506	0.20	1.000	0.4480	106	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051648-004AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723163

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.524	0.20	1.000	1.468	106	90	110				

Sample ID	N051648-005AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723165

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.975	0.20	1.000	1.942	103	90	110				

Sample ID	N051648-001AMSD	SampType:	MSD	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723166

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.515	0.20	1.000	0.4452	107	90	110	1.436	5.30	20	

Sample ID	N051615-004AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723177

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.044	0.20	1.000	0	104	90	110				

Sample ID	N051615-005AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723179

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.025	0.20	1.000	0	102	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051634-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723180

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1801.640	40	1000	749.4	105	90	110				

Sample ID	N051634-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723184

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	215.744	4.0	100.0	115.5	100	90	110				

Sample ID	N051634-004AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723185

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2069.380	40	1000	1037	103	90	110				

Sample ID	N051634-005AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723186

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.034	0.20	1.000	0	103	90	110				

Sample ID	N051634-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723188

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4781.050	100	2500	2240	102	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051615-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723189

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1022.160	20	500.0	486.8	107	90	110				

Sample ID	N051615-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723190

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	209.200	4.0	100.0	102.5	107	90	110				

Sample ID	N051615-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723191

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1048.670	20	500.0	517.4	106	90	110				

Sample ID	N051615-006AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723195

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.490	1.0	5.000	0	110	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	MB-R164029	SampType:	MBLK	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164029		
Client ID:	PBW	Batch ID:	R164029	TestNo:	EPA 218.6			Analysis Date:	7/18/2022	SeqNo:	4728640		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	ND	0.20											

Sample ID	LCS-R164029	SampType:	LCS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164029		
Client ID:	LCSW	Batch ID:	R164029	TestNo:	EPA 218.6			Analysis Date:	7/18/2022	SeqNo:	4728641		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	5.267	0.20	5.000	0	105	90	110						

Sample ID	N051615-008AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164029		
Client ID:	ZZZZZZ	Batch ID:	R164029	TestNo:	EPA 218.6			Analysis Date:	7/18/2022	SeqNo:	4728647		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	209.708	4.0	100.0	108.0	102	90	110						

Sample ID	N051615-009AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164029		
Client ID:	ZZZZZZ	Batch ID:	R164029	TestNo:	EPA 218.6			Analysis Date:	7/18/2022	SeqNo:	4728648		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	1007.280	20	500.0	492.6	103	90	110						

Sample ID	N051615-010AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164029		
Client ID:	ZZZZZZ	Batch ID:	R164029	TestNo:	EPA 218.6			Analysis Date:	7/18/2022	SeqNo:	4728652		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	2228.660	40	1000	1181	105	90	110						

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **N051615-010AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164029**
Client ID: **ZZZZZZ**	Batch ID: **R164029**	TestNo: **EPA 218.6**		Analysis Date: **7/18/2022**	SeqNo: **4728653**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2230.440	40	1000	1181	105	90	110	2229	0.0798	20	

Sample ID **N051615-011AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164029**
Client ID: **ZZZZZZ**	Batch ID: **R164029**	TestNo: **EPA 218.6**		Analysis Date: **7/18/2022**	SeqNo: **4728654**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1990.960	40	1000	922.6	107	90	110				

Sample ID **N051615-012AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164029**
Client ID: **ZZZZZZ**	Batch ID: **R164029**	TestNo: **EPA 218.6**		Analysis Date: **7/18/2022**	SeqNo: **4728655**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1974.640	40	1000	933.8	104	90	110				

Sample ID **N051615-011ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164029**
Client ID: **ZZZZZZ**	Batch ID: **R164029**	TestNo: **EPA 218.6**		Analysis Date: **7/18/2022**	SeqNo: **4728656**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	961.320	40						922.6	4.11	20	

Sample ID **N051615-013AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164029**
Client ID: **ZZZZZZ**	Batch ID: **R164029**	TestNo: **EPA 218.6**		Analysis Date: **7/18/2022**	SeqNo: **4728657**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4436.350	100	2500	1782	106	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051615-007AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164029
Client ID:	ZZZZZZ	Batch ID:	R164029	TestNo:	EPA 218.6			Analysis Date:	7/18/2022	SeqNo:	4728659

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.017	0.20	1.000	0	102	90	110				

Sample ID	N051615-014AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164029
Client ID:	ZZZZZZ	Batch ID:	R164029	TestNo:	EPA 218.6			Analysis Date:	7/18/2022	SeqNo:	4728663

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.042	0.20	1.000	0	104	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051615-001

Client Sample ID: TW-02D-0722
Collection Date: 7/13/2022 8:52:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718B**	QC Batch: **R164036**			PrepDate:			Analyst: **RAB**
Sulfate	720	6.1	50		mg/L	100	7/18/2022 11:54 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B**	QC Batch: **R163932**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.89	0.095	0.50		mg/L	10	7/15/2022 12:37 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051615-002

Client Sample ID: TW-02S-0722
Collection Date: 7/13/2022 8:19:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718B**	QC Batch: **R164036**			PrepDate:			Analyst: **RAB**
Sulfate	180	1.2	10		mg/L	20	7/19/2022 01:32 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B**	QC Batch: **R163932**			PrepDate:			Analyst: **RAB**
Nitrate as N	2.8	0.095	0.50		mg/L	10	7/14/2022 09:49 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-03D-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
EPA 300.0							
RunID: **NV00922-IC8_220718B** QC Batch: **R164036** PrepDate: Analyst: **RAB**							
Sulfate	750	6.1	50		mg/L	100	7/19/2022 02:21 AM
ANIONS BY ION CHROMATOGRAPHY							
EPA 300.0							
RunID: **NV00922-IC8_220714B** QC Batch: **R163932** PrepDate: Analyst: **RAB**							
Nitrate as N	0.95	0.095	0.50		mg/L	10	7/15/2022 12:54 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718B**	QC Batch: **R164036**			PrepDate:			Analyst: **RAB**
Sulfate	1800	12	100		mg/L	200	7/19/2022 02:37 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B**	QC Batch: **R163932**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/15/2022 01:10 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-71-035-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:46:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718B**	QC Batch: **R164036**			PrepDate:			Analyst: **RAB**
Sulfate	1300	12	100		mg/L	200	7/19/2022 02:53 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B**	QC Batch: **R163932**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/15/2022 01:27 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-26-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 2:29:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718B**	QC Batch: **R164036**			PrepDate:			Analyst: **RAB**
Sulfate	540	6.1	50		mg/L	100	7/19/2022 03:10 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B**	QC Batch: **R163932**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/15/2022 01:44 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-51-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 2:26:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718B**	QC Batch: **R164036**			PrepDate:			Analyst: **RAB**
Sulfate	540	6.1	50		mg/L	100	7/19/2022 03:26 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B**	QC Batch: **R163932**			PrepDate:			Analyst: **RAB**
Nitrate as N	1.4	0.095	0.50		mg/L	10	7/15/2022 02:01 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051615-010

Client Sample ID: MW-20-070-0722
Collection Date: 7/13/2022 9:17:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718B** QC Batch: **R164036**				PrepDate:			Analyst: **RAB**
Sulfate	530	3.0	25		mg/L	50	7/19/2022 03:42 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B** QC Batch: **R163932**				PrepDate:			Analyst: **RAB**
Nitrate as N	28	0.19	1.0		mg/L	20	7/15/2022 12:20 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-100-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 11:05:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718B**	QC Batch: **R164036**			PrepDate:			Analyst: **RAB**
Sulfate	880	6.1	50		mg/L	100	7/19/2022 03:59 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B**	QC Batch: **R163932**			PrepDate:			Analyst: **RAB**
Nitrate as N	5.3	0.095	0.50		mg/L	10	7/15/2022 02:51 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-904-Q322
Lab Order:	N051615	**Collection Date:**	7/13/2022 11:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718B**	QC Batch: **R164036**			PrepDate:			Analyst: **RAB**
Sulfate	890	6.1	50		mg/L	100	7/19/2022 04:15 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B**	QC Batch: **R163932**			PrepDate:			Analyst: **RAB**
Nitrate as N	5.3	0.095	0.50		mg/L	10	7/15/2022 03:08 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-130-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:18:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220718B**	QC Batch: **R164036**			PrepDate:			Analyst: **RAB**
Sulfate	1100	6.1	50		mg/L	100	7/19/2022 04:31 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714B**	QC Batch: **R163932**			PrepDate:			Analyst: **RAB**
Nitrate as N	5.4	0.095	0.50		mg/L	10	7/15/2022 03:25 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	LCS-R164036_SO4	SampType:	LCS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164036	
Client ID:	LCSW	Batch ID:	R164036	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4732105	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Sulfate	3.946	0.50	4.000	0	98.6	90	110					

Sample ID	MB-R164036_SO4	SampType:	MBLK	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164036	
Client ID:	PBW	Batch ID:	R164036	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4732106	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Sulfate	ND	0.50										

Sample ID	N051677-007BMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164036	
Client ID:	ZZZZZZ	Batch ID:	R164036	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4732110	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Sulfate	22.103	1.0	8.000	14.14	99.6	80	120					

Sample ID	N051677-007BMSD	SampType:	MSD	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164036	
Client ID:	ZZZZZZ	Batch ID:	R164036	TestNo:	EPA 300.0			Analysis Date:	7/18/2022	SeqNo:	4732111	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Sulfate	22.172	1.0	8.000	14.14	100	80	120	22.10	0.315	20		

Sample ID	N051615-001BDUP	SampType:	DUP	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164036	
Client ID:	ZZZZZZ	Batch ID:	R164036	TestNo:	EPA 300.0			Analysis Date:	7/19/2022	SeqNo:	4732113	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Sulfate	715.300	50						720.8	0.763	20		

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	N051615-001BMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164036
Client ID:	ZZZZZZ	Batch ID:	R164036	TestNo:	EPA 300.0			Analysis Date:	7/19/2022	SeqNo:	4732114

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	1124.740	50	400.0	720.8	101	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	LCS-R163932_NO3	SampType:	LCS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163932
Client ID:	LCSW	Batch ID:	R163932	TestNo:	EPA 300.0			Analysis Date:	7/14/2022	SeqNo:	4722261

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.219	0.050	1.250	0	97.5	90	110				

Sample ID	MB-R163932_NO3	SampType:	MBLK	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163932
Client ID:	PBW	Batch ID:	R163932	TestNo:	EPA 300.0			Analysis Date:	7/14/2022	SeqNo:	4722262

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID	N051615-002BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163932
Client ID:	ZZZZZZ	Batch ID:	R163932	TestNo:	EPA 300.0			Analysis Date:	7/14/2022	SeqNo:	4722271

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	14.750	0.50	12.50	2.773	95.8	80	120				

Sample ID	N051615-002BMSD	SampType:	MSD	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163932
Client ID:	ZZZZZZ	Batch ID:	R163932	TestNo:	EPA 300.0			Analysis Date:	7/14/2022	SeqNo:	4722272

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	14.978	0.50	12.50	2.773	97.6	80	120	14.75	1.53	20	

Sample ID	N051609-001BDUP	SampType:	DUP	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163932
Client ID:	ZZZZZZ	Batch ID:	R163932	TestNo:	EPA 300.0			Analysis Date:	7/14/2022	SeqNo:	4722275

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	0.505	0.50						0.4900	3.02	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	N051609-001BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	163932
Client ID:	ZZZZZZ	Batch ID:	R163932	TestNo:	EPA 300.0			Analysis Date:	7/14/2022	SeqNo:	4722276

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.388	0.50	12.50	0.4900	95.2	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02D-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 8:52:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220714B**	QC Batch: **R163952**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/14/2022 11:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02S-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 8:19:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220714B**	QC Batch: **R163952**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/15/2022 12:08 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-03D-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220714B**	QC Batch: **R163952**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/15/2022 12:23 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220714B**	QC Batch: **R163952**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/14/2022 11:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-71-035-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:46:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220714B**	QC Batch: **R163952**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/15/2022 12:39 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-26-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 2:29:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220714B**	QC Batch: **R163952**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/15/2022 01:41 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-51-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 2:26:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220715A**	QC Batch: **R163991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/15/2022 02:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-070-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 9:17:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220715A**	QC Batch: **R163991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/15/2022 03:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-100-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 11:05:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220715A**	QC Batch: **R163991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/15/2022 07:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-904-Q322
Lab Order:	N051615	**Collection Date:**	7/13/2022 11:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220715A**	QC Batch: **R163991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/15/2022 08:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-130-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:18:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220715A**	QC Batch: **R163991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/15/2022 04:41 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID **LCS-R163952**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163952**
Client ID: **LCSW**	Batch ID: **R163952**	TestNo: **SM 5310C**		Analysis Date: **7/14/2022**	SeqNo: **4722144**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.026	1.0	5.000	0	101	85	115				

Sample ID **MB-R163952**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163952**
Client ID: **PBW**	Batch ID: **R163952**	TestNo: **SM 5310C**		Analysis Date: **7/14/2022**	SeqNo: **4722145**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID **N051612-005CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163952**
Client ID: **ZZZZZZ**	Batch ID: **R163952**	TestNo: **SM 5310C**		Analysis Date: **7/14/2022**	SeqNo: **4722147**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.162	1.0	5.000	0.1765	99.7	75	125				

Sample ID **N051612-005CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163952**
Client ID: **ZZZZZZ**	Batch ID: **R163952**	TestNo: **SM 5310C**		Analysis Date: **7/14/2022**	SeqNo: **4722155**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.233	1.0	5.000	0.1765	101	75	125	5.162	1.35	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID **MB-R163991**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163991**
Client ID: **PBW**	Batch ID: **R163991**	TestNo: **SM 5310C**		Analysis Date: **7/15/2022**	SeqNo: **4723543**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID **LCS-R163991**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163991**
Client ID: **LCSW**	Batch ID: **R163991**	TestNo: **SM 5310C**		Analysis Date: **7/15/2022**	SeqNo: **4723544**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.040	1.0	5.000	0	101	85	115				

Sample ID **N051611-002DMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163991**
Client ID: **ZZZZZZ**	Batch ID: **R163991**	TestNo: **SM 5310C**		Analysis Date: **7/15/2022**	SeqNo: **4723563**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	95.274	20	100.0	8.114	87.2	75	125				

Sample ID **N051611-002DMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163991**
Client ID: **ZZZZZZ**	Batch ID: **R163991**	TestNo: **SM 5310C**		Analysis Date: **7/15/2022**	SeqNo: **4723564**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	95.604	20	100.0	8.114	87.5	75	125	95.27	0.346	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02D-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 8:52:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220717A**	QC Batch: **93769**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Iron	20	13	20		µg/L	1	7/17/2022 03:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02S-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 8:19:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220717A**	QC Batch: **93769**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/17/2022 04:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-03D-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220717A**	QC Batch: **93769**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/17/2022 04:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220717A**	QC Batch: **93769**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Iron	2500	13	20		µg/L	1	7/17/2022 04:16 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-71-035-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:46:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220717A**	QC Batch: **93769**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Iron	36	13	20		µg/L	1	7/17/2022 04:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-26-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 2:29:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220717A**	QC Batch: **93769**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Iron	76	13	20		µg/L	1	7/17/2022 04:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-51-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 2:26:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220717A**	QC Batch: **93769**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Iron	30	13	20		µg/L	1	7/17/2022 04:33 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-070-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 9:17:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220717A**	QC Batch: **93769**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Iron	35	13	20		µg/L	1	7/17/2022 04:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-100-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 11:05:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220717A**	QC Batch: **93769**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Iron	21	13	20		µg/L	1	7/17/2022 04:52 PM

Qualifiers:				
	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-904-Q322
Lab Order:	N051615	**Collection Date:**	7/13/2022 11:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220717A**	QC Batch: **93769**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Iron	23	13	20		µg/L	1	7/17/2022 04:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-130-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:18:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220717A**	QC Batch: **93769**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Iron	290	13	20		µg/L	1	7/17/2022 05:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	MB-93769	SampType:	MBLK	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164010
Client ID:	PBW	Batch ID:	93769	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	7/17/2022	SeqNo:	4726514

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID	LCS-93769	SampType:	LCS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164010
Client ID:	LCSW	Batch ID:	93769	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	7/17/2022	SeqNo:	4726515

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	91.238	20	100.0	0	91.2	85	115				

Sample ID	N051615-001C-MS	SampType:	MS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164010
Client ID:	ZZZZZZ	Batch ID:	93769	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	7/17/2022	SeqNo:	4726523

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	102.466	20	100.0	20.18	82.3	75	125				

Sample ID	N051615-001C-MSD	SampType:	MSD	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164010
Client ID:	ZZZZZZ	Batch ID:	93769	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	7/17/2022	SeqNo:	4726524

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	102.348	20	100.0	20.18	82.2	75	125	102.5	0.116	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051615-001

Client Sample ID: TW-02D-0722
Collection Date: 7/13/2022 8:52:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E**	QC Batch: **93772**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/16/2022 03:47 AM
Barium	26	0.083	1.0		µg/L	1	7/16/2022 03:47 AM
Manganese	54	0.026	0.50		µg/L	1	7/16/2022 03:47 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02S-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 8:19:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220720C**	QC Batch: **93772**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	0.52	0.050	0.10		µg/L	1	7/20/2022 04:37 PM
Barium	66	0.083	1.0		µg/L	1	7/16/2022 03:53 AM
Manganese	ND	0.026	0.50		µg/L	1	7/16/2022 03:53 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-03D-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E**	QC Batch: **93772**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/16/2022 03:59 AM
Barium	32	0.083	1.0		µg/L	1	7/16/2022 03:59 AM
Manganese	48	0.026	0.50		µg/L	1	7/16/2022 03:59 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E**	QC Batch: **93772**			PrepDate:	**7/15/2022**	Analyst: **DJ**	
Arsenic	3.3	0.050	0.10		µg/L	1	7/16/2022 04:05 AM
Barium	29	0.083	1.0		µg/L	1	7/16/2022 04:05 AM
Manganese	280	0.13	2.5		µg/L	5	7/18/2022 02:59 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-71-035-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:46:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E**	QC Batch: **93772**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/16/2022 04:11 AM
Barium	49	0.083	1.0		µg/L	1	7/16/2022 04:11 AM
Manganese	700	0.13	2.5		µg/L	5	7/18/2022 03:05 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-26-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 2:29:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E**	QC Batch: **93772**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/16/2022 04:46 AM
Barium	79	0.083	1.0		µg/L	1	7/16/2022 04:46 AM
Manganese	110	0.026	0.50		µg/L	1	7/16/2022 04:46 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-51-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 2:26:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220720C**	QC Batch: **93772**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/20/2022 04:55 PM
Barium	40	0.083	1.0		µg/L	1	7/20/2022 04:55 PM
Manganese	14	0.026	0.50		µg/L	1	7/20/2022 04:55 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-070-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 9:17:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220720C**	QC Batch: **93772**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	0.60	0.050	0.10		µg/L	1	7/20/2022 05:01 PM
Barium	41	0.083	1.0		µg/L	1	7/16/2022 04:52 AM
Manganese	3.5	0.026	0.50		µg/L	1	7/16/2022 04:52 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-100-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 11:05:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E**	QC Batch: **93772**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/16/2022 04:58 AM
Barium	74	0.083	1.0		µg/L	1	7/16/2022 04:58 AM
Manganese	ND	0.026	0.50		µg/L	1	7/16/2022 04:58 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-904-Q322
Lab Order:	N051615	**Collection Date:**	7/13/2022 11:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E**	QC Batch: **93772**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/16/2022 05:04 AM
Barium	79	0.083	1.0		µg/L	1	7/16/2022 05:04 AM
Manganese	ND	0.026	0.50		µg/L	1	7/16/2022 05:04 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-130-0722
Lab Order:	N051615	**Collection Date:**	7/13/2022 10:18:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051615-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E**	QC Batch: **93772**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/16/2022 05:10 AM
Barium	26	0.083	1.0		µg/L	1	7/16/2022 05:10 AM
Manganese	2.7	0.026	0.50		µg/L	1	7/16/2022 05:10 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051615
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID **MB-93772**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164015**
Client ID: **PBW**	Batch ID: **93772**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4727180**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID **LCS-93772**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164015**
Client ID: **LCSW**	Batch ID: **93772**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4727181**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.193	0.10	10.00	0	91.9	85	115				
Barium	9.863	1.0	10.00	0	98.6	85	115				
Manganese	100.071	0.50	100.0	0	100	85	115				

Sample ID **N051585-015C-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164015**
Client ID: **ZZZZZZ**	Batch ID: **93772**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4727189**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	8.678	0.10	10.00	0	86.8	75	125				
Barium	34.295	1.0	10.00	24.49	98.0	75	125				
Manganese	96.551	0.50	100.0	4.777	91.8	75	125				

Sample ID **N051585-015C-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164015**
Client ID: **ZZZZZZ**	Batch ID: **93772**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4727191**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	8.623	0.10	10.00	0	86.2	75	125	8.678	0.632	20	
Barium	33.444	1.0	10.00	24.49	89.5	75	125	34.29	2.51	20	
Manganese	95.077	0.50	100.0	4.777	90.3	75	125	96.55	1.54	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

N051615

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

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P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
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CHAIN OF CUSTODY RECORD

Page 1 of 1

| | | |

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	7/13/2022	Workorder:	N051615
Rep sample Temp (Deg C):	2.1/2.9	IR Gun ID:	3
Temp Blank:	☑ Yes ☐ No		
Carrier name:	ASSET		
Last 4 digits of Tracking No.:	NA	Packing Material Used:	None
Cooling process:	☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None		

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For:

Checklist Completed By: MBC YRJ 7/15/2022

for

Reviewed By: MBC 7/20/22

ASSET Laboratories

WORK ORDER Summary

14-Jul-22

WorkOrder: N051615

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/13/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051615-001A	TW-02D-0722	7/13/2022 8:52:00 AM	7/27/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-001B			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051615-001C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051615-001D			7/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051615-002A	TW-02S-0722	7/13/2022 8:19:00 AM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-002B			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051615-002C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051615-002D			7/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051615-003A	TW-03D-0722	7/13/2022 9:24:00 AM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-003B			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051615-003C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

14-Jul-22

WorkOrder: N051615

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/13/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051615-003C	TW-03D-0722	7/13/2022 9:24:00 AM	7/27/2022	Groundwater	EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051615-003D			7/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051615-004A	MW-21-0722	7/13/2022 10:10:00 AM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-004B			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051615-004C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051615-004D			7/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051615-005A	MW-21-EB-0722	7/13/2022 9:44:00 AM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-006A	MW-71-035-0722	7/13/2022 10:46:00 AM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-006B			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051615-006C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051615-006D			7/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051615-007A	EB-705-Q322	7/13/2022 1:02:00 PM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-008A	MW-26-0722	7/13/2022 2:29:00 PM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-008B			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

14-Jul-22

WorkOrder: N051615

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/13/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051615-008B	MW-26-0722	7/13/2022 2:29:00 PM	7/27/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051615-008C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051615-008D			7/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051615-009A	MW-51-0722	7/13/2022 2:26:00 PM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-009B			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051615-009C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051615-009D			7/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051615-010A	MW-20-070-0722	7/13/2022 9:17:00 AM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-010B			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051615-010C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051615-010D			7/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

14-Jul-22

WorkOrder: N051615

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/13/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051615-011A	MW-20-100-0722	7/13/2022 11:05:00 AM	7/27/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-011B			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051615-011C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051615-011D			7/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051615-012A	MW-904-Q322	7/13/2022 11:15:00 AM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-012B			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051615-012C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051615-012D			7/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051615-013A	MW-20-130-0722	7/13/2022 10:18:00 AM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-013B			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051615-013C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

14-Jul-22

WorkOrder: N051615

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/13/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051615-013C	MW-20-130-0722	7/13/2022 10:18:00 AM	7/27/2022	Groundwater	EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051615-013D			7/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051615-014A	EB-706-Q322	7/13/2022 2:45:00 PM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051615-015A	FOLDER	7/27/2022	7/27/2022		Folder	Folder	☐	☐	☐	LAB
			7/27/2022		Folder	Level IV Report	☐	☐	☐	LAB
			7/27/2022		Folder	Folder	☐	☐	☐	LAB

July 29, 2022

Brian Prowd
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N051617

RE: PG&E Topock - OMM TCS PWTF, 30106892

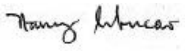
Attention: Brian Prowd

Enclosed are the results for sample(s) received on July 13, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,



Nancy Sibucao
Laboratory Director

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CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 6020_Total:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Chromium in QC samples N051617-001C-MS and N051617-001C-MSD since the analyte concentration in the sample is disproportionate to the spike level. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - OMM TCS PWTF, 30106892
Lab Order: N051617
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N051617-001A	Backwash Pre-filter-070722	Water	7/7/2022 8:00:00 AM	7/13/2022	7/29/2022
N051617-001B	Backwash Pre-filter-070722	Water	7/7/2022 8:00:00 AM	7/13/2022	7/29/2022
N051617-001C	Backwash Pre-filter-070722	Water	7/7/2022 8:00:00 AM	7/13/2022	7/29/2022
N051617-002A	Backwash Post-filter-070722	Water	7/7/2022 8:15:00 AM	7/13/2022	7/29/2022
N051617-002B	Backwash Post-filter-070722	Water	7/7/2022 8:15:00 AM	7/13/2022	7/29/2022
N051617-002C	Backwash Post-filter-070722	Water	7/7/2022 8:15:00 AM	7/13/2022	7/29/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Pre-filter-070722
Lab Order:	N051617	**Collection Date:**	7/7/2022 8:00:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N051617-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A**	QC Batch: **R163973**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	390	1.3	10		µg/L	50	7/15/2022 11:46 AM
TOTAL METALS BY ICPMS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220717C**	QC Batch: **93804**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Chromium	350	0.18	5.0		µg/L	5	7/17/2022 10:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Post-filter-070722
Lab Order:	N051617	**Collection Date:**	7/7/2022 8:15:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N051617-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A**	QC Batch: **R163973**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	390	1.3	10		µg/L	50	7/15/2022 12:05 PM
TOTAL METALS BY ICPMS							
		EPA 3010A			**EPA 6020**		
RunID: **NV00922-ICP8_220717C**	QC Batch: **93804**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Chromium	360	0.18	5.0		µg/L	5	7/17/2022 11:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051617
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **LCS-R163973**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **LCSW**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723141**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.961	0.20	5.000	0	99.2	90	110				

Sample ID **MB-R163973**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **PBW**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723142**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID **N051608-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723144**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	423.400	80	400.0	0	106	90	110				

Sample ID **N051608-002ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723146**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4947.250	100						4974	0.543	20	

Sample ID **N051608-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723147**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	7486.500	100	2500	4974	100	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051617
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **N051617-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723151**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	646.045	10	250.0	390.0	102	90	110				

Sample ID **N051617-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723153**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	637.595	10	250.0	391.8	98.3	90	110				

Sample ID **N051648-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723155**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.436	0.20	1.000	0.4452	99.1	90	110				

Sample ID **N051648-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723157**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.531	0.20	1.000	1.532	99.9	90	110				

Sample ID **N051648-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723159**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.506	0.20	1.000	0.4480	106	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051617
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **N051648-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723163**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.524	0.20	1.000	1.468	106	90	110				

Sample ID **N051648-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723165**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.975	0.20	1.000	1.942	103	90	110				

Sample ID **N051648-001AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723166**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.515	0.20	1.000	0.4452	107	90	110	1.436	5.30	20	

Sample ID **N051615-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723177**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.044	0.20	1.000	0	104	90	110				

Sample ID **N051615-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723179**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.025	0.20	1.000	0	102	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051617
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **N051634-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723180**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1801.640	40	1000	749.4	105	90	110				

Sample ID **N051634-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723184**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	215.744	4.0	100.0	115.5	100	90	110				

Sample ID **N051634-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723185**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2069.380	40	1000	1037	103	90	110				

Sample ID **N051634-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723186**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.034	0.20	1.000	0	103	90	110				

Sample ID **N051634-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723188**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4781.050	100	2500	2240	102	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051617
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N051615-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723189

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1022.160	20	500.0	486.8	107	90	110				

Sample ID	N051615-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723190

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	209.200	4.0	100.0	102.5	107	90	110				

Sample ID	N051615-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723191

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1048.670	20	500.0	517.4	106	90	110				

Sample ID	N051615-006AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	163973
Client ID:	ZZZZZZ	Batch ID:	R163973	TestNo:	EPA 218.6			Analysis Date:	7/15/2022	SeqNo:	4723195

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.490	1.0	5.000	0	110	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051617
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_W_CRPGE_TPK

Sample ID	MB-93804	SampType:	MBLK	TestCode:	6020_W_CRP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164057
Client ID:	PBW	Batch ID:	93804	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/17/2022	SeqNo:	4730964

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									

Sample ID	LCS-93804	SampType:	LCS	TestCode:	6020_W_CRP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164057
Client ID:	LCSW	Batch ID:	93804	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/17/2022	SeqNo:	4730965

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	8.954	1.0	10.00	0	89.5	85	115				

Sample ID	N051617-001C-MS	SampType:	MS	TestCode:	6020_W_CRP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164057
Client ID:	ZZZZZZ	Batch ID:	93804	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/17/2022	SeqNo:	4730969

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	400.514	5.0	10.00	351.3	492	75	125				S

Sample ID	N051617-001C-MSD	SampType:	MSD	TestCode:	6020_W_CRP	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164057
Client ID:	ZZZZZZ	Batch ID:	93804	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	7/17/2022	SeqNo:	4730970

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	408.951	5.0	10.00	351.3	577	75	125	400.5	2.08	20	S

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051617
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_W_CRPGE_TPK

Sample ID	**N051617-001C-PS**	SampType: **PS**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date:	RunNo: **164057**
Client ID:	**ZZZZZZ**	Batch ID: **93804**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/17/2022**	SeqNo: **4730968**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	377.088	5.0	50.00	351.3	51.6	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Pre-filter-070722
Lab Order:	N051617	**Collection Date:**	7/7/2022 8:00:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N051617-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220717A**	QC Batch: **93769**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Iron	20	13	20		µg/L	1	7/17/2022 05:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Post-filter-070722
Lab Order:	N051617	**Collection Date:**	7/7/2022 8:15:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N051617-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220717A**	QC Batch: **93769**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Iron	23	13	20		µg/L	1	7/17/2022 05:49 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051617
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	MB-93769	SampType:	MBLK	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164010
Client ID:	PBW	Batch ID:	93769	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	7/17/2022	SeqNo:	4726514

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID	LCS-93769	SampType:	LCS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164010
Client ID:	LCSW	Batch ID:	93769	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	7/17/2022	SeqNo:	4726515

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	91.238	20	100.0	0	91.2	85	115				

Sample ID	N051615-001C-MS	SampType:	MS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164010
Client ID:	ZZZZZZ	Batch ID:	93769	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	7/17/2022	SeqNo:	4726523

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	102.466	20	100.0	20.18	82.3	75	125				

Sample ID	N051615-001C-MSD	SampType:	MSD	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	7/15/2022	RunNo:	164010
Client ID:	ZZZZZZ	Batch ID:	93769	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	7/17/2022	SeqNo:	4726524

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	102.348	20	100.0	20.18	82.2	75	125	102.5	0.116	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Pre-filter-070722
Lab Order:	N051617	**Collection Date:**	7/7/2022 8:00:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N051617-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E**	QC Batch: **93772**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Manganese	2.0	0.026	0.50		µg/L	1	7/16/2022 05:16 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Post-filter-070722
Lab Order:	N051617	**Collection Date:**	7/7/2022 8:15:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N051617-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220715E**	QC Batch: **93772**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Manganese	1.9	0.026	0.50		µg/L	1	7/16/2022 05:22 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051617
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID **MB-93772**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164015**
Client ID: **PBW**	Batch ID: **93772**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4727180**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	ND	0.50									

Sample ID **LCS-93772**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164015**
Client ID: **LCSW**	Batch ID: **93772**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4727181**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	100.071	0.50	100.0	0	100	85	115				

Sample ID **N051585-015C-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164015**
Client ID: **ZZZZZZ**	Batch ID: **93772**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4727189**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	96.551	0.50	100.0	4.777	91.8	75	125				

Sample ID **N051585-015C-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164015**
Client ID: **ZZZZZZ**	Batch ID: **93772**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4727191**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	95.077	0.50	100.0	4.777	90.3	75	125	96.55	1.54	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

N051617

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Brian Prowd	Bill to: Marty Bloes	EDD Requirement		QA/QC		Sample Receipt Condition
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD		RTNE		Y N
Address: Roseville, CA 95678	Email: brian.prowd@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker		RWQCB	✓	1. Chilled X
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com	Labspec		CalTrans		2. Headspace
Submitted By: C.M. Goldman		P.O.# SWA-ASSET-C9817-051	Others	✓	LEVEL III		3. Container Intact X
Title: O.M. OPERATOR	Phone: 916-786-3302 Fax:	Phone: 949-727-1400. ext 200 Fax:	Specify: RWQCB		LEVEL IV		4. Seal Present
Signature: Date: 7.7.22	Sampled By: K.A. M.G.		Global ID:		Regulatory		5. IR number 3
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may				Specify State:		6. Method of Cooling: ICE
Project Name: PG&E Topock - OMM TCS PWTF	Signature: Date: 7-7-22						Sample Temp: 2.1°C
Project Number: 30106892							Courier: ASSET Tracking No.:

Matrix: Ground; Sediment; Potable; Soil; NPDES; Other Solid; Surface; Water (X)

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH, Filtered (250 mL poly)	Dissolved metals Iron, Manganese (SW6020) FF; HNO3; Filtered (500mL poly)	Total chromium (SW6020) No filter; HNO3 (500mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N051617-01	Backwash Pre-filter-070722	7/7/22	800 AM		X	X	X	E	3	PV	BNS	
2	-02	Backwash Post-filter-070722	7/7/22	815 AM		X	X	X	E	3	PV	BNS	
3													
4													
5													
7													
8													
9													
10													
11													
12													
13													
14													

Relinquished by (Signature and Printed Name): Date/Time: 7.13.22

Relinquished by (Signature and Printed Name): Date/Time: 7.13.22 427

Relinquished by (Signature and Printed Name): REL/REC: MBOARTIN Date/Time:

Relinquished by (Signature and Printed Name): Date/Time: 7/13/22 @ 1027

Relinquished by (Signature and Printed Name): MBOARTIN Date/Time: 7/13/22 @ 1850

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs =200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Turns are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of reports needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On: 7/13/2022 Workorder: N051617

Rep sample Temp (Deg C): 2.1 IR Gun ID: 3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For:

Checklist Completed By: MBC YRJ 7/15/2022

For:

Reviewed By: MBC 7/17/2022

ASSET Laboratories

WORK ORDER Summary

14-Jul-22

WorkOrder: N051617

Client ID: ARCUS02

Project: PG&E Topock - OMM TCS PWTF, 30106892 **QC Level:** Level IV **Date Received:** 7/13/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051617-001A	Backwash Pre-filter-070722	7/7/2022 8:00:00 AM	7/27/2022	Water	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051617-001B			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051617-001C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6020	TOTAL METALS BY ICPMS	☐	☐	☐	WW
N051617-002A	Backwash Post-filter-070722	7/7/2022 8:15:00 AM	7/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051617-002B			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051617-002C			7/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/27/2022		EPA 6020	TOTAL METALS BY ICPMS	☐	☐	☐	WW
N051617-003A	FOLDER	7/27/2022	7/27/2022		Folder	Folder	☐	☐	☐	LAB
			7/27/2022		Folder	Level IV Report	☐	☐	☐	LAB
			7/27/2022		Folder	Folder	☐	☐	☐	LAB

July 19, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N051634

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on July 14, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N051634

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for SM 5310C:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria in QC samples N051611-002DMS and N051611-002DMSD at several dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N051611-002D and MS/MSD were reported at 20x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N051634
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N051634-001A	MW-80-057-0722	Groundwater	7/14/2022 9:09:00 AM	7/14/2022	7/18/2022
N051634-001B	MW-80-057-0722	Groundwater	7/14/2022 9:09:00 AM	7/14/2022	7/18/2022
N051634-001C	MW-80-057-0722	Groundwater	7/14/2022 9:09:00 AM	7/14/2022	7/18/2022
N051634-001D	MW-80-057-0722	Groundwater	7/14/2022 9:09:00 AM	7/14/2022	7/18/2022
N051634-002A	MW-80-082-0722	Groundwater	7/14/2022 8:31:00 AM	7/14/2022	7/18/2022
N051634-002B	MW-80-082-0722	Groundwater	7/14/2022 8:31:00 AM	7/14/2022	7/18/2022
N051634-002C	MW-80-082-0722	Groundwater	7/14/2022 8:31:00 AM	7/14/2022	7/18/2022
N051634-002D	MW-80-082-0722	Groundwater	7/14/2022 8:31:00 AM	7/14/2022	7/18/2022
N051634-003A	MW-79-058-0722	Groundwater	7/14/2022 11:05:00 AM	7/14/2022	7/18/2022
N051634-003B	MW-79-058-0722	Groundwater	7/14/2022 11:05:00 AM	7/14/2022	7/18/2022
N051634-003C	MW-79-058-0722	Groundwater	7/14/2022 11:05:00 AM	7/14/2022	7/18/2022
N051634-003D	MW-79-058-0722	Groundwater	7/14/2022 11:05:00 AM	7/14/2022	7/18/2022
N051634-004A	MW-79-102-0722	Groundwater	7/14/2022 10:24:00 AM	7/14/2022	7/18/2022
N051634-004B	MW-79-102-0722	Groundwater	7/14/2022 10:24:00 AM	7/14/2022	7/18/2022
N051634-004C	MW-79-102-0722	Groundwater	7/14/2022 10:24:00 AM	7/14/2022	7/18/2022
N051634-004D	MW-79-102-0722	Groundwater	7/14/2022 10:24:00 AM	7/14/2022	7/18/2022
N051634-005A	EB-708-Q322	Groundwater	7/14/2022 12:27:00 PM	7/14/2022	7/18/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-057-0722
Lab Order:	N051634	**Collection Date:**	7/14/2022 9:09:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051634-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A**	QC Batch: **R163973**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	750	5.0	40		µg/L	200	7/15/2022 02:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051634-002

Client Sample ID: MW-80-082-0722
Collection Date: 7/14/2022 8:31:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A**	QC Batch: **R163973**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	120	0.50	4.0		µg/L	20	7/15/2022 05:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-058-0722
Lab Order:	N051634	**Collection Date:**	7/14/2022 11:05:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051634-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A**	QC Batch: **R163973**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	2200	13	100		µg/L	500	7/15/2022 06:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-102-0722
Lab Order:	N051634	**Collection Date:**	7/14/2022 10:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051634-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220715A**	QC Batch: **R163973**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	1000	5.0	40		µg/L	200	7/15/2022 02:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-708-Q322
Lab Order:	N051634	**Collection Date:**	7/14/2022 12:27:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051634-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
EPA 218.6							
RunID: **NV00922-IC7_220715A** QC Batch: **R163973** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/15/2022 03:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **LCS-R163973**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **LCSW**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723141**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.961	0.20	5.000	0	99.2	90	110				

Sample ID: **MB-R163973**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **PBW**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723142**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **N051608-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723144**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	423.400	80	400.0	0	106	90	110				

Sample ID: **N051608-002ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723146**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4947.250	100						4974	0.543	20	

Sample ID: **N051608-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723147**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	7486.500	100	2500	4974	100	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N051617-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723151**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	646.045	10	250.0	390.0	102	90	110				

Sample ID: **N051617-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723153**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	637.595	10	250.0	391.8	98.3	90	110				

Sample ID: **N051648-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723155**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.436	0.20	1.000	0.4452	99.1	90	110				

Sample ID: **N051648-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723157**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.531	0.20	1.000	1.532	99.9	90	110				

Sample ID: **N051648-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723159**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.506	0.20	1.000	0.4480	106	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N051648-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163973**
Client ID: **ZZZZZZ** Batch ID: **R163973** TestNo: **EPA 218.6** Analysis Date: **7/15/2022** SeqNo: **4723163**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.524	0.20	1.000	1.468	106	90	110				

Sample ID: **N051648-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163973**
Client ID: **ZZZZZZ** Batch ID: **R163973** TestNo: **EPA 218.6** Analysis Date: **7/15/2022** SeqNo: **4723165**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2.975	0.20	1.000	1.942	103	90	110				

Sample ID: **N051648-001AMSD** SampType: **MSD** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163973**
Client ID: **ZZZZZZ** Batch ID: **R163973** TestNo: **EPA 218.6** Analysis Date: **7/15/2022** SeqNo: **4723166**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.515	0.20	1.000	0.4452	107	90	110	1.436	5.30	20	

Sample ID: **N051615-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163973**
Client ID: **ZZZZZZ** Batch ID: **R163973** TestNo: **EPA 218.6** Analysis Date: **7/15/2022** SeqNo: **4723177**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.044	0.20	1.000	0	104	90	110				

Sample ID: **N051615-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163973**
Client ID: **ZZZZZZ** Batch ID: **R163973** TestNo: **EPA 218.6** Analysis Date: **7/15/2022** SeqNo: **4723179**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.025	0.20	1.000	0	102	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N051634-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163973**
Client ID: **ZZZZZZ** Batch ID: **R163973** TestNo: **EPA 218.6** Analysis Date: **7/15/2022** SeqNo: **4723180**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1801.640	40	1000	749.4	105	90	110				

Sample ID: **N051634-002AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163973**
Client ID: **ZZZZZZ** Batch ID: **R163973** TestNo: **EPA 218.6** Analysis Date: **7/15/2022** SeqNo: **4723184**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	215.744	4.0	100.0	115.5	100	90	110				

Sample ID: **N051634-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163973**
Client ID: **ZZZZZZ** Batch ID: **R163973** TestNo: **EPA 218.6** Analysis Date: **7/15/2022** SeqNo: **4723185**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2069.380	40	1000	1037	103	90	110				

Sample ID: **N051634-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163973**
Client ID: **ZZZZZZ** Batch ID: **R163973** TestNo: **EPA 218.6** Analysis Date: **7/15/2022** SeqNo: **4723186**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.034	0.20	1.000	0	103	90	110				

Sample ID: **N051634-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **163973**
Client ID: **ZZZZZZ** Batch ID: **R163973** TestNo: **EPA 218.6** Analysis Date: **7/15/2022** SeqNo: **4723188**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4781.050	100	2500	2240	102	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N051615-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723189**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1022.160	20	500.0	486.8	107	90	110				

Sample ID: **N051615-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723190**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	209.200	4.0	100.0	102.5	107	90	110				

Sample ID: **N051615-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723191**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1048.670	20	500.0	517.4	106	90	110				

Sample ID: **N051615-006AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **163973**
Client ID: **ZZZZZZ**	Batch ID: **R163973**	TestNo: **EPA 218.6**		Analysis Date: **7/15/2022**	SeqNo: **4723195**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.490	1.0	5.000	0	110	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051634-001

Client Sample ID: MW-80-057-0722
Collection Date: 7/14/2022 9:09:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220715B** QC Batch: **R163968**			PrepDate:				Analyst: **RAB**
Sulfate	490	3.0	25		mg/L	50	7/16/2022 05:45 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220715A** QC Batch: **R163967**			PrepDate:				Analyst: **RAB**
Nitrate as N	8.2	0.095	0.50		mg/L	10	7/15/2022 05:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051634-002

Client Sample ID: MW-80-082-0722
Collection Date: 7/14/2022 8:31:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
EPA 300.0							
RunID: **NV00922-IC8_220715B** QC Batch: **R163968** PrepDate: Analyst: **RAB**							
Sulfate	550	3.0	25		mg/L	50	7/16/2022 06:01 AM
ANIONS BY ION CHROMATOGRAPHY							
EPA 300.0							
RunID: **NV00922-IC8_220715A** QC Batch: **R163967** PrepDate: Analyst: **RAB**							
Nitrate as N	0.59	0.095	0.50		mg/L	10	7/15/2022 05:25 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051634-003

Client Sample ID: MW-79-058-0722
Collection Date: 7/14/2022 11:05:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220715B** QC Batch: **R163968**			PrepDate:				Analyst: **RAB**
Sulfate	440	3.0	25		mg/L	50	7/16/2022 06:18 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220715A** QC Batch: **R163967**			PrepDate:				Analyst: **RAB**
Nitrate as N	7.1	0.095	0.50		mg/L	10	7/15/2022 05:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051634-004

Client Sample ID: MW-79-102-0722
Collection Date: 7/14/2022 10:24:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220715B** QC Batch: **R163968**			PrepDate:				Analyst: **RAB**
Sulfate	610	3.0	25		mg/L	50	7/16/2022 06:35 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220715A** QC Batch: **R163967**			PrepDate:				Analyst: **RAB**
Nitrate as N	2.2	0.095	0.50		mg/L	10	7/15/2022 05:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **LCS-R163968_SO4**	SampType: **LCS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **163968**
Client ID: **LCSW**	Batch ID: **R163968**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722922**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	3.982	0.50	4.000	0	99.6	90	110				

Sample ID: **MB-R163968_SO4**	SampType: **MBLK**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **163968**
Client ID: **PBW**	Batch ID: **R163968**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722923**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.50									

Sample ID: **N051634-001BMS**	SampType: **MS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **163968**
Client ID: **ZZZZZZ**	Batch ID: **R163968**	TestNo: **EPA 300.0**		Analysis Date: **7/16/2022**	SeqNo: **4722934**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	695.435	25	200.0	491.4	102	80	120				

Sample ID: **N051634-001BMSD**	SampType: **MSD**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **163968**
Client ID: **ZZZZZZ**	Batch ID: **R163968**	TestNo: **EPA 300.0**		Analysis Date: **7/16/2022**	SeqNo: **4722935**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	696.840	25	200.0	491.4	103	80	120	695.4	0.202	20	

Sample ID: **N051634-003BDUP**	SampType: **DUP**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **163968**
Client ID: **ZZZZZZ**	Batch ID: **R163968**	TestNo: **EPA 300.0**		Analysis Date: **7/16/2022**	SeqNo: **4722936**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	435.075	25						436.0	0.202	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R163967_NO3**	SampType: **MBLK**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163967**
Client ID: **PBW**	Batch ID: **R163967**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722853**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R163967_NO3**	SampType: **LCS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163967**
Client ID: **LCSW**	Batch ID: **R163967**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722854**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.232	0.050	1.250	0	98.6	90	110				

Sample ID: **N051650-004BMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163967**
Client ID: **ZZZZZZ**	Batch ID: **R163967**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722877**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	3.493	0.10	2.500	0.9728	101	80	120				

Sample ID: **N051650-004BMSD**	SampType: **MSD**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163967**
Client ID: **ZZZZZZ**	Batch ID: **R163967**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722878**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	3.467	0.10	2.500	0.9728	99.8	80	120	3.493	0.753	20	

Sample ID: **N051651-001BDUP**	SampType: **DUP**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163967**
Client ID: **ZZZZZZ**	Batch ID: **R163967**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722879**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	13.180	0.50						13.21	0.212	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **LCS-R163968_NO3**	SampType: **LCS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163968**
Client ID: **LCSW**	Batch ID: **R163968**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722888**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.217	0.050	1.250	0	97.4	90	110				

Sample ID: **MB-R163968_NO3**	SampType: **MBLK**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163968**
Client ID: **PBW**	Batch ID: **R163968**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722889**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **N051651-004BMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163968**
Client ID: **ZZZZZZ**	Batch ID: **R163968**	TestNo: **EPA 300.0**		Analysis Date: **7/16/2022**	SeqNo: **4722910**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	9.291	0.25	6.250	3.062	99.7	80	120				

Sample ID: **N051651-004BMSD**	SampType: **MSD**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163968**
Client ID: **ZZZZZZ**	Batch ID: **R163968**	TestNo: **EPA 300.0**		Analysis Date: **7/16/2022**	SeqNo: **4722911**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	9.379	0.25	6.250	3.062	101	80	120	9.291	0.937	20	

Sample ID: **N051652-013BDUP**	SampType: **DUP**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163968**
Client ID: **ZZZZZZ**	Batch ID: **R163968**	TestNo: **EPA 300.0**		Analysis Date: **7/16/2022**	SeqNo: **4722912**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.776	0.50						6.596	2.69	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **N051652-013BMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163968**
Client ID: **ZZZZZZ**	Batch ID: **R163968**	TestNo: **EPA 300.0**		Analysis Date: **7/16/2022**	SeqNo: **4722913**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	19.243	0.50	12.50	6.596	101	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-057-0722
Lab Order:	N051634	**Collection Date:**	7/14/2022 9:09:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051634-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220715A**	QC Batch: **R163991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/15/2022 04:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-082-0722
Lab Order:	N051634	**Collection Date:**	7/14/2022 8:31:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051634-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220715A**	QC Batch: **R163991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/15/2022 05:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-058-0722
Lab Order:	N051634	**Collection Date:**	7/14/2022 11:05:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051634-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220715A**	QC Batch: **R163991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/15/2022 05:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-102-0722
Lab Order:	N051634	**Collection Date:**	7/14/2022 10:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051634-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220715A**	QC Batch: **R163991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/15/2022 05:43 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R163991**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163991**
Client ID: **PBW**	Batch ID: **R163991**	TestNo: **SM 5310C**		Analysis Date: **7/15/2022**	SeqNo: **4723543**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R163991**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163991**
Client ID: **LCSW**	Batch ID: **R163991**	TestNo: **SM 5310C**		Analysis Date: **7/15/2022**	SeqNo: **4723544**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.040	1.0	5.000	0	101	85	115				

Sample ID: **N051611-002DMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163991**
Client ID: **ZZZZZZ**	Batch ID: **R163991**	TestNo: **SM 5310C**		Analysis Date: **7/15/2022**	SeqNo: **4723563**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	95.274	20	100.0	8.114	87.2	75	125				

Sample ID: **N051611-002DMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163991**
Client ID: **ZZZZZZ**	Batch ID: **R163991**	TestNo: **SM 5310C**		Analysis Date: **7/15/2022**	SeqNo: **4723564**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	95.604	20	100.0	8.114	87.5	75	125	95.27	0.346	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-057-0722
Lab Order:	N051634	**Collection Date:**	7/14/2022 9:09:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051634-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/17/2022 10:16 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051634-002

Client Sample ID: MW-80-082-0722
Collection Date: 7/14/2022 8:31:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/17/2022 10:21 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051634-003

Client Sample ID: MW-79-058-0722
Collection Date: 7/14/2022 11:05:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/17/2022 10:54 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-102-0722
Lab Order:	N051634	**Collection Date:**	7/14/2022 10:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051634-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/17/2022 11:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-93805**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164010**
Client ID: **PBW**	Batch ID: **93805**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/17/2022**	SeqNo: **4726451**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-93805**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164010**
Client ID: **LCSW**	Batch ID: **93805**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/17/2022**	SeqNo: **4726452**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	99.924	20	100.0	0	99.9	85	115				

Sample ID: **N051634-002C-MS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164010**
Client ID: **ZZZZZZ**	Batch ID: **93805**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/17/2022**	SeqNo: **4726457**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	136.505	20	100.0	17.50	119	75	125				

Sample ID: **N051634-002C-MSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164010**
Client ID: **ZZZZZZ**	Batch ID: **93805**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/17/2022**	SeqNo: **4726458**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	126.620	20	100.0	17.50	109	75	125	136.5	7.51	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051634-001

Client Sample ID: MW-80-057-0722
Collection Date: 7/14/2022 9:09:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP7_220716A**	QC Batch: **93803**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	1.9	0.050	0.10		µg/L	1	7/16/2022 12:09 PM
Barium	65	0.083	1.0		µg/L	1	7/16/2022 12:09 PM
Manganese	7.0	0.026	0.50		µg/L	1	7/16/2022 12:09 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051634-002

Client Sample ID: MW-80-082-0722
Collection Date: 7/14/2022 8:31:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP7_220716A**	QC Batch: **93803**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	5.5	0.050	0.10		µg/L	1	7/16/2022 01:20 PM
Barium	39	0.083	1.0		µg/L	1	7/16/2022 01:20 PM
Manganese	9.0	0.026	0.50		µg/L	1	7/16/2022 01:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051634-003

Client Sample ID: MW-79-058-0722
Collection Date: 7/14/2022 11:05:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220717A**	QC Batch: **93803**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/17/2022 11:44 PM
Barium	140	0.083	1.0		µg/L	1	7/16/2022 01:32 PM
Manganese	ND	0.026	0.50		µg/L	1	7/16/2022 01:32 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051634-004

Client Sample ID: MW-79-102-0722
Collection Date: 7/14/2022 10:24:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP7_220716A**	QC Batch: **93803**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	4.1	0.050	0.10		µg/L	1	7/16/2022 01:44 PM
Barium	40	0.083	1.0		µg/L	1	7/16/2022 01:44 PM
Manganese	1.9	0.026	0.50		µg/L	1	7/16/2022 01:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051634
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-93803**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164038**
Client ID: **PBW**	Batch ID: **93803**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4729143**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID: **LCS-93803**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164038**
Client ID: **LCSW**	Batch ID: **93803**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4729144**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.573	0.10	10.00	0	95.7	85	115				
Barium	9.589	1.0	10.00	0	95.9	85	115				
Manganese	93.845	0.50	100.0	0	93.8	85	115				

Sample ID: **N051634-001C-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164038**
Client ID: **ZZZZZZ**	Batch ID: **93803**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4729150**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.104	0.10	10.00	1.868	102	75	125				
Barium	76.310	1.0	10.00	65.28	110	75	125				
Manganese	89.997	0.50	100.0	6.988	83.0	75	125				

Sample ID: **N051634-001C-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164038**
Client ID: **ZZZZZZ**	Batch ID: **93803**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/16/2022**	SeqNo: **4729154**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	11.865	0.10	10.00	1.868	100	75	125	12.10	2.00	20	
Barium	75.873	1.0	10.00	65.28	106	75	125	76.31	0.574	20	
Manganese	91.534	0.50	100.0	6.988	84.5	75	125	90.00	1.69	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ASSET LABORATORIES

ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

Page 1 of 1

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement	QA/QC	Sample Receipt Condition	Y N
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD	RTNE	1. Chilled	X
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker	RWQCB ✓	2. Headspace	
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Labspec	CalTrans	3. Container Intact	X
Submitted By: Reggie Tep			Others ✓	LEVEL III	4. Seal Present	X
Title: Field Tech	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	Specify: RWQCB	LEVEL IV	5. IR number	3
Signature: Date: 7/14/22	Sampled By: Reggie Tep		Global ID:	Regulatory	6. Method of Cooling: ICE	
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for			Specify State:	Sample Temp: 2.3°C / 2.5°C	
Project Name: PG&E Topock - PCM	Signature: Date: 7/14/22	Matrix: Ground X Sediment; Potable Soil; NPDES Other Solid; Surface			Courier: ASSET	
Project Number: 30121866.3Q22GW					Tracking No.:	

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N051634-01	MW-80-057-0722	7/14/2022	9:09		X	X	X			X			C	6	P	BNS	
2	-02	MW-80-082-0722	7/14/2022	8:31		X	X	X			X			C	6	P	BNS	
3	-03	MW-79-058-0722	7/14/2022	11:05		X	X	X			X			C	6	P	BNS	
4	-04	MW-79-102-0722	7/14/2022	10:24		X	X	X			X			C	6	P	BNS	
5	-05	EB-708-Q322	7/14/2022	12:27		X								E	1	P	BNS	
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Reggie Tep	7/14/22 1533	MACARTHUR	7/14/22 @1533
MACARTHUR	7/14/22 1715	Giselle Pamela Flores	7/14/22 1715

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [X] C = 2 Workdays
- [ ] D = 3 Workdays
- [ ] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs =200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy

Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On: 7/14/2022 Workorder: N051634

Rep sample Temp (Deg C): 2.3/2.5 IR Gun ID: 3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For:

Checklist Completed By: GGJ YRJ 7/15/2022

For:

Reviewed By: MBC 7/17/2022

ASSET Laboratories

WORK ORDER Summary

17-Jul-22

WorkOrder: N051634

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/14/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051634-001A	MW-80-057-0722	7/14/2022 9:09:00 AM	7/18/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051634-001B			7/18/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/18/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051634-001C			7/18/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/18/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/18/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/18/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051634-001D			7/18/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051634-002A	MW-80-082-0722	7/14/2022 8:31:00 AM	7/18/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051634-002B			7/18/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/18/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051634-002C			7/18/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/18/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/18/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/18/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051634-002D			7/18/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051634-003A	MW-79-058-0722	7/14/2022 11:05:00 AM	7/18/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051634-003B			7/18/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/18/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051634-003C			7/18/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/18/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/18/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

17-Jul-22

WorkOrder: N051634

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/14/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051634-003C	MW-79-058-0722	7/14/2022 11:05:00 AM	7/18/2022	Groundwater	EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051634-003D			7/18/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051634-004A	MW-79-102-0722	7/14/2022 10:24:00 AM	7/18/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051634-004B			7/18/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/18/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051634-004C			7/18/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/18/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/18/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/18/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051634-004D			7/18/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051634-005A	EB-708-Q322	7/14/2022 12:27:00 PM	7/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N051634-006A	FOLDER	7/18/2022	7/18/2022		Folder	Folder	☐	☐	☐	
			7/18/2022		Folder	Level IV Report	☐	☐	☐	
			7/18/2022		Folder	Folder	☐	☐	☐	

July 28, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N051635

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on July 14, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Dilution was necessary for sample N051635-003 due to matrix interference. Sample was analyzed at lower dilution however matrix spike recovery and retention time criteria were not met indicating possible matrix interference. Sample was reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for EPA 6020_Dissolved:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for some analytes in QC samples N051727-002D-MS and N051727-002D-MSD since the analyte concentration in the sample is disproportionate to the spike level. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for SM 5310C:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria in QC samples N051651-004DMS and N051651-004DMSD at lower dilution possibly due to matrix interference. QC samples were diluted and recovery passed criteria. Thus sample reference N051651-004 and MS/MSD were reported at 5x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N051635
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N051635-001A	MW-44-115-0722	Groundwater	7/14/2022 10:24:00 AM	7/14/2022	7/28/2022
N051635-001B	MW-44-115-0722	Groundwater	7/14/2022 10:24:00 AM	7/14/2022	7/28/2022
N051635-001C	MW-44-115-0722	Groundwater	7/14/2022 10:24:00 AM	7/14/2022	7/28/2022
N051635-001D	MW-44-115-0722	Groundwater	7/14/2022 10:24:00 AM	7/14/2022	7/28/2022
N051635-002A	MW-906-Q322	Groundwater	7/14/2022 10:34:00 AM	7/14/2022	7/28/2022
N051635-002B	MW-906-Q322	Groundwater	7/14/2022 10:34:00 AM	7/14/2022	7/28/2022
N051635-002C	MW-906-Q322	Groundwater	7/14/2022 10:34:00 AM	7/14/2022	7/28/2022
N051635-002D	MW-906-Q322	Groundwater	7/14/2022 10:34:00 AM	7/14/2022	7/28/2022
N051635-003A	MW-44-125-0722	Groundwater	7/14/2022 10:02:00 AM	7/14/2022	7/28/2022
N051635-003B	MW-44-125-0722	Groundwater	7/14/2022 10:02:00 AM	7/14/2022	7/28/2022
N051635-003C	MW-44-125-0722	Groundwater	7/14/2022 10:02:00 AM	7/14/2022	7/28/2022
N051635-003D	MW-44-125-0722	Groundwater	7/14/2022 10:02:00 AM	7/14/2022	7/28/2022
N051635-004A	MW-45-095a-0722	Groundwater	7/14/2022 8:33:00 AM	7/14/2022	7/28/2022
N051635-004B	MW-45-095a-0722	Groundwater	7/14/2022 8:33:00 AM	7/14/2022	7/28/2022
N051635-004C	MW-45-095a-0722	Groundwater	7/14/2022 8:33:00 AM	7/14/2022	7/28/2022
N051635-004D	MW-45-095a-0722	Groundwater	7/14/2022 8:33:00 AM	7/14/2022	7/28/2022
N051635-005A	MW-34-080-0722	Groundwater	7/14/2022 8:04:00 AM	7/14/2022	7/28/2022
N051635-005B	MW-34-080-0722	Groundwater	7/14/2022 8:04:00 AM	7/14/2022	7/28/2022
N051635-005C	MW-34-080-0722	Groundwater	7/14/2022 8:04:00 AM	7/14/2022	7/28/2022
N051635-005D	MW-34-080-0722	Groundwater	7/14/2022 8:04:00 AM	7/14/2022	7/28/2022
N051635-006A	MW-36-090-0722	Groundwater	7/14/2022 9:05:00 AM	7/14/2022	7/28/2022
N051635-006B	MW-36-090-0722	Groundwater	7/14/2022 9:05:00 AM	7/14/2022	7/28/2022
N051635-006C	MW-36-090-0722	Groundwater	7/14/2022 9:05:00 AM	7/14/2022	7/28/2022
N051635-006D	MW-36-090-0722	Groundwater	7/14/2022 9:05:00 AM	7/14/2022	7/28/2022
N051635-007A	MW-36-100-0722	Groundwater	7/14/2022 9:24:00 AM	7/14/2022	7/28/2022
N051635-007B	MW-36-100-0722	Groundwater	7/14/2022 9:24:00 AM	7/14/2022	7/28/2022
N051635-007C	MW-36-100-0722	Groundwater	7/14/2022 9:24:00 AM	7/14/2022	7/28/2022
N051635-007D	MW-36-100-0722	Groundwater	7/14/2022 9:24:00 AM	7/14/2022	7/28/2022
N051635-008A	MW-905-Q322	Groundwater	7/14/2022 9:34:00 AM	7/14/2022	7/28/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N051635
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N051635-008B	MW-905-Q322	Groundwater	7/14/2022 9:34:00 AM	7/14/2022	7/28/2022
N051635-008C	MW-905-Q322	Groundwater	7/14/2022 9:34:00 AM	7/14/2022	7/28/2022
N051635-008D	MW-905-Q322	Groundwater	7/14/2022 9:34:00 AM	7/14/2022	7/28/2022
N051635-009A	EB-707-Q322	Groundwater	7/14/2022 12:05:00 PM	7/14/2022	7/28/2022
N051635-010A	MW-78-070-0722	Groundwater	7/14/2022 11:58:00 AM	7/14/2022	7/28/2022
N051635-010B	MW-78-070-0722	Groundwater	7/14/2022 11:58:00 AM	7/14/2022	7/28/2022
N051635-010C	MW-78-070-0722	Groundwater	7/14/2022 11:58:00 AM	7/14/2022	7/28/2022
N051635-010D	MW-78-070-0722	Groundwater	7/14/2022 11:58:00 AM	7/14/2022	7/28/2022
N051635-011A	MW-78-142-0722	Groundwater	7/14/2022 12:07:00 PM	7/14/2022	7/28/2022
N051635-011B	MW-78-142-0722	Groundwater	7/14/2022 12:07:00 PM	7/14/2022	7/28/2022
N051635-011C	MW-78-142-0722	Groundwater	7/14/2022 12:07:00 PM	7/14/2022	7/28/2022
N051635-011D	MW-78-142-0722	Groundwater	7/14/2022 12:07:00 PM	7/14/2022	7/28/2022
N051635-012A	MW-907-Q322	Groundwater	7/14/2022 12:17:00 PM	7/14/2022	7/28/2022
N051635-012B	MW-907-Q322	Groundwater	7/14/2022 12:17:00 PM	7/14/2022	7/28/2022
N051635-012C	MW-907-Q322	Groundwater	7/14/2022 12:17:00 PM	7/14/2022	7/28/2022
N051635-012D	MW-907-Q322	Groundwater	7/14/2022 12:17:00 PM	7/14/2022	7/28/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-115-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 10:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
EPA 218.6							
RunID: **NV00922-IC7_220726A** QC Batch: **R164319** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/26/2022 03:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-906-Q322
Lab Order:	N051635	**Collection Date:**	7/14/2022 10:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220726A**	QC Batch: **R164319**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/26/2022 03:19 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-125-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 10:02:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220726A**	QC Batch: **R164319**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	7/26/2022 09:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-45-095a-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 8:33:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220726A**	QC Batch: **R164319**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/26/2022 03:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-080-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 8:04:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220726A**	QC Batch: **R164319**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/26/2022 05:32 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-090-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 9:05:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220726A**	QC Batch: **R164319**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/26/2022 05:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-100-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220726A**	QC Batch: **R164319**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/26/2022 06:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-905-Q322
Lab Order:	N051635	**Collection Date:**	7/14/2022 9:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
EPA 218.6							
RunID: **NV00922-IC7_220726A** QC Batch: **R164319** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/26/2022 07:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-707-Q322
Lab Order:	N051635	**Collection Date:**	7/14/2022 12:05:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220726A**	QC Batch: **R164319**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	7/26/2022 07:24 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-070-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 11:58:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220726A**	QC Batch: **R164319**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	190	0.50	4.0		µg/L	20	7/26/2022 08:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-142-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 12:07:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220726A**	QC Batch: **R164319**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	4900	25	200		µg/L	1000	7/26/2022 05:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-907-Q322
Lab Order:	N051635	**Collection Date:**	7/14/2022 12:17:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220726A**	QC Batch: **R164319**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	4800	25	200		µg/L	1000	7/26/2022 07:43 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R164319**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **PBW**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750722**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R164319**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **LCSW**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750723**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.921	0.20	5.000	0	98.4	90	110				

Sample ID: **N051635-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750725**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.080	0.20	1.000	0	108	90	110				

Sample ID: **N051635-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750727**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.025	0.20	1.000	0	102	90	110				

Sample ID: **N051635-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750729**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.956	0.20	1.000	0	95.6	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N051635-011AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750733**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	9950.800	200	5000	4899	101	90	110				

Sample ID: **N051635-011AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750734**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	10076.000	200	5000	4899	104	90	110	9951	1.25	20	

Sample ID: **N051635-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750736**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.034	0.20	1.000	0	103	90	110				

Sample ID: **N051635-006AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750738**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.088	0.20	1.000	0	109	90	110				

Sample ID: **N051635-007AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750742**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.006	0.20	1.000	0	101	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N051635-008AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750744**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.045	0.20	1.000	0	104	90	110				

Sample ID: **N051635-009AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750746**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.032	0.20	1.000	0	103	90	110				

Sample ID: **N051635-012AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750748**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	9807.500	200	5000	4782	101	90	110				

Sample ID: **N051635-010ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750752**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	186.258	4.0						187.8	0.814	20	

Sample ID: **N051635-010AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750753**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	289.504	4.0	100.0	187.8	102	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N051635-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164319**
Client ID: **ZZZZZZ**	Batch ID: **R164319**	TestNo: **EPA 218.6**		Analysis Date: **7/26/2022**	SeqNo: **4750755**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.981	1.0	5.000	0	99.6	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-001

Client Sample ID: MW-44-115-0722
Collection Date: 7/14/2022 10:24:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220719B**	QC Batch: **R164142**			PrepDate:			Analyst: **RAB**
Sulfate	1000	6.1	50		mg/L	100	7/20/2022 03:37 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714C**	QC Batch: **R163959**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/15/2022 07:03 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-002

Client Sample ID: MW-906-Q322
Collection Date: 7/14/2022 10:34:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220719B** QC Batch: **R164142**				PrepDate:			Analyst: **RAB**
Sulfate	1000	6.1	50		mg/L	100	7/20/2022 03:54 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714C** QC Batch: **R163959**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/15/2022 07:20 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-003

Client Sample ID: MW-44-125-0722
Collection Date: 7/14/2022 10:02:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220719B** QC Batch: **R164142**				PrepDate:			Analyst: **RAB**
Sulfate	1100	6.1	50		mg/L	100	7/20/2022 04:10 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714C** QC Batch: **R163959**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/15/2022 07:37 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-45-095a-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 8:33:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220719B** QC Batch: **R164142**				PrepDate:			Analyst: **RAB**
Sulfate	490	3.0	25		mg/L	50	7/20/2022 01:27 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714C** QC Batch: **R163959**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/15/2022 07:54 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-005

Client Sample ID: MW-34-080-0722
Collection Date: 7/14/2022 8:04:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220719B** QC Batch: **R164142**				PrepDate:			Analyst: **RAB**
Sulfate	490	3.0	25		mg/L	50	7/20/2022 02:48 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714C** QC Batch: **R163959**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/15/2022 08:10 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-006

Client Sample ID: MW-36-090-0722
Collection Date: 7/14/2022 9:05:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220719B** QC Batch: **R164142**				PrepDate:			Analyst: **RAB**
Sulfate	280	3.0	25		mg/L	50	7/20/2022 04:26 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714C** QC Batch: **R163959**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/15/2022 08:27 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-007

Client Sample ID: MW-36-100-0722
Collection Date: 7/14/2022 9:24:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220719B** QC Batch: **R164142**				PrepDate:			Analyst: **RAB**
Sulfate	430	3.0	25		mg/L	50	7/20/2022 04:43 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714C** QC Batch: **R163959**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/15/2022 08:44 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-008

Client Sample ID: MW-905-Q322
Collection Date: 7/14/2022 9:34:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220725A** QC Batch: **R164273**				PrepDate:			Analyst: **RAB**
Sulfate	430	3.0	25		mg/L	50	7/25/2022 12:31 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714C** QC Batch: **R163959**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/15/2022 09:34 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-010

Client Sample ID: MW-78-070-0722
Collection Date: 7/14/2022 11:58:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220725A** QC Batch: **R164273**				PrepDate:			Analyst: **RAB**
Sulfate	500	3.0	25		mg/L	50	7/25/2022 01:18 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714C** QC Batch: **R163959**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	7/15/2022 09:51 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-011

Client Sample ID: MW-78-142-0722
Collection Date: 7/14/2022 12:07:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220725A** QC Batch: **R164273**				PrepDate:			Analyst: **RAB**
Sulfate	850	6.1	50		mg/L	100	7/25/2022 01:34 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714C** QC Batch: **R163959**				PrepDate:			Analyst: **RAB**
Nitrate as N	8.2	0.095	0.50		mg/L	10	7/15/2022 10:08 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-012

Client Sample ID: MW-907-Q322
Collection Date: 7/14/2022 12:17:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220725A** QC Batch: **R164273**				PrepDate:			Analyst: **RAB**
Sulfate	830	6.1	50		mg/L	100	7/25/2022 01:50 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220714C** QC Batch: **R163959**				PrepDate:			Analyst: **RAB**
Nitrate as N	8.1	0.095	0.50		mg/L	10	7/15/2022 10:25 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **LCS-R164142_SO4**	SampType: **LCS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164142**
Client ID: **LCSW**	Batch ID: **R164142**	TestNo: **EPA 300.0**		Analysis Date: **7/19/2022**	SeqNo: **4735310**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	3.972	0.50	4.000	0	99.3	90	110				

Sample ID: **MB-R164142_SO4**	SampType: **MBLK**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164142**
Client ID: **PBW**	Batch ID: **R164142**	TestNo: **EPA 300.0**		Analysis Date: **7/19/2022**	SeqNo: **4735311**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.50									

Sample ID: **N051635-004BMS**	SampType: **MS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164142**
Client ID: **ZZZZZZ**	Batch ID: **R164142**	TestNo: **EPA 300.0**		Analysis Date: **7/20/2022**	SeqNo: **4735317**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	700.935	25	200.0	485.6	108	80	120				

Sample ID: **N051635-004BMSD**	SampType: **MSD**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164142**
Client ID: **ZZZZZZ**	Batch ID: **R164142**	TestNo: **EPA 300.0**		Analysis Date: **7/20/2022**	SeqNo: **4735318**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	691.695	25	200.0	485.6	103	80	120	700.9	1.33	20	

Sample ID: **N051635-005BDUP**	SampType: **DUP**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164142**
Client ID: **ZZZZZZ**	Batch ID: **R164142**	TestNo: **EPA 300.0**		Analysis Date: **7/20/2022**	SeqNo: **4735320**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	489.280	25						487.9	0.281	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **MB-R164273_SO4**	SampType: **MBLK**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164273**
Client ID: **PBW**	Batch ID: **R164273**	TestNo: **EPA 300.0**		Analysis Date: **7/25/2022**	SeqNo: **4747312**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.50									

Sample ID: **LCS-R164273_SO4**	SampType: **LCS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164273**
Client ID: **LCSW**	Batch ID: **R164273**	TestNo: **EPA 300.0**		Analysis Date: **7/25/2022**	SeqNo: **4747313**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	3.949	0.50	4.000	0	98.7	90	110				

Sample ID: **N051635-008BMS**	SampType: **MS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164273**
Client ID: **ZZZZZZ**	Batch ID: **R164273**	TestNo: **EPA 300.0**		Analysis Date: **7/25/2022**	SeqNo: **4747315**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	640.050	25	200.0	433.7	103	80	120				

Sample ID: **N051635-008BMSD**	SampType: **MSD**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164273**
Client ID: **ZZZZZZ**	Batch ID: **R164273**	TestNo: **EPA 300.0**		Analysis Date: **7/25/2022**	SeqNo: **4747316**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	638.740	25	200.0	433.7	102	80	120	640.0	0.205	20	

Sample ID: **N051715-001FMS**	SampType: **MS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164273**
Client ID: **ZZZZZZ**	Batch ID: **R164273**	TestNo: **EPA 300.0**		Analysis Date: **7/25/2022**	SeqNo: **4747324**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	335.055	25	200.0	147.1	94.0	80	120				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **N051715-001FMSD**	SampType: **MSD**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164273**
Client ID: **ZZZZZZ**	Batch ID: **R164273**	TestNo: **EPA 300.0**		Analysis Date: **7/25/2022**	SeqNo: **4747325**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	332.620	25	200.0	147.1	92.8	80	120	335.1	0.729	20	

Sample ID: **N051716-001EDUP**	SampType: **DUP**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164273**
Client ID: **ZZZZZZ**	Batch ID: **R164273**	TestNo: **EPA 300.0**		Analysis Date: **7/25/2022**	SeqNo: **4747326**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	144.880	25						143.0	1.30	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R163959_NO3**	SampType: **MBLK**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163959**
Client ID: **PBW**	Batch ID: **R163959**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722322**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R163959_NO3**	SampType: **LCS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163959**
Client ID: **LCSW**	Batch ID: **R163959**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722323**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.220	0.050	1.250	0	97.6	90	110				

Sample ID: **N051635-007BMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163959**
Client ID: **ZZZZZZ**	Batch ID: **R163959**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722337**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.843	0.50	12.50	0	94.7	80	120				

Sample ID: **N051635-007BMSD**	SampType: **MSD**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163959**
Client ID: **ZZZZZZ**	Batch ID: **R163959**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722338**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.818	0.50	12.50	0	94.5	80	120	11.84	0.211	20	

Sample ID: **N051635-004BDUP**	SampType: **DUP**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **163959**
Client ID: **ZZZZZZ**	Batch ID: **R163959**	TestNo: **EPA 300.0**		Analysis Date: **7/15/2022**	SeqNo: **4722339**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.50						0	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **N051635-004BMS** SampType: **MS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **163959**
Client ID: **ZZZZZZ** Batch ID: **R163959** TestNo: **EPA 300.0** Analysis Date: **7/15/2022** SeqNo: **4722340**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.769	0.50	12.50	0	94.2	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-115-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 10:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220716A**	QC Batch: **R163997**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/16/2022 12:36 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-906-Q322
Lab Order:	N051635	**Collection Date:**	7/14/2022 10:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220716A**	QC Batch: **R163997**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/16/2022 12:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-125-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 10:02:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220716A**	QC Batch: **R163997**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/16/2022 01:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-45-095a-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 8:33:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220716A**	QC Batch: **R163997**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/16/2022 01:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-080-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 8:04:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220716A**	QC Batch: **R163997**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/16/2022 01:38 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-090-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 9:05:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220716A**	QC Batch: **R163997**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/16/2022 01:54 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-100-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220716A**	QC Batch: **R163997**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/16/2022 02:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-905-Q322
Lab Order:	N051635	**Collection Date:**	7/14/2022 9:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220716A**	QC Batch: **R163997**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/16/2022 02:25 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-070-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 11:58:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220716A**	QC Batch: **R163997**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/16/2022 02:41 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-142-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 12:07:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220716A**	QC Batch: **R163997**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/16/2022 03:43 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-907-Q322
Lab Order:	N051635	**Collection Date:**	7/14/2022 12:17:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220716A**	QC Batch: **R163997**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	7/16/2022 03:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R163997**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163997**
Client ID: **PBW**	Batch ID: **R163997**	TestNo: **SM 5310C**		Analysis Date: **7/16/2022**	SeqNo: **4725296**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R163997**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163997**
Client ID: **LCSW**	Batch ID: **R163997**	TestNo: **SM 5310C**		Analysis Date: **7/16/2022**	SeqNo: **4725297**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	4.988	1.0	5.000	0	99.8	85	115				

Sample ID: **N051651-004DMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163997**
Client ID: **ZZZZZZ**	Batch ID: **R163997**	TestNo: **SM 5310C**		Analysis Date: **7/16/2022**	SeqNo: **4725304**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	25.492	5.0	25.00	1.231	97.0	75	125				

Sample ID: **N051651-004DMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **163997**
Client ID: **ZZZZZZ**	Batch ID: **R163997**	TestNo: **SM 5310C**		Analysis Date: **7/16/2022**	SeqNo: **4725305**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	25.240	5.0	25.00	1.231	96.0	75	125	25.49	0.995	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-115-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 10:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/17/2022 11:06 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-002

Client Sample ID: MW-906-Q322
Collection Date: 7/14/2022 10:34:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/17/2022 11:11 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-125-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 10:02:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Iron	420	13	20		µg/L	1	7/17/2022 11:17 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-45-095a-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 8:33:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/17/2022 11:23 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-080-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 8:04:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Iron	990	13	20		µg/L	1	7/17/2022 11:28 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-006

Client Sample ID: MW-36-090-0722
Collection Date: 7/14/2022 9:05:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220717A** QC Batch: **93805**				PrepDate:		**7/15/2022**	Analyst: **DJ**
Iron	39	13	20		µg/L	1	7/17/2022 11:34 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-007

Client Sample ID: MW-36-100-0722
Collection Date: 7/14/2022 9:24:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Iron	430	13	20		µg/L	1	7/17/2022 11:39 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-905-Q322
Lab Order:	N051635	**Collection Date:**	7/14/2022 9:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Iron	380	13	20		µg/L	1	7/17/2022 11:45 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-070-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 11:58:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/17/2022 11:58 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-011

Client Sample ID: MW-78-142-0722
Collection Date: 7/14/2022 12:07:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/17/2022 12:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-012

Client Sample ID: MW-907-Q322
Collection Date: 7/14/2022 12:17:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220717A**	QC Batch: **93805**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	7/17/2022 12:09 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-93805**	SampType: **MBLK**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164010**
Client ID: **PBW**	Batch ID: **93805**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/17/2022**	SeqNo: **4726451**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-93805**	SampType: **LCS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164010**
Client ID: **LCSW**	Batch ID: **93805**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/17/2022**	SeqNo: **4726452**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	99.924	20	100.0	0	99.9	85	115				

Sample ID: **N051634-002C-MS**	SampType: **MS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164010**
Client ID: **ZZZZZZ**	Batch ID: **93805**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/17/2022**	SeqNo: **4726457**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	136.505	20	100.0	17.50	119	75	125				

Sample ID: **N051634-002C-MSD**	SampType: **MSD**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **7/15/2022**	RunNo: **164010**
Client ID: **ZZZZZZ**	Batch ID: **93805**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **7/17/2022**	SeqNo: **4726458**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	126.620	20	100.0	17.50	109	75	125	136.5	7.51	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-001

Client Sample ID: MW-44-115-0722
Collection Date: 7/14/2022 10:24:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP7_220716A**	QC Batch: **93803**				PrepDate:	**7/15/2022**	Analyst: **DJ**
Arsenic	4.7	0.050	0.10		µg/L	1	7/16/2022 01:56 PM
Barium	19	0.083	1.0		µg/L	1	7/16/2022 01:56 PM
Manganese	54	0.026	0.50		µg/L	1	7/16/2022 01:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-002

Client Sample ID: MW-906-Q322
Collection Date: 7/14/2022 10:34:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220723C**	QC Batch: **93876**			PrepDate:		**7/20/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	7/23/2022 09:03 AM
Barium	20	0.083	1.0		µg/L	1	7/23/2022 09:03 AM
Manganese	58	0.026	0.50		µg/L	1	7/23/2022 09:03 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-125-0722
Lab Order:	N051635	**Collection Date:**	7/14/2022 10:02:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N051635-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP7_220716A**	QC Batch: **93803**			PrepDate:	**7/15/2022**		Analyst: **DJ**
Arsenic	5.4	0.050	0.10		µg/L	1	7/16/2022 02:32 PM
Barium	45	0.083	1.0		µg/L	1	7/16/2022 02:32 PM
Manganese	510	0.13	2.5		µg/L	5	7/16/2022 02:38 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-004

Client Sample ID: MW-45-095a-0722
Collection Date: 7/14/2022 8:33:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP7_220716A**	QC Batch: **93803**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	1.9	0.050	0.10		µg/L	1	7/16/2022 02:44 PM
Barium	23	0.083	1.0		µg/L	1	7/16/2022 02:44 PM
Manganese	120	0.026	0.50		µg/L	1	7/16/2022 02:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-005

Client Sample ID: MW-34-080-0722
Collection Date: 7/14/2022 8:04:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP7_220716A**	QC Batch: **93803**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	1.7	0.050	0.10		µg/L	1	7/16/2022 02:56 PM
Barium	35	0.083	1.0		µg/L	1	7/16/2022 02:56 PM
Manganese	130	0.026	0.50		µg/L	1	7/16/2022 02:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-006

Client Sample ID: MW-36-090-0722
Collection Date: 7/14/2022 9:05:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP7_220716A**	QC Batch: **93803**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	3.3	0.050	0.10		µg/L	1	7/16/2022 03:08 PM
Barium	37	0.083	1.0		µg/L	1	7/16/2022 03:08 PM
Manganese	150	0.026	0.50		µg/L	1	7/16/2022 03:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-007

Client Sample ID: MW-36-100-0722
Collection Date: 7/14/2022 9:24:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP7_220716A**	QC Batch: **93803**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	4.1	0.050	0.10		µg/L	1	7/16/2022 03:20 PM
Barium	59	0.083	1.0		µg/L	1	7/16/2022 03:20 PM
Manganese	480	0.13	2.5		µg/L	5	7/16/2022 03:26 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-008

Client Sample ID: MW-905-Q322
Collection Date: 7/14/2022 9:34:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP7_220716A**	QC Batch: **93803**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	3.5	0.050	0.10		µg/L	1	7/16/2022 03:44 PM
Barium	54	0.083	1.0		µg/L	1	7/16/2022 03:44 PM
Manganese	460	0.13	2.5		µg/L	5	7/16/2022 03:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-010

Client Sample ID: MW-78-070-0722
Collection Date: 7/14/2022 11:58:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP7_220716A**	QC Batch: **93803**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	0.91	0.050	0.10		µg/L	1	7/16/2022 03:56 PM
Barium	160	0.083	1.0		µg/L	1	7/16/2022 03:56 PM
Manganese	170	0.026	0.50		µg/L	1	7/16/2022 03:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-011

Client Sample ID: MW-78-142-0722
Collection Date: 7/14/2022 12:07:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP7_220716A**	QC Batch: **93803**			PrepDate:		**7/15/2022**	Analyst: **DJ**
Arsenic	4.5	0.050	0.10		µg/L	1	7/16/2022 04:08 PM
Barium	26	0.083	1.0		µg/L	1	7/16/2022 04:08 PM
Manganese	1.7	0.026	0.50		µg/L	1	7/16/2022 04:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N051635-012

Client Sample ID: MW-907-Q322
Collection Date: 7/14/2022 12:17:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP7_220716A** QC Batch: **93803**				PrepDate:	**7/15/2022**		Analyst: **DJ**
Arsenic	4.4	0.050	0.10		µg/L	1	7/16/2022 04:20 PM
Barium	26	0.083	1.0		µg/L	1	7/16/2022 04:20 PM
Manganese	2.7	0.026	0.50		µg/L	1	7/16/2022 04:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-93803** SampType: **MBLK** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **7/15/2022** RunNo: **164038**
Client ID: **PBW** Batch ID: **93803** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **7/16/2022** SeqNo: **4729143**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID: **LCS-93803** SampType: **LCS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **7/15/2022** RunNo: **164038**
Client ID: **LCSW** Batch ID: **93803** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **7/16/2022** SeqNo: **4729144**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.573	0.10	10.00	0	95.7	85	115				
Barium	9.589	1.0	10.00	0	95.9	85	115				
Manganese	93.845	0.50	100.0	0	93.8	85	115				

Sample ID: **N051634-001C-MS** SampType: **MS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **7/15/2022** RunNo: **164038**
Client ID: **ZZZZZZ** Batch ID: **93803** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **7/16/2022** SeqNo: **4729150**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.104	0.10	10.00	1.868	102	75	125				
Barium	76.310	1.0	10.00	65.28	110	75	125				
Manganese	89.997	0.50	100.0	6.988	83.0	75	125				

Sample ID: **N051634-001C-MSD** SampType: **MSD** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **7/15/2022** RunNo: **164038**
Client ID: **ZZZZZZ** Batch ID: **93803** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **7/16/2022** SeqNo: **4729154**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	11.865	0.10	10.00	1.868	100	75	125	12.10	2.00	20	
Barium	75.873	1.0	10.00	65.28	106	75	125	76.31	0.574	20	
Manganese	91.534	0.50	100.0	6.988	84.5	75	125	90.00	1.69	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-93876** SampType: **MBLK** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **7/20/2022** RunNo: **164238**
Client ID: **PBW** Batch ID: **93876** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **7/23/2022** SeqNo: **4744190**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID: **LCS-93876** SampType: **LCS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **7/20/2022** RunNo: **164238**
Client ID: **LCSW** Batch ID: **93876** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **7/23/2022** SeqNo: **4744191**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.659	0.10	10.00	0	96.6	85	115				
Barium	9.123	1.0	10.00	0	91.2	85	115				
Manganese	94.133	0.50	100.0	0	94.1	85	115				

Sample ID: **N051727-002D-MS** SampType: **MS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **7/20/2022** RunNo: **164238**
Client ID: **ZZZZZZ** Batch ID: **93876** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **7/23/2022** SeqNo: **4744197**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.501	0.10	10.00	3.799	97.0	75	125				
Barium	115.246	1.0	10.00	108.1	71.1	75	125				S

Sample ID: **N051727-002D-MSD** SampType: **MSD** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **7/20/2022** RunNo: **164238**
Client ID: **ZZZZZZ** Batch ID: **93876** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **7/23/2022** SeqNo: **4744198**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.490	0.10	10.00	3.799	96.9	75	125	13.50	0.0886	20	
Barium	125.453	1.0	10.00	108.1	173	75	125	115.2	8.48	20	S

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N051727-002D-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/20/2022**	RunNo: **164367**
Client ID: **ZZZZZZ**	Batch ID: **93876**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/24/2022**	SeqNo: **4751781**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	441.900	2.5	100.0	312.2	130	75	125				S

Sample ID: **N051727-002D-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **7/20/2022**	RunNo: **164367**
Client ID: **ZZZZZZ**	Batch ID: **93876**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/24/2022**	SeqNo: **4751782**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	442.374	2.5	100.0	312.2	130	75	125	441.9	0.107	20	S

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N051634-001C-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164038**
Client ID: **ZZZZZZ** Batch ID: **93803** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **7/16/2022** SeqNo: **4729148**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	11.924	0.10	10.00	1.868	101	80	120				
Barium	76.215	1.0	10.00	65.28	109	80	120				
Manganese	89.847	0.50	100.0	6.988	82.9	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N051635
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N051727-002D-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **164238**
Client ID: **ZZZZZZ**	Batch ID: **93876**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/23/2022**	SeqNo: **4744196**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.455	0.10	10.00	3.799	96.6	80	120				
Barium	120.718	1.0	10.00	108.1	126	80	120				S

Sample ID: **N051727-002D-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **164367**
Client ID: **ZZZZZZ**	Batch ID: **93876**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **7/24/2022**	SeqNo: **4751780**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	454.969	2.5	100.0	312.2	143	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement		QA/QC		Sample Receipt Condition
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD		RTNE		Y N
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker		RWQCB	✓	1. Chilled Y
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Labspec		CalTrans		2. Headspace
Submitted By: Reggie Top			Others	✓	LEVEL III		3. Container Intact X
Title: Field Tech	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	Specify: RWQCB		LEVEL IV		4. Seal Present X
Signature: Date: 7/14/22	Sampled By: Reggie Top		Global ID:		Regulatory		5. IR number 3
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for				Specify State:		6. Method of Cooling: ICE
Project Name: PG&E Topock - PCM	Signature:	Date: 7/14/22					Sample Temp: 2.3°C/2.5°C
Project Number: 30121866.3Q22GW							Courier: ASSET
							Tracking No.:

Matrix: Ground X | Sediment | Potable | Soil | NPDES | Other Solid | Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N051635-01	MW-44-115-0722	7/14/2022	10:24		X	X	X			X			E	6	P	BNS	
2	-02	MW-906-Q322	7/14/2022	10:34		X	X	X			X			E	6	P	BNS	
3	-03	MW-44-125-0722	7/14/2022	10:02		X	X	X			X			E	6	P	BNS	
4	-04	MW-45-095a-0722	7/14/2022	8:33		X	X	X			X			E	6	P	BNS	
5	-05	MW-34-080-0722	7/14/2022	8:04		X	X	X			X			E	6	P	BNS	
6	-06	MW-36-090-0722	7/14/2022	9:05		X	X	X			X			E	6	P	BNS	
7	-07	MW-36-100-0722	7/14/2022	9:24		X	X	X			X			E	6	P	BNS	
8	-08	MW-905-Q322	7/14/2022	9:34		X	X	X			X			E	6	P	BNS	
9	-09	EB-707-Q322	7/14/2022	12:05		X								E	1	P	BNS	
10	-10	MW-78-070-0722	7/14/2022	11:58		X	X	X			X			E	6	P	BNS	
11	-11	MW-78-142-0722	7/14/2022	12:07		X	X	X			X			E	6	P	BNS	
12	-12	MW-907-Q322	7/14/2022	12:17		X	X	X			X			E	6	P	BNS	
13																		
14																		

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Reggie Top	7/14/22 1533	MB CARTON	7/14/22 @1533
Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
MB CARTON	7/14/22 1715	Gisella Ramirez-Flores	7/14/22 1715
Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [X] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	7/14/2022	Workorder:	N051635
Rep sample Temp (Deg C):	2.3/2.5	IR Gun ID:	3
Temp Blank:	☑ Yes ☐ No		
Carrier name:	ASSET		
Last 4 digits of Tracking No.:	NA	Packing Material Used:	None
Cooling process:	☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None		

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For:

Checklist Completed By: GGJ YRJ 7/15/2022

for MBC 7/21/2022

Reviewed By:

ASSET Laboratories

WORK ORDER Summary

15-Jul-22

WorkOrder: N051635

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/14/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051635-001A	MW-44-115-0722	7/14/2022 10:24:00 AM	7/28/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW-CA
N051635-001B			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051635-001C			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051635-001D			7/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051635-002A	MW-906-Q322	7/14/2022 10:34:00 AM	7/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW-CA
N051635-002B			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051635-002C			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☑	WW
			7/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051635-002D			7/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051635-003A	MW-44-125-0722	7/14/2022 10:02:00 AM	7/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW-CA
N051635-003B			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051635-003C			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

15-Jul-22

WorkOrder: N051635

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/14/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051635-003C	MW-44-125-0722	7/14/2022 10:02:00 AM	7/28/2022	Groundwater	EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051635-003D			7/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051635-004A	MW-45-095a-0722	7/14/2022 8:33:00 AM	7/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW-CA
N051635-004B			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051635-004C			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051635-004D			7/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051635-005A	MW-34-080-0722	7/14/2022 8:04:00 AM	7/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW-CA
N051635-005B			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051635-005C			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051635-005D			7/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051635-006A	MW-36-090-0722	7/14/2022 9:05:00 AM	7/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW-CA
N051635-006B			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051635-006C			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

15-Jul-22

WorkOrder: N051635

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/14/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051635-006C	MW-36-090-0722	7/14/2022 9:05:00 AM	7/28/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051635-006D			7/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051635-007A	MW-36-100-0722	7/14/2022 9:24:00 AM	7/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW-CA
N051635-007B			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051635-007C			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051635-007D			7/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051635-008A	MW-905-Q322	7/14/2022 9:34:00 AM	7/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW-CA
N051635-008B			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051635-008C			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051635-008D			7/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051635-009A	EB-707-Q322	7/14/2022 12:05:00 PM	7/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW-CA
N051635-010A	MW-78-070-0722	7/14/2022 11:58:00 AM	7/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW-CA

ASSET Laboratories

WORK ORDER Summary

15-Jul-22

WorkOrder: N051635

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/14/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051635-010B	MW-78-070-0722	7/14/2022 11:58:00 AM	7/28/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051635-010C			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051635-010D			7/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051635-011A	MW-78-142-0722	7/14/2022 12:07:00 PM	7/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW-CA
N051635-011B			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051635-011C			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N051635-011D			7/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051635-012A	MW-907-Q322	7/14/2022 12:17:00 PM	7/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW-CA
N051635-012B			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			7/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N051635-012C			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			7/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

15-Jul-22

WorkOrder: N051635

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 7/14/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N051635-012D	MW-907-Q322	7/14/2022 12:17:00 PM	7/28/2022	Groundwater	SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N051635-013A	FOLDER	7/28/2022	7/28/2022		Folder	Folder	☐	☐	☐	LAB
			7/28/2022		Folder	Level IV Report	☐	☐	☐	LAB
			7/28/2022		Folder	Folder	☐	☐	☐	LAB

August 30, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052034

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 08, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Subcontracted Analyses:

Ammonia was subcontracted to BC Labs- Bakersfield,CA.

Analytical Comments for EPA 218.6:

Dilution was necessary for some samples due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for EPA 6010B_Dissolved:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Iron in QC samples N052034-009CMS and N052034-009CMSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020_Dissolved:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for some analytes in QC samples N052034-009CMS, N052034-009CMSD and N052058-010CMS possibly due to matrix interference. Post Spike (PS) passed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for SM 5310C:

Matrix Spike (MS) is outside recovery criteria in QC sample N052034-009DMS at lower dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N052034-009 and MS/MSD were reported at 50x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052034
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052034-001A	MW-76-039-Q322	Groundwater	8/8/2022 12:17:00 PM	8/8/2022	8/30/2022
N052034-001B	MW-76-039-Q322	Groundwater	8/8/2022 12:17:00 PM	8/8/2022	8/30/2022
N052034-001C	MW-76-039-Q322	Groundwater	8/8/2022 12:17:00 PM	8/8/2022	8/30/2022
N052034-001D	MW-76-039-Q322	Groundwater	8/8/2022 12:17:00 PM	8/8/2022	8/30/2022
N052034-001E	MW-76-039-Q322	Groundwater	8/8/2022 12:17:00 PM	8/8/2022	8/30/2022
N052034-002A	MW-76-156-Q322	Groundwater	8/8/2022 1:05:00 PM	8/8/2022	8/30/2022
N052034-002B	MW-76-156-Q322	Groundwater	8/8/2022 1:05:00 PM	8/8/2022	8/30/2022
N052034-002C	MW-76-156-Q322	Groundwater	8/8/2022 1:05:00 PM	8/8/2022	8/30/2022
N052034-002D	MW-76-156-Q322	Groundwater	8/8/2022 1:05:00 PM	8/8/2022	8/30/2022
N052034-002E	MW-76-156-Q322	Groundwater	8/8/2022 1:05:00 PM	8/8/2022	8/30/2022
N052034-003A	MW-76-181-Q322	Groundwater	8/8/2022 1:49:00 PM	8/8/2022	8/30/2022
N052034-003B	MW-76-181-Q322	Groundwater	8/8/2022 1:49:00 PM	8/8/2022	8/30/2022
N052034-003C	MW-76-181-Q322	Groundwater	8/8/2022 1:49:00 PM	8/8/2022	8/30/2022
N052034-003D	MW-76-181-Q322	Groundwater	8/8/2022 1:49:00 PM	8/8/2022	8/30/2022
N052034-003E	MW-76-181-Q322	Groundwater	8/8/2022 1:49:00 PM	8/8/2022	8/30/2022
N052034-004A	MW-76-218-Q322	Groundwater	8/8/2022 2:40:00 PM	8/8/2022	8/30/2022
N052034-004B	MW-76-218-Q322	Groundwater	8/8/2022 2:40:00 PM	8/8/2022	8/30/2022
N052034-004C	MW-76-218-Q322	Groundwater	8/8/2022 2:40:00 PM	8/8/2022	8/30/2022
N052034-004D	MW-76-218-Q322	Groundwater	8/8/2022 2:40:00 PM	8/8/2022	8/30/2022
N052034-004E	MW-76-218-Q322	Groundwater	8/8/2022 2:40:00 PM	8/8/2022	8/30/2022
N052034-005A	EB-709-Q322	Groundwater	8/8/2022 2:50:00 PM	8/8/2022	8/30/2022
N052034-006A	MW-77-046-Q322	Groundwater	8/8/2022 12:24:00 PM	8/8/2022	8/30/2022
N052034-006B	MW-77-046-Q322	Groundwater	8/8/2022 12:24:00 PM	8/8/2022	8/30/2022
N052034-006C	MW-77-046-Q322	Groundwater	8/8/2022 12:24:00 PM	8/8/2022	8/30/2022
N052034-006D	MW-77-046-Q322	Groundwater	8/8/2022 12:24:00 PM	8/8/2022	8/30/2022
N052034-007A	MW-77-102-Q322	Groundwater	8/8/2022 12:59:00 PM	8/8/2022	8/30/2022
N052034-007B	MW-77-102-Q322	Groundwater	8/8/2022 12:59:00 PM	8/8/2022	8/30/2022
N052034-007C	MW-77-102-Q322	Groundwater	8/8/2022 12:59:00 PM	8/8/2022	8/30/2022
N052034-007D	MW-77-102-Q322	Groundwater	8/8/2022 12:59:00 PM	8/8/2022	8/30/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052034
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052034-008A	MW-77-158-Q322	Groundwater	8/8/2022 1:33:00 PM	8/8/2022	8/30/2022
N052034-008B	MW-77-158-Q322	Groundwater	8/8/2022 1:33:00 PM	8/8/2022	8/30/2022
N052034-008C	MW-77-158-Q322	Groundwater	8/8/2022 1:33:00 PM	8/8/2022	8/30/2022
N052034-008D	MW-77-158-Q322	Groundwater	8/8/2022 1:33:00 PM	8/8/2022	8/30/2022
N052034-009A	MW-77-187-Q322	Groundwater	8/8/2022 2:11:00 PM	8/8/2022	8/30/2022
N052034-009B	MW-77-187-Q322	Groundwater	8/8/2022 2:11:00 PM	8/8/2022	8/30/2022
N052034-009C	MW-77-187-Q322	Groundwater	8/8/2022 2:11:00 PM	8/8/2022	8/30/2022
N052034-009D	MW-77-187-Q322	Groundwater	8/8/2022 2:11:00 PM	8/8/2022	8/30/2022
N052034-010A	EB-710-Q322	Groundwater	8/8/2022 3:30:00 PM	8/8/2022	8/30/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 12:17:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220809A**	QC Batch: **R164730**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	140	0.50	4.0		µg/L	20	8/9/2022 05:53 PM
DISSOLVED METALS BY ICP-MS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220813B**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Chromium	130	0.035	1.0		µg/L	1	8/13/2022 03:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 1:05:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220809A**	QC Batch: **R164730**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	8.9	0.13	1.0		µg/L	5	8/9/2022 06:40 PM
DISSOLVED METALS BY ICP-MS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220813B**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Chromium	8.5	0.035	1.0		µg/L	1	8/13/2022 03:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-181-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 1:49:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220809A**	QC Batch: **R164730**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	1300	5.0	40		µg/L	200	8/9/2022 10:03 PM
DISSOLVED METALS BY ICP-MS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220815B**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Chromium	1200	0.88	25		µg/L	25	8/15/2022 05:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-218-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 2:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
EPA 218.6							
RunID: **NV00922-IC7_220809A** QC Batch: **R164730** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	2.3	0.13	1.0		µg/L	5	8/10/2022 12:15 AM
DISSOLVED METALS BY ICP-MS							
EPA 3010A **EPA 6020**							
RunID: **NV00922-ICP8_220813B** QC Batch: **94191** PrepDate: **8/11/2022** Analyst: **DJ**							
Chromium	2.3	0.035	1.0		µg/L	1	8/13/2022 04:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-709-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 2:50:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220809A**	QC Batch: **R164730**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/9/2022 10:32 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 12:24:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220809A**	QC Batch: **R164730**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/9/2022 08:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 12:59:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220809A**	QC Batch: **R164730**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/9/2022 08:19 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 1:33:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220809A**	QC Batch: **R164730**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/9/2022 11:34 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 2:11:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220809A**	QC Batch: **R164730**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	8.8	0.13	1.0		µg/L	5	8/9/2022 05:41 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-710-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 3:30:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220809A**	QC Batch: **R164730**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/9/2022 10:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	**LCS-R164730**	SampType:	**LCS**	TestCode:	**218.6_WPGE**	Units:	**µg/L**	Prep Date:		RunNo:	**164730**
Client ID:	**LCSW**	Batch ID:	**R164730**	TestNo:	**EPA 218.6**			Analysis Date:	**8/9/2022**	SeqNo:	**4771886**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.161	0.20	5.000	0	103	90	110				

Sample ID	**MB-R164730**	SampType:	**MBLK**	TestCode:	**218.6_WPGE**	Units:	**µg/L**	Prep Date:		RunNo:	**164730**
Client ID:	**PBW**	Batch ID:	**R164730**	TestNo:	**EPA 218.6**			Analysis Date:	**8/9/2022**	SeqNo:	**4771887**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID	**N052034-001ADUP**	SampType:	**DUP**	TestCode:	**218.6_WPGE**	Units:	**µg/L**	Prep Date:		RunNo:	**164730**
Client ID:	**ZZZZZZ**	Batch ID:	**R164730**	TestNo:	**EPA 218.6**			Analysis Date:	**8/9/2022**	SeqNo:	**4771890**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	137.874	4.0						136.9	0.680	20	

Sample ID	**N052034-001AMS**	SampType:	**MS**	TestCode:	**218.6_WPGE**	Units:	**µg/L**	Prep Date:		RunNo:	**164730**
Client ID:	**ZZZZZZ**	Batch ID:	**R164730**	TestNo:	**EPA 218.6**			Analysis Date:	**8/9/2022**	SeqNo:	**4771891**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	241.826	4.0	100.0	136.9	105	90	110				

Sample ID	**N052034-006AMS**	SampType:	**MS**	TestCode:	**218.6_WPGE**	Units:	**µg/L**	Prep Date:		RunNo:	**164730**
Client ID:	**ZZZZZZ**	Batch ID:	**R164730**	TestNo:	**EPA 218.6**			Analysis Date:	**8/9/2022**	SeqNo:	**4771897**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.033	0.20	1.000	0	103	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052034-007AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164730
Client ID:	ZZZZZZ	Batch ID:	R164730	TestNo:	EPA 218.6			Analysis Date:	8/9/2022	SeqNo:	4771899

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.003	0.20	1.000	0	100	90	110				

Sample ID	N052034-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164730
Client ID:	ZZZZZZ	Batch ID:	R164730	TestNo:	EPA 218.6			Analysis Date:	8/9/2022	SeqNo:	4771900

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	14.300	1.0	5.000	8.904	108	90	110				

Sample ID	N052034-009AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164730
Client ID:	ZZZZZZ	Batch ID:	R164730	TestNo:	EPA 218.6			Analysis Date:	8/9/2022	SeqNo:	4771903

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	13.793	1.0	5.000	8.819	99.5	90	110				

Sample ID	N052034-009AMSD	SampType:	MSD	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164730
Client ID:	ZZZZZZ	Batch ID:	R164730	TestNo:	EPA 218.6			Analysis Date:	8/9/2022	SeqNo:	4771904

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	13.651	1.0	5.000	8.819	96.6	90	110	13.79	1.03	20	

Sample ID	N052034-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164730
Client ID:	ZZZZZZ	Batch ID:	R164730	TestNo:	EPA 218.6			Analysis Date:	8/9/2022	SeqNo:	4771906

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2282.380	40	1000	1261	102	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052034-005AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164730
Client ID:	ZZZZZZ	Batch ID:	R164730	TestNo:	EPA 218.6			Analysis Date:	8/9/2022	SeqNo:	4771908

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.044	0.20	1.000	0	104	90	110				

Sample ID	N052034-010AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164730
Client ID:	ZZZZZZ	Batch ID:	R164730	TestNo:	EPA 218.6			Analysis Date:	8/9/2022	SeqNo:	4771910

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.030	0.20	1.000	0	103	90	110				

Sample ID	N052034-008AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164730
Client ID:	ZZZZZZ	Batch ID:	R164730	TestNo:	EPA 218.6			Analysis Date:	8/9/2022	SeqNo:	4771914

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.140	1.0	5.000	0	103	90	110				

Sample ID	N052034-004AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164730
Client ID:	ZZZZZZ	Batch ID:	R164730	TestNo:	EPA 218.6			Analysis Date:	8/10/2022	SeqNo:	4771916

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	7.399	1.0	5.000	2.303	102	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020DIS_CrPGE_TPK

Sample ID	MB-94191	SampType:	MBLK	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164825
Client ID:	PBW	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778690

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									

Sample ID	LCS-94191	SampType:	LCS	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164825
Client ID:	LCSW	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778691

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.518	1.0	10.00	0	95.2	85	115				

Sample ID	N052034-009CMS	SampType:	MS	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164825
Client ID:	ZZZZZZ	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778715

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	18.034	1.0	10.00	8.786	92.5	75	125				

Sample ID	N052034-009CMSD	SampType:	MSD	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164825
Client ID:	ZZZZZZ	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778717

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	17.484	1.0	10.00	8.786	87.0	75	125	18.03	3.10	20	

Sample ID	N052058-010CMS	SampType:	MS	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164825
Client ID:	ZZZZZZ	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778748

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.667	1.0	10.00	0.3644	93.0	75	125				

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020DIS_CrPGE_TPK

Sample ID **N052058-010CMSD**	SampType: **MSD**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164825**				
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778750**				

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.827	1.0	10.00	0.3644	94.6	75	125	9.667	1.64	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 12:17:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A** QC Batch: **R164670**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/8/2022 07:12 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A** QC Batch: **R164670**				PrepDate:			Analyst: **RAB**
Sulfate	230	1.2	10		mg/L	20	8/8/2022 11:56 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A** QC Batch: **R164670**				PrepDate:			Analyst: **RAB**
Nitrate as N	2.8	0.095	0.50		mg/L	10	8/8/2022 07:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 1:05:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A** QC Batch: **R164670**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/8/2022 07:59 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A** QC Batch: **R164670**				PrepDate:			Analyst: **RAB**
Sulfate	710	6.1	50		mg/L	100	8/9/2022 12:28 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A** QC Batch: **R164670**				PrepDate:			Analyst: **RAB**
Nitrate as N	1.9	0.095	0.50		mg/L	10	8/8/2022 07:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052034-003

Client Sample ID: MW-76-181-Q322
Collection Date: 8/8/2022 1:49:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY				**EPA 300.0**			
RunID: **NV00922-IC8_220808A** QC Batch: **R164670**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/8/2022 09:18 PM
ANIONS BY ION CHROMATOGRAPHY				**EPA 300.0**			
RunID: **NV00922-IC8_220808A** QC Batch: **R164670**				PrepDate:			Analyst: **RAB**
Sulfate	780	6.1	50		mg/L	100	8/9/2022 01:15 AM
ANIONS BY ION CHROMATOGRAPHY				**EPA 300.0**			
RunID: **NV00922-IC8_220808A** QC Batch: **R164670**				PrepDate:			Analyst: **RAB**
Nitrate as N	1.6	0.095	0.50		mg/L	10	8/8/2022 09:18 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052034-004

Client Sample ID: MW-76-218-Q322
Collection Date: 8/8/2022 2:40:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY				**EPA 300.0**			
RunID: **NV00922-IC8_220808A** QC Batch: **R164670**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/8/2022 10:06 PM
ANIONS BY ION CHROMATOGRAPHY				**EPA 300.0**			
RunID: **NV00922-IC8_220808A** QC Batch: **R164670**				PrepDate:			Analyst: **RAB**
Sulfate	640	6.1	50		mg/L	100	8/9/2022 01:31 AM
ANIONS BY ION CHROMATOGRAPHY				**EPA 300.0**			
RunID: **NV00922-IC8_220808A** QC Batch: **R164670**				PrepDate:			Analyst: **RAB**
Nitrate as N	0.55	0.095	0.50		mg/L	10	8/8/2022 10:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 12:24:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A**	QC Batch: **R164670**			PrepDate:			Analyst: **RAB**
Sulfate	920	3.0	25		mg/L	50	8/9/2022 01:47 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A**	QC Batch: **R164670**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/8/2022 10:21 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052034-007

Client Sample ID: MW-77-102-Q322
Collection Date: 8/8/2022 12:59:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A**	QC Batch: **R164670**			PrepDate:			Analyst: **RAB**
Sulfate	560	6.1	50		mg/L	100	8/9/2022 02:03 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A**	QC Batch: **R164670**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.61	0.095	0.50		mg/L	10	8/8/2022 10:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 1:33:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A**	QC Batch: **R164670**			PrepDate:			Analyst: **RAB**
Sulfate	660	3.0	25		mg/L	50	8/9/2022 02:19 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A**	QC Batch: **R164670**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/8/2022 10:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 2:11:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A**	QC Batch: **R164670**			PrepDate:			Analyst: **RAB**
Sulfate	860	6.1	50		mg/L	100	8/8/2022 11:09 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220808A**	QC Batch: **R164670**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.95	0.095	0.50		mg/L	10	8/8/2022 08:31 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_NO2PGE

Sample ID	MB-R164670_NO2	SampType:	MBLK	TestCode:	300_W_NO2P	Units:	mg/L	Prep Date:		RunNo:	164670
Client ID:	PBW	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768348

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	ND	0.50									

Sample ID	LCS-R164670_NO2	SampType:	LCS	TestCode:	300_W_NO2P	Units:	mg/L	Prep Date:		RunNo:	164670
Client ID:	LCSW	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768349

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	1.197	0.50	1.250	0	95.7	90	110				

Sample ID	N052034-001BMS	SampType:	MS	TestCode:	300_W_NO2P	Units:	mg/L	Prep Date:		RunNo:	164670
Client ID:	ZZZZZZ	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768353

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	13.869	5.0	12.50	0	111	80	120				

Sample ID	N052034-001BMSD	SampType:	MSD	TestCode:	300_W_NO2P	Units:	mg/L	Prep Date:		RunNo:	164670
Client ID:	ZZZZZZ	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768354

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	14.298	5.0	12.50	0	114	80	120	13.87	3.05	20	

Sample ID	N052034-002BDUP	SampType:	DUP	TestCode:	300_W_NO2P	Units:	mg/L	Prep Date:		RunNo:	164670
Client ID:	ZZZZZZ	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768356

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	ND	5.0						0	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	MB-R164670_SO4	SampType:	MBLK	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164670		
Client ID:	PBW	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768398		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Sulfate	0.222	0.50											

Sample ID	LCS-R164670_SO4	SampType:	LCS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164670		
Client ID:	LCSW	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768399		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Sulfate	3.836	0.50	4.000	0	95.9	90	110						

Sample ID	N052034-009BMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164670		
Client ID:	ZZZZZZ	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768405		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Sulfate	1239.630	50	400.0	861.4	94.6	80	120						

Sample ID	N052034-009BMSD	SampType:	MSD	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164670		
Client ID:	ZZZZZZ	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768406		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Sulfate	1237.600	50	400.0	861.4	94.0	80	120	1240	0.164	20			

Sample ID	N052034-001BDUP	SampType:	DUP	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164670		
Client ID:	ZZZZZZ	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4768408		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Sulfate	227.538	10						228.9	0.614	20			

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	N051991-001BMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164670
Client ID:	ZZZZZZ	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4768418

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	116.115	5.0	40.00	77.68	96.1	80	120				

Sample ID	N051991-001BMSD	SampType:	MSD	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164670
Client ID:	ZZZZZZ	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4768419

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	117.364	5.0	40.00	77.68	99.2	80	120	116.1	1.07	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	MB-R164670_NO3	SampType:	MBLK	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	164670
Client ID:	PBW	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768371

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID	LCS-R164670_NO3	SampType:	LCS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	164670
Client ID:	LCSW	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768372

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.229	0.050	1.250	0	98.3	90	110				

Sample ID	N052034-002BDUP	SampType:	DUP	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	164670
Client ID:	ZZZZZZ	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768377

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.903	0.50						1.878	1.32	20	

Sample ID	N052034-009BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	164670
Client ID:	ZZZZZZ	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768379

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.718	0.50	12.50	0.9470	94.2	80	120				

Sample ID	N052034-009BMSD	SampType:	MSD	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	164670
Client ID:	ZZZZZZ	Batch ID:	R164670	TestNo:	EPA 300.0			Analysis Date:	8/8/2022	SeqNo:	4768380

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.961	0.50	12.50	0.9470	96.1	80	120	12.72	1.89	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 12:17:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220809A**	QC Batch: **R164698**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/9/2022 07:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 1:05:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220809A**	QC Batch: **R164698**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 12:43 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-181-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 1:49:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220809A**	QC Batch: **R164698**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 12:58 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-218-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 2:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220809A**	QC Batch: **R164698**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 01:14 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 12:24:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220810A**	QC Batch: **R164722**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 07:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 12:59:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220810A**	QC Batch: **R164722**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 08:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 1:33:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220810A**	QC Batch: **R164722**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 07:17 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 2:11:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	6.8	50		mg/L	50	8/11/2022 05:55 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID **MB-R164698**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164698**
Client ID: **PBW**	Batch ID: **R164698**	TestNo: **SM 5310C**		Analysis Date: **8/9/2022**	SeqNo: **4770182**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID **LCS-R164698**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164698**
Client ID: **LCSW**	Batch ID: **R164698**	TestNo: **SM 5310C**		Analysis Date: **8/9/2022**	SeqNo: **4770183**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.004	1.0	5.000	0	100	85	115				

Sample ID **N051991-001CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164698**
Client ID: **ZZZZZZ**	Batch ID: **R164698**	TestNo: **SM 5310C**		Analysis Date: **8/9/2022**	SeqNo: **4770185**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.408	1.0	5.000	0.3415	101	75	125				

Sample ID **N051991-001CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164698**
Client ID: **ZZZZZZ**	Batch ID: **R164698**	TestNo: **SM 5310C**		Analysis Date: **8/9/2022**	SeqNo: **4770186**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.528	1.0	5.000	0.3415	104	75	125	5.408	2.21	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID	MB-R164722	SampType:	MBLK	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164722
Client ID:	PBW	Batch ID:	R164722	TestNo:	SM 5310C			Analysis Date:	8/10/2022	SeqNo:	4772638

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID	LCS-R164722	SampType:	LCS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164722
Client ID:	LCSW	Batch ID:	R164722	TestNo:	SM 5310C			Analysis Date:	8/10/2022	SeqNo:	4772639

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	4.987	1.0	5.000	0	99.7	85	115				

Sample ID	N051991-002CMS	SampType:	MS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164722
Client ID:	ZZZZZZ	Batch ID:	R164722	TestNo:	SM 5310C			Analysis Date:	8/10/2022	SeqNo:	4772641

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.807	1.0	5.000	1.022	95.7	75	125				

Sample ID	N051991-002CMSD	SampType:	MSD	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164722
Client ID:	ZZZZZZ	Batch ID:	R164722	TestNo:	SM 5310C			Analysis Date:	8/10/2022	SeqNo:	4772642

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	6.059	1.0	5.000	1.022	101	75	125	5.807	4.25	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID	MB-R164745	SampType:	MBLK	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164745
Client ID:	PBW	Batch ID:	R164745	TestNo:	SM 5310C			Analysis Date:	8/11/2022	SeqNo:	4775942

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID	LCS-R164745	SampType:	LCS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164745
Client ID:	LCSW	Batch ID:	R164745	TestNo:	SM 5310C			Analysis Date:	8/11/2022	SeqNo:	4775943

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.097	1.0	5.000	0	102	85	115				

Sample ID	N052034-009DMS	SampType:	MS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164745
Client ID:	ZZZZZZ	Batch ID:	R164745	TestNo:	SM 5310C			Analysis Date:	8/11/2022	SeqNo:	4775956

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	230.280	50	250.0	0	92.1	75	125				

Sample ID	N052034-009DMSD	SampType:	MSD	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164745
Client ID:	ZZZZZZ	Batch ID:	R164745	TestNo:	SM 5310C			Analysis Date:	8/11/2022	SeqNo:	4775957

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	233.585	50	250.0	0	93.4	75	125	230.3	1.42	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 12:17:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 02:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 1:05:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	27	13	20		µg/L	1	8/13/2022 02:09 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-181-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 1:49:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 02:14 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-218-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 2:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 02:19 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 12:24:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	27	13	20		µg/L	1	8/13/2022 02:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 12:59:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	400	13	20		µg/L	1	8/13/2022 02:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 1:33:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 02:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 2:11:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	61	13	20		µg/L	1	8/13/2022 02:47 PM

Qualifiers:				
	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	MB-94189	SampType:	MBLK	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	PBW	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777827

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID	LCS-94189	SampType:	LCS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	LCSW	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777828

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	107.402	20	100.0	0	107	85	115				

Sample ID	N052034-009CMS	SampType:	MS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	ZZZZZZ	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777841

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	109.068	20	100.0	61.13	47.9	75	125				S

Sample ID	N052034-009CMSD	SampType:	MSD	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	ZZZZZZ	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777842

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	103.353	20	100.0	61.13	42.2	75	125	109.1	5.38	20	S

Sample ID	N052058-010CMS	SampType:	MS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	ZZZZZZ	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777856

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	90.072	20	100.0	0	90.1	75	125				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	N052058-010CMSD	SampType:	MSD	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	ZZZZZZ	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777857

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	94.804	20	100.0	0	94.8	75	125	90.07	5.12	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	N052034-009C-PS	SampType:	PS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:		RunNo:	164812
Client ID:	ZZZZZZ	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777840

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	105.392	20	100.0	61.13	44.3	80	120				S

Sample ID	N052058-010C-PS	SampType:	PS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:		RunNo:	164812
Client ID:	ZZZZZZ	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777855

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	94.354	20	100.0	0	94.4	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052034-001

Client Sample ID: MW-76-039-Q322
Collection Date: 8/8/2022 12:17:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 03:44 PM
Barium	53	0.083	1.0		µg/L	1	8/13/2022 03:44 PM
Manganese	ND	0.026	0.50		µg/L	1	8/13/2022 03:44 PM
Molybdenum	23	0.12	0.50		µg/L	1	8/13/2022 03:44 PM
Selenium	3.7	0.044	0.50		µg/L	1	8/13/2022 03:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052034-002

Client Sample ID: MW-76-156-Q322
Collection Date: 8/8/2022 1:05:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 03:56 PM
Barium	44	0.083	1.0		µg/L	1	8/13/2022 03:56 PM
Manganese	130	0.026	0.50		µg/L	1	8/13/2022 03:56 PM
Molybdenum	27	0.12	0.50		µg/L	1	8/13/2022 03:56 PM
Selenium	0.93	0.044	0.50		µg/L	1	8/15/2022 05:14 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052034-003

Client Sample ID: MW-76-181-Q322
Collection Date: 8/8/2022 1:49:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 04:08 PM
Barium	54	0.083	1.0		µg/L	1	8/13/2022 04:08 PM
Manganese	9.6	0.026	0.50		µg/L	1	8/13/2022 04:08 PM
Molybdenum	30	0.12	0.50		µg/L	1	8/13/2022 04:08 PM
Selenium	1.2	0.044	0.50		µg/L	1	8/13/2022 04:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052034-004

Client Sample ID: MW-76-218-Q322
Collection Date: 8/8/2022 2:40:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 04:20 PM
Barium	73	0.083	1.0		µg/L	1	8/13/2022 04:20 PM
Manganese	350	0.13	2.5		µg/L	5	8/13/2022 04:44 PM
Molybdenum	33	0.12	0.50		µg/L	1	8/13/2022 04:20 PM
Selenium	0.74	0.044	0.50		µg/L	1	8/13/2022 04:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 12:24:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220829C**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Arsenic	2.3	0.050	0.10		µg/L	1	8/29/2022 01:52 PM
Barium	97	0.083	1.0		µg/L	1	8/13/2022 04:50 PM
Manganese	800	0.13	2.5		µg/L	5	8/13/2022 04:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-Q322
Lab Order:	N052034	**Collection Date:**	8/8/2022 12:59:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052034-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 05:02 PM
Barium	42	0.083	1.0		µg/L	1	8/13/2022 05:02 PM
Manganese	53	0.026	0.50		µg/L	1	8/13/2022 05:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052034-008

Client Sample ID: MW-77-158-Q322
Collection Date: 8/8/2022 1:33:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 05:14 PM
Barium	46	0.083	1.0		µg/L	1	8/13/2022 05:14 PM
Manganese	64	0.026	0.50		µg/L	1	8/13/2022 05:14 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052034-009

Client Sample ID: MW-77-187-Q322
Collection Date: 8/8/2022 2:11:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220817B**	QC Batch: **94191**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/17/2022 06:27 PM
Barium	30	0.083	1.0		µg/L	1	8/13/2022 05:26 PM
Manganese	28	0.026	0.50		µg/L	1	8/13/2022 05:26 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID **MB-94191**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **PBW**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778847**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	ND	1.0									
Manganese	ND	0.50									
Molybdenum	ND	0.50									
Selenium	ND	0.50									

Sample ID **LCS-94191**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **LCSW**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778848**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.500	0.10	10.00	0	95.0	85	115				
Barium	9.348	1.0	10.00	0	93.5	85	115				
Manganese	94.570	0.50	100.0	0	94.6	85	115				
Molybdenum	9.339	0.50	10.00	0	93.4	85	115				
Selenium	8.934	0.50	10.00	0	89.3	85	115				

Sample ID **N052034-009CMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778872**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	38.488	1.0	10.00	30.16	83.3	75	125				
Manganese	114.915	0.50	100.0	27.82	87.1	75	125				
Molybdenum	157.700	0.50	10.00	147.1	106	75	125				

Sample ID **N052034-009CMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778874**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	37.579	1.0	10.00	30.16	74.2	75	125	38.49	2.39	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID **N052034-009CMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778874**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	112.223	0.50	100.0	27.82	84.4	75	125	114.9	2.37	20	
Molybdenum	153.687	0.50	10.00	147.1	66.2	75	125	157.7	2.58	20	S

Sample ID **N052058-010CMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778905**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.497	0.10	10.00	1.189	93.1	75	125				
Barium	43.883	1.0	10.00	35.47	84.1	75	125				
Molybdenum	14.259	0.50	10.00	4.272	99.9	75	125				
Selenium	8.682	0.50	10.00	0.06231	86.2	75	125				

Sample ID **N052058-010CMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778906**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	331.656	2.5	100.0	187.6	144	75	125				S

Sample ID **N052058-010CMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778907**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.421	0.10	10.00	1.189	92.3	75	125	10.50	0.723	20	
Barium	44.134	1.0	10.00	35.47	86.6	75	125	43.88	0.571	20	
Molybdenum	14.110	0.50	10.00	4.272	98.4	75	125	14.26	1.05	20	
Selenium	8.489	0.50	10.00	0.06231	84.3	75	125	8.682	2.26	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N052058-010CMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164826
Client ID:	ZZZZZZ	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778908

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	300.843	2.5	100.0	187.6	113	75	125	331.7	9.74	20	

Sample ID	MB-94191	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164874
Client ID:	PBW	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/15/2022	SeqNo:	4781827

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									

Sample ID	N052034-009CMS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164907
Client ID:	ZZZZZZ	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/17/2022	SeqNo:	4784566

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.289	0.10	10.00	0	123	75	125				
Selenium	10.317	0.50	10.00	1.039	92.8	75	125				

Sample ID	N052034-009CMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164907
Client ID:	ZZZZZZ	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/17/2022	SeqNo:	4784567

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	11.930	0.10	10.00	0	119	75	125	12.29	2.96	20	
Selenium	10.139	0.50	10.00	1.039	91.0	75	125	10.32	1.74	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052034
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID **N052034-009C-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164826**
Client ID: **ZZZZZZ** Batch ID: **94191** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/13/2022** SeqNo: **4778870**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	38.211	1.0	10.00	30.16	80.5	80	120				
Manganese	114.072	0.50	100.0	27.82	86.2	80	120				
Molybdenum	155.134	0.50	10.00	147.1	80.6	80	120				

Sample ID **N052058-010C-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164826**
Client ID: **ZZZZZZ** Batch ID: **94191** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/13/2022** SeqNo: **4778901**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.593	0.10	10.00	1.189	94.0	80	120				
Barium	44.040	1.0	10.00	35.47	85.7	80	120				
Molybdenum	14.257	0.50	10.00	4.272	99.9	80	120				
Selenium	8.412	0.50	10.00	0.06231	83.5	80	120				

Sample ID **N052058-010C-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164826**
Client ID: **ZZZZZZ** Batch ID: **94191** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/13/2022** SeqNo: **4778904**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	306.426	2.5	100.0	187.6	119	80	120				

Sample ID **N052034-009C-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164907**
Client ID: **ZZZZZZ** Batch ID: **94191** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/17/2022** SeqNo: **4784565**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	11.782	0.10	10.00	0	118	80	120				
Selenium	10.642	0.50	10.00	1.039	96.0	80	120				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

ASSET LABORATORIES

ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

Page 1 of 1

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement	QA/QC	Sample Receipt Condition
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD	RTNE	Y N
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker	RWQCB ✓	1. Chilled ✓
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Labspec	CalTrans	2. Headspace
Submitted By: Riggie Tap		Phone: 949-727-1400, ext 200 Fax:	Others ✓	LEVEL III	3. Container Intact ✓
Title: Field Tech	Phone: 916-786-3302 Fax:		Specify: RWQCB	LEVEL IV	4. Seal Present ✓
Signature: Date: 8/8/22	Sampled By: Riggie Tap		Global ID:	Regulatory	5. IR number 3
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of the sample. I am aware that tampering with or intentionally misleading the sample location, date or time of collection is considered fraud and may be grounds for			Specify State:	6. Method of Cooling: Ice
Project Name: PG&E Topock - PCM	Signature:	Date: 8/8/22			Sample Temp: 2.4°C
Project Number: 30121866.3Q22GW					Courier: Asset
					Tracking No.:

Matrix: Ground X | Sediment; Potable | Soil; NPDES | Other Solid; Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrite, Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter, HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052034-01	MW-76-039-0822	8/8/2022	12:17		X	X	X	X	X	X		X		E	7	P	BNS	
2	-02	MW-76-156-0822	8/8/2022	13:05		X	X	X	X	X	X		X		E	7	P	BNS	
3	-03	MW-76-181-0822	8/8/2022	13:49		X	X	X	X	X	X		X		E	7	P	BNS	
4	-04	MW-76-218-0822	8/8/2022	14:40		X	X	X	X	X	X		X		E	7	P	BNS	
5	-05	EB-709-Q322	8/8/2022	14:50		X									E	1	P	BNS	
6	-06	MW-77-046-0822	8/8/2022	12:24		X		X			X			X	E	6	P	BNS	
7	-07	MW-77-102-0822	8/8/2022	12:59		X		X			X			X	E	6	P	BNS	
8	-08	MW-77-158-0822	8/8/2022	13:33		X		X			X			X	E	6	P	BNS	
9	-09	MW-77-187-0822	8/8/2022	14:11		X		X			X			X	E	9	P	BNS	MS/MSD
10	-10	EB-710-Q322	8/8/2022	15:30		X									E	1	P	BNS	
11																			
12																			
13																			
14																			

Relinquished by (Signature and Printed Name): Riggie Tap	Date/Time: 8/8/22 1550	Received by (Signature and Printed Name):	Date/Time: 8/8/22 1550
Relinquished by (Signature and Printed Name):	Date/Time: 8/8/22 1756	Received by (Signature and Printed Name): Joandra Rodriguez	Date/Time: 8/8/22 1756
Relinquished by (Signature and Printed Name):	Date/Time:	Received by (Signature and Printed Name):	Date/Time:

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B	(NH4)2SO4/NH4OH		M=Metal	M=Metal	C=Can

White=Laboratory Copy

Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/8/2022	Workorder:	N052034
Rep sample Temp (Deg C):	2.1	IR Gun ID:	3
Temp Blank:	☑ Yes ☐ No		
Carrier name:	ASSET		
Last 4 digits of Tracking No.:	NA	Packing Material Used:	None
Cooling process:	☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None		

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☐	No ☑	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☑	No ☐	NA ☐
Was Client notified?	Yes ☑	No ☐	NA ☐

Comments: See Correspondence.

For:

Checklist Completed By: YR EFanegF 8/9/2022

Reviewed By: for: MBC 8/11/2022

Subject: RE: PG&E Topock - PCM, 30121866.3Q22GW (ASSET Labs No. N052034)
From: "Madsen, Laura" <Laura.Madsen@arcadis.com>
Date: 8/9/2022, 1:03 PM
To: Yoandra Rodriguez <yoandra@assetlaboratories.com>
CC: "maryann.balilu@assetlaboratoriesph.com" <maryann.balilu@assetlaboratoriesph.com>, Tina Rice <Tina.Rice@critigen.com>

Hi Yoandra,
The labels are correct and the Sample IDs should be “Q322”. Today’s samples will have the same error. I’ll get the COCs changed for tomorrow, sorry about that.

Thanks!
Laura

From: Yoandra Rodriguez <yoandra@assetlaboratories.com>
Sent: Tuesday, August 9, 2022 3:02 PM
To: Madsen, Laura <Laura.Madsen@arcadis.com>
Cc: maryann.balilu@assetlaboratoriesph.com; Tina Rice <Tina.Rice@critigen.com>
Subject: PG&E Topock - PCM, 30121866.3Q22GW (ASSET Labs No. N052034)

Hi Laura,

Please, kindly confirm if sample IDs should be "0822" per COC or "Q322" per labels.

EB samples are correct.

--
Thanks,

Yoandra Rodriguez
Project Manager

Nevada: 3151 W. Post Road, Las Vegas, NV 89118 | P: 702.307.2659 | F: 702.307.2691
California: 11110 Artesia Blvd., Ste. B, Cerritos, CA 90703 | P: 562.219.7435 | F: 562.219.7436

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ASSET Laboratories

WORK ORDER Summary

09-Aug-22

WorkOrder: N052034

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/8/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052034-001A	MW-76-039-Q322	8/8/2022 12:17:00 PM	8/22/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052034-001B			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052034-001C			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052034-001D			8/22/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052034-001E			8/22/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052034-002A	MW-76-156-Q322	8/8/2022 1:05:00 PM	8/22/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052034-002B			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052034-002C			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052034-002D			8/22/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

09-Aug-22

WorkOrder: N052034

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/8/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052034-002E	MW-76-156-Q322	8/8/2022 1:05:00 PM	8/22/2022	Groundwater	SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052034-003A	MW-76-181-Q322	8/8/2022 1:49:00 PM	8/22/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052034-003B			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052034-003C			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052034-003D			8/22/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052034-003E			8/22/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052034-004A	MW-76-218-Q322	8/8/2022 2:40:00 PM	8/22/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052034-004B			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052034-004C			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

09-Aug-22

WorkOrder: N052034

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/8/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052034-004D	MW-76-218-Q322	8/8/2022 2:40:00 PM	8/22/2022	Groundwater	SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052034-004E			8/22/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052034-005A	EB-709-Q322	8/8/2022 2:50:00 PM	8/22/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052034-006A	MW-77-046-Q322	8/8/2022 12:24:00 PM	8/22/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052034-006B			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052034-006C			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052034-006D			8/22/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052034-007A	MW-77-102-Q322	8/8/2022 12:59:00 PM	8/22/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052034-007B			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052034-007C			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052034-007D			8/22/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052034-008A	MW-77-158-Q322	8/8/2022 1:33:00 PM	8/22/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052034-008B			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

09-Aug-22

WorkOrder: N052034

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/8/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052034-008C	MW-77-158-Q322	8/8/2022 1:33:00 PM	8/22/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/22/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052034-008D			8/22/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052034-009A	MW-77-187-Q322	8/8/2022 2:11:00 PM	8/22/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☑	☐	WW
N052034-009B			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
			8/22/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
N052034-009C			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			8/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			8/22/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☑	☐	WW
			8/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☑	☐	WW
N052034-009D			8/22/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☑	☐	VW
N052034-010A	EB-710-Q322	8/8/2022 3:30:00 PM	8/22/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052034-011A	FOLDER	8/22/2022	8/22/2022		Folder	Folder	☐	☐	☐	LAB
			8/22/2022		Folder	Level IV Report	☐	☐	☐	LAB
			8/22/2022		Folder	Folder	☐	☐	☐	LAB

ASSET Laboratories
3151-3153 W Post Rd., Las Vegas, NV 89118
www.atl-labs.com
TEL: 7023072659 *FAX: 7023072691*

CHAIN-OF-CUSTODY RECORD

QC Level: Level IV

Subcontractor:
BC Labs
4100 Atlas Court
Bakersfield, CA 93308

TEL: (661) 327-4911
FAX: (661) 327-1918
Acct #:

Field Sampler: Riggie Tep

10-Aug-22

Sample ID	Matrix	Date Collected	Bottle Type	Ammonia ~~SM4500-NH3D~~	Requested Tests	
N052034-001E / MW-76-039-Q322	Groundwater	8/8/2022 12:17:00 PM	16OZP	1		
N052034-002E / MW-76-156-Q322	Groundwater	8/8/2022 1:05:00 PM	16OZP	1		
N052034-003E / MW-76-181-Q322	Groundwater	8/8/2022 1:49:00 PM	16OZP	1		
N052034-004E / MW-76-218-Q322	Groundwater	8/8/2022 2:40:00 PM	16OZP	1		

General Comments: PLEASE EMAIL SAMPLE RECEIPT ACKNOWLEDGEMENT TO THE PM. ALWAYS CC: sonny.lorenzo@assetlaboratories.com

Please use PO#:N52034A Please email Invoices and Account Receivable Statements to elvira@assetlaboratories.com. For questions, call Marlon at (702)-307-2659. Please e-mail results to reports.lv@assetlaboratories.com by: Standard TAT.

Please analyze for Ammonia. EDD requirement Labspec7 edata.

GSO #: 557512000

		Date/Time			Date/Time
Relinquished by:	YLJ	8/10/2022 1630	**Received by:**		
Relinquished by:			**Received by:**		

August 30, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052058

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 09, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Subcontracted Analyses:

Ammonia was subcontracted to BC Labs- Bakersfield,CA.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for EPA 6010B_Dissolved:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Iron in QC samples N052034-009CMS, N052034-009CMSD and N052065-001BMSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020_Dissolved:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for some analytes in QC samples N052034-009CMS, N052034-009CMSD, N052058-010CMS, N052065-001BMS and N052065-001BMSD possibly due to matrix interference. Post Spike (PS) passed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for SM 5310C:

Matrix Spike (MS) is outside recovery criteria in QC sample N052034-009DMS at lower dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N052034-009 and MS/MSD were reported at 50x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Matrix Spike (MS) is outside recovery criteria in QC sample N052282-007CMS at lower dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N052282-007 and MS/MSD were reported at 50x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052058
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052058-001A	TW-02D-Q322	Groundwater	8/9/2022 8:35:00 AM	8/9/2022	8/30/2022
N052058-001B	TW-02D-Q322	Groundwater	8/9/2022 8:35:00 AM	8/9/2022	8/30/2022
N052058-001C	TW-02D-Q322	Groundwater	8/9/2022 8:35:00 AM	8/9/2022	8/30/2022
N052058-001D	TW-02D-Q322	Groundwater	8/9/2022 8:35:00 AM	8/9/2022	8/30/2022
N052058-001E	TW-02D-Q322	Groundwater	8/9/2022 8:35:00 AM	8/9/2022	8/30/2022
N052058-002A	TW-02S-Q322	Groundwater	8/9/2022 8:04:00 AM	8/9/2022	8/30/2022
N052058-002B	TW-02S-Q322	Groundwater	8/9/2022 8:04:00 AM	8/9/2022	8/30/2022
N052058-002C	TW-02S-Q322	Groundwater	8/9/2022 8:04:00 AM	8/9/2022	8/30/2022
N052058-002D	TW-02S-Q322	Groundwater	8/9/2022 8:04:00 AM	8/9/2022	8/30/2022
N052058-002E	TW-02S-Q322	Groundwater	8/9/2022 8:04:00 AM	8/9/2022	8/30/2022
N052058-003A	TW-03D-Q322	Groundwater	8/9/2022 9:06:00 AM	8/9/2022	8/30/2022
N052058-003B	TW-03D-Q322	Groundwater	8/9/2022 9:06:00 AM	8/9/2022	8/30/2022
N052058-003C	TW-03D-Q322	Groundwater	8/9/2022 9:06:00 AM	8/9/2022	8/30/2022
N052058-003D	TW-03D-Q322	Groundwater	8/9/2022 9:06:00 AM	8/9/2022	8/30/2022
N052058-003E	TW-03D-Q322	Groundwater	8/9/2022 9:06:00 AM	8/9/2022	8/30/2022
N052058-004A	MW-20-070-Q322	Groundwater	8/9/2022 10:10:00 AM	8/9/2022	8/30/2022
N052058-004B	MW-20-070-Q322	Groundwater	8/9/2022 10:10:00 AM	8/9/2022	8/30/2022
N052058-004C	MW-20-070-Q322	Groundwater	8/9/2022 10:10:00 AM	8/9/2022	8/30/2022
N052058-004D	MW-20-070-Q322	Groundwater	8/9/2022 10:10:00 AM	8/9/2022	8/30/2022
N052058-004E	MW-20-070-Q322	Groundwater	8/9/2022 10:10:00 AM	8/9/2022	8/30/2022
N052058-005A	MW-910-Q322	Groundwater	8/9/2022 10:20:00 AM	8/9/2022	8/30/2022
N052058-005B	MW-910-Q322	Groundwater	8/9/2022 10:20:00 AM	8/9/2022	8/30/2022
N052058-005C	MW-910-Q322	Groundwater	8/9/2022 10:20:00 AM	8/9/2022	8/30/2022
N052058-005D	MW-910-Q322	Groundwater	8/9/2022 10:20:00 AM	8/9/2022	8/30/2022
N052058-005E	MW-910-Q322	Groundwater	8/9/2022 10:20:00 AM	8/9/2022	8/30/2022
N052058-006A	MW-20-100-Q322	Groundwater	8/9/2022 11:44:00 AM	8/9/2022	8/30/2022
N052058-006B	MW-20-100-Q322	Groundwater	8/9/2022 11:44:00 AM	8/9/2022	8/30/2022
N052058-006C	MW-20-100-Q322	Groundwater	8/9/2022 11:44:00 AM	8/9/2022	8/30/2022
N052058-006D	MW-20-100-Q322	Groundwater	8/9/2022 11:44:00 AM	8/9/2022	8/30/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052058
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052058-006E	MW-20-100-Q322	Groundwater	8/9/2022 11:44:00 AM	8/9/2022	8/30/2022
N052058-007A	MW-20-130-Q322	Groundwater	8/9/2022 10:55:00 AM	8/9/2022	8/30/2022
N052058-007B	MW-20-130-Q322	Groundwater	8/9/2022 10:55:00 AM	8/9/2022	8/30/2022
N052058-007C	MW-20-130-Q322	Groundwater	8/9/2022 10:55:00 AM	8/9/2022	8/30/2022
N052058-007D	MW-20-130-Q322	Groundwater	8/9/2022 10:55:00 AM	8/9/2022	8/30/2022
N052058-007E	MW-20-130-Q322	Groundwater	8/9/2022 10:55:00 AM	8/9/2022	8/30/2022
N052058-008A	EB-711-Q322	Groundwater	8/9/2022 12:00:00 PM	8/9/2022	8/30/2022
N052058-009A	MW-39-040-Q322	Groundwater	8/9/2022 8:13:00 AM	8/9/2022	8/30/2022
N052058-009B	MW-39-040-Q322	Groundwater	8/9/2022 8:13:00 AM	8/9/2022	8/30/2022
N052058-009C	MW-39-040-Q322	Groundwater	8/9/2022 8:13:00 AM	8/9/2022	8/30/2022
N052058-009D	MW-39-040-Q322	Groundwater	8/9/2022 8:13:00 AM	8/9/2022	8/30/2022
N052058-010A	MW-39-050-Q322	Groundwater	8/9/2022 9:38:00 AM	8/9/2022	8/30/2022
N052058-010B	MW-39-050-Q322	Groundwater	8/9/2022 9:38:00 AM	8/9/2022	8/30/2022
N052058-010C	MW-39-050-Q322	Groundwater	8/9/2022 9:38:00 AM	8/9/2022	8/30/2022
N052058-010D	MW-39-050-Q322	Groundwater	8/9/2022 9:38:00 AM	8/9/2022	8/30/2022
N052058-011A	MW-39-060-Q322	Groundwater	8/9/2022 11:00:00 AM	8/9/2022	8/30/2022
N052058-011B	MW-39-060-Q322	Groundwater	8/9/2022 11:00:00 AM	8/9/2022	8/30/2022
N052058-011C	MW-39-060-Q322	Groundwater	8/9/2022 11:00:00 AM	8/9/2022	8/30/2022
N052058-011D	MW-39-060-Q322	Groundwater	8/9/2022 11:00:00 AM	8/9/2022	8/30/2022
N052058-012A	MW-39-070-Q322	Groundwater	8/9/2022 8:54:00 AM	8/9/2022	8/30/2022
N052058-012B	MW-39-070-Q322	Groundwater	8/9/2022 8:54:00 AM	8/9/2022	8/30/2022
N052058-012C	MW-39-070-Q322	Groundwater	8/9/2022 8:54:00 AM	8/9/2022	8/30/2022
N052058-012D	MW-39-070-Q322	Groundwater	8/9/2022 8:54:00 AM	8/9/2022	8/30/2022
N052058-013A	MW-915-Q322	Groundwater	8/9/2022 9:04:00 AM	8/9/2022	8/30/2022
N052058-013B	MW-915-Q322	Groundwater	8/9/2022 9:04:00 AM	8/9/2022	8/30/2022
N052058-013C	MW-915-Q322	Groundwater	8/9/2022 9:04:00 AM	8/9/2022	8/30/2022
N052058-013D	MW-915-Q322	Groundwater	8/9/2022 9:04:00 AM	8/9/2022	8/30/2022
N052058-014A	MW-39-080-Q322	Groundwater	8/9/2022 10:20:00 AM	8/9/2022	8/30/2022
N052058-014B	MW-39-080-Q322	Groundwater	8/9/2022 10:20:00 AM	8/9/2022	8/30/2022
N052058-014C	MW-39-080-Q322	Groundwater	8/9/2022 10:20:00 AM	8/9/2022	8/30/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052058
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052058-014D	MW-39-080-Q322	Groundwater	8/9/2022 10:20:00 AM	8/9/2022	8/30/2022
N052058-015A	MW-39-100-Q322	Groundwater	8/9/2022 11:53:00 AM	8/9/2022	8/30/2022
N052058-015B	MW-39-100-Q322	Groundwater	8/9/2022 11:53:00 AM	8/9/2022	8/30/2022
N052058-015C	MW-39-100-Q322	Groundwater	8/9/2022 11:53:00 AM	8/9/2022	8/30/2022
N052058-015D	MW-39-100-Q322	Groundwater	8/9/2022 11:53:00 AM	8/9/2022	8/30/2022
N052058-016A	EB-712-Q322	Groundwater	8/9/2022 12:10:00 PM	8/9/2022	8/30/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02D-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 8:35:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	200	1.3	10		µg/L	50	8/10/2022 09:24 PM
DISSOLVED METALS BY ICP-MS							
		EPA 3010A	**EPA 6020**				
RunID: **NV00922-ICP8_220813B**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Chromium	210	0.18	5.0		µg/L	5	8/13/2022 06:43 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02S-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 8:04:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	130	0.50	4.0		µg/L	20	8/10/2022 05:01 PM
DISSOLVED METALS BY ICP-MS							
		EPA 3010A			**EPA 6020**		
RunID: **NV00922-ICP8_220813B**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Chromium	130	0.035	1.0		µg/L	1	8/13/2022 07:18 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-03D-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 9:06:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	160	1.3	10		µg/L	50	8/10/2022 09:43 PM
DISSOLVED METALS BY ICP-MS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220813B**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Chromium	150	0.035	1.0		µg/L	1	8/13/2022 07:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-070-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	700	2.5	20		µg/L	100	8/10/2022 05:20 PM
DISSOLVED METALS BY ICP-MS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220813B**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Chromium	720	0.18	5.0		µg/L	5	8/13/2022 07:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-910-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A** QC Batch: **R164784**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	690	2.5	20		µg/L	100	8/10/2022 11:08 PM
DISSOLVED METALS BY ICP-MS							
			EPA 3010A		**EPA 6020**		
RunID: **NV00922-ICP8_220813B** QC Batch: **94191**				PrepDate:	**8/11/2022**		Analyst: **DJ**
Chromium	680	0.18	5.0		µg/L	5	8/13/2022 08:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-100-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 11:44:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	1600	5.0	40		µg/L	200	8/10/2022 05:29 PM
DISSOLVED METALS BY ICP-MS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220815B**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Chromium	1700	0.88	25		µg/L	25	8/15/2022 06:31 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-130-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:55:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	1800	5.0	40		µg/L	200	8/10/2022 05:39 PM
DISSOLVED METALS BY ICP-MS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220815B**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Chromium	1700	0.88	25		µg/L	25	8/15/2022 06:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-711-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 12:00:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/10/2022 08:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-040-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 8:13:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/10/2022 06:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 9:38:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/10/2022 04:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-060-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 11:00:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/10/2022 07:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-070-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 8:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/10/2022 07:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-915-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 9:04:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/10/2022 08:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	0.53	0.025	0.20		µg/L	1	8/10/2022 11:36 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 11:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	79	0.25	2.0		µg/L	10	8/11/2022 12:14 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-712-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 12:10:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220810A**	QC Batch: **R164784**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/10/2022 09:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	MB-R164784	SampType:	MBLK	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164784
Client ID:	PBW	Batch ID:	R164784	TestNo:	EPA 218.6			Analysis Date:	8/10/2022	SeqNo:	4776220

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID	LCS-R164784	SampType:	LCS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164784
Client ID:	LCSW	Batch ID:	R164784	TestNo:	EPA 218.6			Analysis Date:	8/10/2022	SeqNo:	4776221

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.207	0.20	5.000	0	104	90	110				

Sample ID	N052058-010AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164784
Client ID:	ZZZZZZ	Batch ID:	R164784	TestNo:	EPA 218.6			Analysis Date:	8/10/2022	SeqNo:	4776230

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.032	0.20	1.000	0	103	90	110				

Sample ID	N052058-010AMSD	SampType:	MSD	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164784
Client ID:	ZZZZZZ	Batch ID:	R164784	TestNo:	EPA 218.6			Analysis Date:	8/10/2022	SeqNo:	4776231

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.041	0.20	1.000	0	104	90	110	1.032	0.945	20	

Sample ID	N052058-009AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164784
Client ID:	ZZZZZZ	Batch ID:	R164784	TestNo:	EPA 218.6			Analysis Date:	8/10/2022	SeqNo:	4776233

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.064	0.20	1.000	0	106	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052058-011AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164784
Client ID:	ZZZZZZ	Batch ID:	R164784	TestNo:	EPA 218.6			Analysis Date:	8/10/2022	SeqNo:	4776235

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.036	0.20	1.000	0	104	90	110				

Sample ID	N052058-012AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164784
Client ID:	ZZZZZZ	Batch ID:	R164784	TestNo:	EPA 218.6			Analysis Date:	8/10/2022	SeqNo:	4776237

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.030	0.20	1.000	0	103	90	110				

Sample ID	N052058-013AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164784
Client ID:	ZZZZZZ	Batch ID:	R164784	TestNo:	EPA 218.6			Analysis Date:	8/10/2022	SeqNo:	4776241

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.053	0.20	1.000	0	105	90	110				

Sample ID	N052058-008AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164784
Client ID:	ZZZZZZ	Batch ID:	R164784	TestNo:	EPA 218.6			Analysis Date:	8/10/2022	SeqNo:	4776243

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.013	0.20	1.000	0	101	90	110				

Sample ID	N052058-016AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164784
Client ID:	ZZZZZZ	Batch ID:	R164784	TestNo:	EPA 218.6			Analysis Date:	8/10/2022	SeqNo:	4776245

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.035	0.20	1.000	0	104	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **N052058-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164784**
Client ID: **ZZZZZZ** Batch ID: **R164784** TestNo: **EPA 218.6** Analysis Date: **8/10/2022** SeqNo: **4776247**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	455.705	10	250.0	197.6	103	90	110				

Sample ID **N052058-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164784**
Client ID: **ZZZZZZ** Batch ID: **R164784** TestNo: **EPA 218.6** Analysis Date: **8/10/2022** SeqNo: **4776249**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	424.500	10	250.0	163.3	104	90	110				

Sample ID **N052058-002AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164784**
Client ID: **ZZZZZZ** Batch ID: **R164784** TestNo: **EPA 218.6** Analysis Date: **8/10/2022** SeqNo: **4776252**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	239.034	4.0	100.0	132.7	106	90	110				

Sample ID **N052058-006ADUP** SampType: **DUP** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164784**
Client ID: **ZZZZZZ** Batch ID: **R164784** TestNo: **EPA 218.6** Analysis Date: **8/10/2022** SeqNo: **4776253**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1612.460	40						1628	0.990	20	

Sample ID **N052058-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164784**
Client ID: **ZZZZZZ** Batch ID: **R164784** TestNo: **EPA 218.6** Analysis Date: **8/10/2022** SeqNo: **4776254**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2634.620	40	1000	1628	101	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **N052058-007AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164784**
Client ID: **ZZZZZZ**	Batch ID: **R164784**	TestNo: **EPA 218.6**		Analysis Date: **8/10/2022**	SeqNo: **4776255**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2796.740	40	1000	1775	102	90	110				

Sample ID **N052058-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164784**
Client ID: **ZZZZZZ**	Batch ID: **R164784**	TestNo: **EPA 218.6**		Analysis Date: **8/10/2022**	SeqNo: **4776256**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1200.030	20	500.0	696.2	101	90	110				

Sample ID **N052058-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164784**
Client ID: **ZZZZZZ**	Batch ID: **R164784**	TestNo: **EPA 218.6**		Analysis Date: **8/10/2022**	SeqNo: **4776258**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1201.260	20	500.0	688.1	103	90	110				

Sample ID **N052058-014AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164784**
Client ID: **ZZZZZZ**	Batch ID: **R164784**	TestNo: **EPA 218.6**		Analysis Date: **8/10/2022**	SeqNo: **4776260**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.560	0.20	1.000	0.5273	103	90	110				

Sample ID **N052058-015AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164784**
Client ID: **ZZZZZZ**	Batch ID: **R164784**	TestNo: **EPA 218.6**		Analysis Date: **8/11/2022**	SeqNo: **4776264**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	128.684	2.0	50.00	78.55	100	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020DIS_CrPGE_TPK

Sample ID	MB-94191	SampType:	MBLK	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164825
Client ID:	PBW	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778690

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									

Sample ID	LCS-94191	SampType:	LCS	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164825
Client ID:	LCSW	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778691

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.518	1.0	10.00	0	95.2	85	115				

Sample ID	N052034-009CMS	SampType:	MS	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164825
Client ID:	ZZZZZZ	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778715

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	18.034	1.0	10.00	8.786	92.5	75	125				

Sample ID	N052034-009CMSD	SampType:	MSD	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164825
Client ID:	ZZZZZZ	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778717

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	17.484	1.0	10.00	8.786	87.0	75	125	18.03	3.10	20	

Sample ID	N052058-010CMS	SampType:	MS	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164825
Client ID:	ZZZZZZ	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778748

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.667	1.0	10.00	0.3644	93.0	75	125				

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020DIS_CrPGE_TPK

Sample ID **N052058-010CMSD**	SampType: **MSD**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164825**				
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778750**				

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.827	1.0	10.00	0.3644	94.6	75	125	9.667	1.64	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-001

Client Sample ID: TW-02D-Q322
Collection Date: 8/9/2022 8:35:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/9/2022 11:41 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Sulfate	650	6.1	50		mg/L	100	8/10/2022 04:57 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrate as N	1.5	0.095	0.50		mg/L	10	8/9/2022 11:41 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-002

Client Sample ID: TW-02S-Q322
Collection Date: 8/9/2022 8:04:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/9/2022 09:35 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Sulfate	170	1.2	10		mg/L	20	8/10/2022 05:13 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrate as N	3.0	0.095	0.50		mg/L	10	8/9/2022 09:35 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-003

Client Sample ID: TW-03D-Q322
Collection Date: 8/9/2022 9:06:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/9/2022 11:10 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Sulfate	660	6.1	50		mg/L	100	8/10/2022 05:29 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrate as N	1.6	0.095	0.50		mg/L	10	8/9/2022 11:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-004

Client Sample ID: MW-20-070-Q322
Collection Date: 8/9/2022 10:10:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/9/2022 11:57 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Sulfate	690	3.0	25		mg/L	50	8/10/2022 05:45 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrate as N	40	0.19	1.0		mg/L	20	8/10/2022 01:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-005

Client Sample ID: MW-910-Q322
Collection Date: 8/9/2022 10:20:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/10/2022 12:45 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Sulfate	690	3.0	25		mg/L	50	8/10/2022 06:01 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrate as N	39	0.19	1.0		mg/L	20	8/10/2022 01:16 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-006

Client Sample ID: MW-20-100-Q322
Collection Date: 8/9/2022 11:44:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY				**EPA 300.0**			
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/10/2022 01:32 AM
ANIONS BY ION CHROMATOGRAPHY				**EPA 300.0**			
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Sulfate	650	6.1	50		mg/L	100	8/10/2022 06:16 AM
ANIONS BY ION CHROMATOGRAPHY				**EPA 300.0**			
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrate as N	8.2	0.095	0.50		mg/L	10	8/10/2022 01:32 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-007

Client Sample ID: MW-20-130-Q322
Collection Date: 8/9/2022 10:55:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/10/2022 01:48 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Sulfate	1100	6.1	50		mg/L	100	8/10/2022 07:04 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A** QC Batch: **R164706**				PrepDate:			Analyst: **RAB**
Nitrate as N	5.3	0.095	0.50		mg/L	10	8/10/2022 01:48 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-009

Client Sample ID: MW-39-040-Q322
Collection Date: 8/9/2022 8:13:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Sulfate	120	1.2	10		mg/L	20	8/10/2022 07:20 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/10/2022 02:04 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 9:38:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Sulfate	180	1.2	10		mg/L	20	8/10/2022 04:10 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/9/2022 10:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-060-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 11:00:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Sulfate	200	1.2	10		mg/L	20	8/10/2022 07:35 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/10/2022 02:19 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-012

Client Sample ID: MW-39-070-Q322
Collection Date: 8/9/2022 8:54:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Sulfate	240	3.0	25		mg/L	50	8/10/2022 07:51 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/10/2022 02:35 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-013

Client Sample ID: MW-915-Q322
Collection Date: 8/9/2022 9:04:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Sulfate	240	3.0	25		mg/L	50	8/10/2022 08:07 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/10/2022 02:51 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-014

Client Sample ID: MW-39-080-Q322
Collection Date: 8/9/2022 10:20:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Sulfate	350	3.0	25		mg/L	50	8/10/2022 08:23 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/10/2022 03:07 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 11:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Sulfate	750	6.1	50		mg/L	100	8/10/2022 08:39 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220809A**	QC Batch: **R164706**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/10/2022 03:54 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_NO2PGE

Sample ID	MB-R164706_NO2	SampType:	MBLK	TestCode:	300_W_NO2P	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	PBW	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770520

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	ND	0.50									

Sample ID	LCS-R164706_NO2	SampType:	LCS	TestCode:	300_W_NO2P	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	LCSW	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770521

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	1.216	0.50	1.250	0	97.3	90	110				

Sample ID	N052058-002BMS	SampType:	MS	TestCode:	300_W_NO2P	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	ZZZZZZ	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770525

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	14.683	5.0	12.50	0	117	80	120				

Sample ID	N052058-002BMSD	SampType:	MSD	TestCode:	300_W_NO2P	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	ZZZZZZ	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770526

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	13.502	5.0	12.50	0	108	80	120	14.68	8.38	20	

Sample ID	N052058-003BDUP	SampType:	DUP	TestCode:	300_W_NO2P	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	ZZZZZZ	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770528

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	ND	5.0						0	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	MB-R164706_SO4	SampType:	MBLK	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	PBW	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770661

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.50									

Sample ID	LCS-R164706_SO4	SampType:	LCS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	LCSW	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770662

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	3.881	0.50	4.000	0	97.0	90	110				

Sample ID	N051991-002BMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	ZZZZZZ	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770664

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	160.822	5.0	40.00	121.0	99.7	80	120				

Sample ID	N051991-002BMSD	SampType:	MSD	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	ZZZZZZ	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770665

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	157.889	5.0	40.00	121.0	92.3	80	120	160.8	1.84	20	

Sample ID	N051991-004BDUP	SampType:	DUP	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	ZZZZZZ	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770669

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	69.374	5.0						69.68	0.436	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	N052058-010BMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	ZZZZZZ	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/10/2022	SeqNo:	4770678

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	256.798	10	80.00	183.4	91.7	80	120				

Sample ID	N052058-010BMSD	SampType:	MSD	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	ZZZZZZ	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/10/2022	SeqNo:	4770679

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	258.162	10	80.00	183.4	93.4	80	120	256.8	0.530	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	MB-R164706_NO3	SampType:	MBLK	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	PBW	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770546

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	0.024	0.050									

Sample ID	LCS-R164706_NO3	SampType:	LCS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	LCSW	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770547

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.237	0.050	1.250	0	99.0	90	110				

Sample ID	N052058-002BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	ZZZZZZ	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770551

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	15.481	0.50	12.50	3.029	99.6	80	120				

Sample ID	N052058-002BMSD	SampType:	MSD	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	ZZZZZZ	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770552

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	14.324	0.50	12.50	3.029	90.4	80	120	15.48	7.76	20	

Sample ID	N052058-010BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	164706
Client ID:	ZZZZZZ	Batch ID:	R164706	TestNo:	EPA 300.0			Analysis Date:	8/9/2022	SeqNo:	4770554

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.105	0.25	6.250	0.08750	96.3	80	120				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID **N052058-010BMSD**	SampType: **MSD**	TestCode: **300WLLNO3**	Units: **mg/L**	Prep Date:	RunNo: **164706**
Client ID: **ZZZZZZ**	Batch ID: **R164706**	TestNo: **EPA 300.0**		Analysis Date: **8/9/2022**	SeqNo: **4770555**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.209	0.25	6.250	0.08750	97.9	80	120	6.105	1.69	20	

Sample ID **N052058-003BDUP**	SampType: **DUP**	TestCode: **300WLLNO3**	Units: **mg/L**	Prep Date:	RunNo: **164706**
Client ID: **ZZZZZZ**	Batch ID: **R164706**	TestNo: **EPA 300.0**		Analysis Date: **8/9/2022**	SeqNo: **4770557**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.619	0.50						1.595	1.49	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02D-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 8:35:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220810A**	QC Batch: **R164722**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 08:19 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02S-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 8:04:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220810A**	QC Batch: **R164722**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 08:35 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-03D-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 9:06:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220810A**	QC Batch: **R164722**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 08:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-070-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220810A**	QC Batch: **R164722**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 09:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-910-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220810A**	QC Batch: **R164722**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 09:21 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-100-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 11:44:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220810A**	QC Batch: **R164722**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 09:37 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-130-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:55:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220810A**	QC Batch: **R164722**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 09:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-040-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 8:13:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220810A**	QC Batch: **R164722**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	2.7	0.14	1.0		mg/L	1	8/10/2022 10:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 9:38:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 12:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-060-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 11:00:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220810A**	QC Batch: **R164722**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/10/2022 10:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-070-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 8:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/25/2022 10:41 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-915-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 9:04:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/25/2022 10:25 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 03:49 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 11:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 04:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID **MB-R164722**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164722**
Client ID: **PBW**	Batch ID: **R164722**	TestNo: **SM 5310C**		Analysis Date: **8/10/2022**	SeqNo: **4772638**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID **LCS-R164722**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164722**
Client ID: **LCSW**	Batch ID: **R164722**	TestNo: **SM 5310C**		Analysis Date: **8/10/2022**	SeqNo: **4772639**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	4.987	1.0	5.000	0	99.7	85	115				

Sample ID **N051991-002CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164722**
Client ID: **ZZZZZZ**	Batch ID: **R164722**	TestNo: **SM 5310C**		Analysis Date: **8/10/2022**	SeqNo: **4772641**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.807	1.0	5.000	1.022	95.7	75	125				

Sample ID **N051991-002CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164722**
Client ID: **ZZZZZZ**	Batch ID: **R164722**	TestNo: **SM 5310C**		Analysis Date: **8/10/2022**	SeqNo: **4772642**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	6.059	1.0	5.000	1.022	101	75	125	5.807	4.25	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID	MB-R164745	SampType:	MBLK	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164745
Client ID:	PBW	Batch ID:	R164745	TestNo:	SM 5310C			Analysis Date:	8/11/2022	SeqNo:	4775942

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID	LCS-R164745	SampType:	LCS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164745
Client ID:	LCSW	Batch ID:	R164745	TestNo:	SM 5310C			Analysis Date:	8/11/2022	SeqNo:	4775943

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.097	1.0	5.000	0	102	85	115				

Sample ID	N052034-009DMS	SampType:	MS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164745
Client ID:	ZZZZZZ	Batch ID:	R164745	TestNo:	SM 5310C			Analysis Date:	8/11/2022	SeqNo:	4775956

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	230.280	50	250.0	0	92.1	75	125				

Sample ID	N052034-009DMSD	SampType:	MSD	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164745
Client ID:	ZZZZZZ	Batch ID:	R164745	TestNo:	SM 5310C			Analysis Date:	8/11/2022	SeqNo:	4775957

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	233.585	50	250.0	0	93.4	75	125	230.3	1.42	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID	MB-R164829	SampType:	MBLK	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164829
Client ID:	PBW	Batch ID:	R164829	TestNo:	SM 5310C			Analysis Date:	8/12/2022	SeqNo:	4779023

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID	LCS-R164829	SampType:	LCS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164829
Client ID:	LCSW	Batch ID:	R164829	TestNo:	SM 5310C			Analysis Date:	8/12/2022	SeqNo:	4779024

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.050	1.0	5.000	0	101	85	115				

Sample ID	N052058-010DMS	SampType:	MS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164829
Client ID:	ZZZZZZ	Batch ID:	R164829	TestNo:	SM 5310C			Analysis Date:	8/12/2022	SeqNo:	4779026

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.246	1.0	5.000	0.8311	88.3	75	125				

Sample ID	N052058-010DMSD	SampType:	MSD	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	164829
Client ID:	ZZZZZZ	Batch ID:	R164829	TestNo:	SM 5310C			Analysis Date:	8/12/2022	SeqNo:	4779029

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.153	1.0	5.000	0.8311	86.4	75	125	5.246	1.78	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID	MB-R165151	SampType:	MBLK	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	165151
Client ID:	PBW	Batch ID:	R165151	TestNo:	SM 5310C			Analysis Date:	8/25/2022	SeqNo:	4800089

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID	LCS-R165151	SampType:	LCS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	165151
Client ID:	LCSW	Batch ID:	R165151	TestNo:	SM 5310C			Analysis Date:	8/25/2022	SeqNo:	4800090

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.184	1.0	5.000	0	104	85	115				

Sample ID	N052282-007CMS	SampType:	MS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	165151
Client ID:	ZZZZZZ	Batch ID:	R165151	TestNo:	SM 5310C			Analysis Date:	8/25/2022	SeqNo:	4800109

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	232.730	50	250.0	0	93.1	75	125				

Sample ID	N052282-007CMSD	SampType:	MSD	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	165151
Client ID:	ZZZZZZ	Batch ID:	R165151	TestNo:	SM 5310C			Analysis Date:	8/25/2022	SeqNo:	4800110

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	234.140	50	250.0	0	93.7	75	125	232.7	0.604	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- Calculations are based on raw values

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02D-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 8:35:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 03:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-002

Client Sample ID: TW-02S-Q322
Collection Date: 8/9/2022 8:04:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 03:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-03D-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 9:06:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 03:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-070-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 03:25 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-910-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 03:39 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-100-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 11:44:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 03:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-130-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:55:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 03:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-040-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 8:13:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	240	13	20		µg/L	1	8/13/2022 03:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 9:38:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 03:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-060-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 11:00:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	270	13	20		µg/L	1	8/13/2022 04:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-070-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 8:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	25	13	20		µg/L	1	8/13/2022 04:50 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-915-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 9:04:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94189**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 04:55 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 05:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 11:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 05:13 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	MB-94189	SampType:	MBLK	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	PBW	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777827

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID	LCS-94189	SampType:	LCS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	LCSW	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777828

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	107.402	20	100.0	0	107	85	115				

Sample ID	N052034-009CMS	SampType:	MS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	ZZZZZZ	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777841

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	109.068	20	100.0	61.13	47.9	75	125				S

Sample ID	N052034-009CMSD	SampType:	MSD	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	ZZZZZZ	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777842

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	103.353	20	100.0	61.13	42.2	75	125	109.1	5.38	20	S

Sample ID	N052058-010CMS	SampType:	MS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	ZZZZZZ	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777856

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	90.072	20	100.0	0	90.1	75	125				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	N052058-010CMSD	SampType:	MSD	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	ZZZZZZ	Batch ID:	94189	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777857

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	94.804	20	100.0	0	94.8	75	125	90.07	5.12	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	MB-94190	SampType:	MBLK	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	PBW	Batch ID:	94190	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777865

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID	LCS-94190	SampType:	LCS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	LCSW	Batch ID:	94190	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777866

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	101.283	20	100.0	0	101	85	115				

Sample ID	N052065-001BMS	SampType:	MS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	ZZZZZZ	Batch ID:	94190	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777874

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	179.636	20	100.0	89.60	90.0	75	125				

Sample ID	N052065-001BMSD	SampType:	MSD	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164812
Client ID:	ZZZZZZ	Batch ID:	94190	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777875

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	154.307	20	100.0	89.60	64.7	75	125	179.6	15.2	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	**N052034-009C-PS**	SampType: **PS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date:	RunNo: **164812**
Client ID:	**ZZZZZZ**	Batch ID: **94189**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4777840**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	105.392	20	100.0	61.13	44.3	80	120				S

Sample ID	**N052058-010C-PS**	SampType: **PS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date:	RunNo: **164812**
Client ID:	**ZZZZZZ**	Batch ID: **94189**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4777855**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	94.354	20	100.0	0	94.4	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	N052065-001B-PS	SampType:	PS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:		RunNo:	164812
Client ID:	ZZZZZZ	Batch ID:	94190	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4777873

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	165.970	20	100.0	89.60	76.4	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-001

Client Sample ID: TW-02D-Q322
Collection Date: 8/9/2022 8:35:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 06:37 PM
Barium	24	0.083	1.0		µg/L	1	8/13/2022 06:37 PM
Manganese	39	0.026	0.50		µg/L	1	8/13/2022 06:37 PM
Molybdenum	32	0.12	0.50		µg/L	1	8/13/2022 06:37 PM
Selenium	0.84	0.044	0.50		µg/L	1	8/17/2022 03:18 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-002

Client Sample ID: TW-02S-Q322
Collection Date: 8/9/2022 8:04:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818A**	QC Batch: **94191**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/18/2022 03:38 PM
Barium	77	0.083	1.0		µg/L	1	8/13/2022 07:18 PM
Manganese	1.5	0.026	0.50		µg/L	1	8/13/2022 07:18 PM
Molybdenum	8.0	0.12	0.50		µg/L	1	8/13/2022 07:18 PM
Selenium	2.2	0.044	0.50		µg/L	1	8/13/2022 07:18 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-003

Client Sample ID: TW-03D-Q322
Collection Date: 8/9/2022 9:06:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 07:30 PM
Barium	45	0.083	1.0		µg/L	1	8/13/2022 07:30 PM
Manganese	55	0.026	0.50		µg/L	1	8/13/2022 07:30 PM
Molybdenum	32	0.12	0.50		µg/L	1	8/13/2022 07:30 PM
Selenium	0.94	0.044	0.50		µg/L	1	8/13/2022 07:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-004

Client Sample ID: MW-20-070-Q322
Collection Date: 8/9/2022 10:10:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 07:42 PM
Barium	53	0.083	1.0		µg/L	1	8/13/2022 07:42 PM
Manganese	ND	0.026	0.50		µg/L	1	8/13/2022 07:42 PM
Molybdenum	19	0.12	0.50		µg/L	1	8/13/2022 07:42 PM
Selenium	43	0.044	0.50		µg/L	1	8/13/2022 07:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-910-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 07:54 PM
Barium	50	0.083	1.0		µg/L	1	8/13/2022 07:54 PM
Manganese	ND	0.026	0.50		µg/L	1	8/13/2022 07:54 PM
Molybdenum	18	0.12	0.50		µg/L	1	8/13/2022 07:54 PM
Selenium	41	0.044	0.50		µg/L	1	8/13/2022 07:54 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-006

Client Sample ID: MW-20-100-Q322
Collection Date: 8/9/2022 11:44:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 08:06 PM
Barium	56	0.083	1.0		µg/L	1	8/13/2022 08:06 PM
Manganese	ND	0.026	0.50		µg/L	1	8/13/2022 08:06 PM
Molybdenum	1.7	0.12	0.50		µg/L	1	8/13/2022 08:06 PM
Selenium	15	0.044	0.50		µg/L	1	8/13/2022 08:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-007

Client Sample ID: MW-20-130-Q322
Collection Date: 8/9/2022 10:55:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 08:35 PM
Barium	24	0.083	1.0		µg/L	1	8/13/2022 08:35 PM
Manganese	2.3	0.026	0.50		µg/L	1	8/13/2022 08:35 PM
Molybdenum	6.9	0.12	0.50		µg/L	1	8/13/2022 08:35 PM
Selenium	18	0.044	0.50		µg/L	1	8/13/2022 08:35 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-040-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 8:13:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Arsenic	13	0.050	0.10		µg/L	1	8/13/2022 08:47 PM
Barium	59	0.083	1.0		µg/L	1	8/13/2022 08:47 PM
Manganese	93	0.026	0.50		µg/L	1	8/13/2022 08:47 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 9:38:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Arsenic	1.2	0.050	0.10		µg/L	1	8/13/2022 08:59 PM
Barium	35	0.083	1.0		µg/L	1	8/13/2022 08:59 PM
Manganese	190	0.13	2.5		µg/L	5	8/13/2022 09:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052058-011

Client Sample ID: MW-39-060-Q322
Collection Date: 8/9/2022 11:00:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	1.6	0.050	0.10		µg/L	1	8/13/2022 10:10 PM
Barium	36	0.083	1.0		µg/L	1	8/13/2022 10:10 PM
Manganese	190	0.13	2.5		µg/L	5	8/13/2022 10:16 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-070-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 8:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Arsenic	1.2	0.050	0.10		µg/L	1	8/13/2022 10:22 PM
Barium	22	0.083	1.0		µg/L	1	8/13/2022 10:22 PM
Manganese	10	0.026	0.50		µg/L	1	8/13/2022 10:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-915-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 9:04:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220813C**	QC Batch: **94191**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Arsenic	1.2	0.050	0.10		µg/L	1	8/13/2022 11:03 PM
Barium	24	0.083	1.0		µg/L	1	8/13/2022 11:03 PM
Manganese	12	0.026	0.50		µg/L	1	8/13/2022 11:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 10:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220813C**	QC Batch: **94192**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 11:27 PM
Barium	20	0.083	1.0		µg/L	1	8/13/2022 11:27 PM
Manganese	6.5	0.026	0.50		µg/L	1	8/13/2022 11:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-Q322
Lab Order:	N052058	**Collection Date:**	8/9/2022 11:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052058-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220813C**	QC Batch: **94192**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/13/2022 11:39 PM
Barium	26	0.083	1.0		µg/L	1	8/13/2022 11:39 PM
Manganese	8.5	0.026	0.50		µg/L	1	8/13/2022 11:39 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID **MB-94191**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **PBW**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778847**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	ND	1.0									
Manganese	ND	0.50									
Molybdenum	ND	0.50									
Selenium	ND	0.50									

Sample ID **LCS-94191**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **LCSW**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778848**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.500	0.10	10.00	0	95.0	85	115				
Barium	9.348	1.0	10.00	0	93.5	85	115				
Manganese	94.570	0.50	100.0	0	94.6	85	115				
Molybdenum	9.339	0.50	10.00	0	93.4	85	115				
Selenium	8.934	0.50	10.00	0	89.3	85	115				

Sample ID **N052034-009CMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778872**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	38.488	1.0	10.00	30.16	83.3	75	125				
Manganese	114.915	0.50	100.0	27.82	87.1	75	125				
Molybdenum	157.700	0.50	10.00	147.1	106	75	125				

Sample ID **N052034-009CMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778874**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	37.579	1.0	10.00	30.16	74.2	75	125	38.49	2.39	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID **N052034-009CMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778874**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	112.223	0.50	100.0	27.82	84.4	75	125	114.9	2.37	20	
Molybdenum	153.687	0.50	10.00	147.1	66.2	75	125	157.7	2.58	20	S

Sample ID **N052058-010CMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778905**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.497	0.10	10.00	1.189	93.1	75	125				
Barium	43.883	1.0	10.00	35.47	84.1	75	125				
Molybdenum	14.259	0.50	10.00	4.272	99.9	75	125				
Selenium	8.682	0.50	10.00	0.06231	86.2	75	125				

Sample ID **N052058-010CMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778906**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	331.656	2.5	100.0	187.6	144	75	125				S

Sample ID **N052058-010CMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94191**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778907**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.421	0.10	10.00	1.189	92.3	75	125	10.50	0.723	20	
Barium	44.134	1.0	10.00	35.47	86.6	75	125	43.88	0.571	20	
Molybdenum	14.110	0.50	10.00	4.272	98.4	75	125	14.26	1.05	20	
Selenium	8.489	0.50	10.00	0.06231	84.3	75	125	8.682	2.26	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N052058-010CMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164826
Client ID:	ZZZZZZ	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778908

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	300.843	2.5	100.0	187.6	113	75	125	331.7	9.74	20	

Sample ID	MB-94191	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164874
Client ID:	PBW	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/15/2022	SeqNo:	4781827

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									

Sample ID	N052034-009CMS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164907
Client ID:	ZZZZZZ	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/17/2022	SeqNo:	4784566

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.289	0.10	10.00	0	123	75	125				
Selenium	10.317	0.50	10.00	1.039	92.8	75	125				

Sample ID	N052034-009CMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164907
Client ID:	ZZZZZZ	Batch ID:	94191	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/17/2022	SeqNo:	4784567

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	11.930	0.10	10.00	0	119	75	125	12.29	2.96	20	
Selenium	10.139	0.50	10.00	1.039	91.0	75	125	10.32	1.74	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	MB-94192	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164826
Client ID:	PBW	Batch ID:	94192	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778919

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									
Molybdenum	ND	0.50									
Selenium	ND	0.50									

Sample ID	LCS-94192	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164826
Client ID:	LCSW	Batch ID:	94192	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/13/2022	SeqNo:	4778920

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.178	0.10	10.00	0	91.8	85	115				
Barium	9.094	1.0	10.00	0	90.9	85	115				
Manganese	95.878	0.50	100.0	0	95.9	85	115				
Molybdenum	9.351	0.50	10.00	0	93.5	85	115				
Selenium	9.296	0.50	10.00	0	93.0	85	115				

Sample ID	N052065-001BMS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164826
Client ID:	ZZZZZZ	Batch ID:	94192	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/14/2022	SeqNo:	4778932

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	118.595	1.0	10.00	112.4	61.8	75	125				S
Manganese	132.010	0.50	100.0	45.30	86.7	75	125				
Molybdenum	30.494	0.50	10.00	21.07	94.2	75	125				

Sample ID	N052065-001BMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164826
Client ID:	ZZZZZZ	Batch ID:	94192	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/14/2022	SeqNo:	4778934

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	124.039	1.0	10.00	112.4	116	75	125	118.6	4.49	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N052065-001BMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164826
Client ID:	ZZZZZZ	Batch ID:	94192	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/14/2022	SeqNo:	4778934

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	134.142	0.50	100.0	45.30	88.8	75	125	132.0	1.60	20	
Molybdenum	32.120	0.50	10.00	21.07	111	75	125	30.49	5.20	20	

Sample ID	N052065-001BMS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164874
Client ID:	ZZZZZZ	Batch ID:	94192	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/15/2022	SeqNo:	4781834

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	9.639	0.50	10.00	1.196	84.4	75	125				

Sample ID	N052065-001BMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164874
Client ID:	ZZZZZZ	Batch ID:	94192	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/15/2022	SeqNo:	4781835

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	8.626	0.50	10.00	1.196	74.3	75	125	9.639	11.1	20	S

Sample ID	N052065-001BMS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164826
Client ID:	ZZZZZZ	Batch ID:	94192	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/14/2022	SeqNo:	4804460

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.351	0.10	10.00	1.206	91.4	75	125				

Sample ID	N052065-001BMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	8/11/2022	RunNo:	164826
Client ID:	ZZZZZZ	Batch ID:	94192	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/14/2022	SeqNo:	4804461

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.542	0.10	10.00	1.206	93.4	75	125	10.35	1.83	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID **N052034-009C-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164826**
Client ID: **ZZZZZZ** Batch ID: **94191** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/13/2022** SeqNo: **4778870**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	38.211	1.0	10.00	30.16	80.5	80	120				
Manganese	114.072	0.50	100.0	27.82	86.2	80	120				
Molybdenum	155.134	0.50	10.00	147.1	80.6	80	120				

Sample ID **N052058-010C-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164826**
Client ID: **ZZZZZZ** Batch ID: **94191** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/13/2022** SeqNo: **4778901**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.593	0.10	10.00	1.189	94.0	80	120				
Barium	44.040	1.0	10.00	35.47	85.7	80	120				
Molybdenum	14.257	0.50	10.00	4.272	99.9	80	120				
Selenium	8.412	0.50	10.00	0.06231	83.5	80	120				

Sample ID **N052058-010C-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164826**
Client ID: **ZZZZZZ** Batch ID: **94191** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/13/2022** SeqNo: **4778904**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	306.426	2.5	100.0	187.6	119	80	120				

Sample ID **N052034-009C-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164907**
Client ID: **ZZZZZZ** Batch ID: **94191** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/17/2022** SeqNo: **4784565**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	11.782	0.10	10.00	0	118	80	120				
Selenium	10.642	0.50	10.00	1.039	96.0	80	120				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052058
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N052065-001B-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	164826
Client ID:	ZZZZZZ	Batch ID:	94192	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/14/2022	SeqNo:	4778930

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	121.265	1.0	10.00	112.4	88.6	80	120				
Manganese	132.686	0.50	100.0	45.30	87.4	80	120				
Molybdenum	31.062	0.50	10.00	21.07	99.9	80	120				

Sample ID	N052065-001B-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	164874
Client ID:	ZZZZZZ	Batch ID:	94192	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/15/2022	SeqNo:	4781833

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	9.249	0.50	10.00	1.196	80.5	80	120				

Sample ID	N052065-001B-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	164826
Client ID:	ZZZZZZ	Batch ID:	94192	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	8/14/2022	SeqNo:	4804459

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.511	0.10	10.00	1.206	93.0	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement		QA/QC		Sample Receipt Condition
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD		RTNE		Y N
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker		RWQCB	✓	1. Chilled ✓
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Labspec		CalTrans		2. Headspace
Submitted By: Riggie Tap	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	Others	✓	LEVEL III		3. Container Intact ✓
Title: Field Tech			Specify: RWQCB		LEVEL IV		4. Seal Present ✓
Signature: Date: 8/9/22	Sampled By: Riggie Tap		Global ID:		Regulatory		5. IR number 3
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for				Specify State:		6. Method of Cooling: ICE
Project Name: PG&E Topock - PCM	Signature: Date: 8/9/22						Sample Temp: 2.6C / 3.6C
Project Number: 30121866.3Q22GW							Courier: ASSET
							Tracking No.:

Matrix: Ground X | Sediment | Potable | Soil | NPDES | Other Solid | Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrite, Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052058-01	TW-02D-Q322	8/9/2022	8:35		X	X	X	X	X	X		X		E	7	P	BNS	
2	-02	TW-02S-Q322	8/9/2022	8:04		X	X	X	X	X	X		X		E	7	P	BNS	
3	-03	TW-03D-Q322	8/9/2022	9:06		X	X	X	X	X	X		X		E	7	P	BNS	
4	-04	MW-20-070-Q322	8/9/2022	10:10		X	X	X	X	X	X		X		E	7	P	BNS	
5	-05	MW-910-Q322	8/9/2022	10:20		X	X	X	X	X	X		X		E	7	P	BNS	
6	-06	MW-20-100-Q322	8/9/2022	11:44		X	X	X	X	X	X		X		E	7	P	BNS	
7	-07	MW-20-130-Q322	8/9/2022	10:55		X	X	X	X	X	X		X		E	7	P	BNS	
8	-08	EB-711-Q322	8/9/2022	12:00		X									E	1	P	BNS	
9	-09	MW-39-040-Q322	8/9/2022	8:13		X		X			X			X	E	6	P	BNS	
10	-10	MW-39-050-Q322	8/9/2022	9:38		X		X			X			X	E	9	P	BNS	MS/MSD
11	-11	MW-39-060-Q322	8/9/2022	11:00		X		X			X			X	E	6	P	BNS	
12	-12	MW-39-070-Q322	8/9/2022	8:54		X		X			X			X	E	6	P	BNS	
13	-13	MW-915-Q322	8/9/2022	9:04		X		X			X			X	E	6	P	BNS	
14																			

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Riggie Tap	8/9/22 1645	Dante Ortiz Dante Ortiz	8/9/22 16:45
Dante Ortiz Dante Ortiz	8/9/22 20:09	Dante Ortiz Dante Ortiz	8/9/22 20:09

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [X] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable samples.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:

H=HCL	N=HNO_3	S=H_2SO_4	C=4°C
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$	
Others/Specify:	B	(NH4)2SO4/NH4OH	

Container Type:

T=Tube	V=VOA	P=Pint
J=Jar	B=Tedlar	G=Glass
M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

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www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement	QA/QC	Sample Receipt Condition	Y N
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD	RTNE	1. Chilled	✓
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com daniel.moore@critigen.com	Address:	Geotracker	RWQCB ✓	2. Headspace	
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Labspec	CalTrans	3. Container Intact	✓
Submitted By:		Phone: 949-727-1400, ext 200 Fax:	Others ✓	LEVEL III	4. Seal Present	✓
Title: Field Tech	Phone: 916-786-3302 Fax:		Specify: RWQCB	LEVEL IV	5. IR number	3
Signature: Date: 8/9/22	Sampled By: Maggie Top		Global ID:	Regulatory	6. Method of Cooling: ICE	
I hereby authorize ASSET Labs to perform the tests indicated below.	*I attest to the validity and authenticity of this sample, I am aware that tampering with or intentionally misslabeling the sample location, date or time of collection is considered fraud and may be grounds for*			Specify State:	Sample Temp: 2.6c / 3.6c	
Project Name: PG&E Topock - PCM	Signature: Date: 8/9/22				Courier: ASSET	
Project Number: 30121866.3Q22GW					Tracking No.:	

Matrix: Ground X | Sediment | Potable | Soil | NPDES | Other Solid | Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrite, Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052058-14	MW-39-080-Q322	8/9/2022	10:20		X		X			X			X	E	6	P	BNS	
2	-15	MW-39-100-Q322	8/9/2022	11:53		X		X			X			X	E	6	P	BNS	
3	-16	EB-712-Q322	8/9/2022	12:10		X									E	1	P	BNS	
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Maggie Top	8/9/22 1645	Dante Ortiz	Aug 9, 22 16:45
Dante Ortiz	8/9/22 20:09	Dante Ortiz	8/9/22 20:09

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- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [X] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

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1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 6-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample
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7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B	(NH4)2SO4/NH4OH		M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/9/2022	Workorder:	N052058
Rep sample Temp (Deg C):	2.6/3.6	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: EF *EFanegF* 8/10/2022

Reviewed By: for: MBC 8/17/2022

ASSET Laboratories

WORK ORDER Summary

10-Aug-22

WorkOrder: N052058

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/9/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052058-001A	TW-02D-Q322	8/9/2022 8:35:00 AM	8/23/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-001B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052058-001C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052058-001D			8/23/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052058-001E			8/23/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052058-002A	TW-02S-Q322	8/9/2022 8:04:00 AM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-002B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052058-002C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052058-002D			8/23/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

10-Aug-22

WorkOrder: N052058

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/9/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052058-002E	TW-02S-Q322	8/9/2022 8:04:00 AM	8/23/2022	Groundwater	SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052058-003A	TW-03D-Q322	8/9/2022 9:06:00 AM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-003B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052058-003C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052058-003D			8/23/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052058-003E			8/23/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052058-004A	MW-20-070-Q322	8/9/2022 10:10:00 AM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-004B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052058-004C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

10-Aug-22

WorkOrder: N052058

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/9/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052058-004D	MW-20-070-Q322	8/9/2022 10:10:00 AM	8/23/2022	Groundwater	SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052058-004E			8/23/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052058-005A	MW-910-Q322	8/9/2022 10:20:00 AM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-005B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052058-005C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052058-005D			8/23/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052058-005E			8/23/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052058-006A	MW-20-100-Q322	8/9/2022 11:44:00 AM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-006B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052058-006C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

10-Aug-22

WorkOrder: N052058

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/9/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052058-006C	MW-20-100-Q322	8/9/2022 11:44:00 AM	8/23/2022	Groundwater	EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052058-006D			8/23/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052058-006E			8/23/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052058-007A	MW-20-130-Q322	8/9/2022 10:55:00 AM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-007B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052058-007C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052058-007D			8/23/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052058-007E			8/23/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052058-008A	EB-711-Q322	8/9/2022 12:00:00 PM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-009A	MW-39-040-Q322	8/9/2022 8:13:00 AM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-009B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052058-009C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

10-Aug-22

WorkOrder: N052058

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/9/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052058-009C	MW-39-040-Q322	8/9/2022 8:13:00 AM	8/23/2022	Groundwater	EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052058-009D			8/23/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052058-010A	MW-39-050-Q322	8/9/2022 9:38:00 AM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☑	☐	WW
N052058-010B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
N052058-010C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☑	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☑	☐	WW
N052058-010D			8/23/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☑	☐	VW
N052058-011A	MW-39-060-Q322	8/9/2022 11:00:00 AM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-011B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052058-011C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052058-011D			8/23/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052058-012A	MW-39-070-Q322	8/9/2022 8:54:00 AM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-012B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052058-012C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

10-Aug-22

WorkOrder: N052058

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/9/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052058-012C	MW-39-070-Q322	8/9/2022 8:54:00 AM	8/23/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052058-012D			8/23/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052058-013A	MW-915-Q322	8/9/2022 9:04:00 AM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-013B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052058-013C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052058-013D			8/23/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052058-014A	MW-39-080-Q322	8/9/2022 10:20:00 AM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-014B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052058-014C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052058-014D			8/23/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052058-015A	MW-39-100-Q322	8/9/2022 11:53:00 AM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-015B			8/23/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

10-Aug-22

WorkOrder: N052058

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/9/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052058-015B	MW-39-100-Q322	8/9/2022 11:53:00 AM	8/23/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052058-015C			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/23/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/23/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052058-015D			8/23/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052058-016A	EB-712-Q322	8/9/2022 12:10:00 PM	8/23/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052058-017A	FOLDER	8/23/2022	8/23/2022		Folder	Folder	☐	☐	☐	LAB
			8/23/2022		Folder	Level IV Report	☐	☐	☐	LAB
			8/23/2022		Folder	Folder	☐	☐	☐	LAB

ASSET Laboratories
3151-3153 W Post Rd., Las Vegas, NV 89118
www.atl-labs.com
TEL: 7023072659 *FAX: 7023072691*

CHAIN-OF-CUSTODY RECORD

QC Level: Level IV

Subcontractor:

BC Labs
4100 Atlas Court
Bakersfield, CA 93308

TEL: (661) 327-4911
FAX: (661) 327-1918
Acct #:

Field Sampler: Riggie Tep

10-Aug-22

				Ammonia		
				Requested Tests		
Sample ID	**Matrix**	**Date Collected**	**Bottle Type**	~~**SM4500-NH3D**~~		
N052058-001E / TW-02D-Q322	Groundwater	8/9/2022 8:35:00 AM	16OZP	1		
N052058-002E / TW-02S-Q322	Groundwater	8/9/2022 8:04:00 AM	16OZP	1		
N052058-003E / TW-03D-Q322	Groundwater	8/9/2022 9:06:00 AM	16OZP	1		
N052058-004E / MW-20-070-Q322	Groundwater	8/9/2022 10:10:00 AM	16OZP	1		
N052058-005E / MW-910-Q322	Groundwater	8/9/2022 10:20:00 AM	16OZP	1		
N052058-006E / MW-20-100-Q322	Groundwater	8/9/2022 11:44:00 AM	16OZP	1		
N052058-007E / MW-20-130-Q322	Groundwater	8/9/2022 10:55:00 AM	16OZP	1		

General Comments: PLEASE EMAIL SAMPLE RECEIPT ACKNOWLEDGEMENT TO THE PM. ALWAYS CC: sonny.lorenzo@assetlaboratories.com

Please use PO#:N52058A Please email Invoices and Account Receivable Statements to elvira@assetlaboratories.com. For questions, call Marlon at (702)-307-2659. Please e-mail results to reports.lv@assetlaboratories.com by: Standard TAT.

Please analyze for Ammonia. EDD requirement Labspec7 edata.

GSO #: 557512000

	Date/Time		**Date/Time**
Relinquished by: YRJ	8/10/2022	**Received by:**	
Relinquished by:		**Received by:**	

August 29, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052065

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 10, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052065

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Subcontracted Analyses:

Ammonia and Nitrate/Nitrite as N were subcontracted to BC Labs - Bakersfield, CA.

Analytical Comments for EPA 218.6:

Dilution was necessary for some samples due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Nitrite in QC samples N052065-008BMS and N052065-008BMSD possibly due to matrix interference. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for SM 5310C:

Matrix Spike (MS) is outside recovery criteria in QC sample N052034-009DMS at lower dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N052034-009 and MS/MSD were reported at 50x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Matrix Spike (MS) is outside recovery criteria in QC sample N052065-001CMS at lower dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N052065-001 and MS/MSD were reported at 10x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytiacal Comments for EPA 6010B:

Matrix Spike Duplicate (MSD) is outside recovery criteria for Iron in QC sample N052065-001BMSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020:

Matrix Spike (MS) is outside recovery criteria for Barium and Selenium in QC samples N052065-001BMS and N052065-001BMSD possibly due to matrix interference. Post Spike passed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052065
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052065-001A	MW-81-043-Q322	Groundwater	8/10/2022 10:11:00 AM	8/10/2022	8/29/2022
N052065-001B	MW-81-043-Q322	Groundwater	8/10/2022 10:11:00 AM	8/10/2022	8/29/2022
N052065-001C	MW-81-043-Q322	Groundwater	8/10/2022 10:11:00 AM	8/10/2022	8/29/2022
N052065-001D	MW-81-043-Q322	Groundwater	8/10/2022 10:11:00 AM	8/10/2022	8/29/2022
N052065-002A	MW-81-098-Q322	Groundwater	8/10/2022 10:38:00 AM	8/10/2022	8/29/2022
N052065-002B	MW-81-098-Q322	Groundwater	8/10/2022 10:38:00 AM	8/10/2022	8/29/2022
N052065-002C	MW-81-098-Q322	Groundwater	8/10/2022 10:38:00 AM	8/10/2022	8/29/2022
N052065-002D	MW-81-098-Q322	Groundwater	8/10/2022 10:38:00 AM	8/10/2022	8/29/2022
N052065-003A	MW-82-046-Q322	Groundwater	8/10/2022 8:29:00 AM	8/10/2022	8/29/2022
N052065-003B	MW-82-046-Q322	Groundwater	8/10/2022 8:29:00 AM	8/10/2022	8/29/2022
N052065-003C	MW-82-046-Q322	Groundwater	8/10/2022 8:29:00 AM	8/10/2022	8/29/2022
N052065-003D	MW-82-046-Q322	Groundwater	8/10/2022 8:29:00 AM	8/10/2022	8/29/2022
N052065-004A	MW-82-112-Q322	Groundwater	8/10/2022 9:02:00 AM	8/10/2022	8/29/2022
N052065-004B	MW-82-112-Q322	Groundwater	8/10/2022 9:02:00 AM	8/10/2022	8/29/2022
N052065-004C	MW-82-112-Q322	Groundwater	8/10/2022 9:02:00 AM	8/10/2022	8/29/2022
N052065-004D	MW-82-112-Q322	Groundwater	8/10/2022 9:02:00 AM	8/10/2022	8/29/2022
N052065-005A	MW-82-168-Q322	Groundwater	8/10/2022 11:49:00 AM	8/10/2022	8/29/2022
N052065-005B	MW-82-168-Q322	Groundwater	8/10/2022 11:49:00 AM	8/10/2022	8/29/2022
N052065-005C	MW-82-168-Q322	Groundwater	8/10/2022 11:49:00 AM	8/10/2022	8/29/2022
N052065-005D	MW-82-168-Q322	Groundwater	8/10/2022 11:49:00 AM	8/10/2022	8/29/2022
N052065-006A	MW-82-198-Q322	Groundwater	8/10/2022 12:28:00 PM	8/10/2022	8/29/2022
N052065-006B	MW-82-198-Q322	Groundwater	8/10/2022 12:28:00 PM	8/10/2022	8/29/2022
N052065-006C	MW-82-198-Q322	Groundwater	8/10/2022 12:28:00 PM	8/10/2022	8/29/2022
N052065-006D	MW-82-198-Q322	Groundwater	8/10/2022 12:28:00 PM	8/10/2022	8/29/2022
N052065-007A	EB-713-Q322	Groundwater	8/10/2022 1:00:00 PM	8/10/2022	8/29/2022
N052065-008A	MW-31-060-Q322	Groundwater	8/10/2022 12:40:00 PM	8/10/2022	8/29/2022
N052065-008B	MW-31-060-Q322	Groundwater	8/10/2022 12:40:00 PM	8/10/2022	8/29/2022
N052065-008C	MW-31-060-Q322	Groundwater	8/10/2022 12:40:00 PM	8/10/2022	8/29/2022
N052065-008D	MW-31-060-Q322	Groundwater	8/10/2022 12:40:00 PM	8/10/2022	8/29/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052065
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052065-008E	MW-31-060-Q322	Groundwater	8/10/2022 12:40:00 PM	8/10/2022	8/29/2022
N052065-009A	MW-31-135-Q322	Groundwater	8/10/2022 1:40:00 PM	8/10/2022	8/29/2022
N052065-009B	MW-31-135-Q322	Groundwater	8/10/2022 1:40:00 PM	8/10/2022	8/29/2022
N052065-009C	MW-31-135-Q322	Groundwater	8/10/2022 1:40:00 PM	8/10/2022	8/29/2022
N052065-009D	MW-31-135-Q322	Groundwater	8/10/2022 1:40:00 PM	8/10/2022	8/29/2022
N052065-009E	MW-31-135-Q322	Groundwater	8/10/2022 1:40:00 PM	8/10/2022	8/29/2022
N052065-010A	MW-30-050-Q322	Groundwater	8/10/2022 8:29:00 AM	8/10/2022	8/29/2022
N052065-010B	MW-30-050-Q322	Groundwater	8/10/2022 8:29:00 AM	8/10/2022	8/29/2022
N052065-010C	MW-30-050-Q322	Groundwater	8/10/2022 8:29:00 AM	8/10/2022	8/29/2022
N052065-010D	MW-30-050-Q322	Groundwater	8/10/2022 8:29:00 AM	8/10/2022	8/29/2022
N052065-011A	MW-911-Q322	Groundwater	8/10/2022 8:39:00 AM	8/10/2022	8/29/2022
N052065-011B	MW-911-Q322	Groundwater	8/10/2022 8:39:00 AM	8/10/2022	8/29/2022
N052065-011C	MW-911-Q322	Groundwater	8/10/2022 8:39:00 AM	8/10/2022	8/29/2022
N052065-011D	MW-911-Q322	Groundwater	8/10/2022 8:39:00 AM	8/10/2022	8/29/2022
N052065-012A	MW-36-070-Q322	Groundwater	8/10/2022 9:20:00 AM	8/10/2022	8/29/2022
N052065-012B	MW-36-070-Q322	Groundwater	8/10/2022 9:20:00 AM	8/10/2022	8/29/2022
N052065-012C	MW-36-070-Q322	Groundwater	8/10/2022 9:20:00 AM	8/10/2022	8/29/2022
N052065-012D	MW-36-070-Q322	Groundwater	8/10/2022 9:20:00 AM	8/10/2022	8/29/2022
N052065-013A	MW-914-Q322	Groundwater	8/10/2022 9:30:00 AM	8/10/2022	8/29/2022
N052065-013B	MW-914-Q322	Groundwater	8/10/2022 9:30:00 AM	8/10/2022	8/29/2022
N052065-013C	MW-914-Q322	Groundwater	8/10/2022 9:30:00 AM	8/10/2022	8/29/2022
N052065-013D	MW-914-Q322	Groundwater	8/10/2022 9:30:00 AM	8/10/2022	8/29/2022
N052065-014A	MW-36-090-Q322	Groundwater	8/10/2022 10:21:00 AM	8/10/2022	8/29/2022
N052065-014B	MW-36-090-Q322	Groundwater	8/10/2022 10:21:00 AM	8/10/2022	8/29/2022
N052065-014C	MW-36-090-Q322	Groundwater	8/10/2022 10:21:00 AM	8/10/2022	8/29/2022
N052065-014D	MW-36-090-Q322	Groundwater	8/10/2022 10:21:00 AM	8/10/2022	8/29/2022
N052065-015A	MW-36-100-Q322	Groundwater	8/10/2022 11:13:00 AM	8/10/2022	8/29/2022
N052065-015B	MW-36-100-Q322	Groundwater	8/10/2022 11:13:00 AM	8/10/2022	8/29/2022
N052065-015C	MW-36-100-Q322	Groundwater	8/10/2022 11:13:00 AM	8/10/2022	8/29/2022
N052065-015D	MW-36-100-Q322	Groundwater	8/10/2022 11:13:00 AM	8/10/2022	8/29/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052065
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052065-015E	MW-36-100-Q322	Groundwater	8/10/2022 11:13:00 AM	8/10/2022	8/29/2022
N052065-016A	EB-714-Q322	Groundwater	8/10/2022 2:15:00 PM	8/10/2022	8/29/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-043-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 10:11:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	3.0	0.025	0.20		µg/L	1	8/11/2022 11:09 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-098-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 10:38:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	0.55	0.025	0.20		µg/L	1	8/11/2022 11:39 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-046-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 8:29:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/11/2022 01:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-112-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 9:02:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/11/2022 12:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-168-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 11:49:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/11/2022 01:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-198-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 12:28:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/11/2022 06:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-713-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 1:00:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/11/2022 05:24 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-008

Client Sample ID: MW-31-060-Q322
Collection Date: 8/10/2022 12:40:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A** QC Batch: **R164787**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/11/2022 06:40 PM
DISSOLVED METALS BY ICP-MS							
			EPA 3010A				**EPA 6020**
RunID: **NV00922-ICP8_220813B** QC Batch: **94192**				PrepDate:		**8/11/2022**	Analyst: **DJ**
Chromium	ND	0.035	1.0		µg/L	1	8/14/2022 02:48 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-009

Client Sample ID: MW-31-135-Q322
Collection Date: 8/10/2022 1:40:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A** QC Batch: **R164787**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	25	0.13	1.0		µg/L	5	8/11/2022 11:30 AM
DISSOLVED METALS BY ICP-MS							
		EPA 3010A		**EPA 6020**			
RunID: **NV00922-ICP8_220813B** QC Batch: **94192**				PrepDate:	**8/11/2022**		Analyst: **DJ**
Chromium	25	0.035	1.0		µg/L	1	8/14/2022 03:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-050-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 8:29:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/11/2022 02:58 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-911-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 8:39:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/11/2022 07:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-070-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 9:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/11/2022 03:36 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-914-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 9:30:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/11/2022 07:17 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-090-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 10:21:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/11/2022 04:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-100-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 11:13:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	3.5	0.025	0.20		µg/L	1	8/11/2022 05:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-714-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 2:15:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220811A**	QC Batch: **R164787**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/11/2022 05:43 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R164787**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164787**
Client ID: **PBW**	Batch ID: **R164787**	TestNo: **EPA 218.6**		Analysis Date: **8/11/2022**	SeqNo: **4776330**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R164787**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164787**
Client ID: **LCSW**	Batch ID: **R164787**	TestNo: **EPA 218.6**		Analysis Date: **8/11/2022**	SeqNo: **4776331**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.039	0.20	5.000	0	101	90	110				

Sample ID: **N052065-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164787**
Client ID: **ZZZZZZ**	Batch ID: **R164787**	TestNo: **EPA 218.6**		Analysis Date: **8/11/2022**	SeqNo: **4776335**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.638	0.20	1.000	0.5457	109	90	110				

Sample ID: **N052065-001AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164787**
Client ID: **ZZZZZZ**	Batch ID: **R164787**	TestNo: **EPA 218.6**		Analysis Date: **8/11/2022**	SeqNo: **4776337**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.046	0.20	1.000	2.999	105	90	110	4.083	0.903	20	

Sample ID: **N052065-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164787**
Client ID: **ZZZZZZ**	Batch ID: **R164787**	TestNo: **EPA 218.6**		Analysis Date: **8/11/2022**	SeqNo: **4776341**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.090	0.20	1.000	0	109	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052065-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776343**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.025	0.20	1.000	0	103	90	110				

Sample ID: **N052065-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776345**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.235	1.0	5.000	0	105	90	110				

Sample ID: **N052065-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776346**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.083	0.20	1.000	2.999	108	90	110				

Sample ID: **N052065-009ADUP** SampType: **DUP** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776347**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	24.511	1.0						24.70	0.762	20	

Sample ID: **N052065-009AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776348**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	50.276	1.0	25.00	24.70	102	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052065-011AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776352**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.040	0.20	1.000	0	104	90	110				

Sample ID: **N052065-012AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776354**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.024	0.20	1.000	0	102	90	110				

Sample ID: **N052065-013AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776355**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.052	0.20	1.000	0	105	90	110				

Sample ID: **N052065-014AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776359**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.053	0.20	1.000	0	105	90	110				

Sample ID: **N052065-015AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776361**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.551	0.20	1.000	3.506	105	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052065-007AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776363**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.998	0.20	1.000	0	99.8	90	110				

Sample ID: **N052065-016AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776365**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.000	0.20	1.000	0	100	90	110				

Sample ID: **N052065-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776367**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.062	1.0	5.000	0	101	90	110				

Sample ID: **N052065-008AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776371**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.931	1.0	5.000	0	98.6	90	110				

Sample ID: **N052065-010AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164787**
Client ID: **ZZZZZZ** Batch ID: **R164787** TestNo: **EPA 218.6** Analysis Date: **8/11/2022** SeqNo: **4776372**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.055	0.20	1.000	0	106	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020DIS_CrPGE_TPK

Sample ID: **MB-94192**	SampType: **MBLK**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164825**
Client ID: **PBW**	Batch ID: **94192**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778762**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									

Sample ID: **LCS-94192**	SampType: **LCS**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164825**
Client ID: **LCSW**	Batch ID: **94192**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778763**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.746	1.0	10.00	0	97.5	85	115				

Sample ID: **N052065-001BMS**	SampType: **MS**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164825**
Client ID: **ZZZZZZ**	Batch ID: **94192**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/14/2022**	SeqNo: **4778775**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	12.581	1.0	10.00	3.544	90.4	75	125				

Sample ID: **N052065-001BMSD**	SampType: **MSD**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164825**
Client ID: **ZZZZZZ**	Batch ID: **94192**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/14/2022**	SeqNo: **4778777**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	12.856	1.0	10.00	3.544	93.1	75	125	12.58	2.16	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-001

Client Sample ID: MW-81-043-Q322
Collection Date: 8/10/2022 10:11:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Sulfate	460	3.0	25		mg/L	50	8/11/2022 05:13 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/11/2022 11:14 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-002

Client Sample ID: MW-81-098-Q322
Collection Date: 8/10/2022 10:38:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Sulfate	580	6.1	50		mg/L	100	8/11/2022 07:49 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/11/2022 01:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-003

Client Sample ID: MW-82-046-Q322
Collection Date: 8/10/2022 8:29:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Sulfate	1600	12	100		mg/L	200	8/11/2022 08:05 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/11/2022 02:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-004

Client Sample ID: MW-82-112-Q322
Collection Date: 8/10/2022 9:02:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Sulfate	630	6.1	50		mg/L	100	8/11/2022 08:52 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrate as N	0.61	0.095	0.50		mg/L	10	8/11/2022 02:24 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-005

Client Sample ID: MW-82-168-Q322
Collection Date: 8/10/2022 11:49:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
EPA 300.0							
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Sulfate	520	3.0	25		mg/L	50	8/11/2022 09:08 PM
ANIONS BY ION CHROMATOGRAPHY							
EPA 300.0							
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/11/2022 02:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-006

Client Sample ID: MW-82-198-Q322
Collection Date: 8/10/2022 12:28:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY				**EPA 300.0**			
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Sulfate	1000	6.1	50		mg/L	100	8/11/2022 09:24 PM
ANIONS BY ION CHROMATOGRAPHY				**EPA 300.0**			
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrate as N	0.76	0.095	0.50		mg/L	10	8/11/2022 02:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-008

Client Sample ID: MW-31-060-Q322
Collection Date: 8/10/2022 12:40:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/11/2022 10:43 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Sulfate	540	6.1	50		mg/L	100	8/11/2022 07:33 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/11/2022 10:43 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-009

Client Sample ID: MW-31-135-Q322
Collection Date: 8/10/2022 1:40:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/11/2022 10:59 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Sulfate	690	6.1	50		mg/L	100	8/11/2022 06:46 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrate as N	1.5	0.095	0.50		mg/L	10	8/11/2022 10:59 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-010

Client Sample ID: MW-30-050-Q322
Collection Date: 8/10/2022 8:29:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Sulfate	200	1.2	10		mg/L	20	8/11/2022 09:40 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/11/2022 03:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-011

Client Sample ID: MW-911-Q322
Collection Date: 8/10/2022 8:39:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Sulfate	190	1.2	10		mg/L	20	8/11/2022 09:55 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/11/2022 03:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-070-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 9:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A**	QC Batch: **R164763**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/11/2022 01:21 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-914-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 9:30:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A**	QC Batch: **R164763**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/11/2022 01:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-014

Client Sample ID: MW-36-090-Q322
Collection Date: 8/10/2022 10:21:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Sulfate	230	1.2	10		mg/L	20	8/11/2022 10:11 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/11/2022 03:43 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-015

Client Sample ID: MW-36-100-Q322
Collection Date: 8/10/2022 11:13:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Sulfate	240	1.2	10		mg/L	20	8/11/2022 10:27 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220811A** QC Batch: **R164763**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/11/2022 04:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_NO2PGE

Sample ID: **MB-R164763_NO2**	SampType: **MBLK**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164763**
Client ID: **PBW**	Batch ID: **R164763**	TestNo: **EPA 300.0**		Analysis Date: **8/11/2022**	SeqNo: **4775981**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	ND	0.50									

Sample ID: **LCS-R164763_NO2**	SampType: **LCS**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164763**
Client ID: **LCSW**	Batch ID: **R164763**	TestNo: **EPA 300.0**		Analysis Date: **8/11/2022**	SeqNo: **4775982**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	1.270	0.50	1.250	0	102	90	110				

Sample ID: **N052065-008BMS**	SampType: **MS**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164763**
Client ID: **ZZZZZZ**	Batch ID: **R164763**	TestNo: **EPA 300.0**		Analysis Date: **8/11/2022**	SeqNo: **4775985**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	20.628	5.0	12.50	0	165	80	120				S

Sample ID: **N052065-008BMSD**	SampType: **MSD**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164763**
Client ID: **ZZZZZZ**	Batch ID: **R164763**	TestNo: **EPA 300.0**		Analysis Date: **8/11/2022**	SeqNo: **4775986**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	19.122	5.0	12.50	0	153	80	120	20.63	7.58	20	S

Sample ID: **N052065-009BDUP**	SampType: **DUP**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164763**
Client ID: **ZZZZZZ**	Batch ID: **R164763**	TestNo: **EPA 300.0**		Analysis Date: **8/11/2022**	SeqNo: **4775987**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	ND	5.0						0	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **MB-R164763_SO4**	SampType: **MBLK**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164763**
Client ID: **PBW**	Batch ID: **R164763**	TestNo: **EPA 300.0**		Analysis Date: **8/11/2022**	SeqNo: **4776031**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.50									

Sample ID: **LCS-R164763_SO4**	SampType: **LCS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164763**
Client ID: **LCSW**	Batch ID: **R164763**	TestNo: **EPA 300.0**		Analysis Date: **8/11/2022**	SeqNo: **4776032**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	3.913	0.50	4.000	0	97.8	90	110				

Sample ID: **N052065-001DMS**	SampType: **MS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164763**
Client ID: **ZZZZZZ**	Batch ID: **R164763**	TestNo: **EPA 300.0**		Analysis Date: **8/11/2022**	SeqNo: **4776038**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	680.010	25	200.0	457.9	111	80	120				

Sample ID: **N052065-001DMSD**	SampType: **MSD**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164763**
Client ID: **ZZZZZZ**	Batch ID: **R164763**	TestNo: **EPA 300.0**		Analysis Date: **8/11/2022**	SeqNo: **4776039**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	666.175	25	200.0	457.9	104	80	120	680.0	2.06	20	

Sample ID: **N052065-009BDUP**	SampType: **DUP**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164763**
Client ID: **ZZZZZZ**	Batch ID: **R164763**	TestNo: **EPA 300.0**		Analysis Date: **8/11/2022**	SeqNo: **4776041**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	691.110	50						690.1	0.152	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **N052065-009BMS** SampType: **MS** TestCode: **300_W_SO4P** Units: **mg/L** Prep Date: RunNo: **164763**
Client ID: **ZZZZZZ** Batch ID: **R164763** TestNo: **EPA 300.0** Analysis Date: **8/11/2022** SeqNo: **4776042**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	1087.160	50	400.0	690.1	99.3	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R164763_NO3** SampType: **MBLK** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **164763**
Client ID: **PBW** Batch ID: **R164763** TestNo: **EPA 300.0** Analysis Date: **8/11/2022** SeqNo: **4776000**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R164763_NO3** SampType: **LCS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **164763**
Client ID: **LCSW** Batch ID: **R164763** TestNo: **EPA 300.0** Analysis Date: **8/11/2022** SeqNo: **4776001**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.247	0.050	1.250	0	99.8	90	110				

Sample ID: **N052065-009BDUP** SampType: **DUP** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **164763**
Client ID: **ZZZZZZ** Batch ID: **R164763** TestNo: **EPA 300.0** Analysis Date: **8/11/2022** SeqNo: **4776005**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.473	0.50						1.475	0.136	20	

Sample ID: **N052065-001DMS** SampType: **MS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **164763**
Client ID: **ZZZZZZ** Batch ID: **R164763** TestNo: **EPA 300.0** Analysis Date: **8/11/2022** SeqNo: **4776006**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	13.334	0.50	12.50	0.4930	103	80	120				

Sample ID: **N052065-001DMSD** SampType: **MSD** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **164763**
Client ID: **ZZZZZZ** Batch ID: **R164763** TestNo: **EPA 300.0** Analysis Date: **8/11/2022** SeqNo: **4776007**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.932	0.50	12.50	0.4930	99.5	80	120	13.33	3.06	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-043-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 10:11:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220818A**	QC Batch: **R164969**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	1.4	10		mg/L	10	8/18/2022 12:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-098-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 10:38:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 06:41 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-046-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 8:29:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	2.2	0.14	1.0		mg/L	1	8/11/2022 06:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-112-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 9:02:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 07:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-168-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 11:49:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 07:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-198-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 12:28:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 07:43 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-060-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 12:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 07:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-135-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 1:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 08:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-050-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 8:29:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 09:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-911-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 8:39:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 09:16 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-070-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 9:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 09:31 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-914-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 9:30:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 09:47 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-090-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 10:21:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 10:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-100-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 11:13:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220811A**	QC Batch: **R164745**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/11/2022 10:18 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R164745**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164745**
Client ID: **PBW**	Batch ID: **R164745**	TestNo: **SM 5310C**		Analysis Date: **8/11/2022**	SeqNo: **4775942**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R164745**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164745**
Client ID: **LCSW**	Batch ID: **R164745**	TestNo: **SM 5310C**		Analysis Date: **8/11/2022**	SeqNo: **4775943**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.097	1.0	5.000	0	102	85	115				

Sample ID: **N052034-009DMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164745**
Client ID: **ZZZZZZ**	Batch ID: **R164745**	TestNo: **SM 5310C**		Analysis Date: **8/11/2022**	SeqNo: **4775956**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	230.280	50	250.0	0	92.1	75	125				

Sample ID: **N052034-009DMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164745**
Client ID: **ZZZZZZ**	Batch ID: **R164745**	TestNo: **SM 5310C**		Analysis Date: **8/11/2022**	SeqNo: **4775957**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	233.585	50	250.0	0	93.4	75	125	230.3	1.42	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R164969**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164969**
Client ID: **PBW**	Batch ID: **R164969**	TestNo: **SM 5310C**		Analysis Date: **8/18/2022**	SeqNo: **4787509**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R164969**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164969**
Client ID: **LCSW**	Batch ID: **R164969**	TestNo: **SM 5310C**		Analysis Date: **8/18/2022**	SeqNo: **4787510**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.014	1.0	5.000	0	100	85	115				

Sample ID: **N052065-001CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164969**
Client ID: **ZZZZZZ**	Batch ID: **R164969**	TestNo: **SM 5310C**		Analysis Date: **8/18/2022**	SeqNo: **4787516**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	37.836	10	50.00	0	75.7	75	125				

Sample ID: **N052065-001CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164969**
Client ID: **ZZZZZZ**	Batch ID: **R164969**	TestNo: **SM 5310C**		Analysis Date: **8/18/2022**	SeqNo: **4787521**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	37.826	10	50.00	0	75.7	75	125	37.84	0.0264	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-001

Client Sample ID: MW-81-043-Q322
Collection Date: 8/10/2022 10:11:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Iron	90	13	20		µg/L	1	8/13/2022 05:18 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-098-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 10:38:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 05:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-046-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 8:29:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	6000	13	20		µg/L	1	8/13/2022 05:55 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-112-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 9:02:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 06:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-005

Client Sample ID: MW-82-168-Q322
Collection Date: 8/10/2022 11:49:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Iron	24	13	20		µg/L	1	8/13/2022 06:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-198-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 12:28:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A		**EPA 6010B**				
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	25	13	20		µg/L	1	8/13/2022 06:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-060-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 12:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	260	13	20		µg/L	1	8/13/2022 06:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-135-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 1:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 06:19 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-050-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 8:29:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	52	13	20		µg/L	1	8/13/2022 06:33 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-911-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 8:39:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	47	13	20		µg/L	1	8/13/2022 06:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-070-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 9:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	33	13	20		µg/L	1	8/13/2022 06:41 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-914-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 9:30:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	29	13	20		µg/L	1	8/13/2022 06:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-090-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 10:21:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	37	13	20		µg/L	1	8/13/2022 06:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-015

Client Sample ID: MW-36-100-Q322
Collection Date: 8/10/2022 11:13:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220813A**	QC Batch: **94190**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/13/2022 06:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94190**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164812**
Client ID: **PBW**	Batch ID: **94190**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4777865**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-94190**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164812**
Client ID: **LCSW**	Batch ID: **94190**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4777866**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	101.283	20	100.0	0	101	85	115				

Sample ID: **N052065-001BMS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164812**
Client ID: **ZZZZZZ**	Batch ID: **94190**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4777874**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	179.636	20	100.0	89.60	90.0	75	125				

Sample ID: **N052065-001BMSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164812**
Client ID: **ZZZZZZ**	Batch ID: **94190**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4777875**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	154.307	20	100.0	89.60	64.7	75	125	179.6	15.2	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **N052065-001B-PS** SampType: **PS** TestCode: **6010_WDPGE** Units: **µg/L** Prep Date: RunNo: **164812**
Client ID: **ZZZZZZ** Batch ID: **94190** TestNo: **EPA 6010B** **EPA 3010A** Analysis Date: **8/13/2022** SeqNo: **4777873**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	165.970	20	100.0	89.60	76.4	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-001

Client Sample ID: MW-81-043-Q322
Collection Date: 8/10/2022 10:11:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220817B**	QC Batch: **94192**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	1.2	0.050	0.10		µg/L	1	8/17/2022 07:03 PM
Barium	110	0.083	1.0		µg/L	1	8/13/2022 11:50 PM
Manganese	45	0.026	0.50		µg/L	1	8/13/2022 11:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-002

Client Sample ID: MW-81-098-Q322
Collection Date: 8/10/2022 10:38:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94192**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/14/2022 01:02 AM
Barium	59	0.083	1.0		µg/L	1	8/14/2022 01:02 AM
Manganese	160	0.026	0.50		µg/L	1	8/14/2022 01:02 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-046-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 8:29:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220813C** QC Batch: **94192**				PrepDate:	**8/11/2022**		Analyst: **DJ**
Arsenic	25	0.050	0.10		µg/L	1	8/14/2022 01:31 AM
Barium	52	0.083	1.0		µg/L	1	8/14/2022 01:31 AM
Manganese	310	0.13	2.5		µg/L	5	8/14/2022 01:37 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-112-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 9:02:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94192**			PrepDate:	**8/11/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/14/2022 01:43 AM
Barium	36	0.083	1.0		µg/L	1	8/14/2022 01:43 AM
Manganese	61	0.026	0.50		µg/L	1	8/14/2022 01:43 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-168-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 11:49:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220813C**	QC Batch: **94192**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/14/2022 01:55 AM
Barium	38	0.083	1.0		µg/L	1	8/14/2022 01:55 AM
Manganese	41	0.026	0.50		µg/L	1	8/14/2022 01:55 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-006

Client Sample ID: MW-82-198-Q322
Collection Date: 8/10/2022 12:28:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94192**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/14/2022 02:07 AM
Barium	39	0.083	1.0		µg/L	1	8/14/2022 02:07 AM
Manganese	150	0.026	0.50		µg/L	1	8/14/2022 02:07 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-008

Client Sample ID: MW-31-060-Q322
Collection Date: 8/10/2022 12:40:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220813C**	QC Batch: **94192**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/14/2022 02:48 AM
Barium	76	0.083	1.0		µg/L	1	8/14/2022 02:48 AM
Manganese	850	0.13	2.5		µg/L	5	8/14/2022 02:54 AM
Molybdenum	7.6	0.12	0.50		µg/L	1	8/14/2022 02:48 AM
Selenium	ND	0.044	0.50		µg/L	1	8/14/2022 02:48 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-009

Client Sample ID: MW-31-135-Q322
Collection Date: 8/10/2022 1:40:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94192**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/14/2022 03:00 AM
Barium	40	0.083	1.0		µg/L	1	8/14/2022 03:00 AM
Manganese	2.1	0.026	0.50		µg/L	1	8/14/2022 03:00 AM
Molybdenum	28	0.12	0.50		µg/L	1	8/14/2022 03:00 AM
Selenium	0.92	0.044	0.50		µg/L	1	8/14/2022 03:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-010

Client Sample ID: MW-30-050-Q322
Collection Date: 8/10/2022 8:29:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94192**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	2.5	0.050	0.10		µg/L	1	8/14/2022 03:12 AM
Barium	18	0.083	1.0		µg/L	1	8/14/2022 03:12 AM
Manganese	360	0.13	2.5		µg/L	5	8/14/2022 03:18 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-011

Client Sample ID: MW-911-Q322
Collection Date: 8/10/2022 8:39:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94192**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	8/14/2022 03:24 AM
Barium	18	0.083	1.0		µg/L	1	8/14/2022 03:24 AM
Manganese	370	0.13	2.5		µg/L	5	8/14/2022 03:30 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-012

Client Sample ID: MW-36-070-Q322
Collection Date: 8/10/2022 9:20:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C**	QC Batch: **94192**			PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	1.9	0.050	0.10		µg/L	1	8/14/2022 03:36 AM
Barium	36	0.083	1.0		µg/L	1	8/14/2022 03:36 AM
Manganese	280	0.13	2.5		µg/L	5	8/14/2022 03:59 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-914-Q322
Lab Order:	N052065	**Collection Date:**	8/10/2022 9:30:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052065-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220813C**	QC Batch: **94192**				PrepDate:	**8/11/2022**	Analyst: **DJ**
Arsenic	2.2	0.050	0.10		µg/L	1	8/14/2022 04:05 AM
Barium	36	0.083	1.0		µg/L	1	8/14/2022 04:05 AM
Manganese	290	0.13	2.5		µg/L	5	8/14/2022 04:11 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-014

Client Sample ID: MW-36-090-Q322
Collection Date: 8/10/2022 10:21:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220813C** QC Batch: **94192**				PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	1.2	0.050	0.10		µg/L	1	8/14/2022 04:17 AM
Barium	33	0.083	1.0		µg/L	1	8/14/2022 04:17 AM
Manganese	160	0.026	0.50		µg/L	1	8/14/2022 04:17 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052065-015

Client Sample ID: MW-36-100-Q322
Collection Date: 8/10/2022 11:13:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220813C** QC Batch: **94192**				PrepDate:		**8/11/2022**	Analyst: **DJ**
Arsenic	13	0.050	0.10		µg/L	1	8/14/2022 04:29 AM
Barium	33	0.083	1.0		µg/L	1	8/14/2022 04:29 AM
Manganese	9.8	0.026	0.50		µg/L	1	8/14/2022 04:29 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94192**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **PBW**	Batch ID: **94192**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778919**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									
Molybdenum	ND	0.50									
Selenium	ND	0.50									

Sample ID: **LCS-94192**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **LCSW**	Batch ID: **94192**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/13/2022**	SeqNo: **4778920**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.178	0.10	10.00	0	91.8	85	115				
Barium	9.094	1.0	10.00	0	90.9	85	115				
Manganese	95.878	0.50	100.0	0	95.9	85	115				
Molybdenum	9.351	0.50	10.00	0	93.5	85	115				
Selenium	9.296	0.50	10.00	0	93.0	85	115				

Sample ID: **N052065-001BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94192**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/14/2022**	SeqNo: **4778932**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	118.595	1.0	10.00	112.4	61.8	75	125				S
Manganese	132.010	0.50	100.0	45.30	86.7	75	125				
Molybdenum	30.494	0.50	10.00	21.07	94.2	75	125				

Sample ID: **N052065-001BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94192**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/14/2022**	SeqNo: **4778934**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052065-001BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94192**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/14/2022**	SeqNo: **4778934**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	124.039	1.0	10.00	112.4	116	75	125	118.6	4.49	20	
Manganese	134.142	0.50	100.0	45.30	88.8	75	125	132.0	1.60	20	
Molybdenum	32.120	0.50	10.00	21.07	111	75	125	30.49	5.20	20	

Sample ID: **N052065-001BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164874**
Client ID: **ZZZZZZ**	Batch ID: **94192**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/15/2022**	SeqNo: **4781834**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	9.639	0.50	10.00	1.196	84.4	75	125				

Sample ID: **N052065-001BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164874**
Client ID: **ZZZZZZ**	Batch ID: **94192**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/15/2022**	SeqNo: **4781835**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	8.626	0.50	10.00	1.196	74.3	75	125	9.639	11.1	20	S

Sample ID: **N052065-001BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94192**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/14/2022**	SeqNo: **4804460**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.351	0.10	10.00	1.206	91.4	75	125				

Sample ID: **N052065-001BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/11/2022**	RunNo: **164826**
Client ID: **ZZZZZZ**	Batch ID: **94192**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/14/2022**	SeqNo: **4804461**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.542	0.10	10.00	1.206	93.4	75	125	10.35	1.83	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052065
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052065-001B-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164826**
Client ID: **ZZZZZZ** Batch ID: **94192** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/14/2022** SeqNo: **4778930**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	121.265	1.0	10.00	112.4	88.6	80	120				
Manganese	132.686	0.50	100.0	45.30	87.4	80	120				
Molybdenum	31.062	0.50	10.00	21.07	99.9	80	120				

Sample ID: **N052065-001B-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164874**
Client ID: **ZZZZZZ** Batch ID: **94192** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/15/2022** SeqNo: **4781833**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	9.249	0.50	10.00	1.196	80.5	80	120				

Sample ID: **N052065-001B-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164826**
Client ID: **ZZZZZZ** Batch ID: **94192** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/14/2022** SeqNo: **4804459**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.511	0.10	10.00	1.206	93.0	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

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CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement		QA/QC		Sample Receipt Condition: Y N
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD		RTNE		1. Chilled ✓
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker		RWQCB	✓	2. Headspace
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Labspec		CalTrans		3. Container Intact ✓
Submitted By: Riggie Tap		Phone: 949-727-1400, ext 200 Fax:	Others	✓	LEVEL III		4. Seal Present
Title: Field Tech	Phone: 916-786-3302 Fax:		Specify: RWQCB		LEVEL IV		5. IR number 3
Signature: Date: 8/10/22	Sampled By: Riggie Tap		Global ID:		Regulatory		6. Method of Cooling: ICE
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for				Specify State:		Sample Temp: 2.6°C, 1.8°C
Project Name: PG&E Topock - PCM	Signature: Date: 8/10/22						Courier: Asset
Project Number: 30121866.3Q22GW							Tracking No.:

Matrix: Ground X | Sediment | Potable | Soil | NPDES | Other Solid | Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrite, Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Nitrate (EPA 300.0) (1 L poly)			Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052065-01	MW-81-043-Q322	8/10/2022	10:11		X		X			X			X	X			E	9	P	BNS	MS/MSD
2	-02	MW-81-098-Q322	8/10/2022	10:38		X		X			X			X	X			E	6	P	BNS	
3	-03	MW-82-046-Q322	8/10/2022	8:29		X		X			X			X	X			E	6	P	BNS	
4	-04	MW-82-112-Q322	8/10/2022	9:02		X		X			X			X	X			E	6	P	BNS	
5	-05	MW-82-168-Q322	8/10/2022	11:49		X		X			X			X	X			E	6	P	BNS	
6	-06	MW-82-198-Q322	8/10/2022	12:28		X		X			X			X	X			E	6	P	BNS	
7	-07	EB-713-Q322	8/10/2022	13:00		X												E	1	P	BNS	
8	-08	MW-31-060-Q322	8/10/2022	12:40		X	X	X	X	X	X		X					E	7	P	BNS	
9	-09	MW-31-135-Q322	8/10/2022	13:40		X	X	X	X	X	X		X					E	7	P	BNS	
10	-10	MW-30-050-Q322	8/10/2022	8:29		X		X			X			X	X			E	6	P	BNS	
11	-11	MW-911-Q322	8/10/2022	8:39		X		X			X			X	X			E	6	P	BNS	
12	-12	MW-36-070-Q322	8/10/2022	9:20		X		X			X				X			E	6	P	BNS	
13	-13	MW-914-Q322	8/10/2022	9:30		X		X			X				X			E	6	P	BNS	
14																						

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Riggie Tap	8/10/22 1450	Dante Ortiz	8/10/22 14:50
Dante Ortiz	8/10/22 18:05	Dante Ortiz	8/10/22 18:05

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
   Less than 24 Hrs. =200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

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Page 1 of 1

| | | |

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/10/2022	Workorder:	N052065
Rep sample Temp (Deg C):	2.6/1.8	IR Gun ID:	3
Temp Blank:	☑ Yes ☐ No		
Carrier name:	ASSET		
Last 4 digits of Tracking No.:	NA	Packing Material Used:	None
Cooling process:	☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None		

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☐	No ☑	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☑	No ☐	NA ☐
Was Client notified?	Yes ☑	No ☐	NA ☐

Comments: See Correspondence.

For:

Checklist Completed By: EF YRJ 8/11/2022

for:

Reviewed By: MBC 8/17/2022

Mary Ann Balilu

From: Madsen, Laura <Laura.Madsen@arcadis.com>
Sent: Friday, August 12, 2022 6:33 AM
To: Yoandra Rodriguez
Cc: maryann.balilu@assetlaboratoriesph.com; rustico.aquino@assetlaboratoriesph.com; eilen@assetlaboratories.com
Subject: RE: PG&E Topock - PCM, 30121866.3Q22GW (ASSET Labs No. N052065)

Hi,

For Sample 15 (MW-36-100-Q322) that is correct, we need nitrate by 300, nitrate/nitrite as nitrogen by SM4500. No ammonia needed for this sample.

Thanks,

Laura

Laura Madsen PG

Project Geologist

Arcadis U.S., Inc.
M +1 303 653 5749

From: Yoandra Rodriguez <yoandra@assetlaboratories.com>
Sent: Thursday, August 11, 2022 6:21 PM
To: Madsen, Laura <Laura.Madsen@arcadis.com>
Cc: maryann.balilu@assetlaboratoriesph.com; rustico.aquino@assetlaboratoriesph.com; eilen@assetlaboratories.com
Subject: Re: PG&E Topock - PCM, 30121866.3Q22GW (ASSET Labs No. N052065)

Noted Laura,

What about sample 15 (MW-36-100-Q322)? Nitrate/Nitrite by 4500 and Nitrate by 300? No Ammonia?

On 8/11/2022 4:08 PM, Madsen, Laura wrote:

> Hi Yoandra,
>
> We are needing Nitrate, Nitrite, sulfate, and Ammonia for MW-31-060 and MW-31-135, plus the metals and TOC
>
> Thanks,

Laura

Laura Madsen PG

Project Geologist

Arcadis U.S., Inc.
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From: Yoandra Rodriguez <yoandra@assetlaboratories.com> <mailto:yoandra@assetlaboratories.com>
Sent: Thursday, August 11, 2022 5:27 PM
To: Madsen, Laura <Laura.Madsen@arcadis.com> <mailto:Laura.Madsen@arcadis.com>
Cc: maryann.balilu@assetlaboratoriesph.com <mailto:maryann.balilu@assetlaboratoriesph.com> ; rustico.aquino@assetlaboratoriesph.com <mailto:rustico.aquino@assetlaboratoriesph.com> ; eilen@assetlaboratories.com <mailto:eilen@assetlaboratories.com>
Subject: Re: PG&E Topock - PCM, 30121866.3Q22GW (ASSET Labs No. N052065)

Thanks Laura!

Another question please, just for confirmation. The request for Ammonia and Nitrate/Nitrite is correct?

I'm asking because the bottles are labelled Nitrate/Nitrite.

Thanks,

On 8/11/2022 2:58 PM, Madsen, Laura wrote:

Hello,

Sample 9: Collection time is 13:40 is correct

- Sample 14: Collection time is 10:21 is correct

Thanks!

Laura Madsen PG

Project Geologist

Arcadis U.S., Inc.
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From: Yoandra Rodriguez <yoandra@assetlaboratories.com> <mailto:yoandra@assetlaboratories.com>

Sent: Thursday, August 11, 2022 4:52 PM
To: Madsen, Laura <Laura.Madsen@arcadis.com> <mailto:Laura.Madsen@arcadis.com>
Cc: maryann.balilu@assetlaboratoriesph.com <mailto:maryann.balilu@assetlaboratoriesph.com> ; rustico.aquino@assetlaboratoriesph.com <mailto:rustico.aquino@assetlaboratoriesph.com> ; eilen@assetlaboratories.com <mailto:eilen@assetlaboratories.com>
Subject: PG&E Topock - PCM, 30121866.3Q22GW (ASSET Labs No. N052065)

Hi Laura,

Please, advise on the following discrepancies for the attached COC:

- Sample 9: Collection time is 13:40 on COC and 12:40 on labels

- Sample 14: Collection time is 10:20 on COC and 10:21 on labels

--
Thanks,

Yoandra Rodriguez
Project Manager

Nevada: 3151 W. Post Road, Las Vegas, NV 89118 | P: 702.307.2659 | F: 702.307.2691
California: 11110 Artesia Blvd., Ste. B, Cerritos, CA 90703 | P: 562.219.7435 | F: 562.219.7436

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--
Thanks,

Yoandra Rodriguez
Project Manager

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California: 11110 Artesia Blvd., Ste. B, Cerritos, CA 90703 | P: 562.219.7435 | F: 562.219.7436

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ASSET Laboratories

WORK ORDER Summary

11-Aug-22

WorkOrder: N052065

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/10/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052065-001A	MW-81-043-Q322	8/10/2022 10:11:00 AM	8/24/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☑	☐	WW
N052065-001B			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			8/24/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☑	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☑	☐	WW
N052065-001C			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☑	☐	VW
N052065-001D			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
N052065-002A	MW-81-098-Q322	8/10/2022 10:38:00 AM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052065-002B			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052065-002C			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052065-002D			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052065-003A	MW-82-046-Q322	8/10/2022 8:29:00 AM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052065-003B			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052065-003C			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

11-Aug-22

WorkOrder: N052065

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/10/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052065-003D	MW-82-046-Q322	8/10/2022 8:29:00 AM	8/24/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052065-004A	MW-82-112-Q322	8/10/2022 9:02:00 AM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052065-004B			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052065-004C			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052065-004D			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052065-005A	MW-82-168-Q322	8/10/2022 11:49:00 AM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052065-005B			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052065-005C			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052065-005D			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052065-006A	MW-82-198-Q322	8/10/2022 12:28:00 PM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052065-006B			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

11-Aug-22

WorkOrder: N052065

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/10/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052065-006B	MW-82-198-Q322	8/10/2022 12:28:00 PM	8/24/2022	Groundwater	EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052065-006C			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052065-006D			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052065-007A	EB-713-Q322	8/10/2022 1:00:00 PM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052065-008A	MW-31-060-Q322	8/10/2022 12:40:00 PM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052065-008B			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052065-008C			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052065-008D			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052065-008E			8/24/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052065-009A	MW-31-135-Q322	8/10/2022 1:40:00 PM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052065-009B			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052065-009C			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

11-Aug-22

WorkOrder: N052065

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/10/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052065-009C	MW-31-135-Q322	8/10/2022 1:40:00 PM	8/24/2022	Groundwater	EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052065-009D			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052065-009E			8/24/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052065-010A	MW-30-050-Q322	8/10/2022 8:29:00 AM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052065-010B			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052065-010C			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052065-010D			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052065-011A	MW-911-Q322	8/10/2022 8:39:00 AM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052065-011B			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052065-011C			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052065-011D			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052065-012A	MW-36-070-Q322	8/10/2022 9:20:00 AM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

11-Aug-22

WorkOrder: N052065

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/10/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052065-012B	MW-36-070-Q322	8/10/2022 9:20:00 AM	8/24/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052065-012C			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052065-012D			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052065-013A	MW-914-Q322	8/10/2022 9:30:00 AM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052065-013B			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052065-013C			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052065-013D			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052065-014A	MW-36-090-Q322	8/10/2022 10:21:00 AM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052065-014B			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052065-014C			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052065-014D			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052065-015A	MW-36-100-Q322	8/10/2022 11:13:00 AM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

11-Aug-22

WorkOrder: N052065

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/10/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052065-015B	MW-36-100-Q322	8/10/2022 11:13:00 AM	8/24/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/24/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/24/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052065-015C			8/24/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052065-015D			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/24/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052065-015E			8/24/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052065-016A	EB-714-Q322	8/10/2022 2:15:00 PM	8/24/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052065-017A	FOLDER	8/24/2022	8/24/2022		Folder	Folder	☐	☐	☐	LAB
			8/24/2022		Folder	Level IV Report	☐	☐	☐	LAB
			8/24/2022		Folder	Folder	☐	☐	☐	LAB

ASSET Laboratories
3151-3153 W Post Rd., Las Vegas, NV 89118
www.atl-labs.com
TEL: 7023072659 *FAX: 7023072691*

CHAIN-OF-CUSTODY RECORD

QC Level: Level IV

Subcontractor:

BC Labs
4100 Atlas Court
Bakersfield, CA 93308

TEL: (661) 327-4911
FAX: (661) 327-1918
Acct #:

Field Sampler: Riggie Tep

11-Aug-22

				Requested Tests		
				Ammonia		
Sample ID	**Matrix**	**Date Collected**	**Bottle Type**	**SM4500-NH3D**	~~**SM4500-NO3F**~~ Nitrate/Nitrite	
N052065-008E / MW-31-060-Q322	Groundwater	8/10/2022 12:40:00 PM	8OZP	1		
N052065-009E / MW-31-135-Q322	Groundwater	8/10/2022 1:40:00 PM	8OZP	1		
N052065-015E / MW-36-100-Q322	Groundwater	8/10/2022 11:13:00 AM	8OZP		1	

General Comments: PLEASE EMAIL SAMPLE RECEIPT ACKNOWLEDGEMENT TO THE PM. ALWAYS CC: sonny.lorenzo@assetlaboratories.com

Please use PO#:N52065A Please email Invoices and Account Receivable Statements to elvira@assetlaboratories.com. For questions, call Marlon at (702)-307-2659. Please e-mail results to reports.lv@assetlaboratories.com by: Standard TAT.

EDD requirement Labspec7 edata.

GSO #: 557526493

		Date/Time			Date/Time
Relinquished by:	YRJ	8/11/2022 1630	**Received by:**		
Relinquished by:			**Received by:**		

August 29, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052083

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 11, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Subcontracted Analyses:

Ammonia and Nitrate/Nitrite as N were subcontracted to BC Labs - Bakersfield, CA.

Analytical Comments for EPA 218.6:

Dilution was necessary for some samples due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Nitrite in QC samples N052083-013DMS and N052083-013DMSD possibly due to matrix interference. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Arsenic and Molybdenum in QC samples N052083-005B-MS and N052083-005B-MSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052083
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052083-001A	MW-96-045-Q322	Groundwater	8/11/2022 11:01:00 AM	8/11/2022	8/29/2022
N052083-002A	MW-96-217-Q322	Groundwater	8/11/2022 11:36:00 AM	8/11/2022	8/29/2022
N052083-003A	MW-34-080-Q322	Groundwater	8/11/2022 8:14:00 AM	8/11/2022	8/29/2022
N052083-003B	MW-34-080-Q322	Groundwater	8/11/2022 8:14:00 AM	8/11/2022	8/29/2022
N052083-003C	MW-34-080-Q322	Groundwater	8/11/2022 8:14:00 AM	8/11/2022	8/29/2022
N052083-003D	MW-34-080-Q322	Groundwater	8/11/2022 8:14:00 AM	8/11/2022	8/29/2022
N052083-004A	MW-34-080-EB-Q322	Groundwater	8/11/2022 7:50:00 AM	8/11/2022	8/29/2022
N052083-005A	MW-44-115-Q322	Groundwater	8/11/2022 9:52:00 AM	8/11/2022	8/29/2022
N052083-005B	MW-44-115-Q322	Groundwater	8/11/2022 9:52:00 AM	8/11/2022	8/29/2022
N052083-005C	MW-44-115-Q322	Groundwater	8/11/2022 9:52:00 AM	8/11/2022	8/29/2022
N052083-005D	MW-44-115-Q322	Groundwater	8/11/2022 9:52:00 AM	8/11/2022	8/29/2022
N052083-006A	MW-916-Q322	Groundwater	8/11/2022 10:02:00 AM	8/11/2022	8/29/2022
N052083-006B	MW-916-Q322	Groundwater	8/11/2022 10:02:00 AM	8/11/2022	8/29/2022
N052083-006C	MW-916-Q322	Groundwater	8/11/2022 10:02:00 AM	8/11/2022	8/29/2022
N052083-006D	MW-916-Q322	Groundwater	8/11/2022 10:02:00 AM	8/11/2022	8/29/2022
N052083-007A	MW-44-125-Q322	Groundwater	8/11/2022 9:22:00 AM	8/11/2022	8/29/2022
N052083-007B	MW-44-125-Q322	Groundwater	8/11/2022 9:22:00 AM	8/11/2022	8/29/2022
N052083-007C	MW-44-125-Q322	Groundwater	8/11/2022 9:22:00 AM	8/11/2022	8/29/2022
N052083-007D	MW-44-125-Q322	Groundwater	8/11/2022 9:22:00 AM	8/11/2022	8/29/2022
N052083-007E	MW-44-125-Q322	Groundwater	8/11/2022 9:22:00 AM	8/11/2022	8/29/2022
N052083-008A	MW-44-125-EB-Q322	Groundwater	8/11/2022 9:00:00 AM	8/11/2022	8/29/2022
N052083-009A	MW-45-095a-Q322	Groundwater	8/11/2022 8:43:00 AM	8/11/2022	8/29/2022
N052083-009B	MW-45-095a-Q322	Groundwater	8/11/2022 8:43:00 AM	8/11/2022	8/29/2022
N052083-009C	MW-45-095a-Q322	Groundwater	8/11/2022 8:43:00 AM	8/11/2022	8/29/2022
N052083-009D	MW-45-095a-Q322	Groundwater	8/11/2022 8:43:00 AM	8/11/2022	8/29/2022
N052083-010A	EB-715-Q322	Groundwater	8/11/2022 12:00:00 PM	8/11/2022	8/29/2022
N052083-011A	MW-78-070-Q322	Groundwater	8/11/2022 11:56:00 AM	8/11/2022	8/29/2022
N052083-011B	MW-78-070-Q322	Groundwater	8/11/2022 11:56:00 AM	8/11/2022	8/29/2022
N052083-011C	MW-78-070-Q322	Groundwater	8/11/2022 11:56:00 AM	8/11/2022	8/29/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052083
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052083-011D	MW-78-070-Q322	Groundwater	8/11/2022 11:56:00 AM	8/11/2022	8/29/2022
N052083-011E	MW-78-070-Q322	Groundwater	8/11/2022 11:56:00 AM	8/11/2022	8/29/2022
N052083-012A	MW-78-142-Q322	Groundwater	8/11/2022 12:34:00 PM	8/11/2022	8/29/2022
N052083-012B	MW-78-142-Q322	Groundwater	8/11/2022 12:34:00 PM	8/11/2022	8/29/2022
N052083-012C	MW-78-142-Q322	Groundwater	8/11/2022 12:34:00 PM	8/11/2022	8/29/2022
N052083-012D	MW-78-142-Q322	Groundwater	8/11/2022 12:34:00 PM	8/11/2022	8/29/2022
N052083-012E	MW-78-142-Q322	Groundwater	8/11/2022 12:34:00 PM	8/11/2022	8/29/2022
N052083-013A	MW-79-058-Q322	Groundwater	8/11/2022 9:57:00 AM	8/11/2022	8/29/2022
N052083-013B	MW-79-058-Q322	Groundwater	8/11/2022 9:57:00 AM	8/11/2022	8/29/2022
N052083-013C	MW-79-058-Q322	Groundwater	8/11/2022 9:57:00 AM	8/11/2022	8/29/2022
N052083-013D	MW-79-058-Q322	Groundwater	8/11/2022 9:57:00 AM	8/11/2022	8/29/2022
N052083-013E	MW-79-058-Q322	Groundwater	8/11/2022 9:57:00 AM	8/11/2022	8/29/2022
N052083-014A	MW-79-102-Q322	Groundwater	8/11/2022 10:43:00 AM	8/11/2022	8/29/2022
N052083-014B	MW-79-102-Q322	Groundwater	8/11/2022 10:43:00 AM	8/11/2022	8/29/2022
N052083-014C	MW-79-102-Q322	Groundwater	8/11/2022 10:43:00 AM	8/11/2022	8/29/2022
N052083-014D	MW-79-102-Q322	Groundwater	8/11/2022 10:43:00 AM	8/11/2022	8/29/2022
N052083-014E	MW-79-102-Q322	Groundwater	8/11/2022 10:43:00 AM	8/11/2022	8/29/2022
N052083-015A	MW-80-057-Q322	Groundwater	8/11/2022 8:55:00 AM	8/11/2022	8/29/2022
N052083-015B	MW-80-057-Q322	Groundwater	8/11/2022 8:55:00 AM	8/11/2022	8/29/2022
N052083-015C	MW-80-057-Q322	Groundwater	8/11/2022 8:55:00 AM	8/11/2022	8/29/2022
N052083-015D	MW-80-057-Q322	Groundwater	8/11/2022 8:55:00 AM	8/11/2022	8/29/2022
N052083-015E	MW-80-057-Q322	Groundwater	8/11/2022 8:55:00 AM	8/11/2022	8/29/2022
N052083-016A	MW-80-082-Q322	Groundwater	8/11/2022 8:06:00 AM	8/11/2022	8/29/2022
N052083-016B	MW-80-082-Q322	Groundwater	8/11/2022 8:06:00 AM	8/11/2022	8/29/2022
N052083-016C	MW-80-082-Q322	Groundwater	8/11/2022 8:06:00 AM	8/11/2022	8/29/2022
N052083-016D	MW-80-082-Q322	Groundwater	8/11/2022 8:06:00 AM	8/11/2022	8/29/2022
N052083-016E	MW-80-082-Q322	Groundwater	8/11/2022 8:06:00 AM	8/11/2022	8/29/2022
N052083-017A	EB-716-Q322	Groundwater	8/11/2022 1:20:00 PM	8/11/2022	8/29/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-96-045-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 11:01:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220815A**	QC Batch: **R164863**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/15/2022 03:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-96-217-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 11:36:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220812A**	QC Batch: **R164834**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/12/2022 06:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-080-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 8:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
EPA 218.6							
RunID: **NV00922-IC7_220812A** QC Batch: **R164834** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/12/2022 11:56 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-080-EB-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 7:50:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220812A**	QC Batch: **R164834**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/12/2022 12:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-115-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 9:52:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220815A**	QC Batch: **R164863**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/15/2022 03:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-916-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 10:02:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
EPA 218.6							
RunID: **NV00922-IC7_220812A** QC Batch: **R164834** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/12/2022 01:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-125-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 9:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220815A**	QC Batch: **R164863**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/15/2022 02:49 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-125-EB-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 9:00:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220812A**	QC Batch: **R164834**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/12/2022 05:34 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-45-095a-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 8:43:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220812A**	QC Batch: **R164834**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/12/2022 05:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-010

Client Sample ID: EB-715-Q322
Collection Date: 8/11/2022 12:00:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220812A**	QC Batch: **R164834**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/12/2022 05:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-011

Client Sample ID: MW-78-070-Q322
Collection Date: 8/11/2022 11:56:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220815A** QC Batch: **R164863**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	1200	5.0	40		µg/L	200	8/15/2022 01:43 PM
DISSOLVED METALS BY ICP-MS							
			EPA 3010A		**EPA 6020**		
RunID: **NV00922-ICP8_220816D** QC Batch: **94230**				PrepDate:	**8/13/2022**		Analyst: **DJ**
Chromium	1300	0.88	25		µg/L	25	8/16/2022 06:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-012

Client Sample ID: MW-78-142-Q322
Collection Date: 8/11/2022 12:34:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220812A** QC Batch: **R164834**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	5300	25	200		µg/L	1000	8/12/2022 01:31 PM
DISSOLVED METALS BY ICP-MS							
			EPA 3010A		**EPA 6020**		
RunID: **NV00922-ICP8_220816D** QC Batch: **94230**				PrepDate:	**8/13/2022**		Analyst: **DJ**
Chromium	6100	4.4	120		µg/L	125	8/16/2022 07:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-013

Client Sample ID: MW-79-058-Q322
Collection Date: 8/11/2022 9:57:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220812A** QC Batch: **R164834**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	2100	5.0	40		µg/L	200	8/12/2022 03:05 PM
DISSOLVED METALS BY ICP-MS							
			EPA 3010A		**EPA 6020**		
RunID: **NV00922-ICP8_220816D** QC Batch: **94230**				PrepDate:	**8/13/2022**		Analyst: **DJ**
Chromium	2100	0.88	25		µg/L	25	8/16/2022 06:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-014

Client Sample ID: MW-79-102-Q322
Collection Date: 8/11/2022 10:43:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220812A** QC Batch: **R164834**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	2000	5.0	40		µg/L	200	8/12/2022 01:59 PM
DISSOLVED METALS BY ICP-MS							
			EPA 3010A		**EPA 6020**		
RunID: **NV00922-ICP8_220816D** QC Batch: **94230**				PrepDate:	**8/13/2022**		Analyst: **DJ**
Chromium	2200	0.88	25		µg/L	25	8/16/2022 07:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-015

Client Sample ID: MW-80-057-Q322
Collection Date: 8/11/2022 8:55:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220812A** QC Batch: **R164834**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	650	5.0	40		µg/L	200	8/12/2022 03:24 PM
DISSOLVED METALS BY ICP-MS							
			EPA 3010A		**EPA 6020**		
RunID: **NV00922-ICP8_220816D** QC Batch: **94230**				PrepDate:	**8/13/2022**		Analyst: **DJ**
Chromium	690	0.18	5.0		µg/L	5	8/16/2022 07:21 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-016

Client Sample ID: MW-80-082-Q322
Collection Date: 8/11/2022 8:06:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220812A** QC Batch: **R164834**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	200	0.50	4.0		µg/L	20	8/12/2022 03:43 PM
DISSOLVED METALS BY ICP-MS							
			EPA 3010A		**EPA 6020**		
RunID: **NV00922-ICP8_220816D** QC Batch: **94230**				PrepDate:	**8/13/2022**		Analyst: **DJ**
Chromium	240	0.18	5.0		µg/L	5	8/16/2022 07:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-716-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 1:20:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220812A**	QC Batch: **R164834**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/12/2022 06:31 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R164834**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164834**
Client ID: **PBW**	Batch ID: **R164834**	TestNo: **EPA 218.6**		Analysis Date: **8/12/2022**	SeqNo: **4779246**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R164834**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164834**
Client ID: **LCSW**	Batch ID: **R164834**	TestNo: **EPA 218.6**		Analysis Date: **8/12/2022**	SeqNo: **4779247**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.787	0.20	5.000	0	95.7	90	110				

Sample ID: **N052083-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164834**
Client ID: **ZZZZZZ**	Batch ID: **R164834**	TestNo: **EPA 218.6**		Analysis Date: **8/12/2022**	SeqNo: **4779249**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.004	0.20	1.000	0	100	90	110				

Sample ID: **N052083-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164834**
Client ID: **ZZZZZZ**	Batch ID: **R164834**	TestNo: **EPA 218.6**		Analysis Date: **8/12/2022**	SeqNo: **4779251**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.964	0.20	1.000	0	96.4	90	110				

Sample ID: **N052083-006AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164834**
Client ID: **ZZZZZZ**	Batch ID: **R164834**	TestNo: **EPA 218.6**		Analysis Date: **8/12/2022**	SeqNo: **4779255**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.014	0.20	1.000	0	101	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052083-012AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164834**
Client ID: **ZZZZZZ** Batch ID: **R164834** TestNo: **EPA 218.6** Analysis Date: **8/12/2022** SeqNo: **4779257**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	9929.400	200	5000	5258	93.4	90	110				

Sample ID: **N052083-012AMSD** SampType: **MSD** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164834**
Client ID: **ZZZZZZ** Batch ID: **R164834** TestNo: **EPA 218.6** Analysis Date: **8/12/2022** SeqNo: **4779258**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	9928.200	200	5000	5258	93.4	90	110	9929	0.0121	20	

Sample ID: **N052083-014ADUP** SampType: **DUP** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164834**
Client ID: **ZZZZZZ** Batch ID: **R164834** TestNo: **EPA 218.6** Analysis Date: **8/12/2022** SeqNo: **4779260**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2015.720	40						2015	0.0248	20	

Sample ID: **N052083-014AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164834**
Client ID: **ZZZZZZ** Batch ID: **R164834** TestNo: **EPA 218.6** Analysis Date: **8/12/2022** SeqNo: **4779261**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2983.180	40	1000	2015	96.8	90	110				

Sample ID: **N052083-013AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164834**
Client ID: **ZZZZZZ** Batch ID: **R164834** TestNo: **EPA 218.6** Analysis Date: **8/12/2022** SeqNo: **4779265**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	3006.480	40	1000	2052	95.4	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052083-015AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164834**
Client ID: **ZZZZZZ** Batch ID: **R164834** TestNo: **EPA 218.6** Analysis Date: **8/12/2022** SeqNo: **4779267**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1648.220	40	1000	646.8	100	90	110				

Sample ID: **N052083-016AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164834**
Client ID: **ZZZZZZ** Batch ID: **R164834** TestNo: **EPA 218.6** Analysis Date: **8/12/2022** SeqNo: **4779269**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	295.954	4.0	100.0	197.5	98.5	90	110				

Sample ID: **N052083-009AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164834**
Client ID: **ZZZZZZ** Batch ID: **R164834** TestNo: **EPA 218.6** Analysis Date: **8/12/2022** SeqNo: **4779273**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.002	0.20	1.000	0	100	90	110				

Sample ID: **N052083-008AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164834**
Client ID: **ZZZZZZ** Batch ID: **R164834** TestNo: **EPA 218.6** Analysis Date: **8/12/2022** SeqNo: **4779275**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.952	0.20	1.000	0	95.2	90	110				

Sample ID: **N052083-010AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164834**
Client ID: **ZZZZZZ** Batch ID: **R164834** TestNo: **EPA 218.6** Analysis Date: **8/12/2022** SeqNo: **4779277**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.942	0.20	1.000	0	94.2	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052083-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164834**
Client ID: **ZZZZZZ**	Batch ID: **R164834**	TestNo: **EPA 218.6**		Analysis Date: **8/12/2022**	SeqNo: **4779279**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.885	1.0	5.000	0	97.7	90	110				

Sample ID: **N052083-017AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164834**
Client ID: **ZZZZZZ**	Batch ID: **R164834**	TestNo: **EPA 218.6**		Analysis Date: **8/12/2022**	SeqNo: **4779281**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.944	0.20	1.000	0	94.4	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R164863**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164863**
Client ID: **PBW**	Batch ID: **R164863**	TestNo: **EPA 218.6**		Analysis Date: **8/15/2022**	SeqNo: **4781109**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R164863**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164863**
Client ID: **LCSW**	Batch ID: **R164863**	TestNo: **EPA 218.6**		Analysis Date: **8/15/2022**	SeqNo: **4781110**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.988	0.20	5.000	0	99.8	90	110				

Sample ID: **N052098-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164863**
Client ID: **ZZZZZZ**	Batch ID: **R164863**	TestNo: **EPA 218.6**		Analysis Date: **8/15/2022**	SeqNo: **4781112**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	204.400	4.0	100.0	104.5	99.9	90	110				

Sample ID: **N052098-005AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164863**
Client ID: **ZZZZZZ**	Batch ID: **R164863**	TestNo: **EPA 218.6**		Analysis Date: **8/15/2022**	SeqNo: **4781113**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	202.830	4.0	100.0	104.5	98.3	90	110	204.4	0.771	20	

Sample ID: **N052083-011AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164863**
Client ID: **ZZZZZZ**	Batch ID: **R164863**	TestNo: **EPA 218.6**		Analysis Date: **8/15/2022**	SeqNo: **4781115**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2182.480	40	1000	1194	98.9	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052083-011ADUP** SampType: **DUP** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164863**
Client ID: **ZZZZZZ** Batch ID: **R164863** TestNo: **EPA 218.6** Analysis Date: **8/15/2022** SeqNo: **4781116**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1176.840	40						1194	1.41	20	

Sample ID: **N052098-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164863**
Client ID: **ZZZZZZ** Batch ID: **R164863** TestNo: **EPA 218.6** Analysis Date: **8/15/2022** SeqNo: **4781118**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	886.350	20	500.0	393.6	98.5	90	110				

Sample ID: **N052083-007AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164863**
Client ID: **ZZZZZZ** Batch ID: **R164863** TestNo: **EPA 218.6** Analysis Date: **8/15/2022** SeqNo: **4781122**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.515	1.0	5.000	0	90.3	90	110				

Sample ID: **N052083-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164863**
Client ID: **ZZZZZZ** Batch ID: **R164863** TestNo: **EPA 218.6** Analysis Date: **8/15/2022** SeqNo: **4781124**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.733	1.0	5.000	0	94.6	90	110				

Sample ID: **N052083-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164863**
Client ID: **ZZZZZZ** Batch ID: **R164863** TestNo: **EPA 218.6** Analysis Date: **8/15/2022** SeqNo: **4781126**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.523	1.0	5.000	0	90.5	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052098-002AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164863**
Client ID: **ZZZZZZ** Batch ID: **R164863** TestNo: **EPA 218.6** Analysis Date: **8/15/2022** SeqNo: **4781128**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.916	0.20	1.000	0	91.6	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020DIS_CrPGE_TPK

Sample ID: **MB-94230**	SampType: **MBLK**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164893**
Client ID: **PBW**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783632**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									

Sample ID: **LCS-94230**	SampType: **LCS**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164893**
Client ID: **LCSW**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783633**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10.178	1.0	10.00	0	102	85	115				

Sample ID: **N052083-005B-MS**	SampType: **MS**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164893**
Client ID: **ZZZZZZ**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783638**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.801	1.0	10.00	0.1789	96.2	75	125				

Sample ID: **N052083-005B-MSD**	SampType: **MSD**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164893**
Client ID: **ZZZZZZ**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783639**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.871	1.0	10.00	0.1789	96.9	75	125	9.801	0.715	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-003

Client Sample ID: MW-34-080-Q322
Collection Date: 8/11/2022 8:14:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
EPA 300.0							
RunID: **NV00922-IC8_220813A** QC Batch: **R164814** PrepDate: Analyst: **RAB**							
Sulfate	540	3.0	25		mg/L	50	8/13/2022 12:38 PM
ANIONS BY ION CHROMATOGRAPHY							
EPA 300.0							
RunID: **NV00922-IC8_220812A** QC Batch: **R164809** PrepDate: Analyst: **RAB**							
Nitrate as N	ND	0.095	0.50		mg/L	10	8/12/2022 01:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-005

Client Sample ID: MW-44-115-Q322
Collection Date: 8/11/2022 9:52:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**			PrepDate:				Analyst: **RAB**
Sulfate	1000	6.1	50		mg/L	100	8/13/2022 02:13 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**			PrepDate:				Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/12/2022 01:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-006

Client Sample ID: MW-916-Q322
Collection Date: 8/11/2022 10:02:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**			PrepDate:				Analyst: **RAB**
Sulfate	940	6.1	50		mg/L	100	8/13/2022 02:29 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**			PrepDate:				Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/12/2022 02:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-007

Client Sample ID: MW-44-125-Q322
Collection Date: 8/11/2022 9:22:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**			PrepDate:				Analyst: **RAB**
Sulfate	1100	6.1	50		mg/L	100	8/13/2022 03:16 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**			PrepDate:				Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/12/2022 02:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-009

Client Sample ID: MW-45-095a-Q322
Collection Date: 8/11/2022 8:43:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**			PrepDate:				Analyst: **RAB**
Sulfate	430	3.0	25		mg/L	50	8/13/2022 01:26 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**			PrepDate:				Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/12/2022 02:43 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-011

Client Sample ID: MW-78-070-Q322
Collection Date: 8/11/2022 11:56:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/12/2022 10:46 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**				PrepDate:			Analyst: **RAB**
Sulfate	440	3.0	25		mg/L	50	8/13/2022 03:48 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrate as N	2.1	0.095	0.50		mg/L	10	8/12/2022 10:46 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-012

Client Sample ID: MW-78-142-Q322
Collection Date: 8/11/2022 12:34:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/12/2022 11:02 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**				PrepDate:			Analyst: **RAB**
Sulfate	840	6.1	50		mg/L	100	8/13/2022 03:32 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrate as N	9.0	0.095	0.50		mg/L	10	8/12/2022 11:02 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-013

Client Sample ID: MW-79-058-Q322
Collection Date: 8/11/2022 9:57:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/12/2022 11:18 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**				PrepDate:			Analyst: **RAB**
Sulfate	460	3.0	25		mg/L	50	8/13/2022 04:04 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrate as N	6.9	0.095	0.50		mg/L	10	8/12/2022 11:18 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-014

Client Sample ID: MW-79-102-Q322
Collection Date: 8/11/2022 10:43:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/12/2022 11:34 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**				PrepDate:			Analyst: **RAB**
Sulfate	660	3.0	25		mg/L	50	8/13/2022 04:19 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrate as N	3.6	0.095	0.50		mg/L	10	8/12/2022 11:34 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-015

Client Sample ID: MW-80-057-Q322
Collection Date: 8/11/2022 8:55:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/12/2022 11:49 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**				PrepDate:			Analyst: **RAB**
Sulfate	440	3.0	25		mg/L	50	8/13/2022 04:35 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrate as N	12	0.095	0.50		mg/L	10	8/12/2022 11:49 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-016

Client Sample ID: MW-80-082-Q322
Collection Date: 8/11/2022 8:06:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/12/2022 12:05 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**				PrepDate:			Analyst: **RAB**
Sulfate	530	3.0	25		mg/L	50	8/13/2022 04:51 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrate as N	1.2	0.095	0.50		mg/L	10	8/12/2022 12:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_NO2PGE

Sample ID: **MB-R164809_NO2**	SampType: **MBLK**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **PBW**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4778444**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	0.014	0.50									

Sample ID: **LCS-R164809_NO2**	SampType: **LCS**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **LCSW**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4778445**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	1.184	0.50	1.250	0	94.7	90	110				

Sample ID: **N052083-013DMS**	SampType: **MS**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **ZZZZZZ**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4778452**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	15.252	5.0	12.50	0	122	80	120				S

Sample ID: **N052083-013DMSD**	SampType: **MSD**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **ZZZZZZ**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4778453**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	15.139	5.0	12.50	0	121	80	120	15.25	0.744	20	S

Sample ID: **N052083-015DDUP**	SampType: **DUP**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **ZZZZZZ**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4778456**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	ND	5.0						0	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

  Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **MB-R164814_SO4**	SampType: **MBLK**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164814**
Client ID: **PBW**	Batch ID: **R164814**	TestNo: **EPA 300.0**		Analysis Date: **8/13/2022**	SeqNo: **4778349**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.50									

Sample ID: **LCS-R164814_SO4**	SampType: **LCS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164814**
Client ID: **LCSW**	Batch ID: **R164814**	TestNo: **EPA 300.0**		Analysis Date: **8/13/2022**	SeqNo: **4778350**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	4.087	0.50	4.000	0	102	90	110				

Sample ID: **N052083-003DMS**	SampType: **MS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164814**
Client ID: **ZZZZZZ**	Batch ID: **R164814**	TestNo: **EPA 300.0**		Analysis Date: **8/13/2022**	SeqNo: **4778352**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	771.600	25	200.0	537.7	117	80	120				

Sample ID: **N052083-003DMSD**	SampType: **MSD**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164814**
Client ID: **ZZZZZZ**	Batch ID: **R164814**	TestNo: **EPA 300.0**		Analysis Date: **8/13/2022**	SeqNo: **4778353**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	759.810	25	200.0	537.7	111	80	120	771.6	1.54	20	

Sample ID: **N052083-009DDUP**	SampType: **DUP**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164814**
Client ID: **ZZZZZZ**	Batch ID: **R164814**	TestNo: **EPA 300.0**		Analysis Date: **8/13/2022**	SeqNo: **4778355**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	430.605	25						431.4	0.183	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **N052083-009DMS**	SampType: **MS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164814**
Client ID: **ZZZZZZ**	Batch ID: **R164814**	TestNo: **EPA 300.0**		Analysis Date: **8/13/2022**	SeqNo: **4778356**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	622.910	25	200.0	431.4	95.8	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R164809_NO3**	SampType: **MBLK**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **PBW**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4777767**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R164809_NO3**	SampType: **LCS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **LCSW**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4777768**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.187	0.050	1.250	0	95.0	90	110				

Sample ID: **N052083-013DMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **ZZZZZZ**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4777775**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	20.635	0.50	12.50	6.870	110	80	120				

Sample ID: **N052083-013DMSD**	SampType: **MSD**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **ZZZZZZ**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4777776**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	20.191	0.50	12.50	6.870	107	80	120	20.64	2.18	20	

Sample ID: **N052083-015DDUP**	SampType: **DUP**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **ZZZZZZ**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4777779**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.586	0.50						11.81	1.87	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **N052083-009DMS** SampType: **MS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **164809**
Client ID: **ZZZZZZ** Batch ID: **R164809** TestNo: **EPA 300.0** Analysis Date: **8/12/2022** SeqNo: **4777785**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.775	0.50	12.50	0	94.2	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-080-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 8:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 01:24 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-115-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 9:52:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 01:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-916-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 10:02:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 03:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-125-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 9:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 03:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-45-095a-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 8:43:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 03:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-070-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 11:56:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 04:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-142-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 12:34:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 04:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-058-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 9:57:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 04:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-102-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 10:43:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 05:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-057-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 8:55:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 05:17 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-082-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 8:06:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 05:32 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R164829**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164829**
Client ID: **PBW**	Batch ID: **R164829**	TestNo: **SM 5310C**		Analysis Date: **8/12/2022**	SeqNo: **4779023**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R164829**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164829**
Client ID: **LCSW**	Batch ID: **R164829**	TestNo: **SM 5310C**		Analysis Date: **8/12/2022**	SeqNo: **4779024**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.050	1.0	5.000	0	101	85	115				

Sample ID: **N052058-010DMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164829**
Client ID: **ZZZZZZ**	Batch ID: **R164829**	TestNo: **SM 5310C**		Analysis Date: **8/12/2022**	SeqNo: **4779026**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.246	1.0	5.000	0.8311	88.3	75	125				

Sample ID: **N052058-010DMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164829**
Client ID: **ZZZZZZ**	Batch ID: **R164829**	TestNo: **SM 5310C**		Analysis Date: **8/12/2022**	SeqNo: **4779029**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.153	1.0	5.000	0.8311	86.4	75	125	5.246	1.78	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-003

Client Sample ID: MW-34-080-Q322
Collection Date: 8/11/2022 8:14:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**				PrepDate:	**8/13/2022**	Analyst: **DJ**
Iron	480	13	20		µg/L	1	8/28/2022 08:56 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-115-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 9:52:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 09:20 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-916-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 10:02:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 09:34 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-125-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 9:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Iron	390	13	20		µg/L	1	8/28/2022 09:39 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-45-095a-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 8:43:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 09:44 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-011

Client Sample ID: MW-78-070-Q322
Collection Date: 8/11/2022 11:56:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:		**8/13/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 09:49 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-142-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 12:34:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 09:54 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-058-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 9:57:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 09:59 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-102-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 10:43:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Iron	22	13	20		µg/L	1	8/28/2022 10:04 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-057-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 8:55:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 10:09 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-082-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 8:06:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Iron	33	13	20		µg/L	1	8/28/2022 10:13 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94229**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **165203**
Client ID: **PBW**	Batch ID: **94229**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803659**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-94229**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **165203**
Client ID: **LCSW**	Batch ID: **94229**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803660**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	105.444	20	100.0	0	105	85	115				

Sample ID: **N052083-003B-MS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **165203**
Client ID: **ZZZZZZ**	Batch ID: **94229**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803664**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	561.580	20	100.0	477.5	84.1	75	125				

Sample ID: **N052083-003B-MSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **165203**
Client ID: **ZZZZZZ**	Batch ID: **94229**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803665**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	562.154	20	100.0	477.5	84.7	75	125	561.6	0.102	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-003

Client Sample ID: MW-34-080-Q322
Collection Date: 8/11/2022 8:14:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220816E**	QC Batch: **94230**				PrepDate:	**8/13/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 03:40 PM
Barium	39	0.083	1.0		µg/L	1	8/16/2022 03:40 PM
Manganese	130	0.026	0.50		µg/L	1	8/16/2022 03:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-115-Q322
Lab Order:	N052083	**Collection Date:**	8/11/2022 9:52:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052083-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220816E**	QC Batch: **94230**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 03:46 PM
Barium	19	0.083	1.0		µg/L	1	8/16/2022 03:46 PM
Manganese	46	0.026	0.50		µg/L	1	8/16/2022 03:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-006

Client Sample ID: MW-916-Q322
Collection Date: 8/11/2022 10:02:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220816E**	QC Batch: **94230**			PrepDate:		**8/13/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 04:16 PM
Barium	21	0.083	1.0		µg/L	1	8/16/2022 04:16 PM
Manganese	52	0.026	0.50		µg/L	1	8/16/2022 04:16 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-007

Client Sample ID: MW-44-125-Q322
Collection Date: 8/11/2022 9:22:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220816E**	QC Batch: **94230**				PrepDate:	**8/13/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 04:40 PM
Barium	46	0.083	1.0		µg/L	1	8/16/2022 04:40 PM
Manganese	540	0.13	2.5		µg/L	5	8/16/2022 06:16 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-009

Client Sample ID: MW-45-095a-Q322
Collection Date: 8/11/2022 8:43:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220816E**	QC Batch: **94230**				PrepDate:	**8/13/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 04:46 PM
Barium	28	0.083	1.0		µg/L	1	8/16/2022 04:46 PM
Manganese	230	0.13	2.5		µg/L	5	8/16/2022 06:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-011

Client Sample ID: MW-78-070-Q322
Collection Date: 8/11/2022 11:56:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220816E**	QC Batch: **94230**				PrepDate:	**8/13/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 04:52 PM
Barium	140	0.083	1.0		µg/L	1	8/16/2022 04:52 PM
Manganese	88	0.026	0.50		µg/L	1	8/16/2022 04:52 PM
Molybdenum	8.2	0.12	0.50		µg/L	1	8/16/2022 04:52 PM
Selenium	2.5	0.044	0.50		µg/L	1	8/16/2022 04:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-012

Client Sample ID: MW-78-142-Q322
Collection Date: 8/11/2022 12:34:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220816E** QC Batch: **94230**				PrepDate:	**8/13/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 04:58 PM
Barium	28	0.083	1.0		µg/L	1	8/16/2022 04:58 PM
Manganese	3.2	0.026	0.50		µg/L	1	8/16/2022 04:58 PM
Molybdenum	20	0.12	0.50		µg/L	1	8/16/2022 04:58 PM
Selenium	35	0.044	0.50		µg/L	1	8/16/2022 04:58 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-013

Client Sample ID: MW-79-058-Q322
Collection Date: 8/11/2022 9:57:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220816E** QC Batch: **94230**				PrepDate:		**8/13/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 05:04 PM
Barium	110	0.083	1.0		µg/L	1	8/16/2022 05:04 PM
Manganese	13	0.026	0.50		µg/L	1	8/16/2022 05:04 PM
Molybdenum	20	0.12	0.50		µg/L	1	8/16/2022 05:04 PM
Selenium	9.2	0.044	0.50		µg/L	1	8/16/2022 05:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-014

Client Sample ID: MW-79-102-Q322
Collection Date: 8/11/2022 10:43:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220816E** QC Batch: **94230**				PrepDate:	**8/13/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 05:10 PM
Barium	46	0.083	1.0		µg/L	1	8/16/2022 05:10 PM
Manganese	ND	0.026	0.50		µg/L	1	8/16/2022 05:10 PM
Molybdenum	27	0.12	0.50		µg/L	1	8/16/2022 05:10 PM
Selenium	11	0.044	0.50		µg/L	1	8/16/2022 05:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-015

Client Sample ID: MW-80-057-Q322
Collection Date: 8/11/2022 8:55:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220816E**	QC Batch: **94230**				PrepDate:	**8/13/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 05:16 PM
Barium	55	0.083	1.0		µg/L	1	8/16/2022 05:16 PM
Manganese	18	0.026	0.50		µg/L	1	8/16/2022 05:16 PM
Molybdenum	25	0.12	0.50		µg/L	1	8/16/2022 05:16 PM
Selenium	20	0.044	0.50		µg/L	1	8/16/2022 05:16 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052083-016

Client Sample ID: MW-80-082-Q322
Collection Date: 8/11/2022 8:06:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220816E** QC Batch: **94230**				PrepDate:	**8/13/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 05:22 PM
Barium	48	0.083	1.0		µg/L	1	8/16/2022 05:22 PM
Manganese	9.5	0.026	0.50		µg/L	1	8/16/2022 05:22 PM
Molybdenum	52	0.12	0.50		µg/L	1	8/16/2022 05:22 PM
Selenium	1.3	0.044	0.50		µg/L	1	8/16/2022 05:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94230**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164894**
Client ID: **PBW**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783735**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	0.047	0.50									
Molybdenum	ND	0.50									
Selenium	ND	0.50									

Sample ID: **LCS-94230**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164894**
Client ID: **LCSW**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783736**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.721	0.10	10.00	0	97.2	85	115				
Barium	9.938	1.0	10.00	0	99.4	85	115				
Manganese	98.288	0.50	100.0	0	98.3	85	115				
Molybdenum	9.699	0.50	10.00	0	97.0	85	115				
Selenium	9.794	0.50	10.00	0	97.9	85	115				

Sample ID: **N052083-005B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164894**
Client ID: **ZZZZZZ**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783741**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	7.165	0.10	10.00	0	71.6	75	125				S
Barium	31.206	1.0	10.00	19.50	117	75	125				
Manganese	141.841	0.50	100.0	46.35	95.5	75	125				
Molybdenum	58.629	0.50	10.00	44.37	143	75	125				S
Selenium	8.986	0.50	10.00	0.1978	87.9	75	125				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052083-005B-MSD** SampType: **MSD** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/13/2022** RunNo: **164894**
Client ID: **ZZZZZZ** Batch ID: **94230** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/16/2022** SeqNo: **4783742**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	7.341	0.10	10.00	0	73.4	75	125	7.165	2.44	20	S
Barium	31.596	1.0	10.00	19.50	121	75	125	31.21	1.24	20	
Manganese	145.068	0.50	100.0	46.35	98.7	75	125	141.8	2.25	20	
Molybdenum	60.063	0.50	10.00	44.37	157	75	125	58.63	2.42	20	S
Selenium	9.220	0.50	10.00	0.1978	90.2	75	125	8.986	2.57	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052083
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052083-005B-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164894**
Client ID: **ZZZZZZ** Batch ID: **94230** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/16/2022** SeqNo: **4783740**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	6.948	0.10	10.00	0	69.5	80	120				S
Barium	31.266	1.0	10.00	19.50	118	80	120				
Manganese	140.890	0.50	100.0	46.35	94.5	80	120				
Molybdenum	58.679	0.50	10.00	44.37	143	80	120				S
Selenium	9.453	0.50	10.00	0.1978	92.6	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ASSET LABORATORIES

ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

Page 1 of 1

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement		QA/QC		Sample Receipt Condition
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD		RTNE		Y N
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com daniel.moore@critigen.com	Address:	Geotracker		RWQCB	✓	1. Chilled ✓
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Labspec		CalTrans		2. Headspace
Submitted By: Riggie Tap			Others	✓	LEVEL III		3. Container Intact ✓
Title: Field Tech	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	Specify: RWQCB		LEVEL IV		4. Seal Present
Signature: Date: 8/11/22	Sampled By: Riggie Tap		Global ID:		Regulatory		5. IR number 3
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for				Specify State:		6. Method of Cooling: ICE
Project Name: PG&E Topock - PCM	Signature:	Date: 8/11/22					Sample Temp: 1.1°C, 2.4°C
Project Number: 30121866.3Q22GW							Courier: ASSET
							Tracking No.:

Matrix: Ground X | Sediment | Potable | Soil | NPDES | Other Solid | Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH 250 mL poly	Nitrite, Nitrate, sulfate (EPA 300.0) 1 L poly	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese 500mL poly	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, 500mL poly	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium 500mL poly	Total Organic Carbon (SM5310C); H2SO4 3x40 mL VOA	Total metals (SW6010) No filter; HNO3 Total Iron 500mL poly	Ammonia as Nitrogen (SM4500NH3); H2SO4 1 L poly	Nitrate, sulfate (EPA 300.0) 1 L poly	Nitrate/nitrite as Nitrogen (SM 4500-NO3); H2SO4 125 mL poly	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052083-01	MW-96-045-Q322	8/11/2022	11:01		X										E	1	P	BNS	
2	-02	MW-96-217-Q322	8/11/2022	11:36		X										E	1	P	BNS	
3	-03	MW-34-080-Q322	8/11/2022	8:14		X		X			X			X		E	6	P	BNS	
4	-04	MW-34-080-EB-Q322	8/11/2022	7:50		X										E	1	P	BNS	
5	-05	MW-44-115-Q322	8/11/2022	9:52		X		X			X			X		E	6	P	BNS	
6	-06	MW-916-Q322	8/11/2022	10:02		X		X			X			X		E	6	P	BNS	
7	-07	MW-44-125-Q322	8/11/2022	9:22		X		X			X			X	X	E	7	P	BNS	
8	-08	MW-44-125-EB-Q322	8/11/2022	9:00		X										E	1	P	BNS	
9	-09	MW-45-095a-Q322	8/11/2022	8:43		X		X			X			X		E	6	P	BNS	
10	-10	EB-715-Q322	8/11/2022	12:00		X										E	1	P	BNS	
11	-11	MW-78-070-Q322	8/11/2022	11:56		X	X	X	X	X	X		X			E	3	P	BNS	
12	-12	MW-78-142-Q322	8/11/2022	12:34		X	X	X	X	X	X		X			E	3	P	BNS	
13																				
14																				

Reliquished by (Signature and Printed Name):	Date/Time:	Reliquished by (Signature and Printed Name):	Date/Time:
Riggie Tap	8/11/22 1435	Dante Ortiz Dante Ortiz	8/11/22 14:25
Dante Ortiz Dante Ortiz	8/11/22 18:18	Dante Ortiz Dante Ortiz	8/11/22 18:18

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [X] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms

1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
   Less than 24 Hrs =200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy

Yellow=Customer's Copy

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes		EDD Requirement		QA/QC		Sample Receipt Condition	Y	N
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:		Excel EDD		RTNE		1. Chilled	✓	
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com daniel.moore@critigen.com	Address:		Geotracker		RWQCB	✓	2. Headspace		✓
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com	P.O.#	Labspec		CalTrans		3. Container Intact	✓	
Submitted By: Rissie Top		Phone: 949-727-1400, ext 200	Fax:	Others	✓	LEVEL III		4. Seal Present		
Title: Field Tech	Phone: 916-786-3302 Fax:			Specify: RWQCB		LEVEL IV		5. IR number	3	
Signature: Date: 8/11/22	Sampled By: Rissie Top			Global ID:		Regulatory		6. Method of Cooling: ICE		
I hereby authorize ASSET Labs to perform the tests indicated below.	*I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for*					Specify State:		Sample Temp: 2.4°C, 1.1°C		
Project Name: PG&E Topock - PCM	Signature: Date: 8/11/22							Courier: ASSET		
Project Number: 30121866.3Q22GW								Tracking No.:		

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrite, Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Nitrate/nitrite as Nitrogen (SM 4500-NO3) ; H2SO4 (125 mL poly)			Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052083-13	MW-79-058-Q322	8/11/2022	9:57		X	X	X	X	X	X		X					E	7	P	BNS	
2	-14	MW-79-102-Q322	8/11/2022	10:43		X	X	X	X	X	X		X					E	7	P	BNS	
3	-15	MW-80-057-Q322	8/11/2022	8:55		X	X	X	X	X	X		X					E	7	P	BNS	
4	-16	MW-80-082-Q322	8/11/2022	8:06		X	X	X	X	X	X		X					E	7	P	BNS	
5	-17	EB-716-Q322	8/11/2022	13:20		X												E	1	P	BNS	
6																						
7																						
8																						
9																						
10																						
11																						
12																						
13																						
14																						

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Rissie Top	8/11/22 1435	Dante Ortiz	8/11/22 14:35
Dante Ortiz	8/11/22 17:15	Dante Ortiz	8/11/22 18:18

Turn Around Time (TAT)

	A	< 24 Hrs or Same Day TAT
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TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

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1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
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Less than 24 Hrs =200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
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9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/11/2022	Workorder:	N052083
Rep sample Temp (Deg C):	2.4/1.1	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: EF EFanegoF 8/12/2022

Reviewed By: for: MBC 8/18/2022

ASSET Laboratories

WORK ORDER Summary

18-Aug-22

WorkOrder: N052083

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/11/2022 6:18 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052083-001A	MW-96-045-Q322	8/11/2022 11:01:00 AM	8/25/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-002A	MW-96-217-Q322	8/11/2022 11:36:00 AM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-003A	MW-34-080-Q322	8/11/2022 8:14:00 AM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-003B			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052083-003C			8/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052083-003D			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052083-004A	MW-34-080-EB-Q322	8/11/2022 7:50:00 AM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-005A	MW-44-115-Q322	8/11/2022 9:52:00 AM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-005B			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052083-005C			8/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052083-005D			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052083-006A	MW-916-Q322	8/11/2022 10:02:00 AM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-006B			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

18-Aug-22

WorkOrder: N052083

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/11/2022 6:18 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052083-006B	MW-916-Q322	8/11/2022 10:02:00 AM	8/25/2022	Groundwater	EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052083-006C			8/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052083-006D			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052083-007A	MW-44-125-Q322	8/11/2022 9:22:00 AM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-007B			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052083-007C			8/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052083-007D			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052083-007E			8/25/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052083-008A	MW-44-125-EB-Q322	8/11/2022 9:00:00 AM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-009A	MW-45-095a-Q322	8/11/2022 8:43:00 AM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-009B			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052083-009C			8/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052083-009D			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

18-Aug-22

WorkOrder: N052083

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/11/2022 6:18 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052083-009D	MW-45-095a-Q322	8/11/2022 8:43:00 AM	8/25/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052083-010A	EB-715-Q322	8/11/2022 12:00:00 PM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-011A	MW-78-070-Q322	8/11/2022 11:56:00 AM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-011B			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052083-011C			8/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052083-011D			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052083-011E			8/25/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052083-012A	MW-78-142-Q322	8/11/2022 12:34:00 PM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-012B			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052083-012C			8/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052083-012D			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

18-Aug-22

WorkOrder: N052083

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/11/2022 6:18 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052083-012D	MW-78-142-Q322	8/11/2022 12:34:00 PM	8/25/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052083-012E			8/25/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052083-013A	MW-79-058-Q322	8/11/2022 9:57:00 AM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-013B			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052083-013C			8/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052083-013D			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052083-013E			8/25/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052083-014A	MW-79-102-Q322	8/11/2022 10:43:00 AM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-014B			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052083-014C			8/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052083-014D			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

18-Aug-22

WorkOrder: N052083

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/11/2022 6:18 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052083-014D	MW-79-102-Q322	8/11/2022 10:43:00 AM	8/25/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052083-014E			8/25/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052083-015A	MW-80-057-Q322	8/11/2022 8:55:00 AM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-015B			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052083-015C			8/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052083-015D			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052083-015E			8/25/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052083-016A	MW-80-082-Q322	8/11/2022 8:06:00 AM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-016B			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/25/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/25/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052083-016C			8/25/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

18-Aug-22

WorkOrder: N052083

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/11/2022 6:18 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052083-016D	MW-80-082-Q322	8/11/2022 8:06:00 AM	8/25/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/25/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052083-016E			8/25/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052083-017A	EB-716-Q322	8/11/2022 1:20:00 PM	8/25/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052083-018A	FOLDER	8/25/2022	8/25/2022		Folder	Folder	☐	☐	☐	LAB
			8/25/2022		Folder	Level IV Report	☐	☐	☐	LAB
			8/25/2022		Folder	Folder	☐	☐	☐	LAB

ASSET Laboratories
3151-3153 W Post Rd., Las Vegas, NV 89118
www.atl-labs.com
TEL: 7023072659 *FAX: 7023072691*

CHAIN-OF-CUSTODY RECORD

QC Level: Level IV

Subcontractor:

BC Labs
4100 Atlas Court
Bakersfield, CA 93308

TEL: (661) 327-4911
FAX: (661) 327-1918
Acct #:

Field Sampler: Rigie Tep

15-Aug-22

				Requested Tests		
Sample ID	Matrix	Date Collected	Bottle Type	Ammonia SM4500-NH3D	~~SM4500-NO3F~~ Nitrate/Nitrite	
N052083-007E / MW-44-125-Q322	Groundwater	8/11/2022 9:22:00 AM	8OZP		1	
N052083-011E / MW-78-070-Q322	Groundwater	8/11/2022 11:56:00 AM	8OZP	1		
N052083-012E / MW-78-142-Q322	Groundwater	8/11/2022 12:34:00 PM	8OZP	1		
N052083-013E / MW-79-058-Q322	Groundwater	8/11/2022 9:57:00 AM	8OZP	1		
N052083-014E / MW-79-102-Q322	Groundwater	8/11/2022 10:43:00 AM	8OZP	1		
N052083-015E / MW-80-057-Q322	Groundwater	8/11/2022 8:55:00 AM	8OZP	1		
N052083-016E / MW-80-082-Q322	Groundwater	8/11/2022 8:06:00 AM	8OZP	1		

General Comments: PLEASE EMAIL SAMPLE RECEIPT ACKNOWLEDGEMENT TO THE PM. ALWAYS CC: sonny.lorenzo@assetlaboratories.com

Please use PO#:N52083A Please email Invoices and Account Receivable Statements to elvira@assetlaboratories.com. For questions, call Marlon at (702)-307-2659. Please e-mail results to reports.lv@assetlaboratories.com by: Standard TAT.

EDD requirement Labspec7 edata.

GSO #: 557545146

	Date/Time		Date/Time
Relinquished by: YRJ	8/15/2022 1630	**Received by:**	
Relinquished by:		**Received by:**	

August 29, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052098

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 12, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Subcontracted Analyses:

Ammonia and Nitrate/Nitrite were subcontracted to BC Labs - Bakersfield, CA.

Analytical Comments for EPA 218.6:

Because the results for total dissolved chromium (5.8 ug/L) and hexavalent chromium (0 ug/L) for sample N052098-001 (MW-21-Q322) are discrepant, sample re-analysis and Matrix Spike protocol were performed and result confirmed initial analysis.

Dilution was necessary for some samples due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of sample upon the addition of eluent.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Nitrite in QC samples N052083-013DMS and N052083-013DMSD possibly due to matrix interference. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020_Dissolved:

Because the results for total dissolved chromium (5.8 ug/L) and hexavalent chromium (0 ug/L) for sample N052098-001 (MW-21-Q322) are discrepant, sample from both the total dissolved chromium and hexavalent chromium containers were redigested and analyzed for total dissolved chromium. The results from the redigested samples were 7.2 and 3.1 ug/L, respectively. Since these data confirmed the original result for total dissolved chromium, the original result is reported.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Arsenic and Molybdenum in QC samples N052083-005B-MS and N052083-005B-MSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052098
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052098-001A	MW-21-Q322	Groundwater	8/12/2022 7:14:00 AM	8/12/2022	8/29/2022
N052098-001B	MW-21-Q322	Groundwater	8/12/2022 7:14:00 AM	8/12/2022	8/29/2022
N052098-001C	MW-21-Q322	Groundwater	8/12/2022 7:14:00 AM	8/12/2022	8/29/2022
N052098-001D	MW-21-Q322	Groundwater	8/12/2022 7:14:00 AM	8/12/2022	8/29/2022
N052098-001E	MW-21-Q322	Groundwater	8/12/2022 7:14:00 AM	8/12/2022	8/29/2022
N052098-002A	MW-21-EB-Q322	Groundwater	8/12/2022 6:50:00 AM	8/12/2022	8/29/2022
N052098-003A	MW-71-035-Q322	Groundwater	8/12/2022 7:46:00 AM	8/12/2022	8/29/2022
N052098-003B	MW-71-035-Q322	Groundwater	8/12/2022 7:46:00 AM	8/12/2022	8/29/2022
N052098-003C	MW-71-035-Q322	Groundwater	8/12/2022 7:46:00 AM	8/12/2022	8/29/2022
N052098-003D	MW-71-035-Q322	Groundwater	8/12/2022 7:46:00 AM	8/12/2022	8/29/2022
N052098-003E	MW-71-035-Q322	Groundwater	8/12/2022 7:46:00 AM	8/12/2022	8/29/2022
N052098-003F	MW-71-035-Q322	Groundwater	8/12/2022 7:46:00 AM	8/12/2022	8/29/2022
N052098-004A	EB-717-Q322	Groundwater	8/12/2022 8:00:00 AM	8/12/2022	8/29/2022
N052098-005A	MW-26-Q322	Groundwater	8/12/2022 7:38:00 AM	8/12/2022	8/29/2022
N052098-005B	MW-26-Q322	Groundwater	8/12/2022 7:38:00 AM	8/12/2022	8/29/2022
N052098-005C	MW-26-Q322	Groundwater	8/12/2022 7:38:00 AM	8/12/2022	8/29/2022
N052098-005D	MW-26-Q322	Groundwater	8/12/2022 7:38:00 AM	8/12/2022	8/29/2022
N052098-005E	MW-26-Q322	Groundwater	8/12/2022 7:38:00 AM	8/12/2022	8/29/2022
N052098-006A	MW-51-Q322	Groundwater	8/12/2022 8:29:00 AM	8/12/2022	8/29/2022
N052098-006B	MW-51-Q322	Groundwater	8/12/2022 8:29:00 AM	8/12/2022	8/29/2022
N052098-006C	MW-51-Q322	Groundwater	8/12/2022 8:29:00 AM	8/12/2022	8/29/2022
N052098-006D	MW-51-Q322	Groundwater	8/12/2022 8:29:00 AM	8/12/2022	8/29/2022
N052098-006E	MW-51-Q322	Groundwater	8/12/2022 8:29:00 AM	8/12/2022	8/29/2022
N052098-007A	EB-718-Q322	Groundwater	8/12/2022 9:00:00 AM	8/12/2022	8/29/2022

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052098-001

Client Sample ID: MW-21-Q322
Collection Date: 8/12/2022 7:14:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220816A** QC Batch: **R164901**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/16/2022 03:18 PM
DISSOLVED METALS BY ICP-MS							
		EPA 3010A			**EPA 6020**		
RunID: **NV00922-ICP8_220816D** QC Batch: **94230**				PrepDate:	**8/13/2022**		Analyst: **DJ**
Chromium	5.8	0.035	1.0		µg/L	1	8/16/2022 05:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-EB-Q322
Lab Order:	N052098	**Collection Date:**	8/12/2022 6:50:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052098-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220815A**	QC Batch: **R164863**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/15/2022 04:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052098-003

Client Sample ID: MW-71-035-Q322
Collection Date: 8/12/2022 7:46:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220816A** QC Batch: **R164901**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/16/2022 03:37 PM
DISSOLVED METALS BY ICP-MS							
			EPA 3010A			**EPA 6020**	
RunID: **NV00922-ICP8_220816D** QC Batch: **94230**				PrepDate:		**8/13/2022**	Analyst: **DJ**
Chromium	ND	0.035	1.0		µg/L	1	8/16/2022 05:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-717-Q322
Lab Order:	N052098	**Collection Date:**	8/12/2022 8:00:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052098-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220816A**	QC Batch: **R164901**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/16/2022 03:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052098-005

Client Sample ID: MW-26-Q322
Collection Date: 8/12/2022 7:38:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220815A** QC Batch: **R164863**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	100	0.50	4.0		µg/L	20	8/15/2022 01:14 PM
DISSOLVED METALS BY ICP-MS							
			EPA 3010A		**EPA 6020**		
RunID: **NV00922-ICP8_220816D** QC Batch: **94230**				PrepDate:	**8/13/2022**		Analyst: **DJ**
Chromium	94	0.035	1.0		µg/L	1	8/16/2022 06:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052098-006

Client Sample ID: MW-51-Q322
Collection Date: 8/12/2022 8:29:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220815A** QC Batch: **R164863**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	390	2.5	20		µg/L	100	8/15/2022 02:11 PM
DISSOLVED METALS BY ICP-MS							
			EPA 3010A		**EPA 6020**		
RunID: **NV00922-ICP8_220816D** QC Batch: **94230**				PrepDate:	**8/13/2022**		Analyst: **DJ**
Chromium	450	0.18	5.0		µg/L	5	8/16/2022 07:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-718-Q322
Lab Order:	N052098	**Collection Date:**	8/12/2022 9:00:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052098-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220816A**	QC Batch: **R164901**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/16/2022 04:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R164863**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164863**
Client ID: **PBW**	Batch ID: **R164863**	TestNo: **EPA 218.6**		Analysis Date: **8/15/2022**	SeqNo: **4781109**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R164863**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164863**
Client ID: **LCSW**	Batch ID: **R164863**	TestNo: **EPA 218.6**		Analysis Date: **8/15/2022**	SeqNo: **4781110**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.988	0.20	5.000	0	99.8	90	110				

Sample ID: **N052098-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164863**
Client ID: **ZZZZZZ**	Batch ID: **R164863**	TestNo: **EPA 218.6**		Analysis Date: **8/15/2022**	SeqNo: **4781112**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	204.400	4.0	100.0	104.5	99.9	90	110				

Sample ID: **N052098-005AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164863**
Client ID: **ZZZZZZ**	Batch ID: **R164863**	TestNo: **EPA 218.6**		Analysis Date: **8/15/2022**	SeqNo: **4781113**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	202.830	4.0	100.0	104.5	98.3	90	110	204.4	0.771	20	

Sample ID: **N052083-011AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164863**
Client ID: **ZZZZZZ**	Batch ID: **R164863**	TestNo: **EPA 218.6**		Analysis Date: **8/15/2022**	SeqNo: **4781115**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2182.480	40	1000	1194	98.9	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052083-011ADUP** SampType: **DUP** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164863**
Client ID: **ZZZZZZ** Batch ID: **R164863** TestNo: **EPA 218.6** Analysis Date: **8/15/2022** SeqNo: **4781116**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1176.840	40						1194	1.41	20	

Sample ID: **N052098-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164863**
Client ID: **ZZZZZZ** Batch ID: **R164863** TestNo: **EPA 218.6** Analysis Date: **8/15/2022** SeqNo: **4781118**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	886.350	20	500.0	393.6	98.5	90	110				

Sample ID: **N052083-007AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164863**
Client ID: **ZZZZZZ** Batch ID: **R164863** TestNo: **EPA 218.6** Analysis Date: **8/15/2022** SeqNo: **4781122**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.515	1.0	5.000	0	90.3	90	110				

Sample ID: **N052083-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164863**
Client ID: **ZZZZZZ** Batch ID: **R164863** TestNo: **EPA 218.6** Analysis Date: **8/15/2022** SeqNo: **4781124**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.733	1.0	5.000	0	94.6	90	110				

Sample ID: **N052083-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164863**
Client ID: **ZZZZZZ** Batch ID: **R164863** TestNo: **EPA 218.6** Analysis Date: **8/15/2022** SeqNo: **4781126**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.523	1.0	5.000	0	90.5	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052098-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164863**
Client ID: **ZZZZZZ**	Batch ID: **R164863**	TestNo: **EPA 218.6**		Analysis Date: **8/15/2022**	SeqNo: **4781128**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.916	0.20	1.000	0	91.6	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R164901**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **PBW**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784260**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R164901**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **LCSW**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784261**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.064	0.20	5.000	0	101	90	110				

Sample ID: **N052126-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **ZZZZZZ**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784263**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.016	0.20	1.000	0	102	90	110				

Sample ID: **N052126-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **ZZZZZZ**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784265**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.998	0.20	1.000	0	99.8	90	110				

Sample ID: **N052126-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **ZZZZZZ**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784267**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.007	0.20	1.000	0	101	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052097-001ADUP** SampType: **DUP** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164901**
Client ID: **ZZZZZZ** Batch ID: **R164901** TestNo: **EPA 218.6** Analysis Date: **8/16/2022** SeqNo: **4784271**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	51.217	2.0						51.35	0.265	20	

Sample ID: **N052098-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164901**
Client ID: **ZZZZZZ** Batch ID: **R164901** TestNo: **EPA 218.6** Analysis Date: **8/16/2022** SeqNo: **4784273**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.276	1.0	5.000	0	106	90	110				

Sample ID: **N052098-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164901**
Client ID: **ZZZZZZ** Batch ID: **R164901** TestNo: **EPA 218.6** Analysis Date: **8/16/2022** SeqNo: **4784275**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.093	1.0	5.000	0	102	90	110				

Sample ID: **N052098-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164901**
Client ID: **ZZZZZZ** Batch ID: **R164901** TestNo: **EPA 218.6** Analysis Date: **8/16/2022** SeqNo: **4784277**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.980	0.20	1.000	0	98.0	90	110				

Sample ID: **N052098-007AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164901**
Client ID: **ZZZZZZ** Batch ID: **R164901** TestNo: **EPA 218.6** Analysis Date: **8/16/2022** SeqNo: **4784279**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.955	0.20	1.000	0	95.5	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052126-004AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **ZZZZZZ**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784282**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.974	0.20	1.000	0	97.4	90	110	1.007	3.33	20	

Sample ID: **N052126-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **ZZZZZZ**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784284**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	15.390	1.0	5.000	10.20	104	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020DIS_CrPGE_TPK

Sample ID: **MB-94230**	SampType: **MBLK**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164893**
Client ID: **PBW**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783632**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									

Sample ID: **LCS-94230**	SampType: **LCS**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164893**
Client ID: **LCSW**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783633**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10.178	1.0	10.00	0	102	85	115				

Sample ID: **N052083-005B-MS**	SampType: **MS**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164893**
Client ID: **ZZZZZZ**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783638**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.801	1.0	10.00	0.1789	96.2	75	125				

Sample ID: **N052083-005B-MSD**	SampType: **MSD**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164893**
Client ID: **ZZZZZZ**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783639**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.871	1.0	10.00	0.1789	96.9	75	125	9.801	0.715	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052098-001

Client Sample ID: MW-21-Q322
Collection Date: 8/12/2022 7:14:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/12/2022 04:20 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**				PrepDate:			Analyst: **RAB**
Sulfate	1600	12	100		mg/L	200	8/13/2022 05:07 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/12/2022 04:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052098-003

Client Sample ID: MW-71-035-Q322
Collection Date: 8/12/2022 7:46:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/12/2022 04:35 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**				PrepDate:			Analyst: **RAB**
Sulfate	1300	12	100		mg/L	200	8/13/2022 05:23 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/12/2022 04:35 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052098-005

Client Sample ID: MW-26-Q322
Collection Date: 8/12/2022 7:38:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/12/2022 04:51 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**				PrepDate:			Analyst: **RAB**
Sulfate	520	6.1	50		mg/L	100	8/13/2022 05:38 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/12/2022 04:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052098-006

Client Sample ID: MW-51-Q322
Collection Date: 8/12/2022 8:29:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrogen, Nitrite	ND	0.029	5.0		mg/L	10	8/12/2022 05:39 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220813A** QC Batch: **R164814**				PrepDate:			Analyst: **RAB**
Sulfate	530	6.1	50		mg/L	100	8/13/2022 06:26 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220812A** QC Batch: **R164809**				PrepDate:			Analyst: **RAB**
Nitrate as N	1.0	0.095	0.50		mg/L	10	8/12/2022 05:39 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_NO2PGE

Sample ID: **MB-R164809_NO2**	SampType: **MBLK**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **PBW**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4778444**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	0.014	0.50									

Sample ID: **LCS-R164809_NO2**	SampType: **LCS**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **LCSW**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4778445**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	1.184	0.50	1.250	0	94.7	90	110				

Sample ID: **N052083-013DMS**	SampType: **MS**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **ZZZZZZ**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4778452**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	15.252	5.0	12.50	0	122	80	120				S

Sample ID: **N052083-013DMSD**	SampType: **MSD**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **ZZZZZZ**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4778453**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	15.139	5.0	12.50	0	121	80	120	15.25	0.744	20	S

Sample ID: **N052083-015DDUP**	SampType: **DUP**	TestCode: **300_W_NO2P**	Units: **mg/L**	Prep Date:	RunNo: **164809**
Client ID: **ZZZZZZ**	Batch ID: **R164809**	TestNo: **EPA 300.0**		Analysis Date: **8/12/2022**	SeqNo: **4778456**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	ND	5.0						0	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **MB-R164814_SO4**	SampType: **MBLK**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164814**
Client ID: **PBW**	Batch ID: **R164814**	TestNo: **EPA 300.0**		Analysis Date: **8/13/2022**	SeqNo: **4778349**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.50									

Sample ID: **LCS-R164814_SO4**	SampType: **LCS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164814**
Client ID: **LCSW**	Batch ID: **R164814**	TestNo: **EPA 300.0**		Analysis Date: **8/13/2022**	SeqNo: **4778350**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	4.087	0.50	4.000	0	102	90	110				

Sample ID: **N052083-003DMS**	SampType: **MS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164814**
Client ID: **ZZZZZZ**	Batch ID: **R164814**	TestNo: **EPA 300.0**		Analysis Date: **8/13/2022**	SeqNo: **4778352**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	771.600	25	200.0	537.7	117	80	120				

Sample ID: **N052083-003DMSD**	SampType: **MSD**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164814**
Client ID: **ZZZZZZ**	Batch ID: **R164814**	TestNo: **EPA 300.0**		Analysis Date: **8/13/2022**	SeqNo: **4778353**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	759.810	25	200.0	537.7	111	80	120	771.6	1.54	20	

Sample ID: **N052083-009DDUP**	SampType: **DUP**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **164814**
Client ID: **ZZZZZZ**	Batch ID: **R164814**	TestNo: **EPA 300.0**		Analysis Date: **8/13/2022**	SeqNo: **4778355**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	430.605	25						431.4	0.183	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **N052083-009DMS** SampType: **MS** TestCode: **300_W_SO4P** Units: **mg/L** Prep Date: RunNo: **164814**
Client ID: **ZZZZZZ** Batch ID: **R164814** TestNo: **EPA 300.0** Analysis Date: **8/13/2022** SeqNo: **4778356**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	622.910	25	200.0	431.4	95.8	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R164809_NO3** SampType: **MBLK** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **164809**
Client ID: **PBW** Batch ID: **R164809** TestNo: **EPA 300.0** Analysis Date: **8/12/2022** SeqNo: **4777767**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R164809_NO3** SampType: **LCS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **164809**
Client ID: **LCSW** Batch ID: **R164809** TestNo: **EPA 300.0** Analysis Date: **8/12/2022** SeqNo: **4777768**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.187	0.050	1.250	0	95.0	90	110				

Sample ID: **N052083-013DMS** SampType: **MS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **164809**
Client ID: **ZZZZZZ** Batch ID: **R164809** TestNo: **EPA 300.0** Analysis Date: **8/12/2022** SeqNo: **4777775**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	20.635	0.50	12.50	6.870	110	80	120				

Sample ID: **N052083-013DMSD** SampType: **MSD** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **164809**
Client ID: **ZZZZZZ** Batch ID: **R164809** TestNo: **EPA 300.0** Analysis Date: **8/12/2022** SeqNo: **4777776**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	20.191	0.50	12.50	6.870	107	80	120	20.64	2.18	20	

Sample ID: **N052083-015DDUP** SampType: **DUP** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **164809**
Client ID: **ZZZZZZ** Batch ID: **R164809** TestNo: **EPA 300.0** Analysis Date: **8/12/2022** SeqNo: **4777779**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.586	0.50						11.81	1.87	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **N052083-009DMS** SampType: **MS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **164809**
Client ID: **ZZZZZZ** Batch ID: **R164809** TestNo: **EPA 300.0** Analysis Date: **8/12/2022** SeqNo: **4777785**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.775	0.50	12.50	0	94.2	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-Q322
Lab Order:	N052098	**Collection Date:**	8/12/2022 7:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052098-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 06:34 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-71-035-Q322
Lab Order:	N052098	**Collection Date:**	8/12/2022 7:46:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052098-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 06:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-26-Q322
Lab Order:	N052098	**Collection Date:**	8/12/2022 7:38:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052098-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 07:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-51-Q322
Lab Order:	N052098	**Collection Date:**	8/12/2022 8:29:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052098-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220812A**	QC Batch: **R164829**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/12/2022 07:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R164829**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164829**
Client ID: **PBW**	Batch ID: **R164829**	TestNo: **SM 5310C**		Analysis Date: **8/12/2022**	SeqNo: **4779023**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R164829**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164829**
Client ID: **LCSW**	Batch ID: **R164829**	TestNo: **SM 5310C**		Analysis Date: **8/12/2022**	SeqNo: **4779024**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.050	1.0	5.000	0	101	85	115				

Sample ID: **N052058-010DMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164829**
Client ID: **ZZZZZZ**	Batch ID: **R164829**	TestNo: **SM 5310C**		Analysis Date: **8/12/2022**	SeqNo: **4779026**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.246	1.0	5.000	0.8311	88.3	75	125				

Sample ID: **N052058-010DMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164829**
Client ID: **ZZZZZZ**	Batch ID: **R164829**	TestNo: **SM 5310C**		Analysis Date: **8/12/2022**	SeqNo: **4779029**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.153	1.0	5.000	0.8311	86.4	75	125	5.246	1.78	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-Q322
Lab Order:	N052098	**Collection Date:**	8/12/2022 7:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052098-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Iron	1200	13	20		µg/L	1	8/28/2022 10:31 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-71-035-Q322
Lab Order:	N052098	**Collection Date:**	8/12/2022 7:46:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052098-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Iron	380	13	20		µg/L	1	8/28/2022 10:36 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-26-Q322
Lab Order:	N052098	**Collection Date:**	8/12/2022 7:38:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052098-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 10:40 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-51-Q322
Lab Order:	N052098	**Collection Date:**	8/12/2022 8:29:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052098-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220828B**	QC Batch: **94229**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 10:45 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94229**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **165203**
Client ID: **PBW**	Batch ID: **94229**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803659**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-94229**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **165203**
Client ID: **LCSW**	Batch ID: **94229**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803660**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	105.444	20	100.0	0	105	85	115				

Sample ID: **N052083-003B-MS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **165203**
Client ID: **ZZZZZZ**	Batch ID: **94229**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803664**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	561.580	20	100.0	477.5	84.1	75	125				

Sample ID: **N052083-003B-MSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **165203**
Client ID: **ZZZZZZ**	Batch ID: **94229**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803665**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	562.154	20	100.0	477.5	84.7	75	125	561.6	0.102	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052098-001

Client Sample ID: MW-21-Q322
Collection Date: 8/12/2022 7:14:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220816E**	QC Batch: **94230**			PrepDate:		**8/13/2022**	Analyst: **DJ**
Arsenic	5.7	0.050	0.10		µg/L	1	8/16/2022 05:51 PM
Barium	25	0.083	1.0		µg/L	1	8/16/2022 05:51 PM
Manganese	280	0.13	2.5		µg/L	5	8/16/2022 07:33 PM
Molybdenum	82	0.12	0.50		µg/L	1	8/16/2022 05:51 PM
Selenium	ND	0.044	0.50		µg/L	1	8/16/2022 05:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052098-003

Client Sample ID: MW-71-035-Q322
Collection Date: 8/12/2022 7:46:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220816E**	QC Batch: **94230**			PrepDate:	**8/13/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 05:57 PM
Barium	52	0.083	1.0		µg/L	1	8/16/2022 05:57 PM
Manganese	2200	0.66	12		µg/L	25	8/16/2022 07:39 PM
Molybdenum	23	0.12	0.50		µg/L	1	8/16/2022 05:57 PM
Selenium	ND	0.044	0.50		µg/L	1	8/16/2022 05:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052098-005

Client Sample ID: MW-26-Q322
Collection Date: 8/12/2022 7:38:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220816E**	QC Batch: **94230**			PrepDate:		**8/13/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 06:03 PM
Barium	73	0.083	1.0		µg/L	1	8/16/2022 06:03 PM
Manganese	3.2	0.026	0.50		µg/L	1	8/16/2022 06:03 PM
Molybdenum	4.1	0.12	0.50		µg/L	1	8/16/2022 06:03 PM
Selenium	0.53	0.044	0.50		µg/L	1	8/17/2022 03:36 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052098-006

Client Sample ID: MW-51-Q322
Collection Date: 8/12/2022 8:29:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220816E**	QC Batch: **94230**				PrepDate:	**8/13/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/16/2022 06:09 PM
Barium	36	0.083	1.0		µg/L	1	8/16/2022 06:09 PM
Manganese	ND	0.026	0.50		µg/L	1	8/16/2022 06:09 PM
Molybdenum	57	0.12	0.50		µg/L	1	8/16/2022 06:09 PM
Selenium	2.9	0.044	0.50		µg/L	1	8/16/2022 06:09 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94230**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164894**
Client ID: **PBW**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783735**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	0.047	0.50									
Molybdenum	ND	0.50									
Selenium	ND	0.50									

Sample ID: **LCS-94230**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164894**
Client ID: **LCSW**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783736**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.721	0.10	10.00	0	97.2	85	115				
Barium	9.938	1.0	10.00	0	99.4	85	115				
Manganese	98.288	0.50	100.0	0	98.3	85	115				
Molybdenum	9.699	0.50	10.00	0	97.0	85	115				
Selenium	9.794	0.50	10.00	0	97.9	85	115				

Sample ID: **N052083-005B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/13/2022**	RunNo: **164894**
Client ID: **ZZZZZZ**	Batch ID: **94230**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/16/2022**	SeqNo: **4783741**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	7.165	0.10	10.00	0	71.6	75	125				S
Barium	31.206	1.0	10.00	19.50	117	75	125				
Manganese	141.841	0.50	100.0	46.35	95.5	75	125				
Molybdenum	58.629	0.50	10.00	44.37	143	75	125				S
Selenium	8.986	0.50	10.00	0.1978	87.9	75	125				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052083-005B-MSD** SampType: **MSD** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/13/2022** RunNo: **164894**
Client ID: **ZZZZZZ** Batch ID: **94230** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/16/2022** SeqNo: **4783742**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	7.341	0.10	10.00	0	73.4	75	125	7.165	2.44	20	S
Barium	31.596	1.0	10.00	19.50	121	75	125	31.21	1.24	20	
Manganese	145.068	0.50	100.0	46.35	98.7	75	125	141.8	2.25	20	
Molybdenum	60.063	0.50	10.00	44.37	157	75	125	58.63	2.42	20	S
Selenium	9.220	0.50	10.00	0.1978	90.2	75	125	8.986	2.57	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052098
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052083-005B-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **164894**
Client ID: **ZZZZZZ** Batch ID: **94230** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/16/2022** SeqNo: **4783740**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	6.948	0.10	10.00	0	69.5	80	120				S
Barium	31.266	1.0	10.00	19.50	118	80	120				
Manganese	140.890	0.50	100.0	46.35	94.5	80	120				
Molybdenum	58.679	0.50	10.00	44.37	143	80	120				S
Selenium	9.453	0.50	10.00	0.1978	92.6	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ASSET LABORATORIES
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CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement: Excel EDD; Geotracker; Labspec; Others ✓; Specify: RWQCB
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	QA/QC: RTNE; RWQCB ✓; CalTrans; LEVEL III; LEVEL IV; Regulatory
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Global ID:
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Specify State:
Submitted By: Riggie Tap	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	
Title: Field Tech			

Sample Receipt Condition

	Y	N
1. Chilled	✓	
2. Headspace		
3. Container Intact	✓	
4. Seal Present	✓	
5. IR number	3	
6. Method of Cooling: ICE		

Sample Temp: 4.3 °C

Signature: Date: 8/12/22
I hereby authorize ASSET Labs to perform the tests indicated below.

Sampled By: Riggie Tap
I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for
Signature: Date: 8/12/22

Project Name: PG&E Topock - PCM
Project Number: 30121866.3Q22GW

Courier:
Tracking No.:

Matrix: Ground X | Sediment | Potable | Soil | NPDES | Other Solid | Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrite, Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Nitrate/nitrite as Nitrogen (SM 4500-NO3) ; H2SO4 (125 mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052098-01	MW-21-Q322	8/12/2022	7:14		X	X	X	X	X	X		X			E	7	P	BNS	
2	-02	MW-21-EB-Q322	8/12/2022	6:50		X										E	1	P	BNS	
3	-03	MW-71-035-Q322	8/12/2022	7:46		X	X	X	X	X	X		X		X	E	8	P	BNS	
4	-04	EB-717-Q322	8/12/2022	8:00		X										E	1	P	BNS	
5	-05	MW-26-Q322	8/12/2022	7:38		X	X	X	X	X	X		X			E	7	P	BNS	
6	-06	MW-51-Q322	8/12/2022	8:29		X	X	X	X	X	X		X			E	7	P	BNS	
7	-07	EB-718-Q322	8/12/2022	9:00		X										E	1	P	BNS	
8																				
9																				
10																				
11																				
12																				
13																				
14																				

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Riggie Tap	8/12/22 1138	MORRISON	8/12/22 @1134
MBCARTIN	8/12/22 1520	Chris Ranco	8/12/22 1520

Turn Around Time (TAT)

	A	< 24 Hrs or Same Day TAT
	B	= Next Workday
	C	= 2 Workdays
	D	= 3 Workdays
X	E	= Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analyses
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:

H=HCl	N=HNO_3	S=H_2SO_4	C=4°C
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$	
Others/Specify:	B	(NH4)2SO4/NH4OH	

Container Type:

T=Tube	V=VOA	P=Pint
J=Jar	B=Tedlar	G=Glass
M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/12/2022	Workorder:	N052098
Rep sample Temp (Deg C):	4.3	IR Gun ID:	3
Temp Blank:	☑ Yes ☐ No		
Carrier name:	ASSET		
Last 4 digits of Tracking No.:	NA	Packing Material Used:	None
Cooling process:	☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None		

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: EF EFanegoF 8/12/2022

Reviewed By: for: MBC 8/17/2022

ASSET Laboratories

WORK ORDER Summary

15-Aug-22

WorkOrder: N052098

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/12/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052098-001A	MW-21-Q322	8/12/2022 7:14:00 AM	8/26/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052098-001B			8/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052098-001C			8/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052098-001D			8/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052098-001E			8/26/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052098-002A	MW-21-EB-Q322	8/12/2022 6:50:00 AM	8/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052098-003A	MW-71-035-Q322	8/12/2022 7:46:00 AM	8/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052098-003B			8/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052098-003C			8/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052098-003D			8/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

15-Aug-22

WorkOrder: N052098

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/12/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052098-003E	MW-71-035-Q322	8/12/2022 7:46:00 AM	8/26/2022	Groundwater	SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052098-003F			8/26/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052098-004A	EB-717-Q322	8/12/2022 8:00:00 AM	8/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052098-005A	MW-26-Q322	8/12/2022 7:38:00 AM	8/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052098-005B			8/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052098-005C			8/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052098-005D			8/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052098-005E			8/26/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052098-006A	MW-51-Q322	8/12/2022 8:29:00 AM	8/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052098-006B			8/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			8/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052098-006C			8/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

15-Aug-22

WorkOrder: N052098

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/12/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052098-006C	MW-51-Q322	8/12/2022 8:29:00 AM	8/26/2022	Groundwater	EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			8/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052098-006D			8/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052098-006E			8/26/2022		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N052098-007A	EB-718-Q322	8/12/2022 9:00:00 AM	8/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052098-008A	FOLDER	8/26/2022	8/26/2022		Folder	Folder	☐	☐	☐	LAB
			8/26/2022		Folder	Level IV Report	☐	☐	☐	LAB
			8/26/2022		Folder	Folder	☐	☐	☐	LAB

ASSET Laboratories
3151-3153 W Post Rd., Las Vegas, NV 89118
www.atl-labs.com
TEL: 7023072659 *FAX: 7023072691*

CHAIN-OF-CUSTODY RECORD

QC Level: Level IV

Subcontractor:

BC Labs
4100 Atlas Court
Bakersfield, CA 93308

TEL: (661) 327-4911
FAX: (661) 327-1918
Acct #:

Field Sampler: Riggie Tep

15-Aug-22

				Requested Tests		
Sample ID	**Matrix**	**Date Collected**	**Bottle Type**	**SM4500-NH3D**	**SM4500-NO3F**	
N052098-001E / MW-21-Q322	Groundwater	8/12/2022 7:14:00 AM	16OZP	1		
N052098-003E / MW-71-035-Q322	Groundwater	8/12/2022 7:46:00 AM	16OZP	1		
N052098-003F / MW-71-035-Q322	Groundwater	8/12/2022 7:46:00 AM	8OZP		1	
N052098-005E / MW-26-Q322	Groundwater	8/12/2022 7:38:00 AM	16OZP	1		
N052098-006E / MW-51-Q322	Groundwater	8/12/2022 8:29:00 AM	16OZP	1		

General Comments: PLEASE EMAIL SAMPLE RECEIPT ACKNOWLEDGEMENT TO THE PM. ALWAYS CC: sonny.lorenzo@assetlaboratories.com

Please use PO#:N52098A Please email Invoices and Account Receivable Statements to elvira@assetlaboratories.com. For questions, call Marlon at (702)-307-2659. Please e-mail results to reports.lv@assetlaboratories.com by: Standard TAT.

EDD requirement Labspec7 edata.

GSO #: 557545146

		Date/Time		Date/Time
Relinquished by:	YRJ	8/15/2022 1630	**Received by:**	
Relinquished by:			**Received by:**	

August 31, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052126

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 15, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for SM 5310C:

Matrix Spike (MS) is outside recovery criteria in QC sample N052065-001CMS at lower dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N052065-001 and MS/MSD were reported at 10x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052126
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052126-001A	PT5D-Q322	Groundwater	8/15/2022 12:37:00 PM	8/15/2022	8/31/2022
N052126-001B	PT5D-Q322	Groundwater	8/15/2022 12:37:00 PM	8/15/2022	8/31/2022
N052126-001C	PT5D-Q322	Groundwater	8/15/2022 12:37:00 PM	8/15/2022	8/31/2022
N052126-001D	PT5D-Q322	Groundwater	8/15/2022 12:37:00 PM	8/15/2022	8/31/2022
N052126-002A	PT5M-Q322	Groundwater	8/15/2022 12:04:00 PM	8/15/2022	8/31/2022
N052126-002B	PT5M-Q322	Groundwater	8/15/2022 12:04:00 PM	8/15/2022	8/31/2022
N052126-002C	PT5M-Q322	Groundwater	8/15/2022 12:04:00 PM	8/15/2022	8/31/2022
N052126-002D	PT5M-Q322	Groundwater	8/15/2022 12:04:00 PM	8/15/2022	8/31/2022
N052126-003A	PT5S-Q322	Groundwater	8/15/2022 11:39:00 AM	8/15/2022	8/31/2022
N052126-003B	PT5S-Q322	Groundwater	8/15/2022 11:39:00 AM	8/15/2022	8/31/2022
N052126-003C	PT5S-Q322	Groundwater	8/15/2022 11:39:00 AM	8/15/2022	8/31/2022
N052126-003D	PT5S-Q322	Groundwater	8/15/2022 11:39:00 AM	8/15/2022	8/31/2022
N052126-004A	EB-719-Q322	Groundwater	8/15/2022 1:00:00 PM	8/15/2022	8/31/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	PT5D-Q322
Lab Order:	N052126	**Collection Date:**	8/15/2022 12:37:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052126-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220816A**	QC Batch: **R164901**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	10	0.13	1.0		µg/L	5	8/16/2022 05:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	PT5M-Q322
Lab Order:	N052126	**Collection Date:**	8/15/2022 12:04:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052126-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220816A**	QC Batch: **R164901**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/16/2022 01:43 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	PT5S-Q322
Lab Order:	N052126	**Collection Date:**	8/15/2022 11:39:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052126-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220816A**	QC Batch: **R164901**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/16/2022 02:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-719-Q322
Lab Order:	N052126	**Collection Date:**	8/15/2022 1:00:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052126-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
EPA 218.6							
RunID: **NV00922-IC7_220816A** QC Batch: **R164901** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/16/2022 02:21 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R164901**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **PBW**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784260**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R164901**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **LCSW**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784261**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.064	0.20	5.000	0	101	90	110				

Sample ID: **N052126-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **ZZZZZZ**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784263**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.016	0.20	1.000	0	102	90	110				

Sample ID: **N052126-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **ZZZZZZ**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784265**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.998	0.20	1.000	0	99.8	90	110				

Sample ID: **N052126-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **ZZZZZZ**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784267**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.007	0.20	1.000	0	101	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052097-001ADUP** SampType: **DUP** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164901**
Client ID: **ZZZZZZ** Batch ID: **R164901** TestNo: **EPA 218.6** Analysis Date: **8/16/2022** SeqNo: **4784271**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	51.217	2.0						51.35	0.265	20	

Sample ID: **N052098-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164901**
Client ID: **ZZZZZZ** Batch ID: **R164901** TestNo: **EPA 218.6** Analysis Date: **8/16/2022** SeqNo: **4784273**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.276	1.0	5.000	0	106	90	110				

Sample ID: **N052098-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164901**
Client ID: **ZZZZZZ** Batch ID: **R164901** TestNo: **EPA 218.6** Analysis Date: **8/16/2022** SeqNo: **4784275**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.093	1.0	5.000	0	102	90	110				

Sample ID: **N052098-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164901**
Client ID: **ZZZZZZ** Batch ID: **R164901** TestNo: **EPA 218.6** Analysis Date: **8/16/2022** SeqNo: **4784277**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.980	0.20	1.000	0	98.0	90	110				

Sample ID: **N052098-007AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164901**
Client ID: **ZZZZZZ** Batch ID: **R164901** TestNo: **EPA 218.6** Analysis Date: **8/16/2022** SeqNo: **4784279**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.955	0.20	1.000	0	95.5	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052126-004AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **ZZZZZZ**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784282**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.974	0.20	1.000	0	97.4	90	110	1.007	3.33	20	

Sample ID: **N052126-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164901**
Client ID: **ZZZZZZ**	Batch ID: **R164901**	TestNo: **EPA 218.6**		Analysis Date: **8/16/2022**	SeqNo: **4784284**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	15.390	1.0	5.000	10.20	104	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	PT5D-Q322
Lab Order:	N052126	**Collection Date:**	8/15/2022 12:37:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052126-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220816A**	QC Batch: **R164903**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/16/2022 10:57 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	PT5M-Q322
Lab Order:	N052126	**Collection Date:**	8/15/2022 12:04:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052126-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220816A**	QC Batch: **R164903**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/16/2022 11:13 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	PT5S-Q322
Lab Order:	N052126	**Collection Date:**	8/15/2022 11:39:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052126-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220816A** QC Batch: **R164903** PrepDate: Analyst: **RAB**							
Nitrate as N	ND	0.048	0.25		mg/L	5	8/16/2022 11:29 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R164903_NO3**	SampType: **MBLK**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164903**
Client ID: **PBW**	Batch ID: **R164903**	TestNo: **EPA 300.0**		Analysis Date: **8/16/2022**	SeqNo: **4784356**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R164903_NO3**	SampType: **LCS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164903**
Client ID: **LCSW**	Batch ID: **R164903**	TestNo: **EPA 300.0**		Analysis Date: **8/16/2022**	SeqNo: **4784357**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.227	0.050	1.250	0	98.1	90	110				

Sample ID: **N052126-002DMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164903**
Client ID: **ZZZZZZ**	Batch ID: **R164903**	TestNo: **EPA 300.0**		Analysis Date: **8/16/2022**	SeqNo: **4784361**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.883	0.50	12.50	0	95.1	80	120				

Sample ID: **N052126-001DDUP**	SampType: **DUP**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164903**
Client ID: **ZZZZZZ**	Batch ID: **R164903**	TestNo: **EPA 300.0**		Analysis Date: **8/16/2022**	SeqNo: **4784362**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	0.338	0.50						0.3390	0	20	

Sample ID: **N052126-002DMSD**	SampType: **MSD**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164903**
Client ID: **ZZZZZZ**	Batch ID: **R164903**	TestNo: **EPA 300.0**		Analysis Date: **8/16/2022**	SeqNo: **4784363**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.956	0.50	12.50	0	95.6	80	120	11.88	0.612	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **N051601-009ADUP** SampType: **DUP** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **164903**
Client ID: **ZZZZZZ** Batch ID: **R164903** TestNo: **EPA 300.0** Analysis Date: **8/17/2022** SeqNo: **4784373**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	5.228	0.25						5.184	0.845	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052126-001

Client Sample ID: PT5D-Q322
Collection Date: 8/15/2022 12:37:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220818A**	QC Batch: **R164969**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/18/2022 11:56 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	PT5M-Q322
Lab Order:	N052126	**Collection Date:**	8/15/2022 12:04:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052126-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220818A**	QC Batch: **R164969**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/18/2022 12:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	PT5S-Q322
Lab Order:	N052126	**Collection Date:**	8/15/2022 11:39:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052126-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220818A**	QC Batch: **R164969**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.9	0.14	1.0		mg/L	1	8/18/2022 02:31 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R164969**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164969**
Client ID: **PBW**	Batch ID: **R164969**	TestNo: **SM 5310C**		Analysis Date: **8/18/2022**	SeqNo: **4787509**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R164969**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164969**
Client ID: **LCSW**	Batch ID: **R164969**	TestNo: **SM 5310C**		Analysis Date: **8/18/2022**	SeqNo: **4787510**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.014	1.0	5.000	0	100	85	115				

Sample ID: **N052065-001CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164969**
Client ID: **ZZZZZZ**	Batch ID: **R164969**	TestNo: **SM 5310C**		Analysis Date: **8/18/2022**	SeqNo: **4787516**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	37.836	10	50.00	0	75.7	75	125				

Sample ID: **N052065-001CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164969**
Client ID: **ZZZZZZ**	Batch ID: **R164969**	TestNo: **SM 5310C**		Analysis Date: **8/18/2022**	SeqNo: **4787521**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	37.826	10	50.00	0	75.7	75	125	37.84	0.0264	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052126-001

Client Sample ID: PT5D-Q322
Collection Date: 8/15/2022 12:37:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94362**			PrepDate:		**8/22/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 10:59 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052126-002

Client Sample ID: PT5M-Q322
Collection Date: 8/15/2022 12:04:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94362**			PrepDate:	**8/22/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 11:45 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052126-003

Client Sample ID: PT5S-Q322
Collection Date: 8/15/2022 11:39:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94362**			PrepDate:	**8/22/2022**		Analyst: **DJ**
Iron	1100	13	20		µg/L	1	8/28/2022 11:50 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94362**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165203**
Client ID: **PBW**	Batch ID: **94362**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803685**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-94362**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165203**
Client ID: **LCSW**	Batch ID: **94362**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803686**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	97.982	20	100.0	0	98.0	85	115				

Sample ID: **N052126-001B-MS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165203**
Client ID: **ZZZZZZ**	Batch ID: **94362**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803690**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	97.277	20	100.0	0	97.3	75	125				

Sample ID: **N052126-001B-MSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165203**
Client ID: **ZZZZZZ**	Batch ID: **94362**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803695**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	112.701	20	100.0	0	113	75	125	97.28	14.7	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	PT5D-Q322
Lab Order:	N052126	**Collection Date:**	8/15/2022 12:37:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052126-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C** QC Batch: **94305**				PrepDate:	**8/18/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/18/2022 08:37 PM
Barium	29	0.083	1.0		µg/L	1	8/18/2022 08:37 PM
Manganese	13	0.026	0.50		µg/L	1	8/18/2022 08:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052126-002

Client Sample ID: PT5M-Q322
Collection Date: 8/15/2022 12:04:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220830B**	QC Batch: **94305**			PrepDate:		**8/18/2022**	Analyst: **DJ**
Arsenic	1.1	0.050	0.10		µg/L	1	8/30/2022 06:48 PM
Barium	41	0.083	1.0		µg/L	1	8/18/2022 09:48 PM
Manganese	1100	0.66	12		µg/L	25	8/18/2022 10:33 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052126-003

Client Sample ID: PT5S-Q322
Collection Date: 8/15/2022 11:39:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220818C** QC Batch: **94305**				PrepDate:		**8/18/2022**	Analyst: **DJ**
Arsenic	14	0.050	0.10		µg/L	1	8/18/2022 10:00 PM
Barium	110	0.083	1.0		µg/L	1	8/18/2022 10:00 PM
Manganese	290	0.13	2.5		µg/L	5	8/18/2022 10:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052126
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94305** SampType: **MBLK** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/18/2022** RunNo: **164980**
Client ID: **PBW** Batch ID: **94305** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/18/2022** SeqNo: **4788698**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID: **LCS-94305** SampType: **LCS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/18/2022** RunNo: **164980**
Client ID: **LCSW** Batch ID: **94305** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/18/2022** SeqNo: **4788699**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.491	0.10	10.00	0	94.9	85	115				
Barium	10.288	1.0	10.00	0	103	85	115				
Manganese	97.090	0.50	100.0	0	97.1	85	115				

Sample ID: **N052126-001B-MS** SampType: **MS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/18/2022** RunNo: **164980**
Client ID: **ZZZZZZ** Batch ID: **94305** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/18/2022** SeqNo: **4788705**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	8.148	0.10	10.00	0	81.5	75	125				
Barium	38.598	1.0	10.00	28.96	96.3	75	125				
Manganese	102.992	0.50	100.0	13.36	89.6	75	125				

Sample ID: **N052126-001B-MSD** SampType: **MSD** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/18/2022** RunNo: **164980**
Client ID: **ZZZZZZ** Batch ID: **94305** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/18/2022** SeqNo: **4788709**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	8.226	0.10	10.00	0	82.3	75	125	8.148	0.956	20	
Barium	38.043	1.0	10.00	28.96	90.8	75	125	38.60	1.45	20	
Manganese	103.836	0.50	100.0	13.36	90.5	75	125	103.0	0.817	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement	QA/QC	Sample Receipt Condition
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	Excel EDD	RTNE	Y N
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker	RWQCB ✓	1. Chilled
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	Labspec	CalTrans	2. Headspace
Submitted By: Riggie Tep			Others ✓	LEVEL III	3. Container Intact
Title: Field Tech	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	Specify: RWQCB	LEVEL IV	4. Seal Present
Signature: Date: 8/15/22	Sampled By: Rissie Tep		Global ID:	Regulatory	5. IR number 3
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for			Specify State:	6. Method of Cooling: Ice
Project Name: PG&E Topock - PCM	Signature: Date: 8/15/22				Sample Temp: 3.9°C
Project Number: 30121866.3Q22GW					Courier: Asset
					Tracking No.:

Matrix: Ground X | Sediment | Potable | Soil | NPDES | Other Solid | Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate (EPA 300.0) (1 L poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052126-01	PT5D-Q322	8/15/2022	12:37		X		X			X			X	E	6	P	BNS	
2	-02	PT5M-Q322	8/15/2022	12:04		X		X			X			X	E	6	P	BNS	
3	-03	PT5S-Q322	8/15/2022	11:39		X		X			X			X	E	6	P	BNS	
4	-04	EB-719-Q322	8/15/2022	13:00		X									E	1	P	BNS	
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Rissie Tep	8/15/22 14:08	Dante Ortiz	8/15/22 14:08
Dante Ortiz	8/15/22 17:14	Joandra Rodriguez	8/15/22 1714

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B	(NH4)2SO4/NH4OH		M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/15/2022	Workorder:	N052126
Rep sample Temp (Deg C):	3.9	IR Gun ID:	3
Temp Blank:	☑ Yes ☐ No		
Carrier name:	ASSET		
Last 4 digits of Tracking No.:	NA	Packing Material Used:	None
Cooling process:	☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None		

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: EF *EFanegoF* 8/16/2022

Reviewed By: for: MBC 8/17/2022

ASSET Laboratories

WORK ORDER Summary

16-Aug-22

WorkOrder: N052126

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/15/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052126-001A	PT5D-Q322	8/15/2022 12:37:00 PM	8/29/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052126-001B			8/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052126-001C			8/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052126-001D			8/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052126-002A	PT5M-Q322	8/15/2022 12:04:00 PM	8/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052126-002B			8/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052126-002C			8/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052126-002D			8/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052126-003A	PT5S-Q322	8/15/2022 11:39:00 AM	8/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052126-003B			8/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			8/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052126-003C			8/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052126-003D			8/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052126-004A	EB-719-Q322	8/15/2022 1:00:00 PM	8/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

16-Aug-22

WorkOrder: N052126

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/15/2022

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052126-005A	FOLDER	8/29/2022	8/29/2022		Folder	Folder	☐	☐	☐	LAB
			8/29/2022		Folder	Level IV Report	☐	☐	☐	LAB
			8/29/2022		Folder	Folder	☐	☐	☐	LAB

August 31, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052173

RE: PG&E Topock - RCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 17, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab Order: N052173

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Samples N052173-007(AmbientBlank-1-Q322) and N052173-009(AmbientBlank-2-Q322) were not analyzed as per attached correspondence.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab Order: N052173
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052173-001A	MW-929-Q322	Surface Water	8/17/2022 8:34:00 AM	8/17/2022	8/31/2022
N052173-001B	MW-929-Q322	Surface Water	8/17/2022 8:34:00 AM	8/17/2022	8/31/2022
N052173-002A	C-R22A-D-Q322	Surface Water	8/17/2022 9:21:00 AM	8/17/2022	8/31/2022
N052173-002B	C-R22A-D-Q322	Surface Water	8/17/2022 9:21:00 AM	8/17/2022	8/31/2022
N052173-003A	C-R22A-S-Q322	Surface Water	8/17/2022 9:29:00 AM	8/17/2022	8/31/2022
N052173-003B	C-R22A-S-Q322	Surface Water	8/17/2022 9:29:00 AM	8/17/2022	8/31/2022
N052173-004A	C-R27-D-Q322	Surface Water	8/17/2022 9:58:00 AM	8/17/2022	8/31/2022
N052173-004B	C-R27-D-Q322	Surface Water	8/17/2022 9:58:00 AM	8/17/2022	8/31/2022
N052173-005A	C-R27-S-Q322	Surface Water	8/17/2022 10:07:00 AM	8/17/2022	8/31/2022
N052173-005B	C-R27-S-Q322	Surface Water	8/17/2022 10:07:00 AM	8/17/2022	8/31/2022
N052173-006A	C-TAZ-D-Q322	Surface Water	8/17/2022 8:14:00 AM	8/17/2022	8/31/2022
N052173-006B	C-TAZ-D-Q322	Surface Water	8/17/2022 8:14:00 AM	8/17/2022	8/31/2022
N052173-007A	AmbientBlank-1-Q322	Surface Water	8/17/2022 9:40:00 AM	8/17/2022	8/31/2022
N052173-008A	C-TAZ-S-Q322	Surface Water	8/17/2022 8:24:00 AM	8/17/2022	8/31/2022
N052173-008B	C-TAZ-S-Q322	Surface Water	8/17/2022 8:24:00 AM	8/17/2022	8/31/2022
N052173-009A	AmbientBlank-2-Q322	Surface Water	8/17/2022 10:14:00 AM	8/17/2022	8/31/2022
N052173-010A	R-28-Q322	Surface Water	8/17/2022 10:18:00 AM	8/17/2022	8/31/2022
N052173-010B	R-28-Q322	Surface Water	8/17/2022 10:18:00 AM	8/17/2022	8/31/2022
N052173-011A	R63-Q322	Surface Water	8/17/2022 9:11:00 AM	8/17/2022	8/31/2022
N052173-011B	R63-Q322	Surface Water	8/17/2022 9:11:00 AM	8/17/2022	8/31/2022
N052173-012A	C-BNS-Q322	Surface Water	8/17/2022 9:44:00 AM	8/17/2022	8/31/2022
N052173-012B	C-BNS-Q322	Surface Water	8/17/2022 9:44:00 AM	8/17/2022	8/31/2022
N052173-013A	C-I-3-D-Q322	Surface Water	8/17/2022 8:42:00 AM	8/17/2022	8/31/2022
N052173-013B	C-I-3-D-Q322	Surface Water	8/17/2022 8:42:00 AM	8/17/2022	8/31/2022
N052173-014A	C-I-3-S-Q322	Surface Water	8/17/2022 8:51:00 AM	8/17/2022	8/31/2022
N052173-014B	C-I-3-S-Q322	Surface Water	8/17/2022 8:51:00 AM	8/17/2022	8/31/2022
N052173-015A	MW-931-Q322	Surface Water	8/17/2022 9:01:00 AM	8/17/2022	8/31/2022
N052173-015B	MW-931-Q322	Surface Water	8/17/2022 9:01:00 AM	8/17/2022	8/31/2022
N052173-016A	SW1-Q322	Surface Water	8/17/2022 10:30:00 AM	8/17/2022	8/31/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab Order: N052173
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052173-016B	SW1-Q322	Surface Water	8/17/2022 10:30:00 AM	8/17/2022	8/31/2022
N052173-017A	SW2-Q322	Surface Water	8/17/2022 11:00:00 AM	8/17/2022	8/31/2022
N052173-017B	SW2-Q322	Surface Water	8/17/2022 11:00:00 AM	8/17/2022	8/31/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-929-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 8:34:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 10:53 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-R22A-D-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 9:21:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 11:12 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-R22A-S-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 9:29:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 11:50 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-R27-D-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 9:58:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 12:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-R27-S-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 10:07:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 12:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-TAZ-D-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 8:14:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 01:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-TAZ-S-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 8:24:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 01:34 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	R-28-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 10:18:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 02:21 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	R63-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 9:11:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 02:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-BNS-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 9:44:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 02:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-I-3-D-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 8:42:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 03:18 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-I-3-S-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 8:51:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 03:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-931-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 9:01:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 04:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	SW1-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 10:30:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 05:09 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	SW2-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 11:00:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220818A**	QC Batch: **R164972**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/18/2022 05:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052173
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	MB-R164972	SampType:	MBLK	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	PBW	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788199

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID	LCS-R164972	SampType:	LCS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	LCSW	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788200

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.090	0.20	5.000	0	102	90	110				

Sample ID	N052173-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788202

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.036	0.20	1.000	0	104	90	110				

Sample ID	N052173-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788204

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.031	0.20	1.000	0	103	90	110				

Sample ID	N052173-002AMSD	SampType:	MSD	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788205

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.009	0.20	1.000	0	101	90	110	1.031	2.17	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052173
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052173-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972		
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788207		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	1.018	0.20	1.000	0	102	90	110						

Sample ID	N052173-004AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972		
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788211		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	1.054	0.20	1.000	0	105	90	110						

Sample ID	N052173-005ADUP	SampType:	DUP	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972		
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788213		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	ND	0.20						0	0	20			

Sample ID	N052173-005AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972		
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788214		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	1.008	0.20	1.000	0	101	90	110						

Sample ID	N052173-006AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972		
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788216		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	1.006	0.20	1.000	0	101	90	110						

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052173
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052173-008AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788218

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.053	0.20	1.000	0	105	90	110				

Sample ID	N052173-010AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788223

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.080	0.20	1.000	0	108	90	110				

Sample ID	N052173-011AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788225

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.053	0.20	1.000	0	105	90	110				

Sample ID	N052173-012AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788227

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.069	0.20	1.000	0	107	90	110				

Sample ID	N052173-013AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788229

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.042	0.20	1.000	0	104	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052173
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052173-014AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788231

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.049	0.20	1.000	0	105	90	110				

Sample ID	N052173-015AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788237

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.043	0.20	1.000	0	104	90	110				

Sample ID	N052173-016AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788239

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.010	0.20	1.000	0	101	90	110				

Sample ID	N052173-017AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	164972
Client ID:	ZZZZZZ	Batch ID:	R164972	TestNo:	EPA 218.6			Analysis Date:	8/18/2022	SeqNo:	4788241

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.017	0.20	1.000	0	102	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-929-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 8:34:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:	**8/18/2022**		Analyst: **DJ**
Arsenic	2.2	0.050	0.10		µg/L	1	8/18/2022 10:12 PM
Manganese	2.7	0.026	0.50		µg/L	1	8/18/2022 10:12 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-R22A-D-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 9:21:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:	**8/18/2022**		Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	8/18/2022 10:27 PM
Manganese	2.8	0.026	0.50		µg/L	1	8/18/2022 10:27 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-R22A-S-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 9:29:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:		**8/18/2022**	Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	8/18/2022 11:09 PM
Manganese	2.5	0.026	0.50		µg/L	1	8/18/2022 11:09 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-R27-D-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 9:58:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:	**8/18/2022**		Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	8/18/2022 11:21 PM
Manganese	1.3	0.026	0.50		µg/L	1	8/18/2022 11:21 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-R27-S-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 10:07:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:	**8/18/2022**		Analyst: **DJ**
Arsenic	2.2	0.050	0.10		µg/L	1	8/18/2022 11:32 PM
Manganese	1.3	0.026	0.50		µg/L	1	8/18/2022 11:32 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-TAZ-D-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 8:14:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:	**8/18/2022**		Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	8/18/2022 11:44 PM
Manganese	3.1	0.026	0.50		µg/L	1	8/18/2022 11:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-TAZ-S-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 8:24:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:		**8/18/2022**	Analyst: **DJ**
Arsenic	2.2	0.050	0.10		µg/L	1	8/19/2022 12:14 AM
Manganese	2.6	0.026	0.50		µg/L	1	8/19/2022 12:14 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	R-28-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 10:18:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:	**8/18/2022**		Analyst: **DJ**
Arsenic	2.2	0.050	0.10		µg/L	1	8/19/2022 12:25 AM
Manganese	2.3	0.026	0.50		µg/L	1	8/19/2022 12:25 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	R63-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 9:11:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:		**8/18/2022**	Analyst: **DJ**
Arsenic	2.0	0.050	0.10		µg/L	1	8/19/2022 12:37 AM
Manganese	8.7	0.026	0.50		µg/L	1	8/19/2022 12:37 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-BNS-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 9:44:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:		**8/18/2022**	Analyst: **DJ**
Arsenic	2.3	0.050	0.10		µg/L	1	8/19/2022 12:49 AM
Manganese	1.3	0.026	0.50		µg/L	1	8/19/2022 12:49 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-I-3-D-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 8:42:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:	**8/18/2022**		Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	8/19/2022 01:01 AM
Manganese	1.5	0.026	0.50		µg/L	1	8/19/2022 01:01 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-I-3-S-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 8:51:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:		**8/18/2022**	Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	8/19/2022 01:30 AM
Manganese	2.2	0.026	0.50		µg/L	1	8/19/2022 01:30 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-931-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 9:01:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:		**8/18/2022**	Analyst: **DJ**
Arsenic	2.5	0.050	0.10		µg/L	1	8/19/2022 01:42 AM
Manganese	1.7	0.026	0.50		µg/L	1	8/19/2022 01:42 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	SW1-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 10:30:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:	**8/18/2022**		Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	8/19/2022 01:54 AM
Manganese	7.7	0.026	0.50		µg/L	1	8/19/2022 01:54 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	SW2-Q322
Lab Order:	N052173	**Collection Date:**	8/17/2022 11:00:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052173-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220818C**	QC Batch: **94305**			PrepDate:	**8/18/2022**		Analyst: **DJ**
Arsenic	2.2	0.050	0.10		µg/L	1	8/19/2022 02:06 AM
Manganese	9.1	0.026	0.50		µg/L	1	8/19/2022 02:06 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052173
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID **MB-94305**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/18/2022**	RunNo: **164980**
Client ID: **PBW**	Batch ID: **94305**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/18/2022**	SeqNo: **4788698**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Manganese	ND	0.50									

Sample ID **LCS-94305**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/18/2022**	RunNo: **164980**
Client ID: **LCSW**	Batch ID: **94305**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/18/2022**	SeqNo: **4788699**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.491	0.10	10.00	0	94.9	85	115				
Manganese	97.090	0.50	100.0	0	97.1	85	115				

Sample ID **N052126-001B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/18/2022**	RunNo: **164980**
Client ID: **ZZZZZZ**	Batch ID: **94305**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/18/2022**	SeqNo: **4788705**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	8.148	0.10	10.00	0	81.5	75	125				
Manganese	102.992	0.50	100.0	13.36	89.6	75	125				

Sample ID **N052126-001B-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/18/2022**	RunNo: **164980**
Client ID: **ZZZZZZ**	Batch ID: **94305**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/18/2022**	SeqNo: **4788709**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	8.226	0.10	10.00	0	82.3	75	125	8.148	0.956	20	
Manganese	103.836	0.50	100.0	13.36	90.5	75	125	103.0	0.817	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

ASSET LABORATORIES
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CHAIN OF CUSTODY RECORD

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement	QA/QC	Sample Receipt Condition
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	Excel EDD	RTNE	Y N
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker	RWQCB ✓	1. Chilled ✓
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	Labspec	CalTrans	2. Headspace
Submitted By: Ryan Tap			Others ✓	LEVEL III	3. Container Intact ✓
Title: Field Tech	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	Specify: RWQCB	LEVEL IV	4. Seal Present
Signature: Date: 8/17/22	Sampled By: Ryan Tap		Global ID:	Regulatory	5. IR number 3
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for			Specify State:	6. Method of Cooling: ICE
Project Name: PG&E Topock - RCM	Signature: Date: 8/17/22				Sample Temp: 2.1 C
Project Number: 30121866.3Q22GW					Courier: ASSET
					Tracking No.:

Matrix: Ground ☐ Sediment ☐ | Potable ☐ Soil ☐ | NPDES ☐ Other Solid ☐ | Surface X ☐

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH 250 mL poly	Nitrate/Nitrite (SM4500N03) Nitrogen; H2SO4 125 mL poly	Dissolved metals (SW6020) FF; HNO3 Arsenic, Manganese, 500mL poly	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, 500mL poly	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052173-01	MW-929-Q322	8/17/2022	8:34		X		X	X	E	2	P	BN	
2	-02	C-R22A-D-Q322	8/17/2022	9:21		X		X	X	E	2	P	BN	
3	-03	C-R22A-S-Q322	8/17/2022	9:29		X		X	X	E	2	P	BN	
4	-04	C-R27-D-Q322	8/17/2022	9:58		X		X	X	E	2	P	BN	
5	-05	C-R27-S-Q322	8/17/2022	10:07		X		X	X	E	2	P	BN	
	-06	C-TAZ-D-Q322	8/17/2022	8:14		X		X	X	E	2	P	BN	
7	-07	AmbientBlank-1-Q322	8/17/2022	9:40		X		X	X	E	2	P	BN	Hold
8	-08	C-TAZ-S-Q322	8/17/2022	8:24		X		X	X	E	2	P	BN	
9	-09	AmbientBlank-2-Q322	8/17/2022	10:14		X		X	X	E	2	P	BN	Hold
10	-10	R-28-Q322	8/17/2022	10:18		X		X	X	E	2	P	BN	
11	-11	R63-Q322	8/17/2022	9:11		X		X	X	E	2	P	BN	
12	-12	C-BNS-Q322	8/17/2022	9:44		X		X	X	E	2	P	BN	
13	-13	C-I-3-D-Q322	8/17/2022	8:42		X		X	X	E	2	P	BN	
14	-14	C-I-3-S-Q322	8/17/2022	8:51		X		X	X	E	2	P	BN	

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Ryan Tap	8/17/22 1440	Dan Bush Arcadis	8/17/22 14:40
Dan Bush Arcadis	8/17/22 20:33	Dan Bush Arcadis	8/17/22 20:33

Turn Around Time (TAT)

- ☐ A = < 24 Hrs or Same Day TAT
- ☐ B = Next Workday
- ☐ C = 2 Workdays
- ☐ D = 3 Workdays
- ☒ E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs =200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:

H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		
Others/Specify:	B (NH4)2SO4/NH4OH			

Container Type:

T=Tube	V=VOA	P=Pint
J=Jar	B=Tedlar	G=Glass
M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 2 of 2

| | | |

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/17/2022	Workorder:	N052173
Rep sample Temp (Deg C):	2.1	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: EF *EFanegoF* 8/18/2022

Reviewed By: for: MBC 8/18/2022

Subject: RE: PG&E Topock - RCM, 30121866.3Q22GW (ASSET Labs No. N052173)
From: "Madsen, Laura" <Laura.Madsen@arcadis.com>
Date: 8/18/2022, 1:11 PM
To: Yoandra Rodriguez <yoandra@assetlaboratories.com>
CC: "maryann.balilu@assetlaboratoriesph.com" <maryann.balilu@assetlaboratoriesph.com>, "rustico.aquino@assetlaboratoriesph.com" <rustico.aquino@assetlaboratoriesph.com>, Tina Rice <Tina.Rice@critigen.com>

Hi,
Yes, that is correct. The Ambient blank samples should be on hold.

Laura Madsen PG
Project Geologist
Arcadis U.S., Inc.
M +1 303 653 5749

From: Yoandra Rodriguez <yoandra@assetlaboratories.com>
Sent: Thursday, August 18, 2022 2:57 PM
To: Madsen, Laura <Laura.Madsen@arcadis.com>
Cc: maryann.balilu@assetlaboratoriesph.com; rustico.aquino@assetlaboratoriesph.com; Tina Rice <Tina.Rice@critigen.com>
Subject: Re: PG&E Topock - RCM, 30121866.3Q22GW (ASSET Labs No. N052173)

Hi Laura,

Noted. But, they are on hold for Cr 6+ per instructions on COC, correct?

Thanks,

On 8/18/2022 12:47 PM, Madsen, Laura wrote:

> Hi Yoandra,
> The Samples 7 and 9 (Ambient blank) should only need Cr6, the COC inadvertently was marked for the additional metal by mistake.
>
> Thanks,
> Laura
>
> **Laura Madsen** PG
> Project Geologist
> Arcadis U.S., Inc.
> M +1 303 653 5749
>
> ---
>
> **From:** Yoandra Rodriguez <yoandra@assetlaboratories.com>
> **Sent:** Thursday, August 18, 2022 2:34 PM
> **To:** Madsen, Laura <Laura.Madsen@arcadis.com>
> **Cc:** maryann.balilu@assetlaboratoriesph.com; rustico.aquino@assetlaboratoriesph.com; Tina Rice <Tina.Rice@critigen.com>
> **Subject:** PG&E Topock - RCM, 30121866.3Q22GW (ASSET Labs No. N052173)

Hi Laura,

We did not receive the bottle for Metals for samples 7 (AmbientBlank-1-Q322) and 9 (AmbientBlank-2-Q322) on the attached COC.

Please advise.

--
Thanks,

Yoandra Rodriguez
Project Manager

Nevada: 3151 W. Post Road, Las Vegas, NV 89118 | P: 702.307.2659 | F: 702.307.2691
California: 11110 Artesia Blvd., Ste. B, Cerritos, CA 90703 | P: 562.219.7435 | F: 562.219.7436

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--
Thanks,

Yoandra Rodriguez
Project Manager

Nevada: 3151 W. Post Road, Las Vegas, NV 89118 | P: 702.307.2659 | F: 702.307.2691
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ASSET Laboratories

WORK ORDER Summary

18-Aug-22

WorkOrder: N052173

Client ID: ARCUS02

Project: PG&E Topock - RCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/17/2022 8:33 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052173-001A	MW-929-Q322	8/17/2022 8:34:00 AM	8/31/2022	Surface Water	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-001B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052173-002A	C-R22A-D-Q322	8/17/2022 9:21:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-002B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052173-003A	C-R22A-S-Q322	8/17/2022 9:29:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-003B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052173-004A	C-R27-D-Q322	8/17/2022 9:58:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-004B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052173-005A	C-R27-S-Q322	8/17/2022 10:07:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-005B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052173-006A	C-TAZ-D-Q322	8/17/2022 8:14:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-006B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052173-007A	AmbientBlank-1-Q322	8/17/2022 9:40:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☑	☐	☐	WW
N052173-008A	C-TAZ-S-Q322	8/17/2022 8:24:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-008B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

18-Aug-22

WorkOrder: N052173

Client ID: ARCUS02

Project: PG&E Topock - RCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/17/2022 8:33 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052173-009A	AmbientBlank-2-Q322	8/17/2022 10:14:00 AM	8/31/2022	Surface Water	EPA 218.6	Hexavalent Chromium by IC	☑	☐	☐	WW
N052173-010A	R-28-Q322	8/17/2022 10:18:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-010B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052173-011A	R63-Q322	8/17/2022 9:11:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-011B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052173-012A	C-BNS-Q322	8/17/2022 9:44:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-012B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052173-013A	C-I-3-D-Q322	8/17/2022 8:42:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-013B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052173-014A	C-I-3-S-Q322	8/17/2022 8:51:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-014B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052173-015A	MW-931-Q322	8/17/2022 9:01:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-015B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052173-016A	SW1-Q322	8/17/2022 10:30:00 AM	8/31/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-016B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

18-Aug-22

WorkOrder: N052173

Client ID: ARCUS02

Project: PG&E Topock - RCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/17/2022 8:33 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052173-017A	SW2-Q322	8/17/2022 11:00:00 AM	8/31/2022	Surface Water	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052173-017B			8/31/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/31/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052173-018A	FOLDER	8/31/2022	8/31/2022		Folder	Folder	☐	☐	☐	LAB
			8/31/2022		Folder	Level IV Report	☐	☐	☐	LAB
			8/31/2022		Folder	Folder	☐	☐	☐	LAB

September 01, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052191

RE: PG&E Topock - RCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 18, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

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CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab Order: N052191

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab Order: N052191
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052191-001A	C-CON-D-Q322	Surface Water	8/18/2022 8:06:00 AM	8/18/2022	9/1/2022
N052191-001B	C-CON-D-Q322	Surface Water	8/18/2022 8:06:00 AM	8/18/2022	9/1/2022
N052191-002A	MW-926-Q322	Surface Water	8/18/2022 8:16:00 AM	8/18/2022	9/1/2022
N052191-002B	MW-926-Q322	Surface Water	8/18/2022 8:16:00 AM	8/18/2022	9/1/2022
N052191-003A	C-CON-S-Q322	Surface Water	8/18/2022 8:24:00 AM	8/18/2022	9/1/2022
N052191-003B	C-CON-S-Q322	Surface Water	8/18/2022 8:24:00 AM	8/18/2022	9/1/2022
N052191-004A	C-NR1-D-Q322	Surface Water	8/18/2022 8:32:00 AM	8/18/2022	9/1/2022
N052191-004B	C-NR1-D-Q322	Surface Water	8/18/2022 8:32:00 AM	8/18/2022	9/1/2022
N052191-005A	C-NR1-S-Q322	Surface Water	8/18/2022 8:50:00 AM	8/18/2022	9/1/2022
N052191-005B	C-NR1-S-Q322	Surface Water	8/18/2022 8:50:00 AM	8/18/2022	9/1/2022
N052191-006A	C-NR3-D-Q322	Surface Water	8/18/2022 8:58:00 AM	8/18/2022	9/1/2022
N052191-006B	C-NR3-D-Q322	Surface Water	8/18/2022 8:58:00 AM	8/18/2022	9/1/2022
N052191-007A	MW-927-Q322	Surface Water	8/18/2022 8:42:00 AM	8/18/2022	9/1/2022
N052191-007B	MW-927-Q322	Surface Water	8/18/2022 8:42:00 AM	8/18/2022	9/1/2022
N052191-008A	C-NR3-S-Q322	Surface Water	8/18/2022 9:05:00 AM	8/18/2022	9/1/2022
N052191-008B	C-NR3-S-Q322	Surface Water	8/18/2022 9:05:00 AM	8/18/2022	9/1/2022
N052191-009A	C-NR4-D-Q322	Surface Water	8/18/2022 9:15:00 AM	8/18/2022	9/1/2022
N052191-009B	C-NR4-D-Q322	Surface Water	8/18/2022 9:15:00 AM	8/18/2022	9/1/2022
N052191-010A	C-NR4-S-Q322	Surface Water	8/18/2022 9:25:00 AM	8/18/2022	9/1/2022
N052191-010B	C-NR4-S-Q322	Surface Water	8/18/2022 9:25:00 AM	8/18/2022	9/1/2022
N052191-011A	R-19-Q322	Surface Water	8/18/2022 9:45:00 AM	8/18/2022	9/1/2022
N052191-011B	R-19-Q322	Surface Water	8/18/2022 9:45:00 AM	8/18/2022	9/1/2022
N052191-012A	C-MAR-D-Q322	Surface Water	8/18/2022 9:55:00 AM	8/18/2022	9/1/2022
N052191-012B	C-MAR-D-Q322	Surface Water	8/18/2022 9:55:00 AM	8/18/2022	9/1/2022
N052191-013A	C-MAR-S-Q322	Surface Water	8/18/2022 10:01:00 AM	8/18/2022	9/1/2022
N052191-013B	C-MAR-S-Q322	Surface Water	8/18/2022 10:01:00 AM	8/18/2022	9/1/2022
N052191-014A	RRB-Q322	Surface Water	8/18/2022 10:13:00 AM	8/18/2022	9/1/2022
N052191-014B	RRB-Q322	Surface Water	8/18/2022 10:13:00 AM	8/18/2022	9/1/2022
N052191-015A	AmbientBlank-3-Q322	Surface Water	8/18/2022 10:10:00 AM	8/18/2022	9/1/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab Order: N052191
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052191-016A	MW-928-Q322	Surface Water	8/18/2022 9:35:00 AM	8/18/2022	9/1/2022
N052191-016B	MW-928-Q322	Surface Water	8/18/2022 9:35:00 AM	8/18/2022	9/1/2022
N052191-017A	MW-930-Q322	Surface Water	8/18/2022 10:23:00 AM	8/18/2022	9/1/2022
N052191-017B	MW-930-Q322	Surface Water	8/18/2022 10:23:00 AM	8/18/2022	9/1/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-CON-D-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:06:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 11:22 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-926-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:16:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 12:09 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-CON-S-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:24:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 12:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-NR1-D-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:32:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 12:47 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-NR1-S-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:50:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 01:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-NR3-D-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:58:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 01:25 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-927-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:42:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 02:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-NR3-S-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 9:05:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 02:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-NR4-D-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 9:15:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 10:21 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-NR4-S-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 9:25:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 02:41 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	R-19-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 9:45:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 03:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-MAR-D-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 9:55:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 03:19 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-MAR-S-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 10:01:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 10:54 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	RRB-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 10:13:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 03:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-928-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 9:35:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 04:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-930-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 10:23:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819A**	QC Batch: **R164992**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 04:34 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052191
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R164992**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164992**
Client ID: **PBW**	Batch ID: **R164992**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789163**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R164992**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164992**
Client ID: **LCSW**	Batch ID: **R164992**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789164**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.955	0.20	5.000	0	99.1	90	110				

Sample ID: **N052191-009AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164992**
Client ID: **ZZZZZZ**	Batch ID: **R164992**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789166**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.991	0.20	1.000	0	99.1	90	110				

Sample ID: **N052191-009AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164992**
Client ID: **ZZZZZZ**	Batch ID: **R164992**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789167**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.055	0.20	1.000	0	106	90	110	0.9908	6.31	20	

Sample ID: **N052191-013AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164992**
Client ID: **ZZZZZZ**	Batch ID: **R164992**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789169**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.023	0.20	1.000	0	102	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052191
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052191-013AMSD** SampType: **MSD** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164992**
Client ID: **ZZZZZZ** Batch ID: **R164992** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789170**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.018	0.20	1.000	0	102	90	110	1.023	0.559	20	

Sample ID: **N052191-001ADUP** SampType: **DUP** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164992**
Client ID: **ZZZZZZ** Batch ID: **R164992** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789172**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20						0	0	20	

Sample ID: **N052191-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164992**
Client ID: **ZZZZZZ** Batch ID: **R164992** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789175**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.000	0.20	1.000	0	100	90	110				

Sample ID: **N052191-002AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164992**
Client ID: **ZZZZZZ** Batch ID: **R164992** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789177**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.997	0.20	1.000	0	99.7	90	110				

Sample ID: **N052191-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164992**
Client ID: **ZZZZZZ** Batch ID: **R164992** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789179**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.997	0.20	1.000	0	99.7	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052191
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052191-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164992**
Client ID: **ZZZZZZ**	Batch ID: **R164992**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789181**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.999	0.20	1.000	0	99.9	90	110				

Sample ID: **N052191-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164992**
Client ID: **ZZZZZZ**	Batch ID: **R164992**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789183**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.020	0.20	1.000	0	102	90	110				

Sample ID: **N052191-006AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164992**
Client ID: **ZZZZZZ**	Batch ID: **R164992**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789187**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.979	0.20	1.000	0	97.9	90	110				

Sample ID: **N052191-007AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164992**
Client ID: **ZZZZZZ**	Batch ID: **R164992**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789189**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.034	0.20	1.000	0	103	90	110				

Sample ID: **N052191-008AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164992**
Client ID: **ZZZZZZ**	Batch ID: **R164992**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789191**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.022	0.20	1.000	0	102	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052191
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052191-010AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164992**
Client ID: **ZZZZZZ** Batch ID: **R164992** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789193**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.021	0.20	1.000	0	102	90	110				

Sample ID: **N052191-011AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164992**
Client ID: **ZZZZZZ** Batch ID: **R164992** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789195**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.008	0.20	1.000	0	101	90	110				

Sample ID: **N052191-012AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164992**
Client ID: **ZZZZZZ** Batch ID: **R164992** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789199**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.978	0.20	1.000	0	97.8	90	110				

Sample ID: **N052191-014AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164992**
Client ID: **ZZZZZZ** Batch ID: **R164992** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789201**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.025	0.20	1.000	0	103	90	110				

Sample ID: **N052191-016AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164992**
Client ID: **ZZZZZZ** Batch ID: **R164992** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789203**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.029	0.20	1.000	0	103	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052191-017AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164992**
Client ID: **ZZZZZZ**	Batch ID: **R164992**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789205**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.006	0.20	1.000	0	101	90	110				

Sample ID: **N052202-004BMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164992**
Client ID: **ZZZZZZ**	Batch ID: **R164992**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789207**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.962	0.20	1.000	0	96.2	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-CON-D-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:06:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**			PrepDate:	**8/22/2022**		Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	8/25/2022 12:51 AM
Manganese	0.72	0.026	0.50		µg/L	1	8/25/2022 12:51 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-926-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:16:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220824D** QC Batch: **94363**				PrepDate:	**8/22/2022**		Analyst: **DJ**
Arsenic	2.2	0.050	0.10		µg/L	1	8/25/2022 01:03 AM
Manganese	4.1	0.026	0.50		µg/L	1	8/25/2022 01:03 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-CON-S-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:24:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**			PrepDate:	**8/22/2022**		Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	8/25/2022 01:15 AM
Manganese	0.92	0.026	0.50		µg/L	1	8/25/2022 01:15 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-NR1-D-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:32:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**			PrepDate:	**8/22/2022**		Analyst: **DJ**
Arsenic	2.5	0.050	0.10		µg/L	1	8/25/2022 01:27 AM
Manganese	ND	0.026	0.50		µg/L	1	8/25/2022 01:27 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-NR1-S-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:50:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**			PrepDate:		**8/22/2022**	Analyst: **DJ**
Arsenic	2.3	0.050	0.10		µg/L	1	8/25/2022 01:50 AM
Manganese	ND	0.026	0.50		µg/L	1	8/25/2022 01:50 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-NR3-D-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:58:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**			PrepDate:		**8/22/2022**	Analyst: **DJ**
Arsenic	2.2	0.050	0.10		µg/L	1	8/25/2022 02:02 AM
Manganese	ND	0.026	0.50		µg/L	1	8/25/2022 02:02 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-927-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 8:42:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220824D** QC Batch: **94363**				PrepDate:		**8/22/2022**	Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	8/25/2022 02:14 AM
Manganese	ND	0.026	0.50		µg/L	1	8/25/2022 02:14 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-NR3-S-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 9:05:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**				PrepDate:	**8/22/2022**	Analyst: **DJ**
Arsenic	2.3	0.050	0.10		µg/L	1	8/25/2022 02:26 AM
Manganese	ND	0.026	0.50		µg/L	1	8/25/2022 02:26 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-NR4-D-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 9:15:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**			PrepDate:		**8/22/2022**	Analyst: **DJ**
Arsenic	2.3	0.050	0.10		µg/L	1	8/25/2022 02:38 AM
Manganese	ND	0.026	0.50		µg/L	1	8/25/2022 02:38 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-NR4-S-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 9:25:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**			PrepDate:		**8/22/2022**	Analyst: **DJ**
Arsenic	2.3	0.050	0.10		µg/L	1	8/25/2022 03:55 AM
Manganese	ND	0.026	0.50		µg/L	1	8/25/2022 03:55 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	R-19-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 9:45:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**			PrepDate:		**8/22/2022**	Analyst: **DJ**
Arsenic	2.5	0.050	0.10		µg/L	1	8/25/2022 04:18 AM
Manganese	1.2	0.026	0.50		µg/L	1	8/25/2022 04:18 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-MAR-D-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 9:55:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**			PrepDate:	**8/22/2022**		Analyst: **DJ**
Arsenic	3.5	0.050	0.10		µg/L	1	8/25/2022 04:30 AM
Manganese	130	0.026	0.50		µg/L	1	8/25/2022 04:30 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	C-MAR-S-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 10:01:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**			PrepDate:		**8/22/2022**	Analyst: **DJ**
Arsenic	4.2	0.050	0.10		µg/L	1	8/25/2022 04:42 AM
Manganese	140	0.13	2.5		µg/L	5	8/25/2022 04:48 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	RRB-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 10:13:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**			PrepDate:		**8/22/2022**	Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	8/25/2022 05:47 AM
Manganese	17	0.026	0.50		µg/L	1	8/25/2022 05:47 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-928-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 9:35:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220824D** QC Batch: **94363**				PrepDate:		**8/22/2022**	Analyst: **DJ**
Arsenic	2.3	0.050	0.10		µg/L	1	8/25/2022 05:59 AM
Manganese	ND	0.026	0.50		µg/L	1	8/25/2022 05:59 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-930-Q322
Lab Order:	N052191	**Collection Date:**	8/18/2022 10:23:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	SURFACE WATER
Lab ID:	N052191-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**			PrepDate:		**8/22/2022**	Analyst: **DJ**
Arsenic	2.1	0.050	0.10		µg/L	1	8/25/2022 06:11 AM
Manganese	15	0.026	0.50		µg/L	1	8/25/2022 06:11 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052191
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94363**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **PBW**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799475**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Manganese	ND	0.50									

Sample ID: **LCS-94363**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **LCSW**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799476**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.875	0.10	10.00	0	98.7	85	115				
Manganese	100.982	0.50	100.0	0	101	85	115				

Sample ID: **N052191-009BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **ZZZZZZ**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799504**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.169	0.10	10.00	2.328	98.4	75	125				
Manganese	98.871	0.50	100.0	0	98.9	75	125				

Sample ID: **N052191-009BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **ZZZZZZ**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799506**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.370	0.10	10.00	2.328	100	75	125	12.17	1.64	20	
Manganese	101.929	0.50	100.0	0	102	75	125	98.87	3.04	20	

Sample ID: **N052191-013BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **ZZZZZZ**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799523**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052191
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052191-013BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **ZZZZZZ**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799523**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.904	0.10	10.00	4.178	97.3	75	125				

Sample ID: **N052191-013BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **ZZZZZZ**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799524**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	247.503	2.5	100.0	143.4	104	75	125				

Sample ID: **N052191-013BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **ZZZZZZ**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799525**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.677	0.10	10.00	4.178	95.0	75	125	13.90	1.65	20	

Sample ID: **N052191-013BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **ZZZZZZ**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799526**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	244.461	2.5	100.0	143.4	101	75	125	247.5	1.24	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

ARCUS02 C: 9/1/2022 12:00 AM
FOLDER R: 8/18/2022
N052191-018A 1 of 1

Page 1 of 2

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com	P.O.#
Submitted By: Reggie Tap		Phone: 949-727-1400, ext 200	Fax:
Title: Field Tech	Phone: 916-786-3302 Fax:		
Signature: Date: 8/18/22	Sampled By: Reggie Tap		
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for		
Project Name: PG&E Topock - RCM	Signature: Date: 8/18/22		
Project Number: 30121866.3Q22GW			

Excel EDD		RTNE	
Geotracker		RWQCB	✓
Labspec		CalTrans	
Others	✓	LEVEL III	
Specify: RWQCB		LEVEL IV	
Global ID:		Regulatory	
		Specify State:	

Matrix: Ground | Sediment | Potable | Soil | NPDES | Other Solid | Surface X

Sample Condition

	Y	N
1. Chilled	/	
2. Headspace		
3. Container Intact	/	
4. Seal Present		/
5. IR number	3	

6. Method of Cooling: ICE
Sample Temp: 3.4 c°
Courier: ASSET
Tracking No.:

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH 250 mL poly	Nitrate/Nitrite (SM4500N03) Nitrogen; H2SO4 125 mL poly	Dissolved metals (SW6020) FF; HNO3 Arsenic, Manganese, 500mL poly	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, 500mL poly	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052191-01	C-CON-D-Q322	8/18/2022	8:06		X		X		E	2	P	BN	
2	-02	MW-926-Q322	8/18/2022	8:16		X		X		E	2	P	BN	
3	-03	C-CON-S-Q322	8/18/2022	8:24		X		X		E	2	P	BN	
4	-04	C-NR1-D-Q322	8/18/2022	8:32		X		X		E	2	P	BN	
5	-05	C-NR1-S-Q322	8/18/2022	8:50		X		X		E	2	P	BN	
	-06	C-NR3-D-Q322	8/18/2022	8:58		X		X		E	2	P	BN	
7	-07	MW-927-Q322	8/18/2022	8:42		X		X		E	2	P	BN	
8	-08	C-NR3-S-Q322	8/18/2022	9:05		X		X		E	2	P	BN	
9	-09	C-NR4-D-Q322	8/18/2022	9:15		X		X		E	2	P	BN	MS/MSD
10	-10	C-NR4-S-Q322	8/18/2022	9:25		X		X		E	2	P	BN	
11	-11	R-19-Q322	8/18/2022	9:45		X		X		E	2	P	BN	
12	-12	C-MAR-D-Q322	8/18/2022	9:55		X		X		E	2	P	BN	
13	-13	C-MAR-S-Q322	8/18/2022	10:01		X		X		E	2	P	BN	MS/MSD
14	-14	RRB-Q322	8/18/2022	10:13		X		X		E	2	P	BN	

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Reggie Tap	8/18/22 1820	Stanley Clark Waste Chem	8/18/22 18:20
Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Stanley Clark Waste Chem	8/18/22 21:03	Andrea Burleson	8/18/22 21:03
Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:

Turn Around Time (TAT)

	A	< 24 Hrs or Same Day TAT
	B	= Next Workday
	C	= 2 Workdays
	D	= 3 Workdays
X	E	= Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=60% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Plnt
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F: 562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement: Excel EDD; Geotracker; Labspec; Others ✓ (Specify: RWQCB)
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	QA/QC: RTNE; RWQCB ✓; CalTrans; LEVEL III ✓; LEVEL IV; Regulatory
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Global ID: Specify State:
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	
Submitted By: Riggie Top		Phone: 949-727-1400, ext 200 Fax:	
Title: Field Tech	Phone: 916-786-3302 Fax:		
Signature: Date: 8/18/22	Sampled By: Riggie Top		

I hereby authorize ASSET Labs to perform the tests indicated below.

I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for

Signature: Date: 8/18/22

Project Name: PG&E Topock - RCM

Project Number: 30121866.3Q22GW

Matrix: Ground; Sediment; Potable; Soil; NPDES; Other Solid; Surface X

Sample Receipt Condition

	Y	N
1. Chilled	✓	
2. Headspace		
3. Container Intact	✓	
4. Seal Present		✓
5. IR number	3	

6. Method of Cooling: ICE

Sample Temp: 3.4 C°

Courier: ASSET

Tracking No.:

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) 250 mL poly (NH4)2, SO4, NH4, OH	Nitrate/Nitrite (SM4500N03) 125 mL poly Nitrogen; H2SO4	Dissolved metals (SW6020) FF; HNO3 500mL poly Arsenic, Manganese,	Dissolved metals (SW6020) FF; HNO3 500mL poly Total Dissolved Chromium,	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052191-15	AmbientBlank-3-Q322	8/18/2022	10:10		X				E	1	P	BN	Hold
2	-16	MW-928-Q322	8/18/2022	9:35		X		X		E	2	P	BN	
3	-17	MW-930-Q322	8/18/2022	10:23		X		X		E	2	P	BN	
4														
5														
7														
8														
9														
10														
11														
12														
13														
14														

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Riggie Top	8/18/22 1850	Dan Bush	8/18/22 19:20
Dan Bush	8/18/22 2100	Dan Bush Arcadis.com	8/18/22 21:07

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy

Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/18/2022	Workorder:	N052191
Rep sample Temp (Deg C):	3.4	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: YR YRJ 8/19/2022

Reviewed By: for: MBC 8/20/2022

ASSET Laboratories

WORK ORDER Summary

19-Aug-22

WorkOrder: N052191

Client ID: ARCUS02

Project: PG&E Topock - RCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/18/2022 9:03 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052191-001A	C-CON-D-Q322	8/18/2022 8:06:00 AM	9/1/2022	Surface Water	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052191-001B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-002A	MW-926-Q322	8/18/2022 8:16:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052191-002B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-003A	C-CON-S-Q322	8/18/2022 8:24:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052191-003B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-004A	C-NR1-D-Q322	8/18/2022 8:32:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052191-004B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-005A	C-NR1-S-Q322	8/18/2022 8:50:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052191-005B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-006A	C-NR3-D-Q322	8/18/2022 8:58:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052191-006B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-007A	MW-927-Q322	8/18/2022 8:42:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052191-007B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-008A	C-NR3-S-Q322	8/18/2022 9:05:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

19-Aug-22

WorkOrder: N052191

Client ID: ARCUS02

Project: PG&E Topock - RCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/18/2022 9:03 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052191-008B	C-NR3-S-Q322	8/18/2022 9:05:00 AM	9/1/2022	Surface Water	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-009A	C-NR4-D-Q322	8/18/2022 9:15:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☑	☐	WW
N052191-009B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☑	☐	WW
N052191-010A	C-NR4-S-Q322	8/18/2022 9:25:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052191-010B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-011A	R-19-Q322	8/18/2022 9:45:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052191-011B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-012A	C-MAR-D-Q322	8/18/2022 9:55:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052191-012B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-013A	C-MAR-S-Q322	8/18/2022 10:01:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☑	☐	WW
N052191-013B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☑	☐	WW
N052191-014A	RRB-Q322	8/18/2022 10:13:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052191-014B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-015A	AmbientBlank-3-Q322	8/18/2022 10:10:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☑	☐	☐	WW
N052191-016A	MW-928-Q322	8/18/2022 9:35:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

19-Aug-22

WorkOrder: N052191

Client ID: ARCUS02

Project: PG&E Topock - RCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/18/2022 9:03 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052191-016B	MW-928-Q322	8/18/2022 9:35:00 AM	9/1/2022	Surface Water	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-017A	MW-930-Q322	8/18/2022 10:23:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052191-017B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052191-018A	FOLDER	9/1/2022	9/1/2022		Folder	Folder	☐	☐	☐	LAB
			9/1/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/1/2022		Folder	Folder	☐	☐	☐	LAB

September 01, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052192

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 18, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052192

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Subcontracted Analyses:

Nitrate/Nitrite was subcontracted to BC Labs - Bakersfield, CA

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of sample upon the addition of eluent.

Analytical Comments for SM 5310C:

Matrix Spike (MS) is outside recovery criteria in QC sample N052192-001CMS at several dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N052192-001 and MS/MSD were reported at 5x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Barium in QC samples N052191-009BMS, N052191-009BMSD and N052191-013BMSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

ASSET Laboratories

Date: *01-Sep-22*

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052192
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052192-001A	MW-42-030-Q322	Groundwater	8/18/2022 12:35:00 PM	8/18/2022	9/1/2022
N052192-001B	MW-42-030-Q322	Groundwater	8/18/2022 12:35:00 PM	8/18/2022	9/1/2022
N052192-001C	MW-42-030-Q322	Groundwater	8/18/2022 12:35:00 PM	8/18/2022	9/1/2022
N052192-001D	MW-42-030-Q322	Groundwater	8/18/2022 12:35:00 PM	8/18/2022	9/1/2022
N052192-001E	MW-42-030-Q322	Groundwater	8/18/2022 12:35:00 PM	8/18/2022	9/1/2022
N052192-002A	MW-42-055-Q322	Groundwater	8/18/2022 12:16:00 PM	8/18/2022	9/1/2022
N052192-002B	MW-42-055-Q322	Groundwater	8/18/2022 12:16:00 PM	8/18/2022	9/1/2022
N052192-002C	MW-42-055-Q322	Groundwater	8/18/2022 12:16:00 PM	8/18/2022	9/1/2022
N052192-002D	MW-42-055-Q322	Groundwater	8/18/2022 12:16:00 PM	8/18/2022	9/1/2022
N052192-003A	MW-42-055-EB-Q322	Groundwater	8/18/2022 11:58:00 AM	8/18/2022	9/1/2022
N052192-004A	MW-42-065-Q322	Groundwater	8/18/2022 11:54:00 AM	8/18/2022	9/1/2022
N052192-004B	MW-42-065-Q322	Groundwater	8/18/2022 11:54:00 AM	8/18/2022	9/1/2022
N052192-004C	MW-42-065-Q322	Groundwater	8/18/2022 11:54:00 AM	8/18/2022	9/1/2022
N052192-004D	MW-42-065-Q322	Groundwater	8/18/2022 11:54:00 AM	8/18/2022	9/1/2022
N052192-005A	MW-42-065-EB-Q322	Groundwater	8/18/2022 11:30:00 AM	8/18/2022	9/1/2022
N052192-006A	EB-723-Q322	Groundwater	8/18/2022 12:58:00 PM	8/18/2022	9/1/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-42-030-Q322
Lab Order:	N052192	**Collection Date:**	8/18/2022 12:35:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052192-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819B**	QC Batch: **R164993**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 06:38 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-42-055-Q322
Lab Order:	N052192	**Collection Date:**	8/18/2022 12:16:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052192-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819B**	QC Batch: **R164993**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 06:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-42-055-EB-Q322
Lab Order:	N052192	**Collection Date:**	8/18/2022 11:58:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052192-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819B**	QC Batch: **R164993**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 07:25 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-42-065-Q322
Lab Order:	N052192	**Collection Date:**	8/18/2022 11:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052192-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819B**	QC Batch: **R164993**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 07:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-42-065-EB-Q322
Lab Order:	N052192	**Collection Date:**	8/18/2022 11:30:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052192-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819B**	QC Batch: **R164993**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 08:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-723-Q322
Lab Order:	N052192	**Collection Date:**	8/18/2022 12:58:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052192-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819B**	QC Batch: **R164993**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/19/2022 08:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **LCS-R164993**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164993**
Client ID: **LCSW**	Batch ID: **R164993**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789269**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.026	0.20	5.000	0	101	90	110				

Sample ID: **MB-R164993**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164993**
Client ID: **PBW**	Batch ID: **R164993**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789272**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **N052192-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164993**
Client ID: **ZZZZZZ**	Batch ID: **R164993**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789274**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.977	0.20	1.000	0	97.7	90	110				

Sample ID: **N052192-002AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164993**
Client ID: **ZZZZZZ**	Batch ID: **R164993**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789275**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.977	0.20	1.000	0	97.7	90	110	0.9770	0.0205	20	

Sample ID: **N052192-001ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164993**
Client ID: **ZZZZZZ**	Batch ID: **R164993**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789277**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20						0	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052192-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **ZZZZZZ** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789278**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.957	0.20	1.000	0	95.7	90	110				

Sample ID: **N052192-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **ZZZZZZ** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789280**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.960	0.20	1.000	0	96.0	90	110				

Sample ID: **N052192-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **ZZZZZZ** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789282**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.972	0.20	1.000	0	97.2	90	110				

Sample ID: **N052192-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **ZZZZZZ** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789286**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.979	0.20	1.000	0	97.9	90	110				

Sample ID: **N052192-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **ZZZZZZ** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789288**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.963	0.20	1.000	0	96.3	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052194-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164993**
Client ID: **ZZZZZZ**	Batch ID: **R164993**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789290**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	376.120	80	400.0	0	94.0	90	110				

Sample ID: **N052194-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164993**
Client ID: **ZZZZZZ**	Batch ID: **R164993**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789292**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	52364.000	1000	25000	27550	99.2	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-42-030-Q322
Lab Order:	N052192	**Collection Date:**	8/18/2022 12:35:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052192-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220819A**	QC Batch: **R164987**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/19/2022 11:03 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-42-055-Q322
Lab Order:	N052192	**Collection Date:**	8/18/2022 12:16:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052192-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220819A**	QC Batch: **R164987**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/19/2022 11:19 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-42-065-Q322
Lab Order:	N052192	**Collection Date:**	8/18/2022 11:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052192-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220819A**	QC Batch: **R164987**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/19/2022 11:35 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R164987_NO3**	SampType: **MBLK**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **PBW**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789103**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R164987_NO3**	SampType: **LCS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **LCSW**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789104**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.244	0.050	1.250	0	99.5	90	110				

Sample ID: **N052192-001DMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **ZZZZZZ**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789110**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.063	0.25	6.250	0.1725	94.2	80	120				

Sample ID: **N052192-001DMSD**	SampType: **MSD**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **ZZZZZZ**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789111**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.224	0.25	6.250	0.1725	96.8	80	120	6.062	2.63	20	

Sample ID: **N052194-002BDUP**	SampType: **DUP**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **ZZZZZZ**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789112**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	23.954	1.0						23.99	0.150	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-42-030-Q322
Lab Order:	N052192	**Collection Date:**	8/18/2022 12:35:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052192-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220819A**	QC Batch: **R164991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.68	5.0		mg/L	5	8/19/2022 01:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-42-055-Q322
Lab Order:	N052192	**Collection Date:**	8/18/2022 12:16:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052192-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220819A**	QC Batch: **R164991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/19/2022 01:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-42-065-Q322
Lab Order:	N052192	**Collection Date:**	8/18/2022 11:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052192-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220819A**	QC Batch: **R164991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/19/2022 02:13 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R164991**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164991**
Client ID: **PBW**	Batch ID: **R164991**	TestNo: **SM 5310C**		Analysis Date: **8/19/2022**	SeqNo: **4790078**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R164991**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164991**
Client ID: **LCSW**	Batch ID: **R164991**	TestNo: **SM 5310C**		Analysis Date: **8/19/2022**	SeqNo: **4790079**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.004	1.0	5.000	0	100	85	115				

Sample ID: **N052192-001CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164991**
Client ID: **ZZZZZZ**	Batch ID: **R164991**	TestNo: **SM 5310C**		Analysis Date: **8/19/2022**	SeqNo: **4790090**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	29.460	5.0	25.00	4.016	102	75	125				

Sample ID: **N052192-001CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164991**
Client ID: **ZZZZZZ**	Batch ID: **R164991**	TestNo: **SM 5310C**		Analysis Date: **8/19/2022**	SeqNo: **4790091**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	29.502	5.0	25.00	4.016	102	75	125	29.46	0.142	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052192-001

Client Sample ID: MW-42-030-Q322
Collection Date: 8/18/2022 12:35:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94362**				PrepDate:	**8/22/2022**	Analyst: **DJ**
Iron	830	13	20		µg/L	1	8/28/2022 11:58 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-42-055-Q322
Lab Order:	N052192	**Collection Date:**	8/18/2022 12:16:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052192-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94362**			PrepDate:	**8/22/2022**		Analyst: **DJ**
Iron	180	13	20		µg/L	1	8/28/2022 12:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052192-004

Client Sample ID: MW-42-065-Q322
Collection Date: 8/18/2022 11:54:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94362**			PrepDate:		**8/22/2022**	Analyst: **DJ**
Iron	410	13	20		µg/L	1	8/28/2022 12:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94362**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165203**
Client ID: **PBW**	Batch ID: **94362**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803685**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-94362**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165203**
Client ID: **LCSW**	Batch ID: **94362**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803686**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	97.982	20	100.0	0	98.0	85	115				

Sample ID: **N052126-001B-MS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165203**
Client ID: **ZZZZZZ**	Batch ID: **94362**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803690**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	97.277	20	100.0	0	97.3	75	125				

Sample ID: **N052126-001B-MSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165203**
Client ID: **ZZZZZZ**	Batch ID: **94362**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803695**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	112.701	20	100.0	0	113	75	125	97.28	14.7	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052192-001

Client Sample ID: MW-42-030-Q322
Collection Date: 8/18/2022 12:35:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220824D** QC Batch: **94363**				PrepDate:		**8/22/2022**	Analyst: **DJ**
Arsenic	1.6	0.050	0.10		µg/L	1	8/25/2022 06:34 AM
Barium	150	0.083	1.0		µg/L	1	8/25/2022 06:34 AM
Manganese	200	0.13	2.5		µg/L	5	8/25/2022 06:40 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052192-002

Client Sample ID: MW-42-055-Q322
Collection Date: 8/18/2022 12:16:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220824D**	QC Batch: **94363**			PrepDate:		**8/22/2022**	Analyst: **DJ**
Arsenic	10	0.050	0.10		µg/L	1	8/25/2022 06:46 AM
Barium	150	0.083	1.0		µg/L	1	8/25/2022 06:46 AM
Manganese	250	0.13	2.5		µg/L	5	8/25/2022 06:52 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052192-004

Client Sample ID: MW-42-065-Q322
Collection Date: 8/18/2022 11:54:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220824D** QC Batch: **94363**				PrepDate:	**8/22/2022**		Analyst: **DJ**
Arsenic	1.6	0.050	0.10		µg/L	1	8/25/2022 06:58 AM
Barium	110	0.083	1.0		µg/L	1	8/25/2022 06:58 AM
Manganese	2300	0.66	12		µg/L	25	8/25/2022 09:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94363**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **PBW**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799475**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID: **LCS-94363**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **LCSW**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799476**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.875	0.10	10.00	0	98.7	85	115				
Barium	10.371	1.0	10.00	0	104	85	115				
Manganese	100.982	0.50	100.0	0	101	85	115				

Sample ID: **N052191-009BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **ZZZZZZ**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799504**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.169	0.10	10.00	2.328	98.4	75	125				
Barium	124.453	1.0	10.00	117.7	67.8	75	125				S
Manganese	98.871	0.50	100.0	0	98.9	75	125				

Sample ID: **N052191-009BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **ZZZZZZ**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799506**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.370	0.10	10.00	2.328	100	75	125	12.17	1.64	20	
Barium	120.555	1.0	10.00	117.7	28.8	75	125	124.5	3.18	20	S
Manganese	101.929	0.50	100.0	0	102	75	125	98.87	3.04	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052191-013BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **ZZZZZZ**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799523**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.904	0.10	10.00	4.178	97.3	75	125				
Barium	126.070	1.0	10.00	114.3	118	75	125				

Sample ID: **N052191-013BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **ZZZZZZ**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799524**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	247.503	2.5	100.0	143.4	104	75	125				

Sample ID: **N052191-013BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **ZZZZZZ**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799525**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.677	0.10	10.00	4.178	95.0	75	125	13.90	1.65	20	
Barium	127.742	1.0	10.00	114.3	135	75	125	126.1	1.32	20	S

Sample ID: **N052191-013BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165137**
Client ID: **ZZZZZZ**	Batch ID: **94363**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4799526**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	244.461	2.5	100.0	143.4	101	75	125	247.5	1.24	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052192
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052191-009B-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **165137**
Client ID: **ZZZZZZ** Batch ID: **94363** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/25/2022** SeqNo: **4799502**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.304	0.10	10.00	2.328	99.8	80	120				
Barium	123.358	1.0	10.00	117.7	56.8	80	120				S
Manganese	98.909	0.50	100.0	0	98.9	80	120				

Sample ID: **N052191-013B-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **165137**
Client ID: **ZZZZZZ** Batch ID: **94363** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/25/2022** SeqNo: **4799519**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	14.160	0.10	10.00	4.178	99.8	80	120				
Barium	127.259	1.0	10.00	114.3	130	80	120				S

Sample ID: **N052191-013B-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **165137**
Client ID: **ZZZZZZ** Batch ID: **94363** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/25/2022** SeqNo: **4799520**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	246.403	2.5	100.0	143.4	103	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ARCUS02 C: 9/1/2022 12:00 AM
FOLDER R: 8/18/2022
N052192-007A 1 of 1

ASSET LABORATORIES

ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDF	RTNE	
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	Excel EDD	RWQCB ✓	1. Chilled ✓
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com daniel.moore@critigen.com	Address:	Geotracker	CalTrans	2. Headspace
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mboles@pivox.com P.O.#	Labspec	LEVEL III	3. Container Intact ✓
Submitted By: Riggie Top		Phone: 949-727-1400, ext 200 Fax:	Others ✓	LEVEL IV	4. Seal Present ✓
Title: Field Tech	Phone: 916-786-3302 Fax:		Specify: RWQCB	Regulatory	5. IR number 3
Signature: Date: 8/18/22	Sampled By: Riggie Top		Global ID:	Specify State:	6. Method of Cooling: ICE
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for				Sample Temp: 5.8 c
Project Name: PG&E Topock - PCM	Signature: Date: 8/18/22				Courier: ASSET
Project Number: 30121866.3Q22GW					Tracking No.:

Matrix: Ground X | Sediment; Potable | Soil; NPDES | Other Solid; Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate (EPA 300.0) (1 L poly)	Nitrate/nitrite as Nitrogen (SM 4500-NO3); H2SO4 (125 mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052192-01	MW-42-030-Q322	8/18/2022	12:35		X		X			X			X	X	E	7	P	BNS	
2	-02	MW-42-055-Q322	8/18/2022	12:16		X		X			X			X		E	6	P	BNS	
3	-03	MW-42-055-EB-Q322	8/18/2022	11:58		X										E	1	P	BNS	
4	-04	MW-42-065-Q322	8/18/2022	1154		X		X			X			X		E	6	P	BNS	
5	-05	MW-42-065-EB-Q322	8/18/2022	11:30		X										E	1	P	BNS	
6	-06	EB-72[illegible]-Q322	8/18/2022	12:58		X										E	1	P	BNS	
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Riggie Top	8/18/22 1820	Dan Bush - Bank one	8/19/22 10:20
Dan Bush	8/18/22 21:03 Bank one	Jennifer Bunkowski	8/18/22 21:03
Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 5% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy

Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/18/2022	Workorder:	N052192
Rep sample Temp (Deg C):	5.8	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: YR YRJ 8/19/2022

Reviewed By: for: MBC 8/20/2022

ASSET Laboratories

WORK ORDER Summary

21-Aug-22

WorkOrder: N052192

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/18/2022 9:03 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052192-001A	MW-42-030-Q322	8/18/2022 12:35:00 PM	9/1/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052192-001B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052192-001C			9/1/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052192-001D			9/1/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052192-001E			9/1/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052192-002A	MW-42-055-Q322	8/18/2022 12:16:00 PM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052192-002B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052192-002C			9/1/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052192-002D			9/1/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052192-003A	MW-42-055-EB-Q322	8/18/2022 11:58:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052192-004A	MW-42-065-Q322	8/18/2022 11:54:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052192-004B			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052192-004C			9/1/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

21-Aug-22

WorkOrder: N052192

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/18/2022 9:03 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052192-004D	MW-42-065-Q322	8/18/2022 11:54:00 AM	9/1/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052192-005A	MW-42-065-EB-Q322	8/18/2022 11:30:00 AM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052192-006A	EB-723-Q322	8/18/2022 12:58:00 PM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052192-007A	FOLDER	9/1/2022	9/1/2022		Folder	Folder	☐	☐	☐	LAB
			9/1/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/1/2022		Folder	Folder	☐	☐	☐	LAB

ASSET Laboratories
3151-3153 W Post Rd., Las Vegas, NV 89118
www.atl-labs.com
TEL: 7023072659 *FAX: 7023072691*

CHAIN-OF-CUSTODY RECORD

QC Level: Level IV

Subcontractor:

BC Labs
4100 Atlas Court
Bakersfield, CA 93308

TEL: (661) 327-4911
FAX: (661) 327-1918
Acct #:

Field Sampler: Riggie Tep

19-Aug-22

				Nitrate/Nitrite	Requested Tests	
Sample ID	**Matrix**	**Date Collected**	**Bottle Type**	~~**SM4500-NO3F**~~		
N052192-001E / MW-42-030-Q322	Groundwater	8/18/2022 12:35:00 PM	8OZP	1		

General Comments: PLEASE EMAIL SAMPLE RECEIPT ACKNOWLEDGEMENT TO THE PM. ALWAYS CC: sonny.lorenzo@assetlaboratories.com

Please use PO#:N52192A Please email Invoices and Account Receivable Statements to elvira@assetlaboratories.com. For questions, call Marlon at (702)-307-2659. Please e-mail results to reports.lv@assetlaboratories.com by: Standard TAT.

Please analyze for Nitrate/Nitrite. EDD requirement Labspec7 edata.

GSO #: 557585740

		Date/Time			Date/Time
Relinquished by:	Eilen Fanego	8/22/2022 1630	**Received by:**		
Relinquished by:			**Received by:**		

September 02, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052194

RE: PG&E Topock - RCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 18, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Dilution was necessary for sample N052194-001 due to matrix. Sample is colored.

Analytical Comments for EPA 300:

Dilution was necessary for sample N052194-001 due to matrix. Sample is colored.

ASSET Laboratories

Date: *02-Sep-22*

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab Order: N052194
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052194-001A	MW-67-185-Q322	Groundwater	8/18/2022 11:50:00 AM	8/18/2022	9/2/2022
N052194-001B	MW-67-185-Q322	Groundwater	8/18/2022 11:50:00 AM	8/18/2022	9/2/2022
N052194-001C	MW-67-185-Q322	Groundwater	8/18/2022 11:50:00 AM	8/18/2022	9/2/2022
N052194-002A	MW-68-180-Q322	Groundwater	8/18/2022 12:54:00 PM	8/18/2022	9/2/2022
N052194-002B	MW-68-180-Q322	Groundwater	8/18/2022 12:54:00 PM	8/18/2022	9/2/2022
N052194-002C	MW-68-180-Q322	Groundwater	8/18/2022 12:54:00 PM	8/18/2022	9/2/2022

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052194
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab ID: N052194-001

Client Sample ID: MW-67-185-Q322
Collection Date: 8/18/2022 11:50:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819B** QC Batch: **R164993**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	10	80		µg/L	400	8/19/2022 08:41 PM
DISSOLVED METALS BY ICP-MS							
		EPA 3010A	**EPA 6020**				
RunID: **NV00922-ICP8_220825D** QC Batch: **94421**				PrepDate:		**8/25/2022**	Analyst: **DJ**
Chromium	ND	0.18	5.0		µg/L	5	8/25/2022 11:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-68-180-Q322
Lab Order:	N052194	**Collection Date:**	8/18/2022 12:54:00 PM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052194-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220819B**	QC Batch: **R164993**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	28000	130	1000		µg/L	5000	8/19/2022 09:00 PM
DISSOLVED METALS BY ICP-MS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220826E**	QC Batch: **94421**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Chromium	31000	8.8	250		µg/L	250	8/26/2022 09:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052194
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **LCS-R164993** SampType: **LCS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **LCSW** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789269**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.026	0.20	5.000	0	101	90	110				

Sample ID: **MB-R164993** SampType: **MBLK** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **PBW** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789272**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **N052192-002AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **ZZZZZZ** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789274**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.977	0.20	1.000	0	97.7	90	110				

Sample ID: **N052192-002AMSD** SampType: **MSD** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **ZZZZZZ** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789275**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.977	0.20	1.000	0	97.7	90	110	0.9770	0.0205	20	

Sample ID: **N052192-001ADUP** SampType: **DUP** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **ZZZZZZ** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789277**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20						0	0	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052194
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052192-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **ZZZZZZ** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789278**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.957	0.20	1.000	0	95.7	90	110				

Sample ID: **N052192-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **ZZZZZZ** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789280**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.960	0.20	1.000	0	96.0	90	110				

Sample ID: **N052192-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **ZZZZZZ** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789282**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.972	0.20	1.000	0	97.2	90	110				

Sample ID: **N052192-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **ZZZZZZ** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789286**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.979	0.20	1.000	0	97.9	90	110				

Sample ID: **N052192-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **164993**
Client ID: **ZZZZZZ** Batch ID: **R164993** TestNo: **EPA 218.6** Analysis Date: **8/19/2022** SeqNo: **4789288**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.963	0.20	1.000	0	96.3	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052194
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052194-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164993**
Client ID: **ZZZZZZ**	Batch ID: **R164993**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789290**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	376.120	80	400.0	0	94.0	90	110				

Sample ID: **N052194-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **164993**
Client ID: **ZZZZZZ**	Batch ID: **R164993**	TestNo: **EPA 218.6**		Analysis Date: **8/19/2022**	SeqNo: **4789292**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	52364.000	1000	25000	27550	99.2	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052194
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020DIS_CrPGE_TPK

Sample ID: **MB-94421**	SampType: **MBLK**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165200**
Client ID: **PBW**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4803316**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									

Sample ID: **LCS-94421**	SampType: **LCS**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165200**
Client ID: **LCSW**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4803317**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10.350	1.0	10.00	0	104	85	115				

Sample ID: **N052261-001B-MS**	SampType: **MS**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165200**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803337**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10.890	1.0	10.00	0.09027	108	75	125				

Sample ID: **N052261-001B-MSD**	SampType: **MSD**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165200**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803340**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10.965	1.0	10.00	0.09027	109	75	125	10.89	0.687	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-67-185-Q322
Lab Order:	N052194	**Collection Date:**	8/18/2022 11:50:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052194-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220819A** QC Batch: **R164987**				PrepDate:			Analyst: **RAB**
Nitrate as N	23	3.8	20		mg/L	400	8/19/2022 10:47 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-68-180-Q322
Lab Order:	N052194	**Collection Date:**	8/18/2022 12:54:00 PM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052194-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220819A** QC Batch: **R164987** PrepDate: Analyst: **RAB**							
Nitrate as N	24	0.19	1.0		mg/L	20	8/19/2022 10:31 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052194
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R164987_NO3**	SampType: **MBLK**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **PBW**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789103**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R164987_NO3**	SampType: **LCS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **LCSW**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789104**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.244	0.050	1.250	0	99.5	90	110				

Sample ID: **N052192-001DMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **ZZZZZZ**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789110**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.063	0.25	6.250	0.1725	94.2	80	120				

Sample ID: **N052192-001DMSD**	SampType: **MSD**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **ZZZZZZ**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789111**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.224	0.25	6.250	0.1725	96.8	80	120	6.062	2.63	20	

Sample ID: **N052194-002BDUP**	SampType: **DUP**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **ZZZZZZ**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789112**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	23.954	1.0						23.99	0.150	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052194
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab ID: N052194-001

Client Sample ID: MW-67-185-Q322
Collection Date: 8/18/2022 11:50:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220825E**	QC Batch: **94421**			PrepDate:		**8/25/2022**	Analyst: **DJ**
Manganese	800	0.13	2.5		µg/L	5	8/25/2022 11:11 PM
Molybdenum	39	0.60	2.5		µg/L	5	8/25/2022 11:11 PM
Selenium	87	0.22	2.5		µg/L	5	8/25/2022 11:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-68-180-Q322
Lab Order:	N052194	**Collection Date:**	8/18/2022 12:54:00 PM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052194-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E** QC Batch: **94421**				PrepDate:	**8/25/2022**		Analyst: **DJ**
Molybdenum	64	0.60	2.5		µg/L	5	8/25/2022 11:23 PM
Selenium	28	0.22	2.5		µg/L	5	8/25/2022 11:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052194
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94421** SampType: **MBLK** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/25/2022** RunNo: **165202**
Client ID: **PBW** Batch ID: **94421** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/25/2022** SeqNo: **4803568**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	ND	0.50									
Molybdenum	ND	0.50									
Selenium	ND	0.50									

Sample ID: **LCS-94421** SampType: **LCS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/25/2022** RunNo: **165202**
Client ID: **LCSW** Batch ID: **94421** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/25/2022** SeqNo: **4803569**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	104.749	0.50	100.0	0	105	85	115				
Molybdenum	9.943	0.50	10.00	0	99.4	85	115				
Selenium	9.470	0.50	10.00	0	94.7	85	115				

Sample ID: **N052261-001B-MS** SampType: **MS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/25/2022** RunNo: **165202**
Client ID: **ZZZZZZ** Batch ID: **94421** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/26/2022** SeqNo: **4803589**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	14.930	0.50	10.00	4.330	106	75	125				
Selenium	9.964	0.50	10.00	0.04683	99.2	75	125				

Sample ID: **N052261-001B-MSD** SampType: **MSD** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/25/2022** RunNo: **165202**
Client ID: **ZZZZZZ** Batch ID: **94421** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/26/2022** SeqNo: **4803592**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	14.857	0.50	10.00	4.330	105	75	125	14.93	0.494	20	
Selenium	10.236	0.50	10.00	0.04683	102	75	125	9.964	2.69	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052194
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052261-001B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4804956**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	185.613	2.5	100.0	107.5	78.2	75	125				

Sample ID: **N052261-001B-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4804957**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	189.146	2.5	100.0	107.5	81.7	75	125	185.6	1.89	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ARCUS02 C: 9/1/2022 12:00 AM
FOLDER R: 8/18/2022
N052194-003A 1 of 1

ASSET LABORATORIES

ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Format
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	Excel EDD
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	Labspec
Submitted By: Nara Tay	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	Others ✓
Title: Project Manager			Specify: RWQCB
Signature: Date: 8/18/22	Sampled By: Nara Tay		Global ID:
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample, I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for		
Project Name: PG&E Topock - RCM	Signature: Date: 8/18/22		
Project Number: 30121866.3Q22GW			

RTNE		1. Chilled	✓
RWQCB	✓	2. Headspace	
CalTrans		3. Container Intact	✓
LEVEL III		4. Seal Present	✓
LEVEL IV		5. IR number	3
Regulatory		6. Method of Cooling: ICE	
Specify State:		Sample Temp: 3.9 C	

Courier: ASSET
Tracking No.:

Matrix			
Ground	X	Sediment	
Potable		Soil	
NPDES		Other Solid	
Surface			

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Manganese, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Selenium (500mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052194-01	MW-67-185-Q322	8/18/2022	11:50		X	X	X	X	X	X	E	3	P	BNS	
2	-02	MW-68-180-Q322	8/18/2022	12:54		X	X		X	X	X	E	3	P	BNS	
3																
4																
5																
7																
8																
9																
10																
11																
12																
13																
14																

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Nara Tay	8/18/22 1820	Dan Bush	8/18/22 18:20
Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Dan Bush	8/18/22 21:05	Dan Bush	8/18/22 21:05 Dan Bush
Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/18/2022	Workorder:	N052194
Rep sample Temp (Deg C):	3.4	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: YR YRJ 8/19/2022

Reviewed By: for MBC 8/19/2022

ASSET Laboratories

WORK ORDER Summary

19-Aug-22

WorkOrder: N052194

Client ID: ARCUS02

Project: PG&E Topock - RCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/18/2022 9:03 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052194-001A	MW-67-185-Q322	8/18/2022 11:50:00 AM	9/1/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052194-001B			9/1/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052194-001C			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052194-002A	MW-68-180-Q322	8/18/2022 12:54:00 PM	9/1/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052194-002B			9/1/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052194-002C			9/1/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			9/1/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052194-003A	FOLDER	9/1/2022	9/1/2022		Folder	Folder	☐	☐	☐	LAB
			9/1/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/1/2022		Folder	Folder	☐	☐	☐	LAB

September 06, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052214

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 19, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052214

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Subcontracted Analyses:

Nitrate/Nitrite was subcontracted to BC Labs - Bakersfield, CA.

Analytical Comments for EPA 218.6:

Dilution was necessary for samples N052214-001 and N052214-002 due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for EPA 6020:

Matrix Spike Duplicate (MSD) is outside recovery criteria for Barium in QC sample N052261-001B-MSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052214
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052214-001A	MW-90-031-Q322	Groundwater	8/19/2022 7:41:00 AM	8/19/2022	9/6/2022
N052214-001B	MW-90-031-Q322	Groundwater	8/19/2022 7:41:00 AM	8/19/2022	9/6/2022
N052214-001C	MW-90-031-Q322	Groundwater	8/19/2022 7:41:00 AM	8/19/2022	9/6/2022
N052214-001D	MW-90-031-Q322	Groundwater	8/19/2022 7:41:00 AM	8/19/2022	9/6/2022
N052214-001E	MW-90-031-Q322	Groundwater	8/19/2022 7:41:00 AM	8/19/2022	9/6/2022
N052214-002A	MW-22-Q322	Groundwater	8/19/2022 7:15:00 AM	8/19/2022	9/6/2022
N052214-002B	MW-22-Q322	Groundwater	8/19/2022 7:15:00 AM	8/19/2022	9/6/2022
N052214-002C	MW-22-Q322	Groundwater	8/19/2022 7:15:00 AM	8/19/2022	9/6/2022
N052214-002D	MW-22-Q322	Groundwater	8/19/2022 7:15:00 AM	8/19/2022	9/6/2022
N052214-002E	MW-22-Q322	Groundwater	8/19/2022 7:15:00 AM	8/19/2022	9/6/2022
N052214-003A	MW-32-020-Q322	Groundwater	8/19/2022 8:04:00 AM	8/19/2022	9/6/2022
N052214-003B	MW-32-020-Q322	Groundwater	8/19/2022 8:04:00 AM	8/19/2022	9/6/2022
N052214-003C	MW-32-020-Q322	Groundwater	8/19/2022 8:04:00 AM	8/19/2022	9/6/2022
N052214-003D	MW-32-020-Q322	Groundwater	8/19/2022 8:04:00 AM	8/19/2022	9/6/2022
N052214-004A	MW-32-020-EB-Q322	Groundwater	8/19/2022 7:45:00 AM	8/19/2022	9/6/2022
N052214-005A	MW-32-035-Q322	Groundwater	8/19/2022 8:34:00 AM	8/19/2022	9/6/2022
N052214-005B	MW-32-035-Q322	Groundwater	8/19/2022 8:34:00 AM	8/19/2022	9/6/2022
N052214-005C	MW-32-035-Q322	Groundwater	8/19/2022 8:34:00 AM	8/19/2022	9/6/2022
N052214-005D	MW-32-035-Q322	Groundwater	8/19/2022 8:34:00 AM	8/19/2022	9/6/2022
N052214-005E	MW-32-035-Q322	Groundwater	8/19/2022 8:34:00 AM	8/19/2022	9/6/2022
N052214-006A	EB-724-Q322	Groundwater	8/19/2022 8:40:00 AM	8/19/2022	9/6/2022
N052214-007A	MW-32-035-EB-Q322	Groundwater	8/19/2022 8:13:00 AM	8/19/2022	9/6/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-90-031-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 7:41:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220822A**	QC Batch: **R165063**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/22/2022 02:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-22-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 7:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220822A**	QC Batch: **R165063**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/22/2022 03:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-32-020-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 8:04:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220822A**	QC Batch: **R165063**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/22/2022 02:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-32-020-EB-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 7:45:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220822A**	QC Batch: **R165063**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/22/2022 03:29 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-32-035-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 8:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220822A**	QC Batch: **R165063**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/22/2022 01:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-724-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 8:40:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220822A**	QC Batch: **R165063**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/22/2022 03:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-32-035-EB-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 8:13:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220822A**	QC Batch: **R165063**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/22/2022 04:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052214
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R165063**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165063**
Client ID: **PBW**	Batch ID: **R165063**	TestNo: **EPA 218.6**		Analysis Date: **8/22/2022**	SeqNo: **4795000**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R165063**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165063**
Client ID: **LCSW**	Batch ID: **R165063**	TestNo: **EPA 218.6**		Analysis Date: **8/22/2022**	SeqNo: **4795001**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.913	0.20	5.000	0	98.3	90	110				

Sample ID: **N052214-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165063**
Client ID: **ZZZZZZ**	Batch ID: **R165063**	TestNo: **EPA 218.6**		Analysis Date: **8/22/2022**	SeqNo: **4795003**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.970	0.20	1.000	0	97.0	90	110				

Sample ID: **N052214-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165063**
Client ID: **ZZZZZZ**	Batch ID: **R165063**	TestNo: **EPA 218.6**		Analysis Date: **8/22/2022**	SeqNo: **4795005**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.652	1.0	5.000	0	93.0	90	110				

Sample ID: **N052214-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165063**
Client ID: **ZZZZZZ**	Batch ID: **R165063**	TestNo: **EPA 218.6**		Analysis Date: **8/22/2022**	SeqNo: **4795009**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.796	1.0	5.000	0	95.9	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052214
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052214-002AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165063**
Client ID: **ZZZZZZ** Batch ID: **R165063** TestNo: **EPA 218.6** Analysis Date: **8/22/2022** SeqNo: **4795011**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.728	1.0	5.000	0	94.6	90	110				

Sample ID: **N052214-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165063**
Client ID: **ZZZZZZ** Batch ID: **R165063** TestNo: **EPA 218.6** Analysis Date: **8/22/2022** SeqNo: **4795013**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.994	0.20	1.000	0	99.4	90	110				

Sample ID: **N052214-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165063**
Client ID: **ZZZZZZ** Batch ID: **R165063** TestNo: **EPA 218.6** Analysis Date: **8/22/2022** SeqNo: **4795015**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.000	0.20	1.000	0	100	90	110				

Sample ID: **N052214-007AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165063**
Client ID: **ZZZZZZ** Batch ID: **R165063** TestNo: **EPA 218.6** Analysis Date: **8/22/2022** SeqNo: **4795019**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.081	0.20	1.000	0	108	90	110				

Sample ID: **N052214-002AMSD** SampType: **MSD** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165063**
Client ID: **ZZZZZZ** Batch ID: **R165063** TestNo: **EPA 218.6** Analysis Date: **8/22/2022** SeqNo: **4795020**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.735	1.0	5.000	0	94.7	90	110	4.728	0.148	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052214
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052217-001ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165063**
Client ID: **ZZZZZZ**	Batch ID: **R165063**	TestNo: **EPA 218.6**		Analysis Date: **8/22/2022**	SeqNo: **4795022**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	21.615	1.0						21.07	2.56	20	

Sample ID: **N052225-001BMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165063**
Client ID: **ZZZZZZ**	Batch ID: **R165063**	TestNo: **EPA 218.6**		Analysis Date: **8/22/2022**	SeqNo: **4795024**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2674.760	40	1000	1675	100	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-90-031-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 7:41:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220819A** QC Batch: **R164987** PrepDate: Analyst: **RAB**							
Nitrate as N	ND	0.095	0.50		mg/L	10	8/19/2022 05:39 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-22-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 7:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220819A**	QC Batch: **R164987**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/19/2022 05:55 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-32-020-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 8:04:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220819A**	QC Batch: **R164987**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/19/2022 06:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-32-035-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 8:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220819A**	QC Batch: **R164987**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/19/2022 06:26 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052214
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R164987_NO3**	SampType: **MBLK**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **PBW**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789103**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R164987_NO3**	SampType: **LCS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **LCSW**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789104**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.244	0.050	1.250	0	99.5	90	110				

Sample ID: **N052192-001DMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **ZZZZZZ**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789110**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.063	0.25	6.250	0.1725	94.2	80	120				

Sample ID: **N052192-001DMSD**	SampType: **MSD**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **ZZZZZZ**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789111**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.224	0.25	6.250	0.1725	96.8	80	120	6.062	2.63	20	

Sample ID: **N052194-002BDUP**	SampType: **DUP**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **164987**
Client ID: **ZZZZZZ**	Batch ID: **R164987**	TestNo: **EPA 300.0**		Analysis Date: **8/19/2022**	SeqNo: **4789112**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	23.954	1.0						23.99	0.150	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-90-031-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 7:41:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220819A**	QC Batch: **R164991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	2.2	0.14	1.0		mg/L	1	8/19/2022 05:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-22-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 7:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220819A**	QC Batch: **R164991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.3	0.14	1.0		mg/L	1	8/19/2022 06:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-32-020-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 8:04:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220823A**	QC Batch: **R165080**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	8.2	0.68	5.0		mg/L	5	8/23/2022 12:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-32-035-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 8:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220819A**	QC Batch: **R164991**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.8	0.14	1.0		mg/L	1	8/19/2022 06:32 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052214
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R164991**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164991**
Client ID: **PBW**	Batch ID: **R164991**	TestNo: **SM 5310C**		Analysis Date: **8/19/2022**	SeqNo: **4790078**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R164991**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164991**
Client ID: **LCSW**	Batch ID: **R164991**	TestNo: **SM 5310C**		Analysis Date: **8/19/2022**	SeqNo: **4790079**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.004	1.0	5.000	0	100	85	115				

Sample ID: **N052192-001CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164991**
Client ID: **ZZZZZZ**	Batch ID: **R164991**	TestNo: **SM 5310C**		Analysis Date: **8/19/2022**	SeqNo: **4790090**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	29.460	5.0	25.00	4.016	102	75	125				

Sample ID: **N052192-001CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **164991**
Client ID: **ZZZZZZ**	Batch ID: **R164991**	TestNo: **SM 5310C**		Analysis Date: **8/19/2022**	SeqNo: **4790091**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	29.502	5.0	25.00	4.016	102	75	125	29.46	0.142	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052214
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R165080**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165080**
Client ID: **PBW**	Batch ID: **R165080**	TestNo: **SM 5310C**		Analysis Date: **8/23/2022**	SeqNo: **4796121**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R165080**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165080**
Client ID: **LCSW**	Batch ID: **R165080**	TestNo: **SM 5310C**		Analysis Date: **8/23/2022**	SeqNo: **4796122**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	4.993	1.0	5.000	0	99.9	85	115				

Sample ID: **N052246-008CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165080**
Client ID: **ZZZZZZ**	Batch ID: **R165080**	TestNo: **SM 5310C**		Analysis Date: **8/23/2022**	SeqNo: **4796127**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	34.234	5.0	25.00	11.87	89.5	75	125				

Sample ID: **N052246-008CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165080**
Client ID: **ZZZZZZ**	Batch ID: **R165080**	TestNo: **SM 5310C**		Analysis Date: **8/23/2022**	SeqNo: **4796131**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	34.371	5.0	25.00	11.87	90.0	75	125	34.23	0.399	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-90-031-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 7:41:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94362**			PrepDate:	**8/22/2022**		Analyst: **DJ**
Iron	7800	13	20		µg/L	1	8/28/2022 12:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-22-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 7:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94362**			PrepDate:		**8/22/2022**	Analyst: **DJ**
Iron	16000	13	20		µg/L	1	8/28/2022 12:29 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052214
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052214-003

Client Sample ID: MW-32-020-Q322
Collection Date: 8/19/2022 8:04:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94362**				PrepDate:	**8/22/2022**	Analyst: **DJ**
Iron	3600	13	20		µg/L	1	8/28/2022 12:34 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-32-035-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 8:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94362**			PrepDate:		**8/22/2022**	Analyst: **DJ**
Iron	10000	13	20		µg/L	1	8/28/2022 12:39 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052214
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94362**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165203**
Client ID: **PBW**	Batch ID: **94362**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803685**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-94362**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165203**
Client ID: **LCSW**	Batch ID: **94362**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803686**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	97.982	20	100.0	0	98.0	85	115				

Sample ID: **N052126-001B-MS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165203**
Client ID: **ZZZZZZ**	Batch ID: **94362**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803690**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	97.277	20	100.0	0	97.3	75	125				

Sample ID: **N052126-001B-MSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/22/2022**	RunNo: **165203**
Client ID: **ZZZZZZ**	Batch ID: **94362**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803695**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	112.701	20	100.0	0	113	75	125	97.28	14.7	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-90-031-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 7:41:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E**	QC Batch: **94421**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/25/2022 11:35 PM
Barium	110	0.083	1.0		µg/L	1	8/25/2022 11:35 PM
Manganese	63	0.026	0.50		µg/L	1	8/25/2022 11:41 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052214
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052214-002

Client Sample ID: MW-22-Q322
Collection Date: 8/19/2022 7:15:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220826F**	QC Batch: **94421**			PrepDate:		**8/25/2022**	Analyst: **DJ**
Arsenic	14	0.050	0.10		µg/L	1	8/26/2022 09:26 PM
Barium	150	0.083	1.0		µg/L	1	8/25/2022 11:47 PM
Manganese	5300	3.3	62		µg/L	125	8/26/2022 09:32 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-32-020-Q322
Lab Order:	N052214	**Collection Date:**	8/19/2022 8:04:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052214-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E** QC Batch: **94421**				PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	2.6	0.050	0.10		µg/L	1	8/26/2022 12:22 AM
Barium	120	0.083	1.0		µg/L	1	8/26/2022 12:22 AM
Manganese	280	0.13	2.5		µg/L	5	8/26/2022 12:29 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052214
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052214-005

Client Sample ID: MW-32-035-Q322
Collection Date: 8/19/2022 8:34:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220825E**	QC Batch: **94421**			PrepDate:		**8/25/2022**	Analyst: **DJ**
Arsenic	17	0.050	0.10		µg/L	1	8/26/2022 12:34 AM
Barium	260	0.42	5.0		µg/L	5	9/4/2022 07:32 PM
Manganese	770	0.13	2.5		µg/L	5	8/26/2022 09:38 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052214
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94421**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **PBW**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4803568**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID: **LCS-94421**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **LCSW**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4803569**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.213	0.10	10.00	0	102	85	115				
Barium	10.416	1.0	10.00	0	104	85	115				
Manganese	104.749	0.50	100.0	0	105	85	115				

Sample ID: **N052261-001B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803589**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.700	0.10	10.00	3.352	103	75	125				
Barium	37.857	1.0	10.00	29.94	79.2	75	125				

Sample ID: **N052261-001B-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803592**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.699	0.10	10.00	3.352	103	75	125	13.70	0.00515	20	
Barium	36.755	1.0	10.00	29.94	68.2	75	125	37.86	2.95	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052214
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052261-001B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4804956**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	185.613	2.5	100.0	107.5	78.2	75	125				

Sample ID: **N052261-001B-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4804957**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	189.146	2.5	100.0	107.5	81.7	75	125	185.6	1.89	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052214
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052261-001B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803588**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.563	0.10	10.00	3.352	102	80	120				
Barium	37.573	1.0	10.00	29.94	76.4	80	120				S

Sample ID: **N052261-001B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4804955**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	190.684	2.5	100.0	107.5	83.2	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement		QA/QC		Sample Receipt Condition	Y	N
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	Excel EDD		RTNE		1. Chilled	1	
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker		RWQCB	✓	2. Headspace		
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	Labspec		CalTrans		3. Container Intact	1	
Submitted By: Riggie Top			Others	✓	LEVEL III		4. Seal Present		1
Title: Field Tech	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	Specify: RWQCB		LEVEL IV		5. IR number	3	
Signature: Date: 8/19/22	Sampled By: Riggie Top		Global ID:		Regulatory		6. Method of Cooling: ICE		
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for				Specify State:		Sample Temp: 5.2 c		
Project Name: PG&E Topock - PCM	Signature: Date: 8/19/22	Matrix: Ground X, Sediment; Potable, Soil; NPDES, Other Solid; Surface					Courier: ASSET		
Project Number: 30121866.3Q22GW							Tracking No.:		

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate (EPA 300.0) (1 L poly)	Nitrate/nitrite as Nitrogen (SM 4500-NO3); H2SO4 (125 mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052214-01	MW-90-031-Q322	8/19/2022	7:41		X		X			X			X	X	E	7	P	BNS	
2	-02	MW-22-Q322	8/19/2022	7:15		X		X			X			X	X	E	7	P	BNS	
3	-03	MW-32-020-Q322	8/19/2022	8:04		X		X			X			X		E	6	P	BNS	
4	-04	MW-32-020-EB-Q322	8/19/2022	7:45		X										E	1	P	BNS	
5	-05	MW-32-035-Q322	8/19/2022	8:34		X		X			X			X	X	E	7	P	BNS	
6	-06	EB-724-Q322	8/19/2022	8:40		X										E	1	P	BNS	
7	-07	MW-32-035-EB-Q322	8/19/2022	8:13		X										E	1	P	BNS	
8																				
9																				
10																				
11																				
12																				
13																				
14																				

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Riggie Top	8/19/22 1203	MSCARTIN	8/19/22 1203
Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
MSCARTIN	8/19/22 1621	Ruben Fanega	8/19/22 1621
Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:

Turn Around Time (TAT)

	A	< 24 Hrs or Same Day TAT
	B	= Next Workday
	C	= 2 Workdays
	D	= 3 Workdays
X	E	= Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis.
Less than 24 Hrs =200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/19/2022	Workorder:	N052214
Rep sample Temp (Deg C):	5.2	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: EF EFanegoF 8/19/2022

Reviewed By: for: MBC 8/24/2022

ASSET Laboratories

WORK ORDER Summary

24-Aug-22

WorkOrder: N052214

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/19/2022 4:21 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052214-001A	MW-90-031-Q322	8/19/2022 7:41:00 AM	9/2/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052214-001B			9/2/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/2/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/2/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/2/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052214-001C			9/2/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052214-001D			9/2/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052214-001E			9/2/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052214-002A	MW-22-Q322	8/19/2022 7:15:00 AM	9/2/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052214-002B			9/2/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/2/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/2/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/2/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052214-002C			9/2/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052214-002D			9/2/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052214-002E			9/2/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052214-003A	MW-32-020-Q322	8/19/2022 8:04:00 AM	9/2/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052214-003B			9/2/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/2/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/2/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/2/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

24-Aug-22

WorkOrder: N052214

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/19/2022 4:21 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052214-003C	MW-32-020-Q322	8/19/2022 8:04:00 AM	9/2/2022	Groundwater	SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052214-003D			9/2/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052214-004A	MW-32-020-EB-Q322	8/19/2022 7:45:00 AM	9/2/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052214-005A	MW-32-035-Q322	8/19/2022 8:34:00 AM	9/2/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052214-005B			9/2/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/2/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/2/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/2/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052214-005C			9/2/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052214-005D			9/2/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052214-005E			9/2/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052214-006A	EB-724-Q322	8/19/2022 8:40:00 AM	9/2/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052214-007A	MW-32-035-EB-Q322	8/19/2022 8:13:00 AM	9/2/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052214-008A	FOLDER	9/2/2022	9/2/2022		Folder	Folder	☐	☐	☐	LAB
			9/2/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/2/2022		Folder	Folder	☐	☐	☐	LAB

ASSET Laboratories
3151-3153 W Post Rd., Las Vegas, NV 89118
www.atl-labs.com
TEL: 7023072659 *FAX: 7023072691*

CHAIN-OF-CUSTODY RECORD

QC Level: Level IV

Subcontractor:

BC Labs
4100 Atlas Court
Bakersfield, CA 93308

TEL: (661) 327-4911
FAX: (661) 327-1918
Acct #:

Field Sampler: Riggie Tep

22-Aug-22

				Nitrate/Nitrite	Requested Tests	
Sample ID	**Matrix**	**Date Collected**	**Bottle Type**	~~SM4500-NO3F~~		
N052214-001E / MW-90-031-Q322	Groundwater	8/19/2022 7:41:00 AM	8OZP	1		
N052214-002E / MW-22-Q322	Groundwater	8/19/2022 7:15:00 AM	8OZP	1		
N052214-005E / MW-32-035-Q322	Groundwater	8/19/2022 8:34:00 AM	8OZP	1		

General Comments: PLEASE EMAIL SAMPLE RECEIPT ACKNOWLEDGEMENT TO THE PM. ALWAYS CC: sonny.lorenzo@assetlaboratories.com

Please use PO#:N52214A Please email Invoices and Account Receivable Statements to elvira@assetlaboratories.com. For questions, call Marlon at (702)-307-2659. Please e-mail results to reports.lv@assetlaboratories.com by: Standard TAT

Please analyze for Nitrate/Nitrite. EDD requirement Labspec7 edata.

GSO #: 557585740

		Date/Time			Date/Time
Relinquished by:	YRJ	8/22/2022 16:30	**Received by:**		
Relinquished by:			**Received by:**		

September 07, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052246

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 22, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052246

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Dilution was necessary for some samples due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of sample upon the addition of eluent.

Analytical Comments for SM 5310C:

Matrix Spike (MS) is outside recovery criteria in QC sample N052246-008CMS at 1x dilution possibly due to matrix interference. QC samples were diluted and recovery passed criteria. Thus sample reference N052246-008 and MS/MSD were reported at 5x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6010B:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Iron in QC samples N052262-011BMS and N052262-011BMSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020:

Matrix Spike Duplicate (MSD) is outside recovery criteria for Barium in QC sample N052261-001B-MSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052246
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052246-001A	MW-97-042-Q322	Groundwater	8/22/2022 1:38:00 PM	8/22/2022	9/7/2022
N052246-002A	MW-97-202-Q322	Groundwater	8/22/2022 12:52:00 PM	8/22/2022	9/7/2022
N052246-003A	TW-04-Q322	Groundwater	8/22/2022 2:20:00 PM	8/22/2022	9/7/2022
N052246-004A	EB-725-Q322	Groundwater	8/22/2022 1:20:00 PM	8/22/2022	9/7/2022
N052246-005A	MW-35-060-Q322	Groundwater	8/22/2022 11:56:00 AM	8/22/2022	9/7/2022
N052246-006A	MW-913-Q322	Groundwater	8/22/2022 12:06:00 PM	8/22/2022	9/7/2022
N052246-007A	MW-35-135-Q322	Groundwater	8/22/2022 12:36:00 PM	8/22/2022	9/7/2022
N052246-008A	MW-30-030-Q322	Groundwater	8/22/2022 1:13:00 PM	8/22/2022	9/7/2022
N052246-008B	MW-30-030-Q322	Groundwater	8/22/2022 1:13:00 PM	8/22/2022	9/7/2022
N052246-008C	MW-30-030-Q322	Groundwater	8/22/2022 1:13:00 PM	8/22/2022	9/7/2022
N052246-008D	MW-30-030-Q322	Groundwater	8/22/2022 1:13:00 PM	8/22/2022	9/7/2022
N052246-009A	MW-30-030-EB-Q322	Groundwater	8/22/2022 12:55:00 PM	8/22/2022	9/7/2022
N052246-010A	EB-726-Q322	Groundwater	8/22/2022 2:30:00 PM	8/22/2022	9/7/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-97-042-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 1:38:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220823A**	QC Batch: **R165071**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	21	0.13	1.0		µg/L	5	8/23/2022 12:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-97-202-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 12:52:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220823A**	QC Batch: **R165071**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/23/2022 01:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-04-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 2:20:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220823A** QC Batch: **R165071**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	12	0.13	1.0		µg/L	5	8/23/2022 01:36 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-725-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 1:20:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220823A**	QC Batch: **R165071**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/23/2022 03:21 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-35-060-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 11:56:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220823A** QC Batch: **R165071** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	20	0.13	1.0		µg/L	5	8/23/2022 12:21 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-913-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 12:06:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220823A**	QC Batch: **R165071**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	20	0.13	1.0		µg/L	5	8/23/2022 12:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-35-135-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 12:36:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220823A**	QC Batch: **R165071**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	27	0.13	1.0		µg/L	5	8/23/2022 12:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-030-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 1:13:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220823A**	QC Batch: **R165071**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/23/2022 01:55 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-030-EB-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 12:55:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220823A**	QC Batch: **R165071**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/23/2022 03:39 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-726-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 2:30:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220823A**	QC Batch: **R165071**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/23/2022 04:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052246
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R165071**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165071**
Client ID: **PBW**	Batch ID: **R165071**	TestNo: **EPA 218.6**		Analysis Date: **8/23/2022**	SeqNo: **4795626**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R165071**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165071**
Client ID: **LCSW**	Batch ID: **R165071**	TestNo: **EPA 218.6**		Analysis Date: **8/23/2022**	SeqNo: **4795627**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.940	0.20	5.000	0	98.8	90	110				

Sample ID: **N052246-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165071**
Client ID: **ZZZZZZ**	Batch ID: **R165071**	TestNo: **EPA 218.6**		Analysis Date: **8/23/2022**	SeqNo: **4795635**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.190	1.0	5.000	0	104	90	110				

Sample ID: **N052246-002AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165071**
Client ID: **ZZZZZZ**	Batch ID: **R165071**	TestNo: **EPA 218.6**		Analysis Date: **8/23/2022**	SeqNo: **4795636**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.085	1.0	5.000	0	102	90	110	5.190	2.03	20	

Sample ID: **N052246-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165071**
Client ID: **ZZZZZZ**	Batch ID: **R165071**	TestNo: **EPA 218.6**		Analysis Date: **8/23/2022**	SeqNo: **4795638**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	17.263	1.0	5.000	11.95	106	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052246
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052246-008AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165071**
Client ID: **ZZZZZZ** Batch ID: **R165071** TestNo: **EPA 218.6** Analysis Date: **8/23/2022** SeqNo: **4795640**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.856	1.0	5.000	0	97.1	90	110				

Sample ID: **N052246-001ADUP** SampType: **DUP** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165071**
Client ID: **ZZZZZZ** Batch ID: **R165071** TestNo: **EPA 218.6** Analysis Date: **8/23/2022** SeqNo: **4795641**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	21.258	1.0						20.84	2.00	20	

Sample ID: **N052246-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165071**
Client ID: **ZZZZZZ** Batch ID: **R165071** TestNo: **EPA 218.6** Analysis Date: **8/23/2022** SeqNo: **4795642**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	46.117	1.0	25.00	20.84	101	90	110				

Sample ID: **N052246-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165071**
Client ID: **ZZZZZZ** Batch ID: **R165071** TestNo: **EPA 218.6** Analysis Date: **8/23/2022** SeqNo: **4795643**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	44.909	1.0	25.00	19.95	99.8	90	110				

Sample ID: **N052246-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165071**
Client ID: **ZZZZZZ** Batch ID: **R165071** TestNo: **EPA 218.6** Analysis Date: **8/23/2022** SeqNo: **4795646**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	45.237	1.0	25.00	19.64	102	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052246
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052246-007AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165071**
Client ID: **ZZZZZZ** Batch ID: **R165071** TestNo: **EPA 218.6** Analysis Date: **8/23/2022** SeqNo: **4795647**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	52.909	1.0	25.00	26.67	105	90	110				

Sample ID: **N052246-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165071**
Client ID: **ZZZZZZ** Batch ID: **R165071** TestNo: **EPA 218.6** Analysis Date: **8/23/2022** SeqNo: **4795649**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.989	0.20	1.000	0	98.9	90	110				

Sample ID: **N052246-009AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165071**
Client ID: **ZZZZZZ** Batch ID: **R165071** TestNo: **EPA 218.6** Analysis Date: **8/23/2022** SeqNo: **4795651**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.011	0.20	1.000	0	101	90	110				

Sample ID: **N052246-010AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165071**
Client ID: **ZZZZZZ** Batch ID: **R165071** TestNo: **EPA 218.6** Analysis Date: **8/23/2022** SeqNo: **4795654**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.994	0.20	1.000	0	99.4	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-030-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 1:13:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220823A**	QC Batch: **R165067**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/23/2022 11:28 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052246
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R165067_NO3**	SampType: **MBLK**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165067**
Client ID: **PBW**	Batch ID: **R165067**	TestNo: **EPA 300.0**		Analysis Date: **8/23/2022**	SeqNo: **4795533**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R165067_NO3**	SampType: **LCS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165067**
Client ID: **LCSW**	Batch ID: **R165067**	TestNo: **EPA 300.0**		Analysis Date: **8/23/2022**	SeqNo: **4795534**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.205	0.050	1.250	0	96.4	90	110				

Sample ID: **N052246-008DDUP**	SampType: **DUP**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165067**
Client ID: **ZZZZZZ**	Batch ID: **R165067**	TestNo: **EPA 300.0**		Analysis Date: **8/23/2022**	SeqNo: **4795536**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	0.276	0.50						0.2890	0	20	

Sample ID: **N052246-008DMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165067**
Client ID: **ZZZZZZ**	Batch ID: **R165067**	TestNo: **EPA 300.0**		Analysis Date: **8/23/2022**	SeqNo: **4795537**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.029	0.50	12.50	0.2890	93.9	80	120				

Sample ID: **N052246-008DMSD**	SampType: **MSD**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165067**
Client ID: **ZZZZZZ**	Batch ID: **R165067**	TestNo: **EPA 300.0**		Analysis Date: **8/23/2022**	SeqNo: **4795538**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.153	0.50	12.50	0.2890	94.9	80	120	12.03	1.03	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-030-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 1:13:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220823A**	QC Batch: **R165080**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	12	0.68	5.0		mg/L	5	8/23/2022 12:18 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052246
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R165080**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165080**
Client ID: **PBW**	Batch ID: **R165080**	TestNo: **SM 5310C**		Analysis Date: **8/23/2022**	SeqNo: **4796121**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R165080**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165080**
Client ID: **LCSW**	Batch ID: **R165080**	TestNo: **SM 5310C**		Analysis Date: **8/23/2022**	SeqNo: **4796122**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	4.993	1.0	5.000	0	99.9	85	115				

Sample ID: **N052246-008CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165080**
Client ID: **ZZZZZZ**	Batch ID: **R165080**	TestNo: **SM 5310C**		Analysis Date: **8/23/2022**	SeqNo: **4796127**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	34.234	5.0	25.00	11.87	89.5	75	125				

Sample ID: **N052246-008CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165080**
Client ID: **ZZZZZZ**	Batch ID: **R165080**	TestNo: **SM 5310C**		Analysis Date: **8/23/2022**	SeqNo: **4796131**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	34.371	5.0	25.00	11.87	90.0	75	125	34.23	0.399	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-030-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 1:13:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	370	13	20		µg/L	1	8/28/2022 12:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052246
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94418**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165203**
Client ID: **PBW**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803709**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-94418**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165203**
Client ID: **LCSW**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803710**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	100.086	20	100.0	0	100	85	115				

Sample ID: **N052262-011BMS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165476**
Client ID: **ZZZZZZ**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/7/2022**	SeqNo: **4820442**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	92.846	20	100.0	42.21	50.6	75	125				S

Sample ID: **N052262-011BMSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165476**
Client ID: **ZZZZZZ**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/7/2022**	SeqNo: **4820443**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	92.672	20	100.0	42.21	50.5	75	125	92.85	0.188	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052246
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **N052262-011B-PS** SampType: **PS** TestCode: **6010_WDPGE** Units: **µg/L** Prep Date: RunNo: **165476**
Client ID: **ZZZZZZ** Batch ID: **94418** TestNo: **EPA 6010B** **EPA 3010A** Analysis Date: **9/7/2022** SeqNo: **4820441**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	91.979	20	100.0	42.21	49.8	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-030-Q322
Lab Order:	N052246	**Collection Date:**	8/22/2022 1:13:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052246-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220825E**	QC Batch: **94421**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 12:41 AM
Barium	240	0.42	5.0		µg/L	5	8/26/2022 12:46 AM
Manganese	110	0.026	0.50		µg/L	1	8/26/2022 12:41 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052246
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94421**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **PBW**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4803568**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID: **LCS-94421**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **LCSW**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4803569**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.213	0.10	10.00	0	102	85	115				
Barium	10.416	1.0	10.00	0	104	85	115				
Manganese	104.749	0.50	100.0	0	105	85	115				

Sample ID: **N052261-001B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803589**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.700	0.10	10.00	3.352	103	75	125				
Barium	37.857	1.0	10.00	29.94	79.2	75	125				

Sample ID: **N052261-001B-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803592**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.699	0.10	10.00	3.352	103	75	125	13.70	0.00515	20	
Barium	36.755	1.0	10.00	29.94	68.2	75	125	37.86	2.95	20	S

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052246
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052261-001B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4804956**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	185.613	2.5	100.0	107.5	78.2	75	125				

Sample ID: **N052261-001B-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4804957**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	189.146	2.5	100.0	107.5	81.7	75	125	185.6	1.89	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052246
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052261-001B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803588**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.563	0.10	10.00	3.352	102	80	120				
Barium	37.573	1.0	10.00	29.94	76.4	80	120				S

Sample ID: **N052261-001B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4804955**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	190.684	2.5	100.0	107.5	83.2	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ARCUS02 C: 9/5/2022 12:00 AM
FOLDER R: 8/22/2022
N052246-011A 1 of 1

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement		QA/QC		Sample Receipt Condition	Y	N
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	Excel EDD		RTNE		1. Chilled	X	
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker		RWQCB	✓	2. Headspace		
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	Labspec		CalTrans		3. Container Intact	X	
Submitted By: Russie Tap		Phone: 949-727-1400, ext 200 Fax:	Others	✓	LEVEL III		4. Seal Present		
Title: Field Tech	Phone: 916-786-3302 Fax:		Specify: RWQCB		LEVEL IV		5. IR number 3		
Signature: Date: 8/22/22	Sampled By: Russie Tap		Global ID:		Regulatory		6. Method of Cooling: ICE		
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for				Specify State:		Sample Temp: 1.2°C		
Project Name: PG&E Topock - PCM	Signature: Date: 8/22/22						Courier: ASSET		
Project Number: 30121866.3Q22GW							Tracking No.:		

Matrix: Ground X; Potable; NPDES; Surface; Sediment; Soil; Other Solid

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate (EPA 300.0) (1 L poly)	Nitrate/nitrite as Nitrogen (SM 4500-NO3); H2SO4 (125 mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052246-01	MW-97-042-Q322	8/22/2022	13:38		X										E	1	P	BNS	
2	-02	MW-97-202-Q322	8/22/2022	12:52		X										E	1	P	BNS	MS/MSD
3	-03	TW-04-Q322	8/22/2022	14:20		X										E	1	P	BNS	
4	-04	EB-725-Q322	8/22/2022	13:20		X										E	1	P	BNS	
5	-05	MW-35-060-Q322	8/22/2022	11:56		X										E	1	P	BNS	
6	-06	MW-913-Q322	8/22/2022	12:06		X										E	1	P	BNS	
7	-07	MW-35-135-Q322	8/22/2022	12:36		X										E	1	P	BNS	
8	-08	MW-30-030-Q322	8/22/2022	13:13		X		X			X			X		E	6	P	BNS	
9	-09	MW-30-030-EB-Q322	8/22/2022	12:55		X										E	1	P	BNS	
10	-10	EB-726-Q322	8/22/2022	14:30		X										E	1	P	BNS	
11																				
12																				
13																				
14																				

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Russie Tap	8/22/22	MSCHERTIN	8/22/22 @ 1630
REL/REC: MSCHERTIN			8/22/22 @ 1935

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
   Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/22/2022	Workorder:	N052246
Rep sample Temp (Deg C):	1.2	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For:

Checklist Completed By: MBC EFanegoF 8/23/2022

Reviewed By: for: MBC 8/25/2022

ASSET Laboratories

WORK ORDER Summary

25-Aug-22

WorkOrder: N052246

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/22/2022 7:35 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052246-001A	MW-97-042-Q322	8/22/2022 1:38:00 PM	9/6/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052246-002A	MW-97-202-Q322	8/22/2022 12:52:00 PM	9/6/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☑	☐	WW
N052246-003A	TW-04-Q322	8/22/2022 2:20:00 PM	9/6/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052246-004A	EB-725-Q322	8/22/2022 1:20:00 PM	9/6/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052246-005A	MW-35-060-Q322	8/22/2022 11:56:00 AM	9/6/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052246-006A	MW-913-Q322	8/22/2022 12:06:00 PM	9/6/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052246-007A	MW-35-135-Q322	8/22/2022 12:36:00 PM	9/6/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052246-008A	MW-30-030-Q322	8/22/2022 1:13:00 PM	9/6/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052246-008B			9/6/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/6/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/6/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/6/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052246-008C			9/6/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052246-008D			9/6/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052246-009A	MW-30-030-EB-Q322	8/22/2022 12:55:00 PM	9/6/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052246-010A	EB-726-Q322	8/22/2022 2:30:00 PM	9/6/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052246-011A	FOLDER	9/6/2022	9/6/2022		Folder	Folder	☐	☐	☐	LAB
			9/6/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/6/2022		Folder	Folder	☐	☐	☐	LAB

September 07, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052261

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 23, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Subcontracted Analyses:

Nitrate/Nitrite was subcontracted to BC Labs - Bakersfield, CA.

Analytical Comments for EPA 218.6:

Dilution was necessary for sample N052261-017 due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for SM 5310C:

Matrix Spike (MS) is outside recovery criteria in QC sample N052262-011CMS at several dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N052262-011 and MS/MSD were reported at 20x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6010B:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Iron in QC samples N052262-011BMS and N052262-011BMSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria.The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020:

Matrix Spike Duplicate (MSD) is outside recovery criteria for Barium in QC sample N052261-001B-MSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052261
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052261-001A	MW-34-055-Q322	Groundwater	8/23/2022 1:39:00 PM	8/23/2022	9/7/2022
N052261-001B	MW-34-055-Q322	Groundwater	8/23/2022 1:39:00 PM	8/23/2022	9/7/2022
N052261-001C	MW-34-055-Q322	Groundwater	8/23/2022 1:39:00 PM	8/23/2022	9/7/2022
N052261-001D	MW-34-055-Q322	Groundwater	8/23/2022 1:39:00 PM	8/23/2022	9/7/2022
N052261-001E	MW-34-055-Q322	Groundwater	8/23/2022 1:39:00 PM	8/23/2022	9/7/2022
N052261-002A	MW-34-055-EB-Q322	Groundwater	8/23/2022 1:20:00 PM	8/23/2022	9/7/2022
N052261-003A	MW-34-100-Q322	Groundwater	8/23/2022 1:13:00 PM	8/23/2022	9/7/2022
N052261-003B	MW-34-100-Q322	Groundwater	8/23/2022 1:13:00 PM	8/23/2022	9/7/2022
N052261-003C	MW-34-100-Q322	Groundwater	8/23/2022 1:13:00 PM	8/23/2022	9/7/2022
N052261-003D	MW-34-100-Q322	Groundwater	8/23/2022 1:13:00 PM	8/23/2022	9/7/2022
N052261-003E	MW-34-100-Q322	Groundwater	8/23/2022 1:13:00 PM	8/23/2022	9/7/2022
N052261-004A	EB-728-Q322	Groundwater	8/23/2022 1:45:00 PM	8/23/2022	9/7/2022
N052261-005A	MW-28-090-Q322	Groundwater	8/23/2022 11:54:00 AM	8/23/2022	9/7/2022
N052261-005B	MW-28-090-Q322	Groundwater	8/23/2022 11:54:00 AM	8/23/2022	9/7/2022
N052261-005C	MW-28-090-Q322	Groundwater	8/23/2022 11:54:00 AM	8/23/2022	9/7/2022
N052261-005D	MW-28-090-Q322	Groundwater	8/23/2022 11:54:00 AM	8/23/2022	9/7/2022
N052261-006A	MW-28-090-EB-Q322	Groundwater	8/23/2022 11:30:00 AM	8/23/2022	9/7/2022
N052261-007A	EB-727-Q322	Groundwater	8/23/2022 2:55:00 PM	8/23/2022	9/7/2022
N052261-008A	MW-36-020-Q322	Groundwater	8/23/2022 8:58:00 AM	8/23/2022	9/7/2022
N052261-008B	MW-36-020-Q322	Groundwater	8/23/2022 8:58:00 AM	8/23/2022	9/7/2022
N052261-008C	MW-36-020-Q322	Groundwater	8/23/2022 8:58:00 AM	8/23/2022	9/7/2022
N052261-008D	MW-36-020-Q322	Groundwater	8/23/2022 8:58:00 AM	8/23/2022	9/7/2022
N052261-009A	MW-36-040-Q322	Groundwater	8/23/2022 9:23:00 AM	8/23/2022	9/7/2022
N052261-009B	MW-36-040-Q322	Groundwater	8/23/2022 9:23:00 AM	8/23/2022	9/7/2022
N052261-009C	MW-36-040-Q322	Groundwater	8/23/2022 9:23:00 AM	8/23/2022	9/7/2022
N052261-009D	MW-36-040-Q322	Groundwater	8/23/2022 9:23:00 AM	8/23/2022	9/7/2022
N052261-009E	MW-36-040-Q322	Groundwater	8/23/2022 9:23:00 AM	8/23/2022	9/7/2022
N052261-010A	MW-36-050-Q322	Groundwater	8/23/2022 9:50:00 AM	8/23/2022	9/7/2022
N052261-010B	MW-36-050-Q322	Groundwater	8/23/2022 9:50:00 AM	8/23/2022	9/7/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052261
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052261-010C	MW-36-050-Q322	Groundwater	8/23/2022 9:50:00 AM	8/23/2022	9/7/2022
N052261-010D	MW-36-050-Q322	Groundwater	8/23/2022 9:50:00 AM	8/23/2022	9/7/2022
N052261-011A	MW-44-070-Q322	Groundwater	8/23/2022 10:26:00 AM	8/23/2022	9/7/2022
N052261-011B	MW-44-070-Q322	Groundwater	8/23/2022 10:26:00 AM	8/23/2022	9/7/2022
N052261-011C	MW-44-070-Q322	Groundwater	8/23/2022 10:26:00 AM	8/23/2022	9/7/2022
N052261-011D	MW-44-070-Q322	Groundwater	8/23/2022 10:26:00 AM	8/23/2022	9/7/2022
N052261-011E	MW-44-070-Q322	Groundwater	8/23/2022 10:26:00 AM	8/23/2022	9/7/2022
N052261-012A	MW-44-070-EB-Q322	Groundwater	8/23/2022 10:05:00 AM	8/23/2022	9/7/2022
N052261-013A	MW-27-020-Q322	Groundwater	8/23/2022 12:35:00 PM	8/23/2022	9/7/2022
N052261-013B	MW-27-020-Q322	Groundwater	8/23/2022 12:35:00 PM	8/23/2022	9/7/2022
N052261-013C	MW-27-020-Q322	Groundwater	8/23/2022 12:35:00 PM	8/23/2022	9/7/2022
N052261-013D	MW-27-020-Q322	Groundwater	8/23/2022 12:35:00 PM	8/23/2022	9/7/2022
N052261-014A	MW-27-020-EB-Q322	Groundwater	8/23/2022 12:18:00 PM	8/23/2022	9/7/2022
N052261-015A	MW-27-060-Q322	Groundwater	8/23/2022 11:40:00 AM	8/23/2022	9/7/2022
N052261-015B	MW-27-060-Q322	Groundwater	8/23/2022 11:40:00 AM	8/23/2022	9/7/2022
N052261-015C	MW-27-060-Q322	Groundwater	8/23/2022 11:40:00 AM	8/23/2022	9/7/2022
N052261-015D	MW-27-060-Q322	Groundwater	8/23/2022 11:40:00 AM	8/23/2022	9/7/2022
N052261-015E	MW-27-060-Q322	Groundwater	8/23/2022 11:40:00 AM	8/23/2022	9/7/2022
N052261-016A	MW-27-060-EB-Q322	Groundwater	8/23/2022 11:20:00 AM	8/23/2022	9/7/2022
N052261-017A	MW-27-085-Q322	Groundwater	8/23/2022 12:06:00 PM	8/23/2022	9/7/2022
N052261-017B	MW-27-085-Q322	Groundwater	8/23/2022 12:06:00 PM	8/23/2022	9/7/2022
N052261-017C	MW-27-085-Q322	Groundwater	8/23/2022 12:06:00 PM	8/23/2022	9/7/2022
N052261-017D	MW-27-085-Q322	Groundwater	8/23/2022 12:06:00 PM	8/23/2022	9/7/2022
N052261-017E	MW-27-085-Q322	Groundwater	8/23/2022 12:06:00 PM	8/23/2022	9/7/2022
N052261-018A	MW-27-085-EB-Q322	Groundwater	8/23/2022 11:49:00 AM	8/23/2022	9/7/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-055-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 1:39:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 09:17 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-055-EB-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 1:20:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 02:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-100-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 1:13:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/24/2022 01:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-728-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 1:45:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 02:39 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-28-090-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 11:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 10:14 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-28-090-EB-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 11:30:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 02:58 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-727-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 2:55:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 03:16 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-020-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 8:58:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 10:52 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-040-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 9:23:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 11:10 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-050-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 9:50:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 11:48 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-070-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 10:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 12:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-070-EB-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 10:05:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 03:35 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-020-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 12:35:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 12:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-020-EB-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 12:18:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 03:54 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-060-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 11:40:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 01:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-060-EB-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 11:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 05:09 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-085-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 12:06:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/24/2022 01:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-085-EB-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 11:49:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-018		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824A**	QC Batch: **R165131**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 05:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R165131**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165131**
Client ID: **PBW**	Batch ID: **R165131**	TestNo: **EPA 218.6**		Analysis Date: **8/24/2022**	SeqNo: **4798750**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R165131**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165131**
Client ID: **LCSW**	Batch ID: **R165131**	TestNo: **EPA 218.6**		Analysis Date: **8/24/2022**	SeqNo: **4798751**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.102	0.20	5.000	0	102	90	110				

Sample ID: **N052261-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165131**
Client ID: **ZZZZZZ**	Batch ID: **R165131**	TestNo: **EPA 218.6**		Analysis Date: **8/24/2022**	SeqNo: **4798753**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.977	0.20	1.000	0	97.7	90	110				

Sample ID: **N052261-001AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165131**
Client ID: **ZZZZZZ**	Batch ID: **R165131**	TestNo: **EPA 218.6**		Analysis Date: **8/24/2022**	SeqNo: **4798754**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.975	0.20	1.000	0	97.5	90	110	0.9769	0.205	20	

Sample ID: **N052261-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165131**
Client ID: **ZZZZZZ**	Batch ID: **R165131**	TestNo: **EPA 218.6**		Analysis Date: **8/24/2022**	SeqNo: **4798756**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.966	0.20	1.000	0	96.6	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052261-008AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798760**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.026	0.20	1.000	0	103	90	110				

Sample ID: **N052261-009AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798762**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.049	0.20	1.000	0	105	90	110				

Sample ID: **N052261-010AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798764**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.981	0.20	1.000	0	98.1	90	110				

Sample ID: **N052261-011AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798766**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.966	0.20	1.000	0	96.6	90	110				

Sample ID: **N052261-013AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798770**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.017	0.20	1.000	0	102	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052261-015AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798772**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.018	0.20	1.000	0	102	90	110				

Sample ID: **N052261-017AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798774**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.060	1.0	5.000	0	101	90	110				

Sample ID: **N052261-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798776**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.095	1.0	5.000	0	102	90	110				

Sample ID: **N052261-002AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798778**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.051	0.20	1.000	0	105	90	110				

Sample ID: **N052261-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798782**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.059	0.20	1.000	0	106	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052261-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798784**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.020	0.20	1.000	0	102	90	110				

Sample ID: **N052261-007AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798786**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.038	0.20	1.000	0	104	90	110				

Sample ID: **N052261-012AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798788**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.027	0.20	1.000	0	103	90	110				

Sample ID: **N052261-014AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798790**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.028	0.20	1.000	0	103	90	110				

Sample ID: **N052261-009ADUP** SampType: **DUP** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165131**
Client ID: **ZZZZZZ** Batch ID: **R165131** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798794**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20						0	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052261-016AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165131**
Client ID: **ZZZZZZ**	Batch ID: **R165131**	TestNo: **EPA 218.6**		Analysis Date: **8/24/2022**	SeqNo: **4798796**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.005	0.20	1.000	0	101	90	110				

Sample ID: **N052261-018AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165131**
Client ID: **ZZZZZZ**	Batch ID: **R165131**	TestNo: **EPA 218.6**		Analysis Date: **8/24/2022**	SeqNo: **4798798**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.029	0.20	1.000	0	103	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-055-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 1:39:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/24/2022 12:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-100-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 1:13:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/24/2022 01:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-28-090-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 11:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/24/2022 01:18 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-020-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 8:58:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/24/2022 02:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-040-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 9:23:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/24/2022 02:21 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-050-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 9:50:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/24/2022 02:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-070-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 10:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/24/2022 02:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-020-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 12:35:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/24/2022 03:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-060-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 11:40:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/24/2022 03:24 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-085-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 12:06:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/24/2022 03:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R165101_NO3** SampType: **MBLK** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165101**
Client ID: **PBW** Batch ID: **R165101** TestNo: **EPA 300.0** Analysis Date: **8/24/2022** SeqNo: **4797939**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R165101_NO3** SampType: **LCS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165101**
Client ID: **LCSW** Batch ID: **R165101** TestNo: **EPA 300.0** Analysis Date: **8/24/2022** SeqNo: **4797940**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.184	0.050	1.250	0	94.7	90	110				

Sample ID: **N052262-011DMS** SampType: **MS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165101**
Client ID: **ZZZZZZ** Batch ID: **R165101** TestNo: **EPA 300.0** Analysis Date: **8/24/2022** SeqNo: **4797942**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.692	0.50	12.50	0.3730	90.6	80	120				

Sample ID: **N052262-011DMSD** SampType: **MSD** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165101**
Client ID: **ZZZZZZ** Batch ID: **R165101** TestNo: **EPA 300.0** Analysis Date: **8/24/2022** SeqNo: **4797943**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.699	0.50	12.50	0.3730	90.6	80	120	11.69	0.0599	20	

Sample ID: **N052261-001DDUP** SampType: **DUP** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165101**
Client ID: **ZZZZZZ** Batch ID: **R165101** TestNo: **EPA 300.0** Analysis Date: **8/24/2022** SeqNo: **4797945**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.25						0	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

  Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **N052261-001DMS** SampType: **MS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165101**
Client ID: **ZZZZZZ** Batch ID: **R165101** TestNo: **EPA 300.0** Analysis Date: **8/24/2022** SeqNo: **4797946**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	5.821	0.25	6.250	0	93.1	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-055-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 1:39:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.1	0.14	1.0		mg/L	1	8/24/2022 02:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-100-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 1:13:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/24/2022 03:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-28-090-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 11:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/24/2022 04:32 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-020-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 8:58:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.6	0.14	1.0		mg/L	1	8/24/2022 04:47 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-040-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 9:23:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.8	0.14	1.0		mg/L	1	8/24/2022 06:13 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-050-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 9:50:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.2	0.14	1.0		mg/L	1	8/24/2022 07:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-070-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 10:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/24/2022 07:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-020-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 12:35:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.1	0.14	1.0		mg/L	1	8/24/2022 07:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-060-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 11:40:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.4	0.14	1.0		mg/L	1	8/24/2022 07:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-085-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 12:06:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/24/2022 08:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R165107**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165107**
Client ID: **PBW**	Batch ID: **R165107**	TestNo: **SM 5310C**		Analysis Date: **8/24/2022**	SeqNo: **4798232**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R165107**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165107**
Client ID: **LCSW**	Batch ID: **R165107**	TestNo: **SM 5310C**		Analysis Date: **8/24/2022**	SeqNo: **4798233**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.246	1.0	5.000	0	105	85	115				

Sample ID: **N052262-011CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165107**
Client ID: **ZZZZZZ**	Batch ID: **R165107**	TestNo: **SM 5310C**		Analysis Date: **8/24/2022**	SeqNo: **4798244**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	87.532	20	100.0	0	87.5	75	125				

Sample ID: **N052262-011CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165107**
Client ID: **ZZZZZZ**	Batch ID: **R165107**	TestNo: **SM 5310C**		Analysis Date: **8/24/2022**	SeqNo: **4798247**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	90.554	20	100.0	0	90.6	75	125	87.53	3.39	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052261-001

Client Sample ID: MW-34-055-Q322
Collection Date: 8/23/2022 1:39:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	94	13	20		µg/L	1	8/28/2022 01:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-100-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 1:13:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Iron	55	13	20		µg/L	1	8/28/2022 01:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-28-090-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 11:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Iron	1100	13	20		µg/L	1	8/28/2022 01:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-020-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 8:58:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	3700	13	20		µg/L	1	8/28/2022 01:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-040-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 9:23:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	470	13	20		µg/L	1	8/28/2022 01:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-050-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 9:50:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	200	13	20		µg/L	1	8/28/2022 01:32 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-070-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 10:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Iron	650	13	20		µg/L	1	8/28/2022 01:36 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-020-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 12:35:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 01:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-060-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 11:40:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	330	13	20		µg/L	1	8/28/2022 01:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-085-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 12:06:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Iron	270	13	20		µg/L	1	8/28/2022 01:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94418**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165203**
Client ID: **PBW**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803709**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-94418**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165203**
Client ID: **LCSW**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803710**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	100.086	20	100.0	0	100	85	115				

Sample ID: **N052262-011BMS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165476**
Client ID: **ZZZZZZ**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/7/2022**	SeqNo: **4820442**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	92.846	20	100.0	42.21	50.6	75	125				S

Sample ID: **N052262-011BMSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165476**
Client ID: **ZZZZZZ**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/7/2022**	SeqNo: **4820443**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	92.672	20	100.0	42.21	50.5	75	125	92.85	0.188	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **N052262-011B-PS** SampType: **PS** TestCode: **6010_WDPGE** Units: **µg/L** Prep Date: RunNo: **165476**
Client ID: **ZZZZZZ** Batch ID: **94418** TestNo: **EPA 6010B** **EPA 3010A** Analysis Date: **9/7/2022** SeqNo: **4820441**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	91.979	20	100.0	42.21	49.8	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052261-001

Client Sample ID: MW-34-055-Q322
Collection Date: 8/23/2022 1:39:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E** QC Batch: **94421**				PrepDate:		**8/25/2022**	Analyst: **DJ**
Arsenic	3.4	0.050	0.10		µg/L	1	8/26/2022 12:52 AM
Barium	30	0.083	1.0		µg/L	1	8/26/2022 12:52 AM
Manganese	110	0.13	2.5		µg/L	5	8/26/2022 09:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-100-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 1:13:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E**	QC Batch: **94421**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 01:40 AM
Barium	21	0.083	1.0		µg/L	1	8/26/2022 01:40 AM
Manganese	120	0.026	0.50		µg/L	1	8/26/2022 01:40 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-28-090-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 11:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220825E**	QC Batch: **94421**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 01:46 AM
Barium	32	0.083	1.0		µg/L	1	8/26/2022 01:46 AM
Manganese	410	0.13	2.5		µg/L	5	8/26/2022 10:13 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-020-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 8:58:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220825E**	QC Batch: **94421**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 01:52 AM
Barium	340	0.42	5.0		µg/L	5	9/4/2022 07:38 PM
Manganese	720	0.13	2.5		µg/L	5	8/26/2022 10:31 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-040-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 9:23:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E**	QC Batch: **94421**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	6.7	0.050	0.10		µg/L	1	8/26/2022 01:58 AM
Barium	55	0.083	1.0		µg/L	1	8/26/2022 01:58 AM
Manganese	170	0.026	0.50		µg/L	1	8/26/2022 01:58 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-050-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 9:50:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220825E**	QC Batch: **94421**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	5.6	0.050	0.10		µg/L	1	8/26/2022 02:03 AM
Barium	28	0.083	1.0		µg/L	1	8/26/2022 02:03 AM
Manganese	320	0.13	2.5		µg/L	5	8/26/2022 10:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-070-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 10:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E** QC Batch: **94421**				PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	2.8	0.050	0.10		µg/L	1	8/26/2022 02:09 AM
Barium	33	0.083	1.0		µg/L	1	8/26/2022 02:09 AM
Manganese	320	0.13	2.5		µg/L	5	8/26/2022 10:43 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-020-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 12:35:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220825E**	QC Batch: **94421**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	0.67	0.050	0.10		µg/L	1	8/26/2022 02:15 AM
Barium	57	0.083	1.0		µg/L	1	8/26/2022 02:15 AM
Manganese	36	0.026	0.50		µg/L	1	8/26/2022 02:15 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-060-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 11:40:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E** QC Batch: **94421**				PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	8.7	0.050	0.10		µg/L	1	8/26/2022 02:21 AM
Barium	62	0.083	1.0		µg/L	1	8/26/2022 02:21 AM
Manganese	260	0.13	2.5		µg/L	5	8/26/2022 10:49 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-27-085-Q322
Lab Order:	N052261	**Collection Date:**	8/23/2022 12:06:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052261-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220825E**	QC Batch: **94421**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 02:45 AM
Barium	50	0.083	1.0		µg/L	1	8/26/2022 02:45 AM
Manganese	260	0.13	2.5		µg/L	5	8/26/2022 10:54 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94421**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **PBW**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4803568**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID: **LCS-94421**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **LCSW**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/25/2022**	SeqNo: **4803569**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.213	0.10	10.00	0	102	85	115				
Barium	10.416	1.0	10.00	0	104	85	115				
Manganese	104.749	0.50	100.0	0	105	85	115				

Sample ID: **N052261-001B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803589**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.700	0.10	10.00	3.352	103	75	125				
Barium	37.857	1.0	10.00	29.94	79.2	75	125				

Sample ID: **N052261-001B-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803592**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.699	0.10	10.00	3.352	103	75	125	13.70	0.00515	20	
Barium	36.755	1.0	10.00	29.94	68.2	75	125	37.86	2.95	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052261-001B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4804956**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	185.613	2.5	100.0	107.5	78.2	75	125				

Sample ID: **N052261-001B-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94421**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4804957**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	189.146	2.5	100.0	107.5	81.7	75	125	185.6	1.89	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052261
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052261-001B-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **165202**
Client ID: **ZZZZZZ** Batch ID: **94421** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/26/2022** SeqNo: **4803588**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	13.563	0.10	10.00	3.352	102	80	120				
Barium	37.573	1.0	10.00	29.94	76.4	80	120				S

Sample ID: **N052261-001B-PS** SampType: **PS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: RunNo: **165217**
Client ID: **ZZZZZZ** Batch ID: **94421** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/26/2022** SeqNo: **4804955**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	190.684	2.5	100.0	107.5	83.2	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

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CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement	QA/QC	Sample Receipt Condition	Y N
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	Excel EDD	RTNE	1. Chilled	X
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker	RWQCB ✓	2. Headspace	
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	Labspec	CalTrans	3. Container Intact	X
Submitted By: Riggie Tep			Others ✓	LEVEL III	4. Seal Present	
Title: Field Tech	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	Specify: RWQCB	LEVEL IV	5. IR number 3	
Signature: Date: 8/23/22	Sampled By: Riggie Tep		Global ID:	Regulatory	6. Method of Cooling: ICE	
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for			Specify State:	Sample Temp: 2.1 °C 5.1 °C	
Project Name: PG&E Topock - PCM	Signature: Date: 8/22/22				Courier: ASSET	
Project Number: 30121866.3Q22GW					Tracking No.:	

Matrix: Ground X | Sediment | Potable | Soil | NPDES | Other Solid | Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH 250 mL poly	Nitrate, sulfate (EPA 300.0) 1 L poly	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese 500mL poly	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, 500mL poly	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium 500mL poly	Total Organic Carbon (SM5310C); H2SO4 3x40 mL VOA	Total metals (SW6010) No filter; HNO3 Total Iron 500mL poly	Ammonia as Nitrogen (SM4500NH3); H2SO4 1 L poly	Nitrate (EPA 300.0) 1 L poly	Nitrate/nitrite as Nitrogen (SM 4500-NO3); H2SO4 125 mL poly	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052261-01	MW-34-055-Q322	8/23/2022	13:39		X		X			X			X	X	E	7	P	BNS	
2	-02	MW-34-055-EB-Q322	8/23/2022	13:20		X										E	1	P	BNS	
3	-03	MW-34-100-Q322	8/23/2022	13:13		X		X			X			X	X	E	7	P	BNS	
4	-04	EB-728-Q322	8/23/2022	13:45		X										E	1	P	BNS	
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				

Reliquished by (Signature and Printed Name):	Date/Time:	Reliquished by (Signature and Printed Name):	Date/Time:
PD Riggie Tep	8/23/22 1539	MBOYLAN	8/23/22 @ 1539
Reliquished by (Signature and Printed Name):	Date/Time:	Reliquished by (Signature and Printed Name):	Date/Time:
REL/REC: MBCARTIN			8/23/22 @1848
Reliquished by (Signature and Printed Name):	Date/Time:	Reliquished by (Signature and Printed Name):	Date/Time:

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Preservatives:

H=HCL	N=HNO_3	S=H_2SO_4	C=4°C
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$	
Others/Specify:	B	(NH4)2SO4/NH4OH	

Container Type:

T=Tube	V=VOA	P=Pint
J=Jar	B=Tedlar	G=Glass
M=Metal	M=Metal	C=Can

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

White=Laboratory Copy

Yellow=Customer's Copy

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement	QA/QC	Sample Receipt Condition
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	Excel EDD	RTNE	1. Chilled: Y X
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker	RWQCB ✓	2. Headspace
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	Labspec	CalTrans	3. Container Intact: X
Submitted By: Riggie Tap		Phone: 949-727-1400, ext 200 Fax:	Others ✓	LEVEL III	4. Seal Present
Title: Field Tech	Phone: 916-786-3302 Fax:		Specify: RWQCB	LEVEL IV	5. IR number: 3
Signature: Date: RT 8/23/22	Sampled By: Riggie Tap		Global ID:	Regulatory	6. Method of Cooling: ICE
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for			Specify State:	Sample Temp: 2.6, 5.1°C
Project Name: PG&E Topock - PCM	Signature: Date: 8/23/22				Courier: ASSET
Project Number: 30121866.3Q22GW					Tracking No.:

Matrix: Ground X | Sediment | Potable | Soil | NPDES | Other Solid | Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate (EPA 300.0) (1 L poly)	Nitrate/nitrite as Nitrogen (SM 4500-NO3); H2SO4 (125 mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052261-05	MW-28-090-Q322	8/23/2022	11:54		X		X			X			X		E	6	P	BNS	
2	-06	MW-28-090-EB-Q322	8/23/2022	11:30		X										E	1	P	BNS	
3	-07	EB-727-Q322	8/23/2022	14:55		X										E	1	P	BNS	
4	-08	MW-36-020-Q322	8/23/2022	8:58		X		X			X			X		E	6	P	BNS	
5	-09	MW-36-040-Q322	8/23/2022	9:23		X		X			X			X	X	E	7	P	BNS	
6	-10	MW-36-050-Q322	8/23/2022	9:50		X		X			X			X		E	6	P	BNS	
7	-11	MW-44-070-Q322	8/23/2022	10:26		X		X			X			X	X	E	7	P	BNS	
8	-12	MW-44-070-EB-Q322	8/23/2022	10:05		X										E	1	P	BNS	
9	-13	MW-27-020-Q322	8/23/2022	12:35		X		X			X			X		E	6	P	BNS	
10	-14	MW-27-020-EB-Q322	8/23/2022	12:18		X										E	1	P	BNS	
11	-15	MW-27-060-Q322	8/23/2022	11:40		X		X			X			X	X	E	7	P	BNS	
12	-16	MW-27-060-EB-Q322	8/23/2022	11:20		X										E	1	P	BNS	
13	-17	MW-27-085-Q322	8/23/2022	12:06		X		X			X			X	X	E	7	P	BNS	
14	-18	MW-27-085-EB-Q322	8/23/2022	11:49		X										E	1	P	BNS	

Relinquished by (Signature and Printed Name): Riggie Tap Date/Time: 8/23/22 1539
Received by (Signature and Printed Name): Date/Time: 8/23/22 @1539
Relinquished by (Signature and Printed Name): REL/REC! MBCARTIN Date/Time:
Received by (Signature and Printed Name): Date/Time: 8/23/22 @1848
Relinquished by (Signature and Printed Name): Date/Time:
Received by (Signature and Printed Name): Date/Time:

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Preservatives:

H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		
Others/Specify:	B	(NH4)2SO4/NH4OH		

Container Type:

T=Tube	V=VOA	P=Pint
J=Jar	B=Tedlar	G=Glass
M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/23/2022	Workorder:	N052261
Rep sample Temp (Deg C):	2.1/5.1	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For:

Checklist Completed By: MBC EFanegoF 8/24/2022

Reviewed By: for: MBC 8/31/2022

ASSET Laboratories

WORK ORDER Summary

31-Aug-22

WorkOrder: N052261

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/23/2022 6:48 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052261-001A	MW-34-055-Q322	8/23/2022 1:39:00 PM	9/7/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-001B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052261-001C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	V-W
N052261-001D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052261-001E			9/7/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052261-002A	MW-34-055-EB-Q322	8/23/2022 1:20:00 PM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-003A	MW-34-100-Q322	8/23/2022 1:13:00 PM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-003B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052261-003C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	V-W
N052261-003D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052261-003E			9/7/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052261-004A	EB-728-Q322	8/23/2022 1:45:00 PM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-005A	MW-28-090-Q322	8/23/2022 11:54:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-005B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

31-Aug-22

WorkOrder: N052261

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/23/2022 6:48 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052261-005B	MW-28-090-Q322	8/23/2022 11:54:00 AM	9/7/2022	Groundwater	EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052261-005C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	V-W
N052261-005D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052261-006A	MW-28-090-EB-Q322	8/23/2022 11:30:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-007A	EB-727-Q322	8/23/2022 2:55:00 PM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-008A	MW-36-020-Q322	8/23/2022 8:58:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-008B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052261-008C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	V-W
N052261-008D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052261-009A	MW-36-040-Q322	8/23/2022 9:23:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-009B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052261-009C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	V-W
N052261-009D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052261-009E			9/7/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052261-010A	MW-36-050-Q322	8/23/2022 9:50:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

31-Aug-22

WorkOrder: N052261

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/23/2022 6:48 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052261-010B	MW-36-050-Q322	8/23/2022 9:50:00 AM	9/7/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052261-010C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	V-W
N052261-010D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052261-011A	MW-44-070-Q322	8/23/2022 10:26:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-011B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052261-011C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	V-W
N052261-011D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052261-011E			9/7/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052261-012A	MW-44-070-EB-Q322	8/23/2022 10:05:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-013A	MW-27-020-Q322	8/23/2022 12:35:00 PM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-013B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052261-013C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	V-W
N052261-013D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

31-Aug-22

WorkOrder: N052261

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/23/2022 6:48 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052261-014A	MW-27-020-EB-Q322	8/23/2022 12:18:00 PM	9/7/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-015A	MW-27-060-Q322	8/23/2022 11:40:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-015B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052261-015C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	V-W
N052261-015D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052261-015E			9/7/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052261-016A	MW-27-060-EB-Q322	8/23/2022 11:20:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-017A	MW-27-085-Q322	8/23/2022 12:06:00 PM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-017B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052261-017C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	V-CA
N052261-017D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052261-017E			9/7/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052261-018A	MW-27-085-EB-Q322	8/23/2022 11:49:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052261-019A	FOLDER	9/7/2022	9/7/2022		Folder	Folder	☐	☐	☐	LAB
			9/7/2022		Folder	Level IV Report	☐	☐	☐	LAB

ASSET Laboratories

WORK ORDER Summary

31-Aug-22

WorkOrder: N052261

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/23/2022 6:48 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052261-019A	FOLDER	9/7/2022	9/7/2022		Folder	Folder	☐	☐	☐	LAB

ASSET Laboratories
3151-3153 W Post Rd., Las Vegas, NV 89118
www.atl-labs.com
TEL: 7023072659 *FAX: 7023072691*

CHAIN-OF-CUSTODY RECORD

QC Level: Level IV

Subcontractor:

BC Labs
4100 Atlas Court
Bakersfield, CA 93308

TEL: (661) 327-4911
FAX: (661) 327-1918
Acct #:

Field Sampler: Riggie Tep

24-Aug-22

				Nitrate/Nitrite	Requested Tests	
Sample ID	**Matrix**	**Date Collected**	**Bottle Type**	**SM4500-NO3F**		
N052261-001E / MW-34-055-Q322	Groundwater	8/23/2022 1:39:00 PM	8OZP	1		
N052261-003E / MW-34-100-Q322	Groundwater	8/23/2022 1:13:00 PM	8OZP	1		
N052261-009E / MW-36-040-Q322	Groundwater	8/23/2022 9:23:00 AM	8OZP	1		
N052261-011E / MW-44-070-Q322	Groundwater	8/23/2022 10:26:00 AM	8OZP	1		
N052261-015E / MW-27-060-Q322	Groundwater	8/23/2022 11:40:00 AM	8OZP	1		
N052261-017E / MW-27-085-Q322	Groundwater	8/23/2022 12:06:00 PM	8OZP	1		

General Comments: PLEASE EMAIL SAMPLE RECEIPT ACKNOWLEDGEMENT TO THE PM. ALWAYS CC: sonny.lorenzo@assetlaboratories.com

Please use PO#:N52261A Please email Invoices and Account Receivable Statements to elvira@assetlaboratories.com. For questions, call Marlon at (702)-307-2659. Please e-mail results to reports.lv@assetlaboratories.com by: Standard TAT

Please analyze for Nitrate/Nitrite as Nitrogen. EDD requirement Labspec7 edata.

GSO #: 557616784

		Date/Time			Date/Time
Relinquished by:	YRJ	8/24/2022 16:30	**Received by:**		
Relinquished by:			**Received by:**		

September 12, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052262

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 23, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052262

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Dilution was necessary for some samples due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for SM 5310C:

Matrix Spike (MS) is outside recovery criteria in QC sample N052262-011CMS at several dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N052262-011 and MS/MSD were reported at 20x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020_Dissolved:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for some analytes in QC samples N052262-011BMS and N052262-011BMSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Manganese in QC samples N052262-011BMS and N052262-011BMSD since the analyte concentration in the sample is disproportionate to the spike level. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052262
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052262-001A	MW-49-135-Q322	Groundwater	8/23/2022 10:34:00 AM	8/23/2022	9/12/2022
N052262-002A	MW-49-135-EB-Q322	Groundwater	8/23/2022 10:05:00 AM	8/23/2022	9/12/2022
N052262-003A	MW-49-275-Q322	Groundwater	8/23/2022 9:52:00 AM	8/23/2022	9/12/2022
N052262-004A	MW-49-275-EB-Q322	Groundwater	8/23/2022 9:20:00 AM	8/23/2022	9/12/2022
N052262-005A	MW-49-365-Q322	Groundwater	8/23/2022 9:02:00 AM	8/23/2022	9/12/2022
N052262-006A	MW-49-365-EB-Q322	Groundwater	8/23/2022 8:20:00 AM	8/23/2022	9/12/2022
N052262-007A	MW-29-Q322	Groundwater	8/23/2022 11:12:00 AM	8/23/2022	9/12/2022
N052262-008A	MW-29-EB-Q322	Groundwater	8/23/2022 10:45:00 AM	8/23/2022	9/12/2022
N052262-009A	MW-86-030-Q322	Groundwater	8/23/2022 2:46:00 PM	8/23/2022	9/12/2022
N052262-009B	MW-86-030-Q322	Groundwater	8/23/2022 2:46:00 PM	8/23/2022	9/12/2022
N052262-009C	MW-86-030-Q322	Groundwater	8/23/2022 2:46:00 PM	8/23/2022	9/12/2022
N052262-009D	MW-86-030-Q322	Groundwater	8/23/2022 2:46:00 PM	8/23/2022	9/12/2022
N052262-010A	MW-86-066-Q322	Groundwater	8/23/2022 2:10:00 PM	8/23/2022	9/12/2022
N052262-010B	MW-86-066-Q322	Groundwater	8/23/2022 2:10:00 PM	8/23/2022	9/12/2022
N052262-010C	MW-86-066-Q322	Groundwater	8/23/2022 2:10:00 PM	8/23/2022	9/12/2022
N052262-010D	MW-86-066-Q322	Groundwater	8/23/2022 2:10:00 PM	8/23/2022	9/12/2022
N052262-011A	MW-86-120-Q322	Groundwater	8/23/2022 1:36:00 PM	8/23/2022	9/12/2022
N052262-011B	MW-86-120-Q322	Groundwater	8/23/2022 1:36:00 PM	8/23/2022	9/12/2022
N052262-011C	MW-86-120-Q322	Groundwater	8/23/2022 1:36:00 PM	8/23/2022	9/12/2022
N052262-011D	MW-86-120-Q322	Groundwater	8/23/2022 1:36:00 PM	8/23/2022	9/12/2022
N052262-012A	MW-86-140-Q322	Groundwater	8/23/2022 1:04:00 PM	8/23/2022	9/12/2022
N052262-012B	MW-86-140-Q322	Groundwater	8/23/2022 1:04:00 PM	8/23/2022	9/12/2022
N052262-012C	MW-86-140-Q322	Groundwater	8/23/2022 1:04:00 PM	8/23/2022	9/12/2022
N052262-012D	MW-86-140-Q322	Groundwater	8/23/2022 1:04:00 PM	8/23/2022	9/12/2022
N052262-013A	MW-28-025-Q322	Groundwater	8/23/2022 12:28:00 PM	8/23/2022	9/12/2022
N052262-013B	MW-28-025-Q322	Groundwater	8/23/2022 12:28:00 PM	8/23/2022	9/12/2022
N052262-013C	MW-28-025-Q322	Groundwater	8/23/2022 12:28:00 PM	8/23/2022	9/12/2022
N052262-013D	MW-28-025-Q322	Groundwater	8/23/2022 12:28:00 PM	8/23/2022	9/12/2022
N052262-014A	MW-28-025-EB-Q322	Groundwater	8/23/2022 12:05:00 PM	8/23/2022	9/12/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-49-135-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 10:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824B**	QC Batch: **R165132**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	7.7	0.13	1.0		µg/L	5	8/25/2022 01:43 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-49-135-EB-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 10:05:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824B**	QC Batch: **R165132**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 10:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-49-275-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 9:52:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A**	QC Batch: **R165180**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/26/2022 04:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-49-275-EB-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 9:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824B**	QC Batch: **R165132**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/25/2022 12:09 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-49-365-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 9:02:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A**	QC Batch: **R165180**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/26/2022 05:09 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-49-365-EB-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 8:20:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824B**	QC Batch: **R165132**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/25/2022 12:46 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-29-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 11:12:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824B**	QC Batch: **R165132**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 09:18 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-29-EB-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 10:45:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824B**	QC Batch: **R165132**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/25/2022 01:05 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-030-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 2:46:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824B**	QC Batch: **R165132**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 08:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-066-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 2:10:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824B**	QC Batch: **R165132**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 09:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-120-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 1:36:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824B**	QC Batch: **R165132**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/24/2022 07:54 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-140-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 1:04:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824B**	QC Batch: **R165132**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/25/2022 03:18 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-28-025-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 12:28:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220824B**	QC Batch: **R165132**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/24/2022 09:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-28-025-EB-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 12:05:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
EPA 218.6							
RunID: **NV00922-IC7_220824B** QC Batch: **R165132** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/25/2022 01:24 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **LCS-R165132**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165132**
Client ID: **LCSW**	Batch ID: **R165132**	TestNo: **EPA 218.6**		Analysis Date: **8/24/2022**	SeqNo: **4798809**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.068	0.20	5.000	0	101	90	110				

Sample ID: **MB-R165132**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165132**
Client ID: **PBW**	Batch ID: **R165132**	TestNo: **EPA 218.6**		Analysis Date: **8/24/2022**	SeqNo: **4798810**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **N052262-011AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165132**
Client ID: **ZZZZZZ**	Batch ID: **R165132**	TestNo: **EPA 218.6**		Analysis Date: **8/24/2022**	SeqNo: **4798812**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.682	1.0	5.000	0	93.6	90	110				

Sample ID: **N052262-011AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165132**
Client ID: **ZZZZZZ**	Batch ID: **R165132**	TestNo: **EPA 218.6**		Analysis Date: **8/24/2022**	SeqNo: **4798813**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.875	1.0	5.000	0	97.5	90	110	4.682	4.04	20	

Sample ID: **N052262-009AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165132**
Client ID: **ZZZZZZ**	Batch ID: **R165132**	TestNo: **EPA 218.6**		Analysis Date: **8/24/2022**	SeqNo: **4798815**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.072	0.20	1.000	0	107	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052262-009ADUP** SampType: **DUP** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165132**
Client ID: **ZZZZZZ** Batch ID: **R165132** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798818**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20						0	0	20	

Sample ID: **N052262-007AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165132**
Client ID: **ZZZZZZ** Batch ID: **R165132** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798820**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.035	0.20	1.000	0	103	90	110				

Sample ID: **N052262-010AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165132**
Client ID: **ZZZZZZ** Batch ID: **R165132** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798822**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.013	0.20	1.000	0	101	90	110				

Sample ID: **N052262-013AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165132**
Client ID: **ZZZZZZ** Batch ID: **R165132** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798824**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.034	0.20	1.000	0	103	90	110				

Sample ID: **N052262-002AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165132**
Client ID: **ZZZZZZ** Batch ID: **R165132** TestNo: **EPA 218.6** Analysis Date: **8/24/2022** SeqNo: **4798826**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.991	0.20	1.000	0	99.1	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052262-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165132**
Client ID: **ZZZZZZ** Batch ID: **R165132** TestNo: **EPA 218.6** Analysis Date: **8/25/2022** SeqNo: **4798832**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.985	0.20	1.000	0	98.5	90	110				

Sample ID: **N052262-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165132**
Client ID: **ZZZZZZ** Batch ID: **R165132** TestNo: **EPA 218.6** Analysis Date: **8/25/2022** SeqNo: **4798836**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.026	0.20	1.000	0	103	90	110				

Sample ID: **N052262-008AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165132**
Client ID: **ZZZZZZ** Batch ID: **R165132** TestNo: **EPA 218.6** Analysis Date: **8/25/2022** SeqNo: **4798838**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.991	0.20	1.000	0	99.1	90	110				

Sample ID: **N052262-014AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165132**
Client ID: **ZZZZZZ** Batch ID: **R165132** TestNo: **EPA 218.6** Analysis Date: **8/25/2022** SeqNo: **4798840**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.988	0.20	1.000	0	98.8	90	110				

Sample ID: **N052262-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165132**
Client ID: **ZZZZZZ** Batch ID: **R165132** TestNo: **EPA 218.6** Analysis Date: **8/25/2022** SeqNo: **4798842**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	12.723	1.0	5.000	7.664	101	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052262-012AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165132**
Client ID: **ZZZZZZ**	Batch ID: **R165132**	TestNo: **EPA 218.6**		Analysis Date: **8/25/2022**	SeqNo: **4798848**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.787	1.0	5.000	0	95.7	90	110				

Sample ID: **N052287-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165132**
Client ID: **ZZZZZZ**	Batch ID: **R165132**	TestNo: **EPA 218.6**		Analysis Date: **8/25/2022**	SeqNo: **4798853**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.939	0.20	1.000	0	93.9	90	110				

Sample ID: **N052287-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165132**
Client ID: **ZZZZZZ**	Batch ID: **R165132**	TestNo: **EPA 218.6**		Analysis Date: **8/25/2022**	SeqNo: **4798854**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.993	0.20	1.000	0	99.3	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R165180**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **PBW**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801889**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R165180**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **LCSW**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801890**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.034	0.20	5.000	0	101	90	110				

Sample ID: **N052282-010AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801893**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	42.372	1.0	25.00	16.88	102	90	110				

Sample ID: **N052282-010AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801894**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	42.778	1.0	25.00	16.88	104	90	110	42.37	0.952	20	

Sample ID: **N052282-011ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801895**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	24.133	1.0						23.76	1.57	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052282-011AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801898**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	49.669	1.0	25.00	23.76	104	90	110				

Sample ID: **N052296-001BMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801900**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1510.700	20	500.0	990.6	104	90	110				

Sample ID: **N052282-013AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801905**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.979	0.20	1.000	0	97.9	90	110				

Sample ID: **N052282-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801909**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.018	0.20	1.000	0	102	90	110				

Sample ID: **N052282-012AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801911**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.023	0.20	1.000	0	102	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052282-014AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801913**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.955	0.20	1.000	0	95.5	90	110				

Sample ID: **N052288-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801915**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.021	0.20	1.000	0	102	90	110				

Sample ID: **N052286-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801917**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5608.450	100	2500	3094	101	90	110				

Sample ID: **N052262-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801921**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.474	1.0	5.000	0	109	90	110				

Sample ID: **N052262-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801923**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.173	1.0	5.000	0	103	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052282-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801925**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.386	1.0	5.000	0	108	90	110				

Sample ID: **N052282-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801927**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	8.143	1.0	5.000	2.820	106	90	110				

Sample ID: **N052282-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801929**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	7.809	1.0	5.000	2.701	102	90	110				

Sample ID: **N052282-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801933**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	11.873	1.0	5.000	6.504	107	90	110				

Sample ID: **N052282-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801935**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	16.565	1.0	5.000	11.26	106	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052282-007AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801937**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	9.317	1.0	5.000	4.290	101	90	110				

Sample ID: **N052282-008AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801939**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.307	1.0	5.000	0.6600	92.9	90	110				

Sample ID: **N052282-009AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801941**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.386	1.0	5.000	0.5725	96.3	90	110				

Sample ID: **N052288-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801944**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.967	0.20	1.000	0	96.7	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-030-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 2:46:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/24/2022 03:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-066-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 2:10:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.65	0.095	0.50		mg/L	10	8/24/2022 04:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-120-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 1:36:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/24/2022 11:27 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-140-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 1:04:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/24/2022 04:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-28-025-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 12:28:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220824A**	QC Batch: **R165101**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/24/2022 05:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R165101_NO3**	SampType: **MBLK**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165101**
Client ID: **PBW**	Batch ID: **R165101**	TestNo: **EPA 300.0**		Analysis Date: **8/24/2022**	SeqNo: **4797939**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R165101_NO3**	SampType: **LCS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165101**
Client ID: **LCSW**	Batch ID: **R165101**	TestNo: **EPA 300.0**		Analysis Date: **8/24/2022**	SeqNo: **4797940**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.184	0.050	1.250	0	94.7	90	110				

Sample ID: **N052262-011DMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165101**
Client ID: **ZZZZZZ**	Batch ID: **R165101**	TestNo: **EPA 300.0**		Analysis Date: **8/24/2022**	SeqNo: **4797942**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.692	0.50	12.50	0.3730	90.6	80	120				

Sample ID: **N052262-011DMSD**	SampType: **MSD**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165101**
Client ID: **ZZZZZZ**	Batch ID: **R165101**	TestNo: **EPA 300.0**		Analysis Date: **8/24/2022**	SeqNo: **4797943**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.699	0.50	12.50	0.3730	90.6	80	120	11.69	0.0599	20	

Sample ID: **N052261-001DDUP**	SampType: **DUP**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165101**
Client ID: **ZZZZZZ**	Batch ID: **R165101**	TestNo: **EPA 300.0**		Analysis Date: **8/24/2022**	SeqNo: **4797945**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.25						0	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **N052261-001DMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165101**
Client ID: **ZZZZZZ**	Batch ID: **R165101**	TestNo: **EPA 300.0**		Analysis Date: **8/24/2022**	SeqNo: **4797946**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	5.821	0.25	6.250	0	93.1	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-030-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 2:46:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.7	0.14	1.0		mg/L	1	8/24/2022 01:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-066-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 2:10:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/24/2022 02:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-120-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 1:36:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	2.7	20		mg/L	20	8/24/2022 04:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-140-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 1:04:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/24/2022 05:58 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-28-025-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 12:28:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220824B**	QC Batch: **R165107**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/24/2022 02:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R165107**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165107**
Client ID: **PBW**	Batch ID: **R165107**	TestNo: **SM 5310C**		Analysis Date: **8/24/2022**	SeqNo: **4798232**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R165107**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165107**
Client ID: **LCSW**	Batch ID: **R165107**	TestNo: **SM 5310C**		Analysis Date: **8/24/2022**	SeqNo: **4798233**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.246	1.0	5.000	0	105	85	115				

Sample ID: **N052262-011CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165107**
Client ID: **ZZZZZZ**	Batch ID: **R165107**	TestNo: **SM 5310C**		Analysis Date: **8/24/2022**	SeqNo: **4798244**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	87.532	20	100.0	0	87.5	75	125				

Sample ID: **N052262-011CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165107**
Client ID: **ZZZZZZ**	Batch ID: **R165107**	TestNo: **SM 5310C**		Analysis Date: **8/24/2022**	SeqNo: **4798247**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	90.554	20	100.0	0	90.6	75	125	87.53	3.39	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-030-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 2:46:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 01:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-066-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 2:10:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	42	13	20		µg/L	1	8/28/2022 01:58 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-120-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 1:36:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 02:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-140-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 1:04:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Iron	520	13	20		µg/L	1	8/28/2022 02:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-28-025-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 12:28:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 02:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94418**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165203**
Client ID: **PBW**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803709**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-94418**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165203**
Client ID: **LCSW**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803710**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	100.086	20	100.0	0	100	85	115				

Sample ID: **N052262-011BMS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165476**
Client ID: **ZZZZZZ**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/7/2022**	SeqNo: **4820442**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	92.846	20	100.0	0	92.8	75	125				

Sample ID: **N052262-011BMSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165476**
Client ID: **ZZZZZZ**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/7/2022**	SeqNo: **4820443**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	92.672	20	100.0	0	92.7	75	125	92.85	0.188	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-030-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 2:46:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	8/26/2022 03:21 AM
Barium	110	0.083	1.0		µg/L	1	8/26/2022 03:21 AM
Manganese	88	0.026	0.50		µg/L	1	8/26/2022 03:21 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-066-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 2:10:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 03:27 AM
Barium	78	0.083	1.0		µg/L	1	8/26/2022 03:27 AM
Manganese	690	0.66	12		µg/L	25	9/8/2022 05:38 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-120-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 1:36:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 03:33 AM
Barium	38	0.083	1.0		µg/L	1	8/26/2022 03:33 AM
Manganese	300	0.66	12		µg/L	25	8/27/2022 12:06 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-86-140-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 1:04:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 04:32 AM
Barium	83	0.083	1.0		µg/L	1	8/26/2022 04:32 AM
Manganese	790	0.13	2.5		µg/L	5	9/8/2022 05:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-28-025-Q322
Lab Order:	N052262	**Collection Date:**	8/23/2022 12:28:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052262-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	0.38	0.050	0.10		µg/L	1	8/26/2022 04:38 AM
Barium	58	0.083	1.0		µg/L	1	8/26/2022 04:38 AM
Manganese	51	0.026	0.50		µg/L	1	8/26/2022 04:38 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94422** SampType: **MBLK** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/25/2022** RunNo: **165202**
Client ID: **PBW** Batch ID: **94422** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/26/2022** SeqNo: **4803607**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	0.108	0.50									

Sample ID: **LCS-94422** SampType: **LCS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/25/2022** RunNo: **165202**
Client ID: **LCSW** Batch ID: **94422** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/26/2022** SeqNo: **4803608**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.300	0.10	10.00	0	103	85	115				
Barium	9.871	1.0	10.00	0	98.7	85	115				
Manganese	105.351	0.50	100.0	0	105	85	115				

Sample ID: **N052262-011BMS** SampType: **MS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/25/2022** RunNo: **165202**
Client ID: **ZZZZZZ** Batch ID: **94422** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/26/2022** SeqNo: **4803618**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	6.532	0.10	10.00	0	65.3	75	125				S
Barium	44.365	1.0	10.00	38.18	61.8	75	125				S

Sample ID: **N052262-011BMSD** SampType: **MSD** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **8/25/2022** RunNo: **165202**
Client ID: **ZZZZZZ** Batch ID: **94422** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **8/26/2022** SeqNo: **4803619**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	5.778	0.10	10.00	0	57.8	75	125	6.532	12.3	20	S
Barium	47.657	1.0	10.00	38.18	94.8	75	125	44.36	7.15	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052262-011BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/27/2022**	SeqNo: **4804980**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	331.296	12	100.0	295.7	35.6	75	125				S

Sample ID: **N052262-011BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/27/2022**	SeqNo: **4804981**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	308.079	12	100.0	295.7	12.4	75	125	331.3	7.26	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052262
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052262-011B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803617**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	6.583	0.10	10.00	0	65.8	80	120				S
Barium	44.703	1.0	10.00	38.18	65.2	80	120				S

Sample ID: **N052262-011B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/27/2022**	SeqNo: **4804979**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	307.203	12	100.0	295.7	11.5	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ASSET LABORATORIES

ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

Page 1 of 1

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement	QA/QC	Sample Receipt Condition
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	Excel EDD	RTNE	Y N
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker	RWQCB ✓	1. Chilled X
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	Labspec	CalTrans	2. Headspace
Submitted By: Riggie Tep	Phone: 916-786-3302 Fax:	Phone: 949-727-1400, ext 200 Fax:	Others ✓	LEVEL III	3. Container Intact X
Title: Field Tech			Specify: RWQCB	LEVEL IV	4. Seal Present
Signature: Date: RT 8/23/22	Sampled By: Riggie Tep		Global ID:	Regulatory	5. IR number 3
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for			Specify State:	6. Method of Cooling: ICE
Project Name: PG&E Topock - PCM	Signature: RT Date: 8/23/22				Sample Temp: 2.6, 5.1°C
Project Number: 30121866.3Q22GW					Courier: ASSET
					Tracking No.:

Matrix: Ground X | Sediment | Potable | Soil | NPDES | Other Solid | Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2. SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate (EPA 300.0) (1 L poly)	Nitrate/nitrite as Nitrogen (SM 4500-NO3); H2SO4 (125 mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052262-01	MW-49-135-Q322	8/23/2022	10:34		X										E	1	P	BNS	
2	-02	MW-49-135-EB-Q322	8/23/2022	10:05		X										E	1	P	BNS	
3	-03	MW-49-275-Q322	8/23/2022	9:52		X										E	1	P	BNS	
4	-04	MW-49-275-EB-Q322	8/23/2022	9:20		X										E	1	P	BNS	
5	-05	MW-49-365-Q322	8/23/2022	9:02		X										E	1	P	BNS	
6	-06	MW-49-365-EB-Q322	8/23/2022	8:20		X										E	1	P	BNS	
7	-07	MW-29-Q322	8/23/2022	11:12		X										E	1	P	BNS	
8	-08	MW-29-EB-Q322	8/23/2022	10:45		X										E	1	P	BNS	
9	-09	MW-86-030-Q322	8/23/2022	14:46		X		X			X			X		E	6	P	BNS	
10	-10	MW-86-066-Q322	8/23/2022	14:10		X		X			X			X		E	6	P	BNS	
11	-11	MW-86-120-Q322	8/23/2022	13:36		X		X			X			X		E	9	P	BNS	MSMSD 9
12	-12	MW-86-140-Q322	8/23/2022	13:04		X		X			X			X		E	6	P	BNS	
13	-13	MW-28-025-Q322	8/23/2022	12:28		X		X			X			X		E	6	P	BNS	
14	-14	MW-28-025-EB-Q322	8/23/2022	12:05		X										E	1	P	BNS	

Relinquished by (Signature and Printed Name):	Date/Time:	Received by (Signature and Printed Name):	Date/Time:
RT Riggie Tep	8/23/22 1539	MBCARTIN	8/23/22 1539
REL/REC: MBCARTIN	8/23/22 1848		

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy

Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/23/2022	Workorder:	N052262
Rep sample Temp (Deg C):	2.1/5.1	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For:

Checklist Completed By: MBC EFanegoF 8/24/2022

for:

Reviewed By: MBC 8/29/2022

ASSET Laboratories

WORK ORDER Summary

29-Aug-22

WorkOrder: N052262

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/23/2022 6:48 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052262-001A	MW-49-135-Q322	8/23/2022 10:34:00 AM	9/7/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052262-002A	MW-49-135-EB-Q322	8/23/2022 10:05:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052262-003A	MW-49-275-Q322	8/23/2022 9:52:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052262-004A	MW-49-275-EB-Q322	8/23/2022 9:20:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052262-005A	MW-49-365-Q322	8/23/2022 9:02:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052262-006A	MW-49-365-EB-Q322	8/23/2022 8:20:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052262-007A	MW-29-Q322	8/23/2022 11:12:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052262-008A	MW-29-EB-Q322	8/23/2022 10:45:00 AM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052262-009A	MW-86-030-Q322	8/23/2022 2:46:00 PM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052262-009B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052262-009C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052262-009D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052262-010A	MW-86-066-Q322	8/23/2022 2:10:00 PM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052262-010B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052262-010C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052262-010D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

29-Aug-22

WorkOrder: N052262

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/23/2022 6:48 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052262-011A	MW-86-120-Q322	8/23/2022 1:36:00 PM	9/7/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☑	☐	WW
N052262-011B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☑	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☑	☐	WW
N052262-011C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☑	☐	VW
N052262-011D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
N052262-012A	MW-86-140-Q322	8/23/2022 1:04:00 PM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052262-012B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052262-012C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052262-012D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052262-013A	MW-28-025-Q322	8/23/2022 12:28:00 PM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052262-013B			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/7/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/7/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052262-013C			9/7/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052262-013D			9/7/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052262-014A	MW-28-025-EB-Q322	8/23/2022 12:05:00 PM	9/7/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

29-Aug-22

WorkOrder: N052262

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/23/2022 6:48 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052262-015A	FOLDER	9/7/2022	9/7/2022		Folder	Folder	☐	☐	☐	LAB
			9/7/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/7/2022		Folder	Folder	☐	☐	☐	LAB

September 08, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052282

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 24, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Subcontracted Analyses:

Nitrate/Nitrite was subcontracted to BC Labs - Bakersfield, CA.

Analytical Comments for EPA 218.6:

Dilution was necessary for some samples due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for SM 5310C:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria in QC samples N052282-007CMS and N052282-007CMSD at several dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N052282-007 and MS/MSD were reported at 50x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6010B:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Iron in QC samples N052262-011BMS and N052262-011BMSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for some analytes in QC samples N052262-011BMS and N052262-011BMSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

ASSET Laboratories

Date: *08-Sep-22*

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052282
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052282-001A	MW-33-040-Q322	Groundwater	8/24/2022 10:36:00 AM	8/24/2022	9/8/2022
N052282-002A	MW-33-040-EB-Q322	Groundwater	8/24/2022 10:10:00 AM	8/24/2022	9/8/2022
N052282-003A	MW-33-090-Q322	Groundwater	8/24/2022 9:56:00 AM	8/24/2022	9/8/2022
N052282-004A	MW-912-Q322	Groundwater	8/24/2022 10:06:00 AM	8/24/2022	9/8/2022
N052282-005A	MW-33-150-Q322	Groundwater	8/24/2022 9:14:00 AM	8/24/2022	9/8/2022
N052282-006A	MW-33-210-Q322	Groundwater	8/24/2022 8:34:00 AM	8/24/2022	9/8/2022
N052282-007A	MW-46-175-Q322	Groundwater	8/24/2022 12:06:00 PM	8/24/2022	9/8/2022
N052282-007B	MW-46-175-Q322	Groundwater	8/24/2022 12:06:00 PM	8/24/2022	9/8/2022
N052282-007C	MW-46-175-Q322	Groundwater	8/24/2022 12:06:00 PM	8/24/2022	9/8/2022
N052282-007D	MW-46-175-Q322	Groundwater	8/24/2022 12:06:00 PM	8/24/2022	9/8/2022
N052282-007E	MW-46-175-Q322	Groundwater	8/24/2022 12:06:00 PM	8/24/2022	9/8/2022
N052282-008A	MW-46-205-Q322	Groundwater	8/24/2022 11:24:00 AM	8/24/2022	9/8/2022
N052282-008B	MW-46-205-Q322	Groundwater	8/24/2022 11:24:00 AM	8/24/2022	9/8/2022
N052282-008C	MW-46-205-Q322	Groundwater	8/24/2022 11:24:00 AM	8/24/2022	9/8/2022
N052282-008D	MW-46-205-Q322	Groundwater	8/24/2022 11:24:00 AM	8/24/2022	9/8/2022
N052282-009A	MW-917-Q322	Groundwater	8/24/2022 11:34:00 AM	8/24/2022	9/8/2022
N052282-009B	MW-917-Q322	Groundwater	8/24/2022 11:34:00 AM	8/24/2022	9/8/2022
N052282-009C	MW-917-Q322	Groundwater	8/24/2022 11:34:00 AM	8/24/2022	9/8/2022
N052282-009D	MW-917-Q322	Groundwater	8/24/2022 11:34:00 AM	8/24/2022	9/8/2022
N052282-010A	MW-47-055-Q322	Groundwater	8/24/2022 1:36:00 PM	8/24/2022	9/8/2022
N052282-011A	MW-47-115-Q322	Groundwater	8/24/2022 12:58:00 PM	8/24/2022	9/8/2022
N052282-012A	EB-729-Q322	Groundwater	8/24/2022 2:00:00 PM	8/24/2022	9/8/2022
N052282-013A	MW-43-025-Q322	Groundwater	8/24/2022 9:15:00 AM	8/24/2022	9/8/2022
N052282-013B	MW-43-025-Q322	Groundwater	8/24/2022 9:15:00 AM	8/24/2022	9/8/2022
N052282-013C	MW-43-025-Q322	Groundwater	8/24/2022 9:15:00 AM	8/24/2022	9/8/2022
N052282-013D	MW-43-025-Q322	Groundwater	8/24/2022 9:15:00 AM	8/24/2022	9/8/2022
N052282-014A	MW-43-025-EB-Q322	Groundwater	8/24/2022 8:55:00 AM	8/24/2022	9/8/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-33-040-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 10:36:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A**	QC Batch: **R165180**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/26/2022 05:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-33-040-EB-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 10:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A**	QC Batch: **R165180**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/26/2022 02:35 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-33-090-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 9:56:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A**	QC Batch: **R165180**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	2.8	0.13	1.0		µg/L	5	8/26/2022 05:47 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-912-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 10:06:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A**	QC Batch: **R165180**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	2.7	0.13	1.0		µg/L	5	8/26/2022 06:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-33-150-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 9:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A**	QC Batch: **R165180**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	6.5	0.13	1.0		µg/L	5	8/26/2022 06:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-33-210-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 8:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A** QC Batch: **R165180**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	11	0.13	1.0		µg/L	5	8/26/2022 07:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-46-175-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 12:06:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A**	QC Batch: **R165180**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	4.3	0.13	1.0		µg/L	5	8/26/2022 07:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-46-205-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 11:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A**	QC Batch: **R165180**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/26/2022 07:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-917-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 11:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A**	QC Batch: **R165180**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/26/2022 07:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-47-055-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 1:36:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A** QC Batch: **R165180**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	17	0.13	1.0		µg/L	5	8/26/2022 09:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-47-115-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 12:58:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
EPA 218.6							
RunID: **NV00922-IC7_220826A** QC Batch: **R165180** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	24	0.13	1.0		µg/L	5	8/26/2022 09:13 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-729-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 2:00:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A**	QC Batch: **R165180**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/26/2022 02:54 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-025-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 9:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A**	QC Batch: **R165180**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/26/2022 01:38 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-025-EB-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 8:55:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220826A**	QC Batch: **R165180**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/26/2022 03:13 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052282
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R165180**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **PBW**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801889**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R165180**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **LCSW**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801890**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.034	0.20	5.000	0	101	90	110				

Sample ID: **N052282-010AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801893**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	42.372	1.0	25.00	16.88	102	90	110				

Sample ID: **N052282-010AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801894**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	42.778	1.0	25.00	16.88	104	90	110	42.37	0.952	20	

Sample ID: **N052282-011ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801895**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	24.133	1.0						23.76	1.57	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052282
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052282-011AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801898**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	49.669	1.0	25.00	23.76	104	90	110				

Sample ID: **N052296-001BMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801900**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1510.700	20	500.0	990.6	104	90	110				

Sample ID: **N052282-013AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801905**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.979	0.20	1.000	0	97.9	90	110				

Sample ID: **N052282-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801909**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.018	0.20	1.000	0	102	90	110				

Sample ID: **N052282-012AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801911**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.023	0.20	1.000	0	102	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052282
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052282-014AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801913**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.955	0.20	1.000	0	95.5	90	110				

Sample ID: **N052288-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801915**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.021	0.20	1.000	0	102	90	110				

Sample ID: **N052286-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801917**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5608.450	100	2500	3094	101	90	110				

Sample ID: **N052262-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801921**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.474	1.0	5.000	0	109	90	110				

Sample ID: **N052262-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165180**
Client ID: **ZZZZZZ** Batch ID: **R165180** TestNo: **EPA 218.6** Analysis Date: **8/26/2022** SeqNo: **4801923**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.173	1.0	5.000	0	103	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052282
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052282-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801925**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.386	1.0	5.000	0	108	90	110				

Sample ID: **N052282-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801927**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	8.143	1.0	5.000	2.820	106	90	110				

Sample ID: **N052282-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801929**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	7.809	1.0	5.000	2.701	102	90	110				

Sample ID: **N052282-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801933**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	11.873	1.0	5.000	6.504	107	90	110				

Sample ID: **N052282-006AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801935**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	16.565	1.0	5.000	11.26	106	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052282
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052282-007AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801937**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	9.317	1.0	5.000	4.290	101	90	110				

Sample ID: **N052282-008AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801939**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.307	1.0	5.000	0.6600	92.9	90	110				

Sample ID: **N052282-009AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801941**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.386	1.0	5.000	0.5725	96.3	90	110				

Sample ID: **N052288-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165180**
Client ID: **ZZZZZZ**	Batch ID: **R165180**	TestNo: **EPA 218.6**		Analysis Date: **8/26/2022**	SeqNo: **4801944**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.967	0.20	1.000	0	96.7	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-46-175-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 12:06:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220825A**	QC Batch: **R165146**			PrepDate:			Analyst: **RAB**
Nitrate as N	1.0	0.048	0.25		mg/L	5	8/25/2022 10:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-46-205-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 11:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220825A**	QC Batch: **R165146**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.82	0.048	0.25		mg/L	5	8/25/2022 10:16 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-917-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 11:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220825A**	QC Batch: **R165146**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.83	0.048	0.25		mg/L	5	8/25/2022 10:31 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-025-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 9:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220825A**	QC Batch: **R165146**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	8/25/2022 10:47 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052282
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R165146_NO3**	SampType: **MBLK**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165146**
Client ID: **PBW**	Batch ID: **R165146**	TestNo: **EPA 300.0**		Analysis Date: **8/25/2022**	SeqNo: **4799746**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R165146_NO3**	SampType: **LCS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165146**
Client ID: **LCSW**	Batch ID: **R165146**	TestNo: **EPA 300.0**		Analysis Date: **8/25/2022**	SeqNo: **4799747**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.187	0.050	1.250	0	94.9	90	110				

Sample ID: **N052282-007DMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165146**
Client ID: **ZZZZZZ**	Batch ID: **R165146**	TestNo: **EPA 300.0**		Analysis Date: **8/25/2022**	SeqNo: **4799754**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.669	0.25	6.250	1.016	90.4	80	120				

Sample ID: **N052282-007DMSD**	SampType: **MSD**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165146**
Client ID: **ZZZZZZ**	Batch ID: **R165146**	TestNo: **EPA 300.0**		Analysis Date: **8/25/2022**	SeqNo: **4799755**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.430	0.25	6.250	1.016	86.6	80	120	6.669	3.65	20	

Sample ID: **N052283-005DDUP**	SampType: **DUP**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165146**
Client ID: **ZZZZZZ**	Batch ID: **R165146**	TestNo: **EPA 300.0**		Analysis Date: **8/25/2022**	SeqNo: **4799759**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	0.310	0.50						0.3370	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052282
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **N052283-005DMS** SampType: **MS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165146**
Client ID: **ZZZZZZ** Batch ID: **R165146** TestNo: **EPA 300.0** Analysis Date: **8/25/2022** SeqNo: **4799760**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.133	0.50	12.50	0.3370	86.4	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-46-175-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 12:06:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	6.8	50		mg/L	50	8/25/2022 02:49 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-46-205-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 11:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/25/2022 11:28 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-917-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 11:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/25/2022 11:43 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-025-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 9:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.9	0.14	1.0		mg/L	1	8/25/2022 11:59 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052282
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R165151**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165151**
Client ID: **PBW**	Batch ID: **R165151**	TestNo: **SM 5310C**		Analysis Date: **8/25/2022**	SeqNo: **4800089**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R165151**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165151**
Client ID: **LCSW**	Batch ID: **R165151**	TestNo: **SM 5310C**		Analysis Date: **8/25/2022**	SeqNo: **4800090**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.184	1.0	5.000	0	104	85	115				

Sample ID: **N052282-007CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165151**
Client ID: **ZZZZZZ**	Batch ID: **R165151**	TestNo: **SM 5310C**		Analysis Date: **8/25/2022**	SeqNo: **4800109**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	232.730	50	250.0	0	93.1	75	125				

Sample ID: **N052282-007CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165151**
Client ID: **ZZZZZZ**	Batch ID: **R165151**	TestNo: **SM 5310C**		Analysis Date: **8/25/2022**	SeqNo: **4800110**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	234.140	50	250.0	0	93.7	75	125	232.7	0.604	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-46-175-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 12:06:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Iron	100	13	20		µg/L	1	8/28/2022 02:58 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-46-205-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 11:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 03:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-917-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 11:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	8/28/2022 03:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-025-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 9:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220828B**	QC Batch: **94418**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Iron	5300	13	20		µg/L	1	8/28/2022 03:25 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052282
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94418**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165203**
Client ID: **PBW**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803709**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-94418**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165203**
Client ID: **LCSW**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803710**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	100.086	20	100.0	0	100	85	115				

Sample ID: **N052262-011BMS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165476**
Client ID: **ZZZZZZ**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/7/2022**	SeqNo: **4820442**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	92.846	20	100.0	42.21	50.6	75	125				S

Sample ID: **N052262-011BMSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165476**
Client ID: **ZZZZZZ**	Batch ID: **94418**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/7/2022**	SeqNo: **4820443**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	92.672	20	100.0	42.21	50.5	75	125	92.85	0.188	20	S

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052282
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **N052262-011B-PS** SampType: **PS** TestCode: **6010_WDPGE** Units: **µg/L** Prep Date: RunNo: **165476**
Client ID: **ZZZZZZ** Batch ID: **94418** TestNo: **EPA 6010B** **EPA 3010A** Analysis Date: **9/7/2022** SeqNo: **4820441**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	91.979	20	100.0	42.21	49.8	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-46-175-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 12:06:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E** QC Batch: **94422**				PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 04:44 AM
Barium	28	0.083	1.0		µg/L	1	8/26/2022 04:44 AM
Manganese	8.3	0.026	0.50		µg/L	1	8/26/2022 04:44 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-46-205-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 11:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 04:50 AM
Barium	34	0.083	1.0		µg/L	1	8/26/2022 04:50 AM
Manganese	35	0.026	0.50		µg/L	1	8/26/2022 04:50 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-917-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 11:34:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E** QC Batch: **94422**				PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 04:56 AM
Barium	33	0.083	1.0		µg/L	1	8/26/2022 04:56 AM
Manganese	35	0.026	0.50		µg/L	1	8/26/2022 04:56 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-025-Q322
Lab Order:	N052282	**Collection Date:**	8/24/2022 9:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052282-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E** QC Batch: **94422**				PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	29	0.050	0.10		µg/L	1	8/26/2022 05:20 AM
Barium	80	0.083	1.0		µg/L	1	8/26/2022 05:20 AM
Manganese	550	0.13	2.5		µg/L	5	8/27/2022 12:35 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052282
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94422**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **PBW**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803607**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	0.108	0.50									

Sample ID: **LCS-94422**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **LCSW**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803608**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.300	0.10	10.00	0	103	85	115				
Barium	9.871	1.0	10.00	0	98.7	85	115				
Manganese	105.351	0.50	100.0	0	105	85	115				

Sample ID: **N052262-011BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803618**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	6.532	0.10	10.00	0	65.3	75	125				S
Barium	44.365	1.0	10.00	38.18	61.8	75	125				S

Sample ID: **N052262-011BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803619**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	5.778	0.10	10.00	0	57.8	75	125	6.532	12.3	20	S
Barium	47.657	1.0	10.00	38.18	94.8	75	125	44.36	7.15	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052282
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052262-011BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/27/2022**	SeqNo: **4804980**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	331.296	12	100.0	295.7	35.6	75	125				S

Sample ID: **N052262-011BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/27/2022**	SeqNo: **4804981**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	308.079	12	100.0	295.7	12.4	75	125	331.3	7.26	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052282
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052262-011B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803617**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	6.583	0.10	10.00	0	65.8	80	120				S
Barium	44.703	1.0	10.00	38.18	65.2	80	120				S

Sample ID: **N052262-011B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/27/2022**	SeqNo: **4804979**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	307.203	12	100.0	295.7	11.5	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ARCUS02
FOLDER
N052282-015A
C: 9/8/2022 12:00 A
R: 8/24/202
1 of 1

ASSET LABORATORIES

ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement: Others ✓ Specify: RWQCB; Global ID:
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	QA/QC: RWQCB ✓
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	
Submitted By: Riggie Tap		Phone: 949-727-1400, ext 200 Fax:	
Title: Field Tech	Phone: 916-786-3302 Fax:		
Signature: Date: RT 8/24/22	Sampled By: Riggie Tap		
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for		
Project Name: PG&E Topock - PCM	Signature: RT Date: 8/24/22		
Project Number: 30121866.3Q22GW			

Matrix: Ground X; Sediment; Potable; Soil; NPDES; Other Solid; Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate (EPA 300.0) (1 L poly)	Nitrate/nitrite as Nitrogen (SM 4500-NO3); H2SO4 (125 mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052282-01	MW-33-040-Q322	8/24/2022	10:36		X										E	1	P	BNS	
2	-02	MW-33-040-EB-Q322	8/24/2022	10:10		X										E	1	P	BNS	
3	-03	MW-33-090-Q322	8/24/2022	9:56		X										E	1	P	BNS	
4	-04	MW-912-Q322	8/24/2022	10:06		X										E	1	P	BNS	
5	-05	MW-33-150-Q322	8/24/2022	9:14		X										E	1	P	BNS	
6	-06	MW-33-210-Q322	8/24/2022	8:34		X										E	1	P	BNS	
7	-07	MW-46-175-Q322	8/24/2022	12:06		X		X			X			X	X	E	3	P	BNS	
8	-08	MW-46-205-Q322	8/24/2022	11:24		X		X			X			X		E	6	P	BNS	
9	-09	MW-917-Q322	8/24/2022	11:34		X		X			X			X		E	6	P	BNS	
10	-10	MW-47-055-Q322	8/24/2022	13:36		X										E	1	P	BNS	
11	-11	MW-47-115-Q322	8/24/2022	12:58		X										E	1	P	BNS	
12	-12	EB-729-Q322	8/24/2022	14:00		X										E	1	P	BNS	
13	-13	MW-43-025-Q322	8/24/2022	~~8:16~~ 9:15		X		X			X			X		E	6	P	BNS	
14	-14	MW-43-025-EB-Q322	8/24/2022	8:55		X										E	1	P	BNS	

Y N
1. Chilled ✓
2. Headspace
3. Container Intact ✓
4. Seal Present
5. IR number 3
6. Method of Cooling: ICE
Sample Temp: 2.1c 3.1c

Courier: ASET
Tracking No.:

Reliquished by (Signature and Printed Name):	Date/Time:	Reliquished by (Signature and Printed Name):	Date/Time:
RT Riggie Tap	8/24/22 1445	Paul Ont Dante Ontz	8/24/22 14:45
Reliquished by (Signature and Printed Name):	Date/Time:	Reliquished by (Signature and Printed Name):	Date/Time:
Paul Ont Dante Ontz	8/24/22 19:54	Paul Ont Dante Ontz	8/24/22 19:54
Reliquished by (Signature and Printed Name):	Date/Time:	Reliquished by (Signature and Printed Name):	Date/Time:

Turn Around Time (TAT)

	A	< 24 Hrs or Same Day TAT
	B	= Next Workday
	C	= 2 Workdays
	D	= 3 Workdays
X	E	= Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis.
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
6. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy

Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/24/2022	Workorder:	N052282
Rep sample Temp (Deg C):	2.1/3.1	IR Gun ID:	3
Temp Blank:	☑ Yes ☐ No		
Carrier name:	ASSET		
Last 4 digits of Tracking No.:	NA	Packing Material Used:	Bubble Wrap
Cooling process:	☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None		

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: EF EFanegoF 8/25/2022

Reviewed By: for: MBC 8/27/2022

ASSET Laboratories

WORK ORDER Summary

27-Aug-22

WorkOrder: N052282

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/24/2022 7:54 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052282-001A	MW-33-040-Q322	8/24/2022 10:36:00 AM	9/8/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052282-002A	MW-33-040-EB-Q322	8/24/2022 10:10:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052282-003A	MW-33-090-Q322	8/24/2022 9:56:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052282-004A	MW-912-Q322	8/24/2022 10:06:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052282-005A	MW-33-150-Q322	8/24/2022 9:14:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052282-006A	MW-33-210-Q322	8/24/2022 8:34:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052282-007A	MW-46-175-Q322	8/24/2022 12:06:00 PM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052282-007B			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/8/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052282-007C			9/8/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052282-007D			9/8/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052282-007E			9/8/2022		SM4500-NO3F	NITRATE/NITRITE-N BY CADMIUM REDUCTION	☐	☐	☑	SUB
N052282-008A	MW-46-205-Q322	8/24/2022 11:24:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052282-008B			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/8/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052282-008C			9/8/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052282-008D			9/8/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052282-009A	MW-917-Q322	8/24/2022 11:34:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

27-Aug-22

WorkOrder: N052282

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/24/2022 7:54 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052282-009B	MW-917-Q322	8/24/2022 11:34:00 AM	9/8/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/8/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052282-009C			9/8/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052282-009D			9/8/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052282-010A	MW-47-055-Q322	8/24/2022 1:36:00 PM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052282-011A	MW-47-115-Q322	8/24/2022 12:58:00 PM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052282-012A	EB-729-Q322	8/24/2022 2:00:00 PM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052282-013A	MW-43-025-Q322	8/24/2022 9:15:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052282-013B			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/8/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052282-013C			9/8/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052282-013D			9/8/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052282-014A	MW-43-025-EB-Q322	8/24/2022 8:55:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052282-015A	FOLDER	9/8/2022	9/8/2022		Folder	Folder	☐	☐	☐	LAB
			9/8/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/8/2022		Folder	Folder	☐	☐	☐	LAB

ASSET Laboratories
3151-3153 W Post Rd., Las Vegas, NV 89118
www.atl-labs.com
TEL: 7023072659 *FAX: 7023072691*

CHAIN-OF-CUSTODY RECORD

QC Level: Level IV

Subcontractor:

BC Labs
4100 Atlas Court
Bakersfield, CA 93308

TEL: (661) 327-4911
FAX: (661) 327-1918
Acct #:

Field Sampler: Riggie Tep

29-Aug-22

				Nitrate/Nitrite	Requested Tests	
Sample ID	**Matrix**	**Date Collected**	**Bottle Type**	**SM4500-NO3F**		
N052282-007E / MW-46-175-Q322	Groundwater	8/24/2022 12:06:00 PM	8OZP	1		

General Comments: PLEASE EMAIL SAMPLE RECEIPT ACKNOWLEDGEMENT TO THE PM. ALWAYS CC: sonny.lorenzo@assetlaboratories.com

Please use PO#:N52282A Please email Invoices and Account Receivable Statements to elvira@assetlaboratories.com. For questions, call Marlon at (702)-307-2659. Please e-mail results to reports.lv@assetlaboratories.com by: Standard TAT

Please analyze for Nitrate/Nitrite. EDD requirement Labspec7 edata.

GSO #: 557641344

		Date/Time			Date/Time
Relinquished by:	GGarcia	8/29/2022 16:30	**Received by:**		
Relinquished by:			**Received by:**		

September 13, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052283

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 24, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052283

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Dilution was necessary for some samples due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for EPA 6010B_Dissolved:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Iron in QC samples N052283-001B-MS and N052283-001B-MSD since the analyte concentration in the sample is disproportionate to the spike level. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020_Dissolved:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for some analytes in QC samples N052262-011BMS and N052262-011BMSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Manganese in QC samples N052262-011BMS and N052262-011BMSD since the analyte concentration in the sample is disproportionate to the spike level. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for SM 5310C:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria in QC samples N052282-007CMS and N052282-007CMSD at several dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N052282-007 and MS/MSD were reported at 50x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

ASSET Laboratories

Date: *13-Sep-22*

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052283
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052283-001A	MW-43-075-Q322	Groundwater	8/24/2022 8:52:00 AM	8/24/2022	9/13/2022
N052283-001B	MW-43-075-Q322	Groundwater	8/24/2022 8:52:00 AM	8/24/2022	9/13/2022
N052283-001C	MW-43-075-Q322	Groundwater	8/24/2022 8:52:00 AM	8/24/2022	9/13/2022
N052283-001D	MW-43-075-Q322	Groundwater	8/24/2022 8:52:00 AM	8/24/2022	9/13/2022
N052283-002A	MW-43-075-EB-Q322	Groundwater	8/24/2022 8:31:00 AM	8/24/2022	9/13/2022
N052283-003A	MW-43-090-Q322	Groundwater	8/24/2022 8:28:00 AM	8/24/2022	9/13/2022
N052283-003B	MW-43-090-Q322	Groundwater	8/24/2022 8:28:00 AM	8/24/2022	9/13/2022
N052283-003C	MW-43-090-Q322	Groundwater	8/24/2022 8:28:00 AM	8/24/2022	9/13/2022
N052283-003D	MW-43-090-Q322	Groundwater	8/24/2022 8:28:00 AM	8/24/2022	9/13/2022
N052283-004A	MW-43-090-EB-Q322	Groundwater	8/24/2022 8:05:00 AM	8/24/2022	9/13/2022
N052283-005A	MW-52D-Q322	Groundwater	8/24/2022 12:11:00 PM	8/24/2022	9/13/2022
N052283-005B	MW-52D-Q322	Groundwater	8/24/2022 12:11:00 PM	8/24/2022	9/13/2022
N052283-005C	MW-52D-Q322	Groundwater	8/24/2022 12:11:00 PM	8/24/2022	9/13/2022
N052283-005D	MW-52D-Q322	Groundwater	8/24/2022 12:11:00 PM	8/24/2022	9/13/2022
N052283-006A	MW-918-Q322	Groundwater	8/24/2022 12:21:00 PM	8/24/2022	9/13/2022
N052283-006B	MW-918-Q322	Groundwater	8/24/2022 12:21:00 PM	8/24/2022	9/13/2022
N052283-006C	MW-918-Q322	Groundwater	8/24/2022 12:21:00 PM	8/24/2022	9/13/2022
N052283-006D	MW-918-Q322	Groundwater	8/24/2022 12:21:00 PM	8/24/2022	9/13/2022
N052283-007A	MW-52M-Q322	Groundwater	8/24/2022 11:48:00 AM	8/24/2022	9/13/2022
N052283-007B	MW-52M-Q322	Groundwater	8/24/2022 11:48:00 AM	8/24/2022	9/13/2022
N052283-007C	MW-52M-Q322	Groundwater	8/24/2022 11:48:00 AM	8/24/2022	9/13/2022
N052283-007D	MW-52M-Q322	Groundwater	8/24/2022 11:48:00 AM	8/24/2022	9/13/2022
N052283-008A	MW-52S-Q322	Groundwater	8/24/2022 11:26:00 AM	8/24/2022	9/13/2022
N052283-008B	MW-52S-Q322	Groundwater	8/24/2022 11:26:00 AM	8/24/2022	9/13/2022
N052283-008C	MW-52S-Q322	Groundwater	8/24/2022 11:26:00 AM	8/24/2022	9/13/2022
N052283-008D	MW-52S-Q322	Groundwater	8/24/2022 11:26:00 AM	8/24/2022	9/13/2022
N052283-009A	MW-53D-Q322	Groundwater	8/24/2022 10:44:00 AM	8/24/2022	9/13/2022
N052283-009B	MW-53D-Q322	Groundwater	8/24/2022 10:44:00 AM	8/24/2022	9/13/2022
N052283-009C	MW-53D-Q322	Groundwater	8/24/2022 10:44:00 AM	8/24/2022	9/13/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052283
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052283-009D	MW-53D-Q322	Groundwater	8/24/2022 10:44:00 AM	8/24/2022	9/13/2022
N052283-010A	MW-53M-Q322	Groundwater	8/24/2022 10:14:00 AM	8/24/2022	9/13/2022
N052283-010B	MW-53M-Q322	Groundwater	8/24/2022 10:14:00 AM	8/24/2022	9/13/2022
N052283-010C	MW-53M-Q322	Groundwater	8/24/2022 10:14:00 AM	8/24/2022	9/13/2022
N052283-010D	MW-53M-Q322	Groundwater	8/24/2022 10:14:00 AM	8/24/2022	9/13/2022
N052283-011A	MW-53S-Q322	Groundwater	8/24/2022 9:49:00 AM	8/24/2022	9/13/2022
N052283-011B	MW-53S-Q322	Groundwater	8/24/2022 9:49:00 AM	8/24/2022	9/13/2022
N052283-011C	MW-53S-Q322	Groundwater	8/24/2022 9:49:00 AM	8/24/2022	9/13/2022
N052283-011D	MW-53S-Q322	Groundwater	8/24/2022 9:49:00 AM	8/24/2022	9/13/2022
N052283-012A	EB-730-Q322	Groundwater	8/24/2022 1:50:00 PM	8/24/2022	9/13/2022
N052283-013A	MW-75-033-Q322	Groundwater	8/24/2022 1:25:00 PM	8/24/2022	9/13/2022
N052283-014A	MW-75-117-Q322	Groundwater	8/24/2022 1:44:00 PM	8/24/2022	9/13/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-075-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 8:52:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220830B**	QC Batch: **R165355**			PrepDate:			Analyst: **CR**
Hexavalent Chromium	ND	0.18	1.0		µg/L	5	8/30/2022 09:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-075-EB-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 8:31:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220830B**	QC Batch: **R165355**			PrepDate:			Analyst: **CR**
Hexavalent Chromium	ND	0.037	0.20		µg/L	1	8/30/2022 03:55 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-090-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 8:28:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220830B**	QC Batch: **R165355**			PrepDate:			Analyst: **CR**
Hexavalent Chromium	ND	0.18	1.0		µg/L	5	8/30/2022 10:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-090-EB-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 8:05:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220830B**	QC Batch: **R165355**			PrepDate:			Analyst: **CR**
Hexavalent Chromium	ND	0.037	0.20		µg/L	1	8/30/2022 05:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52D-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 12:11:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220831A**	QC Batch: **R165356**			PrepDate:			Analyst: **AD**
Hexavalent Chromium	ND	0.18	1.0		µg/L	5	8/31/2022 12:47 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-918-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 12:21:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220831A**	QC Batch: **R165356**			PrepDate:			Analyst: **AD**
Hexavalent Chromium	ND	0.18	1.0		µg/L	5	8/31/2022 01:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52M-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 11:48:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220831A**	QC Batch: **R165356**			PrepDate:			Analyst: **AD**
Hexavalent Chromium	ND	0.18	1.0		µg/L	5	8/31/2022 01:32 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52S-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 11:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220831A**	QC Batch: **R165356**			PrepDate:			Analyst: **AD**
Hexavalent Chromium	ND	0.18	1.0		µg/L	5	8/31/2022 01:55 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53D-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 10:44:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220831A**	QC Batch: **R165356**			PrepDate:			Analyst: **AD**
Hexavalent Chromium	ND	0.18	1.0		µg/L	5	8/31/2022 02:41 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53M-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220831A**	QC Batch: **R165356**			PrepDate:			Analyst: **AD**
Hexavalent Chromium	ND	0.18	1.0		µg/L	5	8/31/2022 03:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53S-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 9:49:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220831A**	QC Batch: **R165356**			PrepDate:			Analyst: **AD**
Hexavalent Chromium	ND	0.037	0.20		µg/L	1	8/31/2022 03:26 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-730-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 1:50:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220831A**	QC Batch: **R165356**			PrepDate:			Analyst: **AD**
Hexavalent Chromium	ND	0.037	0.20		µg/L	1	8/31/2022 04:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-75-033-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 1:25:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220831A**	QC Batch: **R165356**			PrepDate:			Analyst: **AD**
Hexavalent Chromium	36	0.18	1.0		µg/L	5	8/31/2022 04:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-75-117-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 1:44:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **CA01638-IC01_220831A**	QC Batch: **R165356**			PrepDate:			Analyst: **AD**
Hexavalent Chromium	14	0.18	1.0		µg/L	5	8/31/2022 05:09 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: CA_218.6_WPGE

Sample ID: **MB1-R165355**	SampType: **MBLK**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165355**
Client ID: **PBW**	Batch ID: **R165355**	TestNo: **EPA 218.6**		Analysis Date: **8/30/2022**	SeqNo: **4814967**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS1-R165355**	SampType: **LCS**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165355**
Client ID: **LCSW**	Batch ID: **R165355**	TestNo: **EPA 218.6**		Analysis Date: **8/30/2022**	SeqNo: **4814968**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.044	0.20	5.000	0	101	90	110				

Sample ID: **N052283-002A-MS**	SampType: **MS**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165355**
Client ID: **ZZZZZZ**	Batch ID: **R165355**	TestNo: **EPA 218.6**		Analysis Date: **8/30/2022**	SeqNo: **4814974**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.087	0.20	1.000	0	109	90	110				

Sample ID: **N052283-004A-MS**	SampType: **MS**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165355**
Client ID: **ZZZZZZ**	Batch ID: **R165355**	TestNo: **EPA 218.6**		Analysis Date: **8/30/2022**	SeqNo: **4814980**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.994	0.20	1.000	0	99.4	90	110				

Sample ID: **N052283-001A-DUP**	SampType: **DUP**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165355**
Client ID: **ZZZZZZ**	Batch ID: **R165355**	TestNo: **EPA 218.6**		Analysis Date: **8/30/2022**	SeqNo: **4815006**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	1.0						0	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: CA_218.6_WPGE

Sample ID: **N052283-001A-MS**	SampType: **MS**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165355**
Client ID: **ZZZZZZ**	Batch ID: **R165355**	TestNo: **EPA 218.6**		Analysis Date: **8/30/2022**	SeqNo: **4815007**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.720	1.0	5.000	0	94.4	90	110				

Sample ID: **N052283-001A-MSD**	SampType: **MSD**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165355**
Client ID: **ZZZZZZ**	Batch ID: **R165355**	TestNo: **EPA 218.6**		Analysis Date: **8/30/2022**	SeqNo: **4815008**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.777	1.0	5.000	0	95.5	90	110	4.720	1.20	20	

Sample ID: **N052283-003A-MS**	SampType: **MS**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165355**
Client ID: **ZZZZZZ**	Batch ID: **R165355**	TestNo: **EPA 218.6**		Analysis Date: **8/30/2022**	SeqNo: **4815010**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.274	1.0	5.000	0	105	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: CA_218.6_WPGE

Sample ID: **MB1-R165356**	SampType: **MBLK**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165356**
Client ID: **PBW**	Batch ID: **R165356**	TestNo: **EPA 218.6**		Analysis Date: **8/31/2022**	SeqNo: **4815032**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS1-R165356**	SampType: **LCS**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165356**
Client ID: **LCSW**	Batch ID: **R165356**	TestNo: **EPA 218.6**		Analysis Date: **8/31/2022**	SeqNo: **4815033**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.882	0.20	5.000	0	97.6	90	110				

Sample ID: **N052283-005A-MS**	SampType: **MS**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165356**
Client ID: **ZZZZZZ**	Batch ID: **R165356**	TestNo: **EPA 218.6**		Analysis Date: **8/31/2022**	SeqNo: **4815035**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.702	1.0	5.000	0	94.0	90	110				

Sample ID: **N052283-006A-MS**	SampType: **MS**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165356**
Client ID: **ZZZZZZ**	Batch ID: **R165356**	TestNo: **EPA 218.6**		Analysis Date: **8/31/2022**	SeqNo: **4815037**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.932	1.0	5.000	0	98.6	90	110				

Sample ID: **N052283-007A-MS**	SampType: **MS**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165356**
Client ID: **ZZZZZZ**	Batch ID: **R165356**	TestNo: **EPA 218.6**		Analysis Date: **8/31/2022**	SeqNo: **4815039**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.138	1.0	5.000	0	103	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: CA_218.6_WPGE

Sample ID: **N052283-009A-MS** SampType: **MS** TestCode: **CA_218.6_W** Units: **µg/L** Prep Date: RunNo: **165356**
Client ID: **ZZZZZZ** Batch ID: **R165356** TestNo: **EPA 218.6** Analysis Date: **8/31/2022** SeqNo: **4815045**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.164	1.0	5.000	0	103	90	110				

Sample ID: **N052283-010A-MS** SampType: **MS** TestCode: **CA_218.6_W** Units: **µg/L** Prep Date: RunNo: **165356**
Client ID: **ZZZZZZ** Batch ID: **R165356** TestNo: **EPA 218.6** Analysis Date: **8/31/2022** SeqNo: **4815047**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.070	1.0	5.000	0	101	90	110				

Sample ID: **N052283-011A-MS** SampType: **MS** TestCode: **CA_218.6_W** Units: **µg/L** Prep Date: RunNo: **165356**
Client ID: **ZZZZZZ** Batch ID: **R165356** TestNo: **EPA 218.6** Analysis Date: **8/31/2022** SeqNo: **4815049**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.045	0.20	1.000	0.03730	101	90	110				

Sample ID: **N052283-011A-MSD** SampType: **MSD** TestCode: **CA_218.6_W** Units: **µg/L** Prep Date: RunNo: **165356**
Client ID: **ZZZZZZ** Batch ID: **R165356** TestNo: **EPA 218.6** Analysis Date: **8/31/2022** SeqNo: **4815050**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.048	0.20	1.000	0.03730	101	90	110	1.045	0.325	20	

Sample ID: **N052283-012A-MS** SampType: **MS** TestCode: **CA_218.6_W** Units: **µg/L** Prep Date: RunNo: **165356**
Client ID: **ZZZZZZ** Batch ID: **R165356** TestNo: **EPA 218.6** Analysis Date: **8/31/2022** SeqNo: **4815052**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.997	0.20	1.000	0	99.7	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: CA_218.6_WPGE

Sample ID: **N052283-013A-MS**	SampType: **MS**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165356**
Client ID: **ZZZZZZ**	Batch ID: **R165356**	TestNo: **EPA 218.6**		Analysis Date: **8/31/2022**	SeqNo: **4815056**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	60.933	1.0	25.00	35.87	100	90	110				

Sample ID: **N052283-014A-MS**	SampType: **MS**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165356**
Client ID: **ZZZZZZ**	Batch ID: **R165356**	TestNo: **EPA 218.6**		Analysis Date: **8/31/2022**	SeqNo: **4815058**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	39.660	1.0	25.00	14.15	102	90	110				

Sample ID: **N052283-008A-MS**	SampType: **MS**	TestCode: **CA_218.6_W**	Units: **µg/L**	Prep Date:	RunNo: **165356**
Client ID: **ZZZZZZ**	Batch ID: **R165356**	TestNo: **EPA 218.6**		Analysis Date: **8/31/2022**	SeqNo: **4815059**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.376	1.0	5.000	0	108	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-075-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 8:52:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220825A**	QC Batch: **R165146**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/25/2022 11:03 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-090-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 8:28:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220825A**	QC Batch: **R165146**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/25/2022 11:19 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52D-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 12:11:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220825A**	QC Batch: **R165146**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/25/2022 12:38 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-918-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 12:21:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220825A**	QC Batch: **R165146**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/25/2022 01:25 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52M-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 11:48:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220825A**	QC Batch: **R165146**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/25/2022 01:41 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52S-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 11:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220825A**	QC Batch: **R165146**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/25/2022 01:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53D-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 10:44:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220825A**	QC Batch: **R165146**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/25/2022 02:13 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53M-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220825A**	QC Batch: **R165146**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/25/2022 02:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53S-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 9:49:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220825A**	QC Batch: **R165146**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	8/25/2022 02:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R165146_NO3** SampType: **MBLK** TestCode: **300WLLNO3** Units: **mg/L** Prep Date: RunNo: **165146**
Client ID: **PBW** Batch ID: **R165146** TestNo: **EPA 300.0** Analysis Date: **8/25/2022** SeqNo: **4799746**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R165146_NO3** SampType: **LCS** TestCode: **300WLLNO3** Units: **mg/L** Prep Date: RunNo: **165146**
Client ID: **LCSW** Batch ID: **R165146** TestNo: **EPA 300.0** Analysis Date: **8/25/2022** SeqNo: **4799747**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.187	0.050	1.250	0	94.9	90	110				

Sample ID: **N052282-007DMS** SampType: **MS** TestCode: **300WLLNO3** Units: **mg/L** Prep Date: RunNo: **165146**
Client ID: **ZZZZZZ** Batch ID: **R165146** TestNo: **EPA 300.0** Analysis Date: **8/25/2022** SeqNo: **4799754**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.669	0.25	6.250	1.016	90.4	80	120				

Sample ID: **N052282-007DMSD** SampType: **MSD** TestCode: **300WLLNO3** Units: **mg/L** Prep Date: RunNo: **165146**
Client ID: **ZZZZZZ** Batch ID: **R165146** TestNo: **EPA 300.0** Analysis Date: **8/25/2022** SeqNo: **4799755**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.430	0.25	6.250	1.016	86.6	80	120	6.669	3.65	20	

Sample ID: **N052283-005DDUP** SampType: **DUP** TestCode: **300WLLNO3** Units: **mg/L** Prep Date: RunNo: **165146**
Client ID: **ZZZZZZ** Batch ID: **R165146** TestNo: **EPA 300.0** Analysis Date: **8/25/2022** SeqNo: **4799759**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	0.310	0.50						0.3370	0	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **N052283-005DMS**	SampType: **MS**	TestCode: **300WLLNO3**	Units: **mg/L**	Prep Date:	RunNo: **165146**
Client ID: **ZZZZZZ**	Batch ID: **R165146**	TestNo: **EPA 300.0**		Analysis Date: **8/25/2022**	SeqNo: **4799760**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	11.133	0.50	12.50	0.3370	86.4	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-075-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 8:52:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/25/2022 01:31 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-090-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 8:28:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/25/2022 01:47 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52D-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 12:11:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/25/2022 02:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-918-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 12:21:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/25/2022 02:18 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52M-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 11:48:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/25/2022 02:33 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52S-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 11:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.9	0.14	1.0		mg/L	1	8/25/2022 04:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53D-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 10:44:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/25/2022 04:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53M-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	8/25/2022 04:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53S-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 9:49:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220825A**	QC Batch: **R165151**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.5	0.14	1.0		mg/L	1	8/25/2022 04:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R165151**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165151**
Client ID: **PBW**	Batch ID: **R165151**	TestNo: **SM 5310C**		Analysis Date: **8/25/2022**	SeqNo: **4800089**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R165151**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165151**
Client ID: **LCSW**	Batch ID: **R165151**	TestNo: **SM 5310C**		Analysis Date: **8/25/2022**	SeqNo: **4800090**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.184	1.0	5.000	0	104	85	115				

Sample ID: **N052282-007CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165151**
Client ID: **ZZZZZZ**	Batch ID: **R165151**	TestNo: **SM 5310C**		Analysis Date: **8/25/2022**	SeqNo: **4800109**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	232.730	50	250.0	0	93.1	75	125				

Sample ID: **N052282-007CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165151**
Client ID: **ZZZZZZ**	Batch ID: **R165151**	TestNo: **SM 5310C**		Analysis Date: **8/25/2022**	SeqNo: **4800110**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	234.140	50	250.0	0	93.7	75	125	232.7	0.604	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-075-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 8:52:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220907B**	QC Batch: **94419**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	3000	13	20		µg/L	1	9/7/2022 09:51 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-090-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 8:28:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94419**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	1000	13	20		µg/L	1	8/28/2022 04:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52D-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 12:11:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94419**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	740	13	20		µg/L	1	8/28/2022 04:14 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-918-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 12:21:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94419**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	700	13	20		µg/L	1	8/28/2022 04:19 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52M-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 11:48:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94419**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	1600	13	20		µg/L	1	8/28/2022 04:24 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52S-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 11:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94419**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	20000	13	20		µg/L	1	8/28/2022 04:29 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53D-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 10:44:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94419**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	250	13	20		µg/L	1	8/28/2022 04:35 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53M-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94419**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	440	13	20		µg/L	1	8/28/2022 04:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53S-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 9:49:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220828B**	QC Batch: **94419**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Iron	5900	13	20		µg/L	1	8/28/2022 04:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94419**	SampType: **MBLK**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165203**
Client ID: **PBW**	Batch ID: **94419**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803743**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-94419**	SampType: **LCS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165203**
Client ID: **LCSW**	Batch ID: **94419**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **8/28/2022**	SeqNo: **4803744**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	108.905	20	100.0	0	109	85	115				

Sample ID: **N052283-001B-MS**	SampType: **MS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165476**
Client ID: **ZZZZZZ**	Batch ID: **94419**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/7/2022**	SeqNo: **4820449**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	3331.898	20	100.0	3047	284	75	125				S

Sample ID: **N052283-001B-MSD**	SampType: **MSD**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165476**
Client ID: **ZZZZZZ**	Batch ID: **94419**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/7/2022**	SeqNo: **4820450**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	3338.735	20	100.0	3047	291	75	125	3332	0.205	20	S

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **N052283-001B-PS** SampType: **PS** TestCode: **6010_WDPG** Units: **µg/L** Prep Date: RunNo: **165476**
Client ID: **ZZZZZZ** Batch ID: **94419** TestNo: **EPA 6010B** **EPA 3010A** Analysis Date: **9/7/2022** SeqNo: **4820446**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	3341.618	20	100.0	3047	294	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-075-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 8:52:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	7.0	0.050	0.10		µg/L	1	8/26/2022 05:26 AM
Barium	52	0.083	1.0		µg/L	1	8/26/2022 05:26 AM
Manganese	670	0.13	2.5		µg/L	5	8/27/2022 12:41 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-43-090-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 8:28:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:		**8/25/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 05:32 AM
Barium	54	0.083	1.0		µg/L	1	8/26/2022 05:32 AM
Manganese	640	0.66	12		µg/L	25	9/8/2022 05:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52D-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 12:11:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A				**EPA 6020**		
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**				PrepDate:	**8/25/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 05:38 AM
Barium	36	0.083	1.0		µg/L	1	8/26/2022 05:38 AM
Manganese	380	0.13	2.5		µg/L	5	8/27/2022 01:05 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052283-006

Client Sample ID: MW-918-Q322
Collection Date: 8/24/2022 12:21:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:		**8/25/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 05:44 AM
Barium	35	0.083	1.0		µg/L	1	8/26/2022 05:44 AM
Manganese	330	0.13	2.5		µg/L	5	8/27/2022 01:11 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52M-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 11:48:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:		**8/25/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 05:50 AM
Barium	56	0.083	1.0		µg/L	1	8/26/2022 05:50 AM
Manganese	280	0.13	2.5		µg/L	5	8/27/2022 01:17 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-52S-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 11:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:	**8/25/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 05:56 AM
Barium	850	2.1	25		µg/L	25	9/12/2022 05:34 PM
Manganese	1300	0.66	12		µg/L	25	8/27/2022 01:23 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53D-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 10:44:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:		**8/25/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 06:02 AM
Barium	53	0.083	1.0		µg/L	1	8/26/2022 06:02 AM
Manganese	1200	0.66	12		µg/L	25	8/27/2022 01:29 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53M-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:		**8/25/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 06:08 AM
Barium	65	0.083	1.0		µg/L	1	8/26/2022 06:08 AM
Manganese	420	0.13	2.5		µg/L	5	8/27/2022 01:35 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-53S-Q322
Lab Order:	N052283	**Collection Date:**	8/24/2022 9:49:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052283-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220825E**	QC Batch: **94422**			PrepDate:		**8/25/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	8/26/2022 06:31 AM
Barium	190	0.42	5.0		µg/L	5	9/8/2022 06:13 PM
Manganese	1500	0.66	12		µg/L	25	8/27/2022 01:41 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94422**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **PBW**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803607**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	0.108	0.50									

Sample ID: **LCS-94422**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **LCSW**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803608**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.300	0.10	10.00	0	103	85	115				
Barium	9.871	1.0	10.00	0	98.7	85	115				
Manganese	105.351	0.50	100.0	0	105	85	115				

Sample ID: **N052262-011BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803618**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	6.532	0.10	10.00	0	65.3	75	125				S
Barium	44.365	1.0	10.00	38.18	61.8	75	125				S

Sample ID: **N052262-011BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803619**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	5.778	0.10	10.00	0	57.8	75	125	6.532	12.3	20	S
Barium	47.657	1.0	10.00	38.18	94.8	75	125	44.36	7.15	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052262-011BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/27/2022**	SeqNo: **4804980**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	331.296	12	100.0	295.7	35.6	75	125				S

Sample ID: **N052262-011BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **8/25/2022**	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/27/2022**	SeqNo: **4804981**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	308.079	12	100.0	295.7	12.4	75	125	331.3	7.26	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052283
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052262-011B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165202**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/26/2022**	SeqNo: **4803617**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	6.583	0.10	10.00	0	65.8	80	120				S
Barium	44.703	1.0	10.00	38.18	65.2	80	120				S

Sample ID: **N052262-011B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165217**
Client ID: **ZZZZZZ**	Batch ID: **94422**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **8/27/2022**	SeqNo: **4804979**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	307.203	12	100.0	295.7	11.5	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us: N052283
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement: Excel EDD; Geotracker; Labspec; Others ✓ Specify: RWQCB; Global ID:
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	QA/QC: RTNE; RWQCB ✓; CalTrans; LEVEL III; LEVEL IV; Regulatory; Specify State:
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Sample Receipt Condition: 1. Chilled ✓; 2. Headspace; 3. Container Intact ✓; 4. Seal Present; 5. IR number 3
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	6. Method of Cooling: ICE
Submitted By: Riggie Top		Phone: 949-727-1400, ext 200 Fax:	Sample Temp: 3.5C 2.1°C
Title: Field Tech	Phone: 916-786-3302 Fax:		
Signature: Date: 8/24/22	Sampled By: Riggie Top		Courier: ASSET
I hereby authorize ASSET Labs to perform the tests indicated below.	*I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for*		Tracking No.:
Project Name: PG&E Topock - PCM	Signature: Date: 8/24/22		
Project Number: 30121866.3Q22GW			

Matrix: Ground X; Potable; NPDES; Surface; Sediment; Soil; Other Solid

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate (EPA 300.0) (1 L poly)	Nitrate/nitrite as Nitrogen (SM 4500-NO3), H2SO4 (125 mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052283-01	MW-43-075-Q322	8/24/2022	8:52		X		X			X			X		E	6	P	BNS	
2	-02	MW-43-075-EB-Q322	8/24/2022	8:31		X										E	1	P	BNS	
3	-03	MW-43-090-Q322	8/24/2022	8:28		X		X			X			X		E	6	P	BNS	
4	-04	MW-43-090-EB-Q322	8/24/2022	8:05		X										E	6	P	BNS	
5	-05	MW-52D-Q322	8/24/2022	12:11		X		X			X			X		E	6	P	BNS	
6	-06	MW-918-Q322	8/24/2022	12:21		X		X			X			X		E	6	P	BNS	
7	-07	MW-52M-Q322	8/24/2022	11:48		X		X			X			X		E	6	P	BNS	
8	-08	MW-52S-Q322	8/24/2022	11:26		X		X			X			X		E	6	P	BNS	
9	-09	MW-53D-Q322	8/24/2022	10:44		X		X			X			X		E	6	P	BNS	
10	-10	MW-53M-Q322	8/24/2022	10:14		X		X			X			X		E	6	P	BNS	
11	-11	MW-53S-Q322	8/24/2022	9:49		X		X			X			X		E	6	P	BNS	
12	-12	EB-730-Q322	8/24/2022	13:50		X										E	1	P	BNS	
13	-13	MW-75-033-Q322	8/24/2022	13:25		X										E	1	P	BNS	
14	-14	MW-75-117-Q322	8/24/2022	13:44		X										E	1	P	BNS	

Relinquished by (Signature and Printed Name):	Date/Time:	Received by (Signature and Printed Name):	Date/Time:
Riggie Top	8/24/22 1445	Dante Ortiz	8/24/22 14:45
Dante Ortiz	8/24/22 19:54	Dante Ortiz	8/24/22 19:54

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives: H=HCL; N=HNO_3; S=H_2SO_4; C=4°C; Z=Zn(AC)$_2$; O=NaOH; T=$Na_2S_2O_3$; Others/Specify: B (NH4)2SO4/NH4OH

Container Type: T=Tube; V=VOA; P=Pint; J=Jar; B=Tedlar; G=Glass; M=Metal; M=Metal; C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/24/2022	Workorder:	N052283
Rep sample Temp (Deg C):	3.5/2.1	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: EF EFanegoF 8/25/2022

Reviewed By: for: MBC 8/27/2022

ASSET Laboratories

WORK ORDER Summary

27-Aug-22

WorkOrder: N052283

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/24/2022 7:54 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052283-001A	MW-43-075-Q322	8/24/2022 8:52:00 AM	9/8/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052283-001B			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/8/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052283-001C			9/8/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052283-001D			9/8/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052283-002A	MW-43-075-EB-Q322	8/24/2022 8:31:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052283-003A	MW-43-090-Q322	8/24/2022 8:28:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052283-003B			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/8/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052283-003C			9/8/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052283-003D			9/8/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052283-004A	MW-43-090-EB-Q322	8/24/2022 8:05:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052283-005A	MW-52D-Q322	8/24/2022 12:11:00 PM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052283-005B			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/8/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052283-005C			9/8/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

27-Aug-22

WorkOrder: N052283

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/24/2022 7:54 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052283-005D	MW-52D-Q322	8/24/2022 12:11:00 PM	9/8/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052283-006A	MW-918-Q322	8/24/2022 12:21:00 PM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052283-006B			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/8/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052283-006C			9/8/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052283-006D			9/8/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052283-007A	MW-52M-Q322	8/24/2022 11:48:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052283-007B			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/8/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052283-007C			9/8/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052283-007D			9/8/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052283-008A	MW-52S-Q322	8/24/2022 11:26:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052283-008B			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/8/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052283-008C			9/8/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052283-008D			9/8/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

27-Aug-22

WorkOrder: N052283

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/24/2022 7:54 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052283-009A	MW-53D-Q322	8/24/2022 10:44:00 AM	9/8/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052283-009B			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/8/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052283-009C			9/8/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052283-009D			9/8/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052283-010A	MW-53M-Q322	8/24/2022 10:14:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052283-010B			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/8/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052283-010C			9/8/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052283-010D			9/8/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052283-011A	MW-53S-Q322	8/24/2022 9:49:00 AM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052283-011B			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/8/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/8/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052283-011C			9/8/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052283-011D			9/8/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052283-012A	EB-730-Q322	8/24/2022 1:50:00 PM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

27-Aug-22

WorkOrder: N052283

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/24/2022 7:54 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052283-013A	MW-75-033-Q322	8/24/2022 1:25:00 PM	9/8/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052283-014A	MW-75-117-Q322	8/24/2022 1:44:00 PM	9/8/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052283-015A	FOLDER	9/8/2022	9/8/2022		Folder	Folder	☐	☐	☐	LAB
			9/8/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/8/2022		Folder	Folder	☐	☐	☐	LAB

September 03, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052300

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 25, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Dilution was necessary for most of the samples due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052300
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052300-001A	MW-75-202-Q322	Groundwater	8/25/2022 8:30:00 AM	8/25/2022	9/3/2022
N052300-002A	MW-919-Q322	Groundwater	8/25/2022 8:40:00 AM	8/25/2022	9/3/2022
N052300-003A	MW-75-267-Q322	Groundwater	8/25/2022 8:57:00 AM	8/25/2022	9/3/2022
N052300-004A	MW-75-337-Q322	Groundwater	8/25/2022 9:16:00 AM	8/25/2022	9/3/2022
N052300-005A	EB-732-Q322	Groundwater	8/25/2022 12:20:00 PM	8/25/2022	9/3/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-75-202-Q322
Lab Order:	N052300	**Collection Date:**	8/25/2022 8:30:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052300-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220829A**	QC Batch: **R165279**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/29/2022 03:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-919-Q322
Lab Order:	N052300	**Collection Date:**	8/25/2022 8:40:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052300-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220829A**	QC Batch: **R165279**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/29/2022 04:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-75-267-Q322
Lab Order:	N052300	**Collection Date:**	8/25/2022 8:57:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052300-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220829A**	QC Batch: **R165279**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/29/2022 04:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-75-337-Q322
Lab Order:	N052300	**Collection Date:**	8/25/2022 9:16:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052300-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
EPA 218.6							
RunID: **NV00922-IC7_220829A** QC Batch: **R165279** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	8/29/2022 05:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-732-Q322
Lab Order:	N052300	**Collection Date:**	8/25/2022 12:20:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052300-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220829A**	QC Batch: **R165279**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/29/2022 01:54 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052300
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	MB-R165279	SampType:	MBLK	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279		
Client ID:	PBW	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808636		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	ND	0.20											

Sample ID	LCS-R165279	SampType:	LCS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279		
Client ID:	LCSW	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808637		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	5.205	0.20	5.000	0	104	90	110						

Sample ID	N052301-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279		
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808639		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	28.882	4.0	20.00	8.816	100	90	110						

Sample ID	N052301-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279		
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808644		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	57.369	1.0	25.00	31.48	104	90	110						

Sample ID	N052301-002AMSD	SampType:	MSD	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279		
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808645		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	57.378	1.0	25.00	31.48	104	90	110	57.37	0.0148	20			

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052300
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **N052301-006AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165279**
Client ID: **ZZZZZZ**	Batch ID: **R165279**	TestNo: **EPA 218.6**		Analysis Date: **8/29/2022**	SeqNo: **4808649**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.000	0.20	1.000	0	100	90	110				

Sample ID **N052301-003AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165279**
Client ID: **ZZZZZZ**	Batch ID: **R165279**	TestNo: **EPA 218.6**		Analysis Date: **8/29/2022**	SeqNo: **4808650**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	548.655	10	250.0	281.2	107	90	110				

Sample ID **N052301-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165279**
Client ID: **ZZZZZZ**	Batch ID: **R165279**	TestNo: **EPA 218.6**		Analysis Date: **8/29/2022**	SeqNo: **4808651**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	686.145	10	250.0	427.4	103	90	110				

Sample ID **N052301-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165279**
Client ID: **ZZZZZZ**	Batch ID: **R165279**	TestNo: **EPA 218.6**		Analysis Date: **8/29/2022**	SeqNo: **4808652**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	384.125	10	250.0	122.0	105	90	110				

Sample ID **N052301-003ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165279**
Client ID: **ZZZZZZ**	Batch ID: **R165279**	TestNo: **EPA 218.6**		Analysis Date: **8/29/2022**	SeqNo: **4808653**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	287.635	10						281.2	2.27	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052300
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052300-005AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808655

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.048	0.20	1.000	0	105	90	110				

Sample ID	N052300-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808659

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.032	1.0	5.000	0	101	90	110				

Sample ID	N052300-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808661

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.252	1.0	5.000	0	105	90	110				

Sample ID	N052300-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808665

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.157	1.0	5.000	0	103	90	110				

Sample ID	N052300-004AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808667

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.092	1.0	5.000	0	102	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

ARCUS02 C: 9/9/2022 12:00 AM
FOLDER R: 8/25/2022
N052300-006A 1 of 1

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement: Excel EDD; Geotracker; Labspec; Others ✓; Specify: RWQCB; Global ID:
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	QA/QC: RTNE; RWQCB ✓; CalTrans; LEVEL III; LEVEL IV; Regulatory; Specify State:
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	
Submitted By: Riggie Tap		Phone: 949-727-1400, ext 200 Fax:	
Title: Field Tech	Phone: 916-786-3302 Fax:		
Signature: Date: 8/25/22	Sampled By: Riggie Tap		

I hereby authorize ASSET Labs to perform the tests indicated below.

I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for

Project Name: PG&E Topock - PCM
Project Number: 30121866.3Q22GW

Signature: Date: 8/25/22

Matrix: Ground X; Sediment; Potable; Soil; NPDES; Other Solid; Surface

Sample Receipt Condition: 1. Chilled ✓; 2. Headspace; 3. Container Intact ✓; 4. Seal Present; 5. IR number 3; 6. Method of Cooling: ICE; Sample Temp: 1.8°C; Courier:; Tracking No.:

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate (EPA 300.0) (1 L poly)	Nitrate/nitrite as Nitrogen (SM 4500-NO3), H2SO4 (125 mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052300-01	MW-75-202-Q322	8/25/2022	8:30		X										E	1	P	BNS	
2	-02	MW-919-Q322	8/25/2022	8:40		X										E	1	P	BNS	
3	-03	MW-75-267-Q322	8/25/2022	8:57		X										E	1	P	BNS	
4	-04	MW-75-337-Q322	8/25/2022	9:16		X										E	1	P	BNS	
5	-05	EB-732-Q322	8/25/2022	12:20		X										E	1	P	BNS	
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Riggie Tap	8/25/22 1510	Dante Ortiz	8/25/22 15:10
Dante Ortiz	8/25/22 18:47	Dante Ortiz	8/25/22 18:47

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
   Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B	(NH4)2SO4/NH4OH		M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/25/2022	Workorder:	N052300
Rep sample Temp (Deg C):	1.8	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☐	No ☐	NA ☑
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: EF EFanegoF 8/26/2022

Reviewed By: for: MBC 8/27/2022

ASSET Laboratories

WORK ORDER Summary

26-Aug-22

WorkOrder: N052300

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/25/2022 6:47 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052300-001A	MW-75-202-Q322	8/25/2022 8:30:00 AM	9/9/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052300-002A	MW-919-Q322	8/25/2022 8:40:00 AM	9/9/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052300-003A	MW-75-267-Q322	8/25/2022 8:57:00 AM	9/9/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052300-004A	MW-75-337-Q322	8/25/2022 9:16:00 AM	9/9/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052300-005A	EB-732-Q322	8/25/2022 12:20:00 PM	9/9/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052300-006A	FOLDER	9/9/2022	9/9/2022		Folder	Folder	☐	☐	☐	LAB
			9/9/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/9/2022		Folder	Folder	☐	☐	☐	LAB

September 16, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052301

RE: PG&E Topock - RCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on August 25, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab Order: N052301

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Because the results for total dissolved chromium (11 ug/L) and hexavalent chromium (8.8 ug/L) for sample N052301-001 (MW-38D-Q322) are discrepant, sample re-analysis and Matrix Spike protocol were performed and result confirmed initial analysis.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for EPA 6020_Dissolved:

Sample N052301-001 was diluted due to matrix. Digestate is colored.

Because the results for total dissolved chromium (11 ug/L) and hexavalent chromium (8.8 ug/L) for sample N052301-001 (MW-38D-Q322) are discrepant, sample from both the total dissolved chromium and hexavalent chromium containers were redigested and analyzed for total dissolved chromium. The results from the redigested samples were 9.5 and 10 ug/L, respectively. Since these data confirmed the original result for total dissolved chromium, the original result is reported.

ASSET Laboratories

Date: *16-Sep-22*

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab Order: N052301
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052301-001A	MW-38D-Q322	Groundwater	8/25/2022 8:38:00 AM	8/25/2022	9/16/2022
N052301-001B	MW-38D-Q322	Groundwater	8/25/2022 8:38:00 AM	8/25/2022	9/16/2022
N052301-001C	MW-38D-Q322	Groundwater	8/25/2022 8:38:00 AM	8/25/2022	9/16/2022
N052301-002A	MW-38S-Q322	Groundwater	8/25/2022 9:16:00 AM	8/25/2022	9/16/2022
N052301-002B	MW-38S-Q322	Groundwater	8/25/2022 9:16:00 AM	8/25/2022	9/16/2022
N052301-002C	MW-38S-Q322	Groundwater	8/25/2022 9:16:00 AM	8/25/2022	9/16/2022
N052301-003A	MW-65-160-Q322	Groundwater	8/25/2022 11:43:00 AM	8/25/2022	9/16/2022
N052301-003B	MW-65-160-Q322	Groundwater	8/25/2022 11:43:00 AM	8/25/2022	9/16/2022
N052301-003C	MW-65-160-Q322	Groundwater	8/25/2022 11:43:00 AM	8/25/2022	9/16/2022
N052301-004A	MW-65-225-Q322	Groundwater	8/25/2022 11:48:00 AM	8/25/2022	9/16/2022
N052301-004B	MW-65-225-Q322	Groundwater	8/25/2022 11:48:00 AM	8/25/2022	9/16/2022
N052301-004C	MW-65-225-Q322	Groundwater	8/25/2022 11:48:00 AM	8/25/2022	9/16/2022
N052301-005A	MW-69-195-Q322	Groundwater	8/25/2022 10:56:00 AM	8/25/2022	9/16/2022
N052301-005B	MW-69-195-Q322	Groundwater	8/25/2022 10:56:00 AM	8/25/2022	9/16/2022
N052301-005C	MW-69-195-Q322	Groundwater	8/25/2022 10:56:00 AM	8/25/2022	9/16/2022
N052301-006A	EB-731-Q322	Groundwater	8/25/2022 12:10:00 PM	8/25/2022	9/16/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-38D-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 8:38:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220829A**	QC Batch: **R165279**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	8.8	0.50	4.0		µg/L	20	8/29/2022 11:23 AM
DISSOLVED METALS BY ICP-MS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220904C**	QC Batch: **94557**			PrepDate:	**9/2/2022**		Analyst: **DJ**
Chromium	11	0.18	5.0		µg/L	5	9/4/2022 08:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-38S-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 9:16:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
EPA 218.6							
RunID: **NV00922-IC7_220829A** QC Batch: **R165279** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	31	0.13	1.0		µg/L	5	8/29/2022 11:42 AM
DISSOLVED METALS BY ICP-MS							
EPA 3010A **EPA 6020**							
RunID: **NV00922-ICP8_220904C** QC Batch: **94557** PrepDate: **9/2/2022** Analyst: **DJ**							
Chromium	31	0.035	1.0		µg/L	1	9/4/2022 09:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-65-160-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 11:43:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220829A**	QC Batch: **R165279**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	280	1.3	10		µg/L	50	8/29/2022 11:51 AM
DISSOLVED METALS BY ICP-MS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220915B**	QC Batch: **94714**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Chromium	300	0.18	5.0		µg/L	5	9/15/2022 06:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-65-225-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 11:48:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220829A**	QC Batch: **R165279**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	430	1.3	10		µg/L	50	8/29/2022 12:01 PM
DISSOLVED METALS BY ICP-MS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220909B**	QC Batch: **94557**			PrepDate:	**9/2/2022**		Analyst: **DJ**
Chromium	510	0.18	5.0		µg/L	5	9/9/2022 01:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-69-195-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 10:56:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220829A**	QC Batch: **R165279**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	120	1.3	10		µg/L	50	8/29/2022 12:10 PM
DISSOLVED METALS BY ICP-MS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220904C**	QC Batch: **94557**			PrepDate:	**9/2/2022**		Analyst: **DJ**
Chromium	100	0.035	1.0		µg/L	1	9/4/2022 09:18 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-731-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 12:10:00 PM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220829A**	QC Batch: **R165279**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	8/29/2022 12:57 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052301
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	MB-R165279	SampType:	MBLK	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	PBW	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808636

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID	LCS-R165279	SampType:	LCS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	LCSW	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808637

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.205	0.20	5.000	0	104	90	110				

Sample ID	N052301-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808639

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	28.882	4.0	20.00	8.816	100	90	110				

Sample ID	N052301-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808644

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	57.369	1.0	25.00	31.48	104	90	110				

Sample ID	N052301-002AMSD	SampType:	MSD	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808645

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	57.378	1.0	25.00	31.48	104	90	110	57.37	0.0148	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052301
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052301-006AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808649

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.000	0.20	1.000	0	100	90	110				

Sample ID	N052301-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808650

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	548.655	10	250.0	281.2	107	90	110				

Sample ID	N052301-004AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808651

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	686.145	10	250.0	427.4	103	90	110				

Sample ID	N052301-005AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808652

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	384.125	10	250.0	122.0	105	90	110				

Sample ID	N052301-003ADUP	SampType:	DUP	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808653

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	287.635	10						281.2	2.27	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052301
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052300-005AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808655

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.048	0.20	1.000	0	105	90	110				

Sample ID	N052300-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808659

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.032	1.0	5.000	0	101	90	110				

Sample ID	N052300-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808661

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.252	1.0	5.000	0	105	90	110				

Sample ID	N052300-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808665

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.157	1.0	5.000	0	103	90	110				

Sample ID	N052300-004AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165279
Client ID:	ZZZZZZ	Batch ID:	R165279	TestNo:	EPA 218.6			Analysis Date:	8/29/2022	SeqNo:	4808667

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.092	1.0	5.000	0	102	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052301
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020DIS_CrPGE_TPK

Sample ID	MB-94557	SampType:	MBLK	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	9/2/2022	RunNo:	165443
Client ID:	PBW	Batch ID:	94557	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/4/2022	SeqNo:	4819240

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									

Sample ID	LCS-94557	SampType:	LCS	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	9/2/2022	RunNo:	165443
Client ID:	LCSW	Batch ID:	94557	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/4/2022	SeqNo:	4819241

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.868	1.0	10.00	0	98.7	85	115				

Sample ID	N052394-001A-MS	SampType:	MS	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	9/2/2022	RunNo:	165571
Client ID:	ZZZZZZ	Batch ID:	94557	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/8/2022	SeqNo:	4826456

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	13.045	1.0	10.00	3.575	94.7	75	125				

Sample ID	N052394-001A-MSD	SampType:	MSD	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	9/2/2022	RunNo:	165571
Client ID:	ZZZZZZ	Batch ID:	94557	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/8/2022	SeqNo:	4826457

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	13.002	1.0	10.00	3.575	94.3	75	125	13.04	0.330	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052301
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020DIS_CrPGE_TPK

Sample ID	MB-94714	SampType:	MBLK	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	9/14/2022	RunNo:	165724
Client ID:	PBW	Batch ID:	94714	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/15/2022	SeqNo:	4834856

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									

Sample ID	LCS-94714	SampType:	LCS	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	9/14/2022	RunNo:	165724
Client ID:	LCSW	Batch ID:	94714	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/15/2022	SeqNo:	4834857

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10.433	1.0	10.00	0	104	85	115				

Sample ID	N052565-007BMS	SampType:	MS	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	9/14/2022	RunNo:	165724
Client ID:	ZZZZZZ	Batch ID:	94714	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/15/2022	SeqNo:	4834870

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	11.768	1.0	10.00	2.166	96.0	75	125				

Sample ID	N052565-007BMSD	SampType:	MSD	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	9/14/2022	RunNo:	165724
Client ID:	ZZZZZZ	Batch ID:	94714	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/15/2022	SeqNo:	4834871

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	11.471	1.0	10.00	2.166	93.1	75	125	11.77	2.56	20	

Sample ID	N052565-015BMS	SampType:	MS	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	9/14/2022	RunNo:	165724
Client ID:	ZZZZZZ	Batch ID:	94714	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/15/2022	SeqNo:	4834883

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10.632	1.0	10.00	0.5205	101	75	125				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052301
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020DIS_CrPGE_TPK

Sample ID	N052565-015BMSD	SampType:	MSD	TestCode:	6020DIS_CrP	Units:	µg/L	Prep Date:	9/14/2022	RunNo:	165724
Client ID:	ZZZZZZ	Batch ID:	94714	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/15/2022	SeqNo:	4834884

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10.590	1.0	10.00	0.5205	101	75	125	10.63	0.392	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-38D-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 8:38:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220826A**	QC Batch: **R165177**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.19	1.0		mg/L	20	8/26/2022 09:34 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-38S-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 9:16:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220826A**	QC Batch: **R165177**			PrepDate:			Analyst: **RAB**
Nitrate as N	5.2	0.095	0.50		mg/L	10	8/26/2022 09:50 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-65-160-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 11:43:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220826A**	QC Batch: **R165177**			PrepDate:			Analyst: **RAB**
Nitrate as N	14	0.095	0.50		mg/L	10	8/26/2022 10:06 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-65-225-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 11:48:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220826A**	QC Batch: **R165177**			PrepDate:			Analyst: **RAB**
Nitrate as N	7.7	0.048	0.25		mg/L	5	8/26/2022 10:22 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-69-195-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 10:56:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220826A**	QC Batch: **R165177**			PrepDate:			Analyst: **RAB**
Nitrate as N	8.4	0.095	0.50		mg/L	10	8/26/2022 10:38 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052301
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	MB-R165177_NO3	SampType:	MBLK	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165177
Client ID:	PBW	Batch ID:	R165177	TestNo:	EPA 300.0			Analysis Date:	8/26/2022	SeqNo:	4802022

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID	LCS-R165177_NO3	SampType:	LCS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165177
Client ID:	LCSW	Batch ID:	R165177	TestNo:	EPA 300.0			Analysis Date:	8/26/2022	SeqNo:	4802023

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.166	0.050	1.250	0	93.3	90	110				

Sample ID	N052301-002BMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165177
Client ID:	ZZZZZZ	Batch ID:	R165177	TestNo:	EPA 300.0			Analysis Date:	8/26/2022	SeqNo:	4802029

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	17.117	0.50	12.50	5.204	95.3	80	120				

Sample ID	N052301-002BMSD	SampType:	MSD	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165177
Client ID:	ZZZZZZ	Batch ID:	R165177	TestNo:	EPA 300.0			Analysis Date:	8/26/2022	SeqNo:	4802030

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	19.457	0.50	12.50	5.204	114	80	120	17.12	12.8	20	

Sample ID	N052301-003BDUP	SampType:	DUP	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165177
Client ID:	ZZZZZZ	Batch ID:	R165177	TestNo:	EPA 300.0			Analysis Date:	8/26/2022	SeqNo:	4802031

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	15.676	0.50						13.57	14.4	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-38D-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 8:38:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220904C**	QC Batch: **94557**			PrepDate:		**9/2/2022**	Analyst: **DJ**
Molybdenum	32	0.60	2.5		µg/L	5	9/4/2022 08:48 PM
Selenium	ND	0.22	2.5		µg/L	5	9/4/2022 08:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-38S-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 9:16:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220904C**	QC Batch: **94557**			PrepDate:		**9/2/2022**	Analyst: **DJ**
Molybdenum	9.0	0.12	0.50		µg/L	1	9/4/2022 09:00 PM
Selenium	5.0	0.044	0.50		µg/L	1	9/4/2022 09:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-65-160-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 11:43:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220904C**	QC Batch: **94557**			PrepDate:		**9/2/2022**	Analyst: **DJ**
Molybdenum	24	0.12	0.50		µg/L	1	9/4/2022 09:06 PM
Selenium	11	0.044	0.50		µg/L	1	9/4/2022 09:06 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-65-225-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 11:48:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220904C**	QC Batch: **94557**			PrepDate:		**9/2/2022**	Analyst: **DJ**
Molybdenum	28	0.12	0.50		µg/L	1	9/4/2022 09:12 PM
Selenium	5.8	0.044	0.50		µg/L	1	9/4/2022 09:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-69-195-Q322
Lab Order:	N052301	**Collection Date:**	8/25/2022 10:56:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052301-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220904C**	QC Batch: **94557**			PrepDate:		**9/2/2022**	Analyst: **DJ**
Molybdenum	61	0.12	0.50		µg/L	1	9/4/2022 09:18 PM
Selenium	6.1	0.044	0.50		µg/L	1	9/4/2022 09:18 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052301
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	MB-94557	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/2/2022	RunNo:	165443
Client ID:	PBW	Batch ID:	94557	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/4/2022	SeqNo:	4819364

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	ND	0.50									
Selenium	ND	0.50									

Sample ID	LCS-94557	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/2/2022	RunNo:	165443
Client ID:	LCSW	Batch ID:	94557	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/4/2022	SeqNo:	4819365

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	9.123	0.50	10.00	0	91.2	85	115				
Selenium	9.140	0.50	10.00	0	91.4	85	115				

Sample ID	N052394-001A-MS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/2/2022	RunNo:	165443
Client ID:	ZZZZZZ	Batch ID:	94557	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/4/2022	SeqNo:	4819379

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	13.477	0.50	10.00	3.720	97.6	75	125				
Selenium	10.107	0.50	10.00	0.2746	98.3	75	125				

Sample ID	N052394-001A-MSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/2/2022	RunNo:	165443
Client ID:	ZZZZZZ	Batch ID:	94557	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/4/2022	SeqNo:	4819380

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	13.632	0.50	10.00	3.720	99.1	75	125	13.48	1.14	20	
Selenium	10.229	0.50	10.00	0.2746	99.5	75	125	10.11	1.20	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

ARCUS02 C: 9/9/2022 12:00 AM
FOLDER R: 8/25/2022
N052301-007A 1 of 1

ASSET LABORATORIES

ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requi
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	Excel EDD / RTNE
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker / RWQCB ✓
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com P.O.#	Labspec / CalTrans
Submitted By: Riggie Tep		Phone: 949-727-1400, ext 200 Fax:	Others ✓ / LEVEL III
Title: Field Tech	Phone: 916-786-3302 Fax:		Specify: RWQCB / LEVEL IV
Signature: Date: 8/25/22	Sampled By: Riggie Tep		Global ID: / Regulatory / Specify State:
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for		
Project Name: PG&E Topock - RCM	Signature: Date: 8/25/22		
Project Number: 30121866.3Q22GW			

Matrix			
Ground	X	Sediment	
Potable		Soil	
NPDES		Other Solid	
Surface			

1. Chilled	Y ✓ N
2. Headspace	
3. Container Intact	✓
4. Seal Present	
5. IR number	
6. Method of Cooling:	ICE
Sample Temp:	1.8°C
Courier:	
Tracking No.:	

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH 250 mL poly	Nitrate (EPA 300.0) 1 L poly	Dissolved metals (SW6020) FF; HNO3 Manganese, 500mL poly	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, 500mL poly	Dissolved metals (SW6020) FF; HNO3 Molybdenum 500mL poly	Dissolved metals (SW6020) FF; HNO3 Selenium 500mL poly	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052301-01	MW-38D-Q322	8/25/2022	8:38		X	X		X	X	X	E	3	P	BNS	
2	-02	MW-38S-Q322	8/25/2022	9:16		X	X		X	X	X	E	3	P	BNS	
3	-03	MW-65-160-Q322	8/25/2022	11:43		X	X		X	X	X	E	3	P	BNS	
4	-04	MW-65-225-Q322	8/25/2022	11:48		X	X		X	X	X	E	3	P	BNS	
5	-05	MW-69-195-Q322	8/25/2022	10:56		X	X		X	X	X	E	3	P	BNS	
	-06	EB-731-Q322	8/25/2022	12:10		X						E	3	P	BNS	
7																
8																
9																
10																
11																
12																
13																
14																

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Riggie Tep	8/25/22 1510	Dante Ortiz	8/25/22 1510
Dante Ortiz	8/25/22 18:47	Dante Ortiz	8/25/22 18:47

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms

1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
   Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:

H=HCL	N=HNO_3	S=H_2SO_4	C=4°C
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$	
Others/Specify:	B (NH4)2SO4/NH4OH		

Container Type:

T=Tube	V=VOA	P=Pint
J=Jar	B=Tedlar	G=Glass
M=Metal	M=Metal	C=Can

White=Laboratory Copy

Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	8/25/2022	Workorder:	N052301
Rep sample Temp (Deg C):	1.8	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: EF EFanegoF 8/26/2022

Reviewed By: for: MBC 8/27/2022

ASSET Laboratories

WORK ORDER Summary

26-Aug-22

WorkOrder: N052301

Client ID: ARCUS02

Project: PG&E Topock - RCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/25/2022 6:47 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052301-001A	MW-38D-Q322	8/25/2022 8:38:00 AM	9/9/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052301-001B			9/9/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052301-001C			9/9/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/9/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			9/9/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052301-002A	MW-38S-Q322	8/25/2022 9:16:00 AM	9/9/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052301-002B			9/9/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052301-002C			9/9/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/9/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			9/9/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052301-003A	MW-65-160-Q322	8/25/2022 11:43:00 AM	9/9/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052301-003B			9/9/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052301-003C			9/9/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/9/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			9/9/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052301-004A	MW-65-225-Q322	8/25/2022 11:48:00 AM	9/9/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052301-004B			9/9/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052301-004C			9/9/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/9/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			9/9/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052301-005A	MW-69-195-Q322	8/25/2022 10:56:00 AM	9/9/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052301-005B			9/9/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

26-Aug-22

WorkOrder: N052301

Client ID: ARCUS02

Project: PG&E Topock - RCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 8/25/2022 6:47 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052301-005C	MW-69-195-Q322	8/25/2022 10:56:00 AM	9/9/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/9/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			9/9/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052301-006A	EB-731-Q322	8/25/2022 12:10:00 PM	9/9/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052301-007A	FOLDER	9/9/2022	9/9/2022		Folder	Folder	☐	☐	☐	LAB
			9/9/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/9/2022		Folder	Folder	☐	☐	☐	LAB

September 22, 2022

Brian Prowd
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052495

RE: PG&E Topock - OMM TCS PWTF, 30106892

Attention: Brian Prowd

Enclosed are the results for sample(s) received on September 08, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - OMM TCS PWTF, 30106892
Lab Order: N052495

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 6020:

Matrix Spike (MS) and /or Matrix Spike Duplicate (MSD) are outside recovery criteria for Chromium in QC samples N052495-001C-MS and N052495-001C-MSD since the analyte concentration in the sample is disproportionate to the spike level. Post Spike (PS) passed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - OMM TCS PWTF, 30106892
Lab Order: N052495
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052495-001A	Backwash Pre-filter-090822	Water	9/8/2022 7:15:00 AM	9/8/2022	9/22/2022
N052495-001B	Backwash Pre-filter-090822	Water	9/8/2022 7:15:00 AM	9/8/2022	9/22/2022
N052495-001C	Backwash Pre-filter-090822	Water	9/8/2022 7:15:00 AM	9/8/2022	9/22/2022
N052495-002A	Backwash Post-filter-090822	Water	9/8/2022 7:30:00 AM	9/8/2022	9/22/2022
N052495-002B	Backwash Post-filter-090822	Water	9/8/2022 7:30:00 AM	9/8/2022	9/22/2022
N052495-002C	Backwash Post-filter-090822	Water	9/8/2022 7:30:00 AM	9/8/2022	9/22/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Pre-filter-090822
Lab Order:	N052495	**Collection Date:**	9/8/2022 7:15:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052495-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220909A**	QC Batch: **R165548**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	420	1.3	10		µg/L	50	9/9/2022 11:35 AM
TOTAL METALS BY ICPMS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220915E**	QC Batch: **94662**			PrepDate:	**9/12/2022**		Analyst: **DJ**
Chromium	450	0.18	5.0		µg/L	5	9/15/2022 05:17 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Post-filter-090822
Lab Order:	N052495	**Collection Date:**	9/8/2022 7:30:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052495-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220909A** QC Batch: **R165548**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	220	1.3	10		µg/L	50	9/9/2022 12:03 PM
TOTAL METALS BY ICPMS							
			EPA 3010A		**EPA 6020**		
RunID: **NV00922-ICP8_220915E** QC Batch: **94662**				PrepDate:	**9/12/2022**		Analyst: **DJ**
Chromium	240	0.18	5.0		µg/L	5	9/15/2022 05:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052495
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R165548**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165548**
Client ID: **PBW**	Batch ID: **R165548**	TestNo: **EPA 218.6**		Analysis Date: **9/9/2022**	SeqNo: **4825364**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R165548**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165548**
Client ID: **LCSW**	Batch ID: **R165548**	TestNo: **EPA 218.6**		Analysis Date: **9/9/2022**	SeqNo: **4825365**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.213	0.20	5.000	0	104	90	110				

Sample ID: **N052495-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165548**
Client ID: **ZZZZZZ**	Batch ID: **R165548**	TestNo: **EPA 218.6**		Analysis Date: **9/9/2022**	SeqNo: **4825369**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	672.215	10	250.0	423.2	99.6	90	110				

Sample ID: **N052495-001AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165548**
Client ID: **ZZZZZZ**	Batch ID: **R165548**	TestNo: **EPA 218.6**		Analysis Date: **9/9/2022**	SeqNo: **4825370**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	669.180	10	250.0	423.2	98.4	90	110	672.2	0.453	20	

Sample ID: **N052495-002ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165548**
Client ID: **ZZZZZZ**	Batch ID: **R165548**	TestNo: **EPA 218.6**		Analysis Date: **9/9/2022**	SeqNo: **4825374**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	218.435	10						217.9	0.264	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052495
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052495-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165548**
Client ID: **ZZZZZZ**	Batch ID: **R165548**	TestNo: **EPA 218.6**		Analysis Date: **9/9/2022**	SeqNo: **4825375**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	487.195	10	250.0	217.9	108	90	110				

Sample ID: **N052497-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165548**
Client ID: **ZZZZZZ**	Batch ID: **R165548**	TestNo: **EPA 218.6**		Analysis Date: **9/9/2022**	SeqNo: **4825376**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2557.540	40	1000	1506	105	90	110				

Sample ID: **N052497-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165548**
Client ID: **ZZZZZZ**	Batch ID: **R165548**	TestNo: **EPA 218.6**		Analysis Date: **9/9/2022**	SeqNo: **4825377**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	9533.300	200	5000	4198	107	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052495
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_W_CRPGE_TPK

Sample ID: **MB-94662**	SampType: **MBLK**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date: **9/12/2022**	RunNo: **165609**
Client ID: **PBW**	Batch ID: **94662**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/12/2022**	SeqNo: **4829857**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.086	1.0									

Sample ID: **LCS-94662**	SampType: **LCS**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date: **9/12/2022**	RunNo: **165609**
Client ID: **LCSW**	Batch ID: **94662**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/12/2022**	SeqNo: **4829858**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10.196	1.0	10.00	0	102	85	115				

Sample ID: **N052495-001C-MS**	SampType: **MS**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date: **9/12/2022**	RunNo: **165753**
Client ID: **ZZZZZZ**	Batch ID: **94662**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/15/2022**	SeqNo: **4836982**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	480.660	5.0	10.00	445.3	353	75	125				S

Sample ID: **N052495-001C-MSD**	SampType: **MSD**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date: **9/12/2022**	RunNo: **165753**
Client ID: **ZZZZZZ**	Batch ID: **94662**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/15/2022**	SeqNo: **4836983**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	440.188	5.0	10.00	445.3	-51.2	75	125	480.7	8.79	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052495
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_W_CRPGE_TPK

Sample ID: **N052495-001C-PS**	SampType: **PS**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date:	RunNo: **165753**							
Client ID: **ZZZZZZ**	Batch ID: **94662**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/15/2022**	SeqNo: **4836981**							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Chromium	456.988	5.0	10.00	445.3	117	80	120					

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Pre-filter-090822
Lab Order:	N052495	**Collection Date:**	9/8/2022 7:15:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052495-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C**	QC Batch: **94686**			PrepDate:	**9/13/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 03:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Post-filter-090822
Lab Order:	N052495	**Collection Date:**	9/8/2022 7:30:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052495-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94686**			PrepDate:	**9/13/2022**		Analyst: **DJ**
Iron	55	13	20		µg/L	1	9/20/2022 04:14 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052495
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94686**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/13/2022**	RunNo: **165864**
Client ID: **PBW**	Batch ID: **94686**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842723**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **N052389-002F-MS1**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/13/2022**	RunNo: **165864**
Client ID: **ZZZZZZ**	Batch ID: **94686**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842728**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	121.392	20	100.0	24.68	96.7	75	125				

Sample ID: **N052389-002F-MSD1**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/13/2022**	RunNo: **165864**
Client ID: **ZZZZZZ**	Batch ID: **94686**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842729**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	114.632	20	100.0	24.68	89.9	75	125	121.4	5.73	20	

Sample ID: **LCS1-94686**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/13/2022**	RunNo: **165864**
Client ID: **LCSW**	Batch ID: **94686**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842760**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	99.833	20	100.0	0	99.8	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Pre-filter-090822
Lab Order:	N052495	**Collection Date:**	9/8/2022 7:15:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052495-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220912D**	QC Batch: **94661**			PrepDate:	**9/12/2022**		Analyst: **DJ**
Manganese	1.5	0.026	0.50		µg/L	1	9/12/2022 06:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Post-filter-090822
Lab Order:	N052495	**Collection Date:**	9/8/2022 7:30:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052495-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220912D**	QC Batch: **94661**			PrepDate:	**9/12/2022**		Analyst: **DJ**
Manganese	3.6	0.026	0.50		µg/L	1	9/12/2022 06:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052495
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94661**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/12/2022**	RunNo: **165608**
Client ID: **PBW**	Batch ID: **94661**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/12/2022**	SeqNo: **4829752**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	ND	0.50									

Sample ID: **LCS-94661**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/12/2022**	RunNo: **165608**
Client ID: **LCSW**	Batch ID: **94661**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/12/2022**	SeqNo: **4829753**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	98.907	0.50	100.0	0	98.9	85	115				

Sample ID: **N052428-001B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/12/2022**	RunNo: **165608**
Client ID: **ZZZZZZ**	Batch ID: **94661**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/12/2022**	SeqNo: **4829757**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	96.092	0.50	100.0	1.450	94.6	75	125				

Sample ID: **N052428-001B-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/12/2022**	RunNo: **165608**
Client ID: **ZZZZZZ**	Batch ID: **94661**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/12/2022**	SeqNo: **4829758**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	97.016	0.50	100.0	1.450	95.6	75	125	96.09	0.957	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

N052495

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

ASSET LABORATORIES

ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Brian Prowd	Bill to: Marty Bloes	
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	
Address: Roseville, CA 95678	Email: brian.prowd@arcadis.com; daniel.moore@critigen.com	Address:	
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com	P.O.# SWA-ASSET-C9617-051
Submitted By: Kevin A.	Phone: 916-786-3302 Fax:	Phone: 949-727-1400. ext 200	Fax:
Title: O&M Operator	Sampled By: Kevin A. Imark		
Signature: Date: 9/8/22	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.		
I hereby authorize ASSET Labs to perform the tests indicated below.	Signature: Date: 9/8/22		
Project Name: PG&E Topock - O&M TCS PWTF			
Project Number: 30106892			

EDD Requirement		QA/QC		Sample Receipt Condition	Y	N
Excel EDD		RTNE		1. Chilled	✓	
Geotracker		RWQCB	✓	2. Headspace		
Labspec		CalTrans		3. Container Intact	✓	
Others	✓	LEVEL III		4. Seal Present		
Specify: RWQCB		LEVEL IV		5. IR number	3	
Global ID:		Regulatory		6. Method of Cooling: ICE		
		Specify State:		Sample Temp: 4.4°C		

Matrix: Ground; Potable; NPDES; Surface; Sediment; Soil; Other Solid; Water (X)

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	250 mL poly: Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH, Filtered	500mL poly: Dissolved metals Iron, Manganese (SW6020) FF; HNO3; Filtered	500mL poly: Total chromium (SW6020) No filter; HNO3	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052495-01	Backwash Pre-filter-090822	9/8/22	8:15		X	X	X	E	3	PV	BNS	
2	-02	Backwash Post-filter-090822	9/8/22	7:30		X	X	X	E	3	PV	BNS	
3													
4													
5													
7													
8													
9													
10													
11													
12													
13													
14													

Courier:

Tracking No.:

Relinquished by (Signature and Printed Name)	Date/Time	Received by (Signature and Printed Name)	Date/Time
Kevin Ashley	9/8/22	Dante Ortiz Dante Ortiz	9/8/22 14:44
Dante Ortiz Dante Ortiz	9/8/22 17:34	Dante Ortiz Dante Ortiz	9/8/22 17:34

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days. surcharges will apply for rush analysis.
Less than 24 Hr =200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDF will be an additional 3% of the total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of reports needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy

Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	9/8/2022	Workorder:	N052495
Rep sample Temp (Deg C):	4.4	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: EF *EFanegoF* 9/9/2022

Reviewed By: for: MBC 9/13/2022

ASSET Laboratories

WORK ORDER Summary

13-Sep-22

WorkOrder: N052495

Client ID: ARCUS02

Project: PG&E Topock - OMM TCS PWTF, 30106892 **QC Level:** Level IV **Date Received:** 9/8/2022 5:34 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052495-001A	Backwash Pre-filter-090822	9/8/2022 7:15:00 AM	9/22/2022	Water	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052495-001B			9/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/22/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052495-001C			9/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/22/2022		EPA 6020	TOTAL METALS BY ICPMS	☐	☐	☐	WW
N052495-002A	Backwash Post-filter-090822	9/8/2022 7:30:00 AM	9/22/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052495-002B			9/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/22/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/22/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052495-002C			9/22/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/22/2022		EPA 6020	TOTAL METALS BY ICPMS	☐	☐	☐	WW
N052495-003A	FOLDER	9/22/2022	9/22/2022		Folder	Folder	☐	☐	☐	LAB
			9/22/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/22/2022		Folder	Folder	☐	☐	☐	LAB

September 26, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052544

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on September 12, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052544

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Dilution was necessary for samples N052544-002 and -004 due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for SM 5310C:

Matrix Spike (MS) is outside recovery criteria in QC sample N052565-007CMS at lower dilutions possibly due to matrix interference. QC sample was diluted and recovery passed criteria. Thus sample reference N052565-007 and MS/MSD were reported at 20x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052544
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052544-001A	MW-76-039-0922	Groundwater	9/12/2022 3:18:00 PM	9/12/2022	9/26/2022
N052544-001B	MW-76-039-0922	Groundwater	9/12/2022 3:18:00 PM	9/12/2022	9/26/2022
N052544-001C	MW-76-039-0922	Groundwater	9/12/2022 3:18:00 PM	9/12/2022	9/26/2022
N052544-001D	MW-76-039-0922	Groundwater	9/12/2022 3:18:00 PM	9/12/2022	9/26/2022
N052544-002A	MW-76-156-0922	Groundwater	9/12/2022 2:34:00 PM	9/12/2022	9/26/2022
N052544-002B	MW-76-156-0922	Groundwater	9/12/2022 2:34:00 PM	9/12/2022	9/26/2022
N052544-002C	MW-76-156-0922	Groundwater	9/12/2022 2:34:00 PM	9/12/2022	9/26/2022
N052544-002D	MW-76-156-0922	Groundwater	9/12/2022 2:34:00 PM	9/12/2022	9/26/2022
N052544-003A	MW-76-181-0922	Groundwater	9/12/2022 1:48:00 PM	9/12/2022	9/26/2022
N052544-003B	MW-76-181-0922	Groundwater	9/12/2022 1:48:00 PM	9/12/2022	9/26/2022
N052544-003C	MW-76-181-0922	Groundwater	9/12/2022 1:48:00 PM	9/12/2022	9/26/2022
N052544-003D	MW-76-181-0922	Groundwater	9/12/2022 1:48:00 PM	9/12/2022	9/26/2022
N052544-004A	MW-76-218-0922	Groundwater	9/12/2022 1:02:00 PM	9/12/2022	9/26/2022
N052544-004B	MW-76-218-0922	Groundwater	9/12/2022 1:02:00 PM	9/12/2022	9/26/2022
N052544-004C	MW-76-218-0922	Groundwater	9/12/2022 1:02:00 PM	9/12/2022	9/26/2022
N052544-004D	MW-76-218-0922	Groundwater	9/12/2022 1:02:00 PM	9/12/2022	9/26/2022
N052544-005A	EB-727-Q322_N052544	Groundwater	9/12/2022 3:35:00 PM	9/12/2022	9/26/2022
N052544-006A	MW-77-046-0922	Groundwater	9/12/2022 12:34:00 PM	9/12/2022	9/26/2022
N052544-006B	MW-77-046-0922	Groundwater	9/12/2022 12:34:00 PM	9/12/2022	9/26/2022
N052544-006C	MW-77-046-0922	Groundwater	9/12/2022 12:34:00 PM	9/12/2022	9/26/2022
N052544-006D	MW-77-046-0922	Groundwater	9/12/2022 12:34:00 PM	9/12/2022	9/26/2022
N052544-007A	MW-77-102-0922	Groundwater	9/12/2022 2:17:00 PM	9/12/2022	9/26/2022
N052544-007B	MW-77-102-0922	Groundwater	9/12/2022 2:17:00 PM	9/12/2022	9/26/2022
N052544-007C	MW-77-102-0922	Groundwater	9/12/2022 2:17:00 PM	9/12/2022	9/26/2022
N052544-007D	MW-77-102-0922	Groundwater	9/12/2022 2:17:00 PM	9/12/2022	9/26/2022
N052544-008A	MW-77-158-0922	Groundwater	9/12/2022 1:49:00 PM	9/12/2022	9/26/2022
N052544-008B	MW-77-158-0922	Groundwater	9/12/2022 1:49:00 PM	9/12/2022	9/26/2022
N052544-008C	MW-77-158-0922	Groundwater	9/12/2022 1:49:00 PM	9/12/2022	9/26/2022
N052544-008D	MW-77-158-0922	Groundwater	9/12/2022 1:49:00 PM	9/12/2022	9/26/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052544
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052544-009A	MW-77-187-0922	Groundwater	9/12/2022 1:19:00 PM	9/12/2022	9/26/2022
N052544-009B	MW-77-187-0922	Groundwater	9/12/2022 1:19:00 PM	9/12/2022	9/26/2022
N052544-009C	MW-77-187-0922	Groundwater	9/12/2022 1:19:00 PM	9/12/2022	9/26/2022
N052544-009D	MW-77-187-0922	Groundwater	9/12/2022 1:19:00 PM	9/12/2022	9/26/2022
N052544-010A	EB-728-Q322_N052544	Groundwater	9/12/2022 3:00:00 PM	9/12/2022	9/26/2022
N052544-011A	MW-922-Q322	Groundwater	9/12/2022 3:28:00 PM	9/12/2022	9/26/2022
N052544-011B	MW-922-Q322	Groundwater	9/12/2022 3:28:00 PM	9/12/2022	9/26/2022
N052544-011C	MW-922-Q322	Groundwater	9/12/2022 3:28:00 PM	9/12/2022	9/26/2022
N052544-011D	MW-922-Q322	Groundwater	9/12/2022 3:28:00 PM	9/12/2022	9/26/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 3:18:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220913A**	QC Batch: **R165647**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	93	0.50	4.0		µg/L	20	9/13/2022 10:24 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 2:34:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
EPA 218.6							
RunID: **NV00922-IC7_220913A** QC Batch: **R165647** PrepDate: Analyst: **RAB**							
Hexavalent Chromium	13	0.13	1.0		µg/L	5	9/13/2022 02:39 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-181-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:48:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220913A**	QC Batch: **R165647**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	1100	5.0	40		µg/L	200	9/13/2022 10:52 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-218-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:02:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220913A**	QC Batch: **R165647**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	9/13/2022 03:17 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-727-Q322_N052544
Lab Order:	N052544	**Collection Date:**	9/12/2022 3:35:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220913A**	QC Batch: **R165647**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/13/2022 11:49 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 12:34:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220913A**	QC Batch: **R165647**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/13/2022 12:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 2:17:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220913A**	QC Batch: **R165647**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	0.31	0.025	0.20		µg/L	1	9/13/2022 12:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:49:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220913A**	QC Batch: **R165647**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/13/2022 02:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220913A**	QC Batch: **R165647**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	40	0.13	1.0		µg/L	5	9/13/2022 04:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-728-Q322_N052544
Lab Order:	N052544	**Collection Date:**	9/12/2022 3:00:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220913A**	QC Batch: **R165647**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/13/2022 12:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-922-Q322
Lab Order:	N052544	**Collection Date:**	9/12/2022 3:28:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220913A**	QC Batch: **R165647**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	94	0.50	4.0		µg/L	20	9/13/2022 11:39 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052544
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R165647**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165647**
Client ID: **PBW**	Batch ID: **R165647**	TestNo: **EPA 218.6**		Analysis Date: **9/13/2022**	SeqNo: **4831652**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R165647**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165647**
Client ID: **LCSW**	Batch ID: **R165647**	TestNo: **EPA 218.6**		Analysis Date: **9/13/2022**	SeqNo: **4831653**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.110	0.20	5.000	0	102	90	110				

Sample ID: **N052543-001ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165647**
Client ID: **ZZZZZZ**	Batch ID: **R165647**	TestNo: **EPA 218.6**		Analysis Date: **9/13/2022**	SeqNo: **4831655**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.948	0.20						6.064	1.93	20	

Sample ID: **N052544-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165647**
Client ID: **ZZZZZZ**	Batch ID: **R165647**	TestNo: **EPA 218.6**		Analysis Date: **9/13/2022**	SeqNo: **4831658**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	192.106	4.0	100.0	93.15	99.0	90	110				

Sample ID: **N052544-001AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165647**
Client ID: **ZZZZZZ**	Batch ID: **R165647**	TestNo: **EPA 218.6**		Analysis Date: **9/13/2022**	SeqNo: **4831659**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	192.494	4.0	100.0	93.15	99.3	90	110	192.1	0.202	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052544
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052544-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165647**
Client ID: **ZZZZZZ** Batch ID: **R165647** TestNo: **EPA 218.6** Analysis Date: **9/13/2022** SeqNo: **4831661**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2149.060	40	1000	1137	101	90	110				

Sample ID: **N052544-011AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165647**
Client ID: **ZZZZZZ** Batch ID: **R165647** TestNo: **EPA 218.6** Analysis Date: **9/13/2022** SeqNo: **4831664**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	189.290	4.0	100.0	94.02	95.3	90	110				

Sample ID: **N052544-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165647**
Client ID: **ZZZZZZ** Batch ID: **R165647** TestNo: **EPA 218.6** Analysis Date: **9/13/2022** SeqNo: **4831667**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.982	0.20	1.000	0	98.2	90	110				

Sample ID: **N052544-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165647**
Client ID: **ZZZZZZ** Batch ID: **R165647** TestNo: **EPA 218.6** Analysis Date: **9/13/2022** SeqNo: **4831669**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.977	0.20	1.000	0	97.7	90	110				

Sample ID: **N052544-007AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165647**
Client ID: **ZZZZZZ** Batch ID: **R165647** TestNo: **EPA 218.6** Analysis Date: **9/13/2022** SeqNo: **4831671**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.331	0.20	1.000	0.3085	102	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052544
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052544-010AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165647**
Client ID: **ZZZZZZ** Batch ID: **R165647** TestNo: **EPA 218.6** Analysis Date: **9/13/2022** SeqNo: **4831673**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.987	0.20	1.000	0	98.7	90	110				

Sample ID: **N052544-008AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165647**
Client ID: **ZZZZZZ** Batch ID: **R165647** TestNo: **EPA 218.6** Analysis Date: **9/13/2022** SeqNo: **4831677**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.142	0.20	1.000	0.1596	98.2	90	110				

Sample ID: **N052544-002AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165647**
Client ID: **ZZZZZZ** Batch ID: **R165647** TestNo: **EPA 218.6** Analysis Date: **9/13/2022** SeqNo: **4831679**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	18.449	1.0	5.000	13.03	108	90	110				

Sample ID: **N052544-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165647**
Client ID: **ZZZZZZ** Batch ID: **R165647** TestNo: **EPA 218.6** Analysis Date: **9/13/2022** SeqNo: **4831683**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.789	1.0	5.000	0	95.8	90	110				

Sample ID: **N052544-009AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165647**
Client ID: **ZZZZZZ** Batch ID: **R165647** TestNo: **EPA 218.6** Analysis Date: **9/13/2022** SeqNo: **4831685**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	64.227	1.0	25.00	39.85	97.5	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052544
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052545-001BMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165647**
Client ID: **ZZZZZZ**	Batch ID: **R165647**	TestNo: **EPA 218.6**		Analysis Date: **9/13/2022**	SeqNo: **4831688**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2063.860	40	1000	1094	97.0	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 3:18:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Sulfate	250	1.2	10		mg/L	20	9/13/2022 11:47 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Nitrate as N	3.0	0.095	0.50		mg/L	10	9/13/2022 08:28 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 2:34:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Sulfate	760	6.1	50		mg/L	100	9/13/2022 12:32 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Nitrate as N	2.2	0.095	0.50		mg/L	10	9/13/2022 08:43 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-181-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:48:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Sulfate	820	6.1	50		mg/L	100	9/13/2022 03:21 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/13/2022 08:58 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-218-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:02:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Sulfate	680	6.1	50		mg/L	100	9/13/2022 01:18 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/13/2022 09:14 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 12:34:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Sulfate	530	6.1	50		mg/L	100	9/13/2022 02:04 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/13/2022 09:29 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 2:17:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A**	QC Batch: **R165618**			PrepDate:			Analyst: **RAB**
Sulfate	590	6.1	50		mg/L	100	9/13/2022 02:20 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A**	QC Batch: **R165618**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.90	0.095	0.50		mg/L	10	9/13/2022 09:44 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:49:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Sulfate	600	6.1	50		mg/L	100	9/13/2022 02:35 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/13/2022 09:59 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A**	QC Batch: **R165618**			PrepDate:			Analyst: **RAB**
Sulfate	860	6.1	50		mg/L	100	9/13/2022 02:50 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A**	QC Batch: **R165618**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.67	0.095	0.50		mg/L	10	9/13/2022 10:15 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052544
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052544-011

Client Sample ID: MW-922-Q322
Collection Date: 9/12/2022 3:28:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Sulfate	250	1.2	10		mg/L	20	9/13/2022 03:05 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220913A** QC Batch: **R165618**				PrepDate:			Analyst: **RAB**
Nitrate as N	3.0	0.095	0.50		mg/L	10	9/13/2022 01:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052544
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **MB-R165618_SO4**	SampType: **MBLK**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **165618**
Client ID: **PBW**	Batch ID: **R165618**	TestNo: **EPA 300.0**		Analysis Date: **9/13/2022**	SeqNo: **4830641**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.50									

Sample ID: **LCS-R165618_SO4**	SampType: **LCS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **165618**
Client ID: **LCSW**	Batch ID: **R165618**	TestNo: **EPA 300.0**		Analysis Date: **9/13/2022**	SeqNo: **4830642**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	4.048	0.50	4.000	0	101	90	110				

Sample ID: **N052544-001DMS**	SampType: **MS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **165618**
Client ID: **ZZZZZZ**	Batch ID: **R165618**	TestNo: **EPA 300.0**		Analysis Date: **9/13/2022**	SeqNo: **4830646**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	329.738	10	80.00	251.0	98.5	80	120				

Sample ID: **N052544-001DMSD**	SampType: **MSD**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **165618**
Client ID: **ZZZZZZ**	Batch ID: **R165618**	TestNo: **EPA 300.0**		Analysis Date: **9/13/2022**	SeqNo: **4830647**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	328.090	10	80.00	251.0	96.4	80	120	329.7	0.501	20	

Sample ID: **N052544-002DDUP**	SampType: **DUP**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **165618**
Client ID: **ZZZZZZ**	Batch ID: **R165618**	TestNo: **EPA 300.0**		Analysis Date: **9/13/2022**	SeqNo: **4830649**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	764.830	50						759.4	0.711	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052544
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R165618_NO3** SampType: **MBLK** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165618**
Client ID: **PBW** Batch ID: **R165618** TestNo: **EPA 300.0** Analysis Date: **9/13/2022** SeqNo: **4830617**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R165618_NO3** SampType: **LCS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165618**
Client ID: **LCSW** Batch ID: **R165618** TestNo: **EPA 300.0** Analysis Date: **9/13/2022** SeqNo: **4830618**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.280	0.050	1.250	0	102	90	110				

Sample ID: **N052544-001DMS** SampType: **MS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165618**
Client ID: **ZZZZZZ** Batch ID: **R165618** TestNo: **EPA 300.0** Analysis Date: **9/13/2022** SeqNo: **4830629**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	15.705	0.50	12.50	2.996	102	80	120				

Sample ID: **N052544-001DMSD** SampType: **MSD** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165618**
Client ID: **ZZZZZZ** Batch ID: **R165618** TestNo: **EPA 300.0** Analysis Date: **9/13/2022** SeqNo: **4830630**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	15.691	0.50	12.50	2.996	102	80	120	15.70	0.0892	20	

Sample ID: **N052544-007DDUP** SampType: **DUP** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165618**
Client ID: **ZZZZZZ** Batch ID: **R165618** TestNo: **EPA 300.0** Analysis Date: **9/13/2022** SeqNo: **4830631**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.000	0.50						0.9030	10.2	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 3:18:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 11:34 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 2:34:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 11:49 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-181-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:48:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 02:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-218-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:02:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 02:55 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 12:34:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 03:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 2:17:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 03:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:49:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 03:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 04:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-922-Q322
Lab Order:	N052544	**Collection Date:**	9/12/2022 3:28:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 04:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052544
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R165657**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165657**
Client ID: **PBW**	Batch ID: **R165657**	TestNo: **SM 5310C**		Analysis Date: **9/14/2022**	SeqNo: **4832783**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R165657**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165657**
Client ID: **LCSW**	Batch ID: **R165657**	TestNo: **SM 5310C**		Analysis Date: **9/14/2022**	SeqNo: **4832784**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	4.816	1.0	5.000	0	96.3	85	115				

Sample ID: **N052565-007CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165657**
Client ID: **ZZZZZZ**	Batch ID: **R165657**	TestNo: **SM 5310C**		Analysis Date: **9/14/2022**	SeqNo: **4832791**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	78.408	20	100.0	0	78.4	75	125				

Sample ID: **N052565-007CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165657**
Client ID: **ZZZZZZ**	Batch ID: **R165657**	TestNo: **SM 5310C**		Analysis Date: **9/14/2022**	SeqNo: **4832792**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	77.448	20	100.0	0	77.4	75	125	78.41	1.23	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 3:18:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94686**			PrepDate:	**9/13/2022**		Analyst: **DJ**
Iron	110	13	20		µg/L	1	9/20/2022 04:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 2:34:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94686**			PrepDate:	**9/13/2022**		Analyst: **DJ**
Iron	25	13	20		µg/L	1	9/20/2022 04:35 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-181-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:48:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C**	QC Batch: **94686**			PrepDate:	**9/13/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 04:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-218-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:02:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C**	QC Batch: **94686**			PrepDate:	**9/13/2022**		Analyst: **DJ**
Iron	29	13	20		µg/L	1	9/20/2022 04:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 12:34:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C**	QC Batch: **94686**			PrepDate:	**9/13/2022**		Analyst: **DJ**
Iron	76	13	20		µg/L	1	9/20/2022 04:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 2:17:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C**	QC Batch: **94686**			PrepDate:	**9/13/2022**		Analyst: **DJ**
Iron	54	13	20		µg/L	1	9/20/2022 04:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:49:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C**	QC Batch: **94686**			PrepDate:	**9/13/2022**		Analyst: **DJ**
Iron	29	13	20		µg/L	1	9/20/2022 05:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C**	QC Batch: **94686**			PrepDate:	**9/13/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 05:16 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-922-Q322
Lab Order:	N052544	**Collection Date:**	9/12/2022 3:28:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94686**			PrepDate:	**9/13/2022**		Analyst: **DJ**
Iron	78	13	20		µg/L	1	9/20/2022 05:21 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052544
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94686**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/13/2022**	RunNo: **165864**
Client ID: **PBW**	Batch ID: **94686**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842723**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **N052389-002F-MS1**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/13/2022**	RunNo: **165864**
Client ID: **ZZZZZZ**	Batch ID: **94686**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842728**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	121.392	20	100.0	24.68	96.7	75	125				

Sample ID: **N052389-002F-MSD1**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/13/2022**	RunNo: **165864**
Client ID: **ZZZZZZ**	Batch ID: **94686**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842729**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	114.632	20	100.0	24.68	89.9	75	125	121.4	5.73	20	

Sample ID: **LCS1-94686**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/13/2022**	RunNo: **165864**
Client ID: **LCSW**	Batch ID: **94686**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842760**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	99.833	20	100.0	0	99.8	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-039-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 3:18:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 05:47 AM
Barium	59	0.083	1.0		µg/L	1	9/18/2022 05:47 AM
Manganese	32	0.026	0.50		µg/L	1	9/19/2022 03:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-156-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 2:34:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 06:16 AM
Barium	45	0.083	1.0		µg/L	1	9/18/2022 06:16 AM
Manganese	85	0.026	0.50		µg/L	1	9/19/2022 04:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-181-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:48:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 06:22 AM
Barium	65	0.083	1.0		µg/L	1	9/18/2022 06:22 AM
Manganese	39	0.026	0.50		µg/L	1	9/20/2022 01:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-76-218-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:02:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:		**9/17/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 06:28 AM
Barium	86	0.083	1.0		µg/L	1	9/18/2022 06:28 AM
Manganese	430	0.13	2.5		µg/L	5	9/20/2022 02:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-046-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 12:34:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:		**9/17/2022**	Analyst: **DJ**
Arsenic	3.7	0.050	0.10		µg/L	1	9/18/2022 06:46 AM
Barium	59	0.083	1.0		µg/L	1	9/18/2022 06:46 AM
Manganese	470	0.13	2.5		µg/L	5	9/20/2022 02:16 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-102-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 2:17:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 06:52 AM
Barium	52	0.083	1.0		µg/L	1	9/18/2022 06:52 AM
Manganese	55	0.026	0.50		µg/L	1	9/20/2022 02:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-158-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:49:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	9/18/2022 06:58 AM
Barium	31	0.083	1.0		µg/L	1	9/18/2022 06:58 AM
Manganese	39	0.026	0.50		µg/L	1	9/20/2022 02:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-77-187-0922
Lab Order:	N052544	**Collection Date:**	9/12/2022 1:19:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:		**9/17/2022**	Analyst: **DJ**
Arsenic	2.1	0.050	0.10		µg/L	1	9/18/2022 07:04 AM
Barium	31	0.083	1.0		µg/L	1	9/18/2022 07:04 AM
Manganese	13	0.026	0.50		µg/L	1	9/20/2022 02:34 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-922-Q322
Lab Order:	N052544	**Collection Date:**	9/12/2022 3:28:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052544-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 07:10 AM
Barium	60	0.083	1.0		µg/L	1	9/18/2022 07:10 AM
Manganese	29	0.026	0.50		µg/L	1	9/20/2022 02:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052544
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94794**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165789**
Client ID: **PBW**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/18/2022**	SeqNo: **4839300**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									

Sample ID: **LCS-94794**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165789**
Client ID: **LCSW**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/18/2022**	SeqNo: **4839301**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.472	0.10	10.00	0	94.7	85	115				
Barium	10.073	1.0	10.00	0	101	85	115				

Sample ID: **N052544-001B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165789**
Client ID: **ZZZZZZ**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/18/2022**	SeqNo: **4839305**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.573	0.10	10.00	0.09992	94.7	75	125				
Barium	68.259	1.0	10.00	59.08	91.7	75	125				

Sample ID: **N052544-001B-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165789**
Client ID: **ZZZZZZ**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/18/2022**	SeqNo: **4839306**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.547	0.10	10.00	0.09992	94.5	75	125	9.573	0.275	20	
Barium	69.558	1.0	10.00	59.08	105	75	125	68.26	1.89	20	

Sample ID: **MB-94794**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165854**
Client ID: **PBW**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/19/2022**	SeqNo: **4842176**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052544
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94794**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165854**
Client ID: **PBW**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/19/2022**	SeqNo: **4842176**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	0.036	0.50									

Sample ID: **LCS-94794**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165854**
Client ID: **LCSW**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/19/2022**	SeqNo: **4842177**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	103.673	0.50	100.0	0	104	85	115				

Sample ID: **N052544-001B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165854**
Client ID: **ZZZZZZ**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/19/2022**	SeqNo: **4842181**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	128.929	0.50	100.0	32.15	96.8	75	125				

Sample ID: **N052544-001B-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165854**
Client ID: **ZZZZZZ**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/19/2022**	SeqNo: **4842182**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	130.434	0.50	100.0	32.15	98.3	75	125	128.9	1.16	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

N052544

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

| | | |

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	9/12/2022	Workorder:	N052544
Rep sample Temp (Deg C):	4.9	IR Gun ID:	3
Temp Blank:	☑ Yes ☐ No		
Carrier name:	ASSET		
Last 4 digits of Tracking No.:		Packing Material Used:	None
Cooling process:	☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None		

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For: 9/23/2022

Checklist Completed By: EF YRodriguez

Reviewed By: for: MBC 9/23/2022

Mary Ann Balilu

From: Yoandra Rodriguez <yoandra@assetlaboratories.com>
Sent: Tuesday, September 13, 2022 2:27 PM
To: rustico.aquino@assetlaboratoriesph.com; maryann.balilu@assetlaboratoriesph.com
Subject: Fwd: Topock - Sample ID Updates

-------- Forwarded Message --------
Subject: Topock - Sample ID Updates
Date: Tue, 13 Sep 2022 20:04:04 +0000
From: Tina Rice <Tina.Rice@locana.co>
To: Yoandra Rodriguez <yoandra@assetlaboratories.com>
CC: Nancy Sibucao <nancy@assetlaboratories.com>, Madsen, Laura <laura.madsen@arcadis.com>

Hi Yoandra,

Looks like a couple of sample names were duplicated so could you please update the samples in N052544 per below?

ClientSampID	New ClientSampID	WorkOrder	DateCollected
EB-727-Q322	EB-727-Q322_N052544	N052544	9/12/2022 15:35
EB-728-Q322	EB-728-Q322_N052544	N052544	9/12/2022 15:00

Thank you,
Tina
--

Thanks,

Yoandra Rodriguez
Project Manager

Nevada: 3151 W. Post Road, Las Vegas, NV 89118 | P: 702.307.2659 | F: 702.307.2691
California: 11110 Artesia Blvd., Ste. B, Cerritos, CA 90703 | P: 562.219.7435 | F: 562.219.7436

ASSET LABORATORIES - Serving Clients with Passion and Professionalism

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ASSET Laboratories

WORK ORDER Summary

23-Sep-22

WorkOrder: N052544

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/12/2022 6:37 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052544-001A	MW-76-039-0922	9/12/2022 3:18:00 PM	9/26/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052544-001B			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052544-001C			9/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052544-001D			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052544-002A	MW-76-156-0922	9/12/2022 2:34:00 PM	9/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052544-002B			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052544-002C			9/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052544-002D			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052544-003A	MW-76-181-0922	9/12/2022 1:48:00 PM	9/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052544-003B			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052544-003C			9/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

23-Sep-22

WorkOrder: N052544

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/12/2022 6:37 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052544-003D	MW-76-181-0922	9/12/2022 1:48:00 PM	9/26/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052544-004A	MW-76-218-0922	9/12/2022 1:02:00 PM	9/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052544-004B			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052544-004C			9/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052544-004D			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052544-005A	EB-727-Q322_N052544	9/12/2022 3:35:00 PM	9/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052544-006A	MW-77-046-0922	9/12/2022 12:34:00 PM	9/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052544-006B			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052544-006C			9/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052544-006D			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052544-007A	MW-77-102-0922	9/12/2022 2:17:00 PM	9/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052544-007B			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

23-Sep-22

WorkOrder: N052544

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/12/2022 6:37 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052544-007B	MW-77-102-0922	9/12/2022 2:17:00 PM	9/26/2022	Groundwater	EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052544-007C			9/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052544-007D			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052544-008A	MW-77-158-0922	9/12/2022 1:49:00 PM	9/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052544-008B			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052544-008C			9/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052544-008D			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052544-009A	MW-77-187-0922	9/12/2022 1:19:00 PM	9/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052544-009B			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052544-009C			9/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052544-009D			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052544-010A	EB-728-Q322_N052544	9/12/2022 3:00:00 PM	9/26/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

23-Sep-22

WorkOrder: N052544

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/12/2022 6:37 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052544-011A	MW-922-Q322	9/12/2022 3:28:00 PM	9/26/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052544-011B			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/26/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/26/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052544-011C			9/26/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052544-011D			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/26/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052544-012A	FOLDER	9/26/2022	9/26/2022		Folder	Folder	☐	☐	☐	LAB
			9/26/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/26/2022		Folder	Folder	☐	☐	☐	LAB

September 27, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052565

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on September 13, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Dilution was necessary for some samples due to matrix interference. Samples were analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Samples were reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Method Blank (MB) has detect greater than 1/2 the reporting limit for Sulfate. Samples result for this analyte was greater than 5x the Method Blank detection therefore reanalysis of the samples was not necessary.

Analytical Comments for SM 5310C:

Matrix Spike (MS) is outside recovery criteria in QC sample N052565-007CMS at lower dilutions possibly due to matrix interference. QC sample was diluted and recovery passed criteria. Thus sample reference N052565-007 and MS/MSD were reported at 20x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Matrix Spike (MS) is outside recovery criteria in QC sample N052565-015CMS at lower dilutions possibly due to matrix interference. QC sample was diluted and recovery passed criteria. Thus sample reference N052565-015 and MS/MSD were reported at 5x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT:	ARCADIS U.S., Inc. - California
Project:	PG&E Topock - PCM, 30121866.3Q22GW
Lab Order:	N052565

CASE NARRATIVE

Analytical Comments for EPA 6010B:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for Barium in QC samples N052565-007BMS and N052565-007BMSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052565
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052565-001A	MW-82-046-0922	Groundwater	9/13/2022 11:25:00 AM	9/13/2022	9/27/2022
N052565-001B	MW-82-046-0922	Groundwater	9/13/2022 11:25:00 AM	9/13/2022	9/27/2022
N052565-001C	MW-82-046-0922	Groundwater	9/13/2022 11:25:00 AM	9/13/2022	9/27/2022
N052565-001D	MW-82-046-0922	Groundwater	9/13/2022 11:25:00 AM	9/13/2022	9/27/2022
N052565-002A	MW-82-112-0922	Groundwater	9/13/2022 10:54:00 AM	9/13/2022	9/27/2022
N052565-002B	MW-82-112-0922	Groundwater	9/13/2022 10:54:00 AM	9/13/2022	9/27/2022
N052565-002C	MW-82-112-0922	Groundwater	9/13/2022 10:54:00 AM	9/13/2022	9/27/2022
N052565-002D	MW-82-112-0922	Groundwater	9/13/2022 10:54:00 AM	9/13/2022	9/27/2022
N052565-003A	MW-82-168-0922	Groundwater	9/13/2022 10:12:00 AM	9/13/2022	9/27/2022
N052565-003B	MW-82-168-0922	Groundwater	9/13/2022 10:12:00 AM	9/13/2022	9/27/2022
N052565-003C	MW-82-168-0922	Groundwater	9/13/2022 10:12:00 AM	9/13/2022	9/27/2022
N052565-003D	MW-82-168-0922	Groundwater	9/13/2022 10:12:00 AM	9/13/2022	9/27/2022
N052565-004A	MW-925-Q322	Groundwater	9/13/2022 10:22:00 AM	9/13/2022	9/27/2022
N052565-004B	MW-925-Q322	Groundwater	9/13/2022 10:22:00 AM	9/13/2022	9/27/2022
N052565-004C	MW-925-Q322	Groundwater	9/13/2022 10:22:00 AM	9/13/2022	9/27/2022
N052565-004D	MW-925-Q322	Groundwater	9/13/2022 10:22:00 AM	9/13/2022	9/27/2022
N052565-005A	MW-82-198-0922	Groundwater	9/13/2022 9:24:00 AM	9/13/2022	9/27/2022
N052565-005B	MW-82-198-0922	Groundwater	9/13/2022 9:24:00 AM	9/13/2022	9/27/2022
N052565-005C	MW-82-198-0922	Groundwater	9/13/2022 9:24:00 AM	9/13/2022	9/27/2022
N052565-005D	MW-82-198-0922	Groundwater	9/13/2022 9:24:00 AM	9/13/2022	9/27/2022
N052565-006A	MW-81-043-0922	Groundwater	9/13/2022 1:56:00 PM	9/13/2022	9/27/2022
N052565-006B	MW-81-043-0922	Groundwater	9/13/2022 1:56:00 PM	9/13/2022	9/27/2022
N052565-006C	MW-81-043-0922	Groundwater	9/13/2022 1:56:00 PM	9/13/2022	9/27/2022
N052565-006D	MW-81-043-0922	Groundwater	9/13/2022 1:56:00 PM	9/13/2022	9/27/2022
N052565-007A	MW-81-098-0922	Groundwater	9/13/2022 1:22:00 PM	9/13/2022	9/27/2022
N052565-007B	MW-81-098-0922	Groundwater	9/13/2022 1:22:00 PM	9/13/2022	9/27/2022
N052565-007C	MW-81-098-0922	Groundwater	9/13/2022 1:22:00 PM	9/13/2022	9/27/2022
N052565-007D	MW-81-098-0922	Groundwater	9/13/2022 1:22:00 PM	9/13/2022	9/27/2022
N052565-008A	MW-44-115-0922	Groundwater	9/13/2022 12:08:00 PM	9/13/2022	9/27/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052565
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052565-008B	MW-44-115-0922	Groundwater	9/13/2022 12:08:00 PM	9/13/2022	9/27/2022
N052565-008C	MW-44-115-0922	Groundwater	9/13/2022 12:08:00 PM	9/13/2022	9/27/2022
N052565-008D	MW-44-115-0922	Groundwater	9/13/2022 12:08:00 PM	9/13/2022	9/27/2022
N052565-009A	MW-921-Q322	Groundwater	9/13/2022 12:18:00 PM	9/13/2022	9/27/2022
N052565-009B	MW-921-Q322	Groundwater	9/13/2022 12:18:00 PM	9/13/2022	9/27/2022
N052565-009C	MW-921-Q322	Groundwater	9/13/2022 12:18:00 PM	9/13/2022	9/27/2022
N052565-009D	MW-921-Q322	Groundwater	9/13/2022 12:18:00 PM	9/13/2022	9/27/2022
N052565-010A	MW-44-125-0922	Groundwater	9/13/2022 12:45:00 PM	9/13/2022	9/27/2022
N052565-010B	MW-44-125-0922	Groundwater	9/13/2022 12:45:00 PM	9/13/2022	9/27/2022
N052565-010C	MW-44-125-0922	Groundwater	9/13/2022 12:45:00 PM	9/13/2022	9/27/2022
N052565-010D	MW-44-125-0922	Groundwater	9/13/2022 12:45:00 PM	9/13/2022	9/27/2022
N052565-011A	EB-729-Q322_20220913	Groundwater	9/13/2022 2:10:00 PM	9/13/2022	9/27/2022
N052565-012A	MW-39-040-0922	Groundwater	9/13/2022 8:37:00 AM	9/13/2022	9/27/2022
N052565-012B	MW-39-040-0922	Groundwater	9/13/2022 8:37:00 AM	9/13/2022	9/27/2022
N052565-012C	MW-39-040-0922	Groundwater	9/13/2022 8:37:00 AM	9/13/2022	9/27/2022
N052565-012D	MW-39-040-0922	Groundwater	9/13/2022 8:37:00 AM	9/13/2022	9/27/2022
N052565-013A	MW-920-Q322	Groundwater	9/13/2022 8:42:00 AM	9/13/2022	9/27/2022
N052565-013B	MW-920-Q322	Groundwater	9/13/2022 8:42:00 AM	9/13/2022	9/27/2022
N052565-013C	MW-920-Q322	Groundwater	9/13/2022 8:42:00 AM	9/13/2022	9/27/2022
N052565-013D	MW-920-Q322	Groundwater	9/13/2022 8:42:00 AM	9/13/2022	9/27/2022
N052565-014A	MW-39-050-0922	Groundwater	9/13/2022 10:25:00 AM	9/13/2022	9/27/2022
N052565-014B	MW-39-050-0922	Groundwater	9/13/2022 10:25:00 AM	9/13/2022	9/27/2022
N052565-014C	MW-39-050-0922	Groundwater	9/13/2022 10:25:00 AM	9/13/2022	9/27/2022
N052565-014D	MW-39-050-0922	Groundwater	9/13/2022 10:25:00 AM	9/13/2022	9/27/2022
N052565-015A	MW-39-060-0922	Groundwater	9/13/2022 11:28:00 AM	9/13/2022	9/27/2022
N052565-015B	MW-39-060-0922	Groundwater	9/13/2022 11:28:00 AM	9/13/2022	9/27/2022
N052565-015C	MW-39-060-0922	Groundwater	9/13/2022 11:28:00 AM	9/13/2022	9/27/2022
N052565-015D	MW-39-060-0922	Groundwater	9/13/2022 11:28:00 AM	9/13/2022	9/27/2022
N052565-016A	MW-39-070-0922	Groundwater	9/13/2022 9:17:00 AM	9/13/2022	9/27/2022
N052565-016B	MW-39-070-0922	Groundwater	9/13/2022 9:17:00 AM	9/13/2022	9/27/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052565
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052565-016C	MW-39-070-0922	Groundwater	9/13/2022 9:17:00 AM	9/13/2022	9/27/2022
N052565-016D	MW-39-070-0922	Groundwater	9/13/2022 9:17:00 AM	9/13/2022	9/27/2022
N052565-017A	MW-39-080-0922	Groundwater	9/13/2022 9:53:00 AM	9/13/2022	9/27/2022
N052565-017B	MW-39-080-0922	Groundwater	9/13/2022 9:53:00 AM	9/13/2022	9/27/2022
N052565-017C	MW-39-080-0922	Groundwater	9/13/2022 9:53:00 AM	9/13/2022	9/27/2022
N052565-017D	MW-39-080-0922	Groundwater	9/13/2022 9:53:00 AM	9/13/2022	9/27/2022
N052565-018A	MW-39-100-0922	Groundwater	9/13/2022 12:01:00 PM	9/13/2022	9/27/2022
N052565-018B	MW-39-100-0922	Groundwater	9/13/2022 12:01:00 PM	9/13/2022	9/27/2022
N052565-018C	MW-39-100-0922	Groundwater	9/13/2022 12:01:00 PM	9/13/2022	9/27/2022
N052565-018D	MW-39-100-0922	Groundwater	9/13/2022 12:01:00 PM	9/13/2022	9/27/2022
N052565-019A	MW-30-050-0922	Groundwater	9/13/2022 12:57:00 PM	9/13/2022	9/27/2022
N052565-019B	MW-30-050-0922	Groundwater	9/13/2022 12:57:00 PM	9/13/2022	9/27/2022
N052565-019C	MW-30-050-0922	Groundwater	9/13/2022 12:57:00 PM	9/13/2022	9/27/2022
N052565-019D	MW-30-050-0922	Groundwater	9/13/2022 12:57:00 PM	9/13/2022	9/27/2022
N052565-020A	EB-730-Q322_20220913	Groundwater	9/13/2022 1:30:00 PM	9/13/2022	9/27/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-046-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 11:25:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/14/2022 05:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-112-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	0.29	0.025	0.20		µg/L	1	9/14/2022 12:43 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-168-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:12:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/14/2022 01:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-925-Q322
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/14/2022 01:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-198-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	4.1	0.13	1.0		µg/L	5	9/14/2022 07:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-043-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 1:56:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	10	0.025	0.20		µg/L	1	9/14/2022 12:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-098-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 1:22:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	9/14/2022 10:50 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-115-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:08:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	0.66	0.025	0.20		µg/L	1	9/14/2022 06:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-921-Q322
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:18:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	0.67	0.025	0.20		µg/L	1	9/14/2022 06:41 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-125-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:45:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.13	1.0		µg/L	5	9/14/2022 08:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-729-Q322_20220913
Lab Order:	N052565	**Collection Date:**	9/13/2022 2:10:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/14/2022 09:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-040-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 8:37:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/14/2022 02:34 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-920-Q322
Lab Order:	N052565	**Collection Date:**	9/13/2022 8:42:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/14/2022 02:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:25:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/14/2022 03:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-060-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 11:28:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/14/2022 10:12 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-070-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 9:17:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/14/2022 03:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 9:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	17	0.13	1.0		µg/L	5	9/14/2022 09:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:01:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-018		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	110	0.50	4.0		µg/L	20	9/14/2022 11:47 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-050-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:57:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-019		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	3.4	0.025	0.20		µg/L	1	9/14/2022 04:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-730-Q322_20220913
Lab Order:	N052565	**Collection Date:**	9/13/2022 1:30:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-020		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220914A**	QC Batch: **R165688**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/14/2022 04:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R165688**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165688**
Client ID: **PBW**	Batch ID: **R165688**	TestNo: **EPA 218.6**		Analysis Date: **9/14/2022**	SeqNo: **4833364**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R165688**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165688**
Client ID: **LCSW**	Batch ID: **R165688**	TestNo: **EPA 218.6**		Analysis Date: **9/14/2022**	SeqNo: **4833365**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.109	0.20	5.000	0	102	90	110				

Sample ID: **N052565-015AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165688**
Client ID: **ZZZZZZ**	Batch ID: **R165688**	TestNo: **EPA 218.6**		Analysis Date: **9/14/2022**	SeqNo: **4833367**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.009	0.20	1.000	0	101	90	110				

Sample ID: **N052565-007AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165688**
Client ID: **ZZZZZZ**	Batch ID: **R165688**	TestNo: **EPA 218.6**		Analysis Date: **9/14/2022**	SeqNo: **4833371**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.563	1.0	5.000	0.6460	98.3	90	110				

Sample ID: **N052565-007AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165688**
Client ID: **ZZZZZZ**	Batch ID: **R165688**	TestNo: **EPA 218.6**		Analysis Date: **9/14/2022**	SeqNo: **4833374**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.389	1.0	5.000	0.6460	94.9	90	110	5.563	3.18	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052565-015AMSD** SampType: **MSD** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833375**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.024	0.20	1.000	0	102	90	110	1.009	1.45	20	

Sample ID: **N052565-018ADUP** SampType: **DUP** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833377**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	107.032	4.0						105.3	1.61	20	

Sample ID: **N052565-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833382**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.062	0.20	1.000	0	106	90	110				

Sample ID: **N052565-002AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833383**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.241	0.20	1.000	0.2880	95.3	90	110				

Sample ID: **N052565-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833387**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.055	0.20	1.000	0	106	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052565-018AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165688**
Client ID: **ZZZZZZ**	Batch ID: **R165688**	TestNo: **EPA 218.6**		Analysis Date: **9/14/2022**	SeqNo: **4833388**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	206.162	4.0	100.0	105.3	101	90	110				

Sample ID: **N052565-006AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165688**
Client ID: **ZZZZZZ**	Batch ID: **R165688**	TestNo: **EPA 218.6**		Analysis Date: **9/14/2022**	SeqNo: **4833389**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	15.062	0.20	5.000	10.01	101	90	110				

Sample ID: **N052565-012AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165688**
Client ID: **ZZZZZZ**	Batch ID: **R165688**	TestNo: **EPA 218.6**		Analysis Date: **9/14/2022**	SeqNo: **4833391**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.055	0.20	1.000	0	106	90	110				

Sample ID: **N052565-013AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165688**
Client ID: **ZZZZZZ**	Batch ID: **R165688**	TestNo: **EPA 218.6**		Analysis Date: **9/14/2022**	SeqNo: **4833393**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.050	0.20	1.000	0	105	90	110				

Sample ID: **N052565-014AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165688**
Client ID: **ZZZZZZ**	Batch ID: **R165688**	TestNo: **EPA 218.6**		Analysis Date: **9/14/2022**	SeqNo: **4833395**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.071	0.20	1.000	0	107	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052565-016AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833399**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.037	0.20	1.000	0	104	90	110				

Sample ID: **N052565-019AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833401**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.364	0.20	1.000	3.357	101	90	110				

Sample ID: **N052565-020AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833403**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.004	0.20	1.000	0	100	90	110				

Sample ID: **N052565-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833405**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.997	0.20	1.000	0	99.7	90	110				

Sample ID: **N052565-008AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833409**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.620	0.20	1.000	0.6561	96.4	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052565-009AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833411**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.646	0.20	1.000	0.6671	97.9	90	110				

Sample ID: **N052565-005AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833417**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	8.878	1.0	5.000	4.108	95.4	90	110				

Sample ID: **N052565-010AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833419**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.922	1.0	5.000	0	98.4	90	110				

Sample ID: **N052565-011AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833421**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.001	0.20	1.000	0	100	90	110				

Sample ID: **N052565-017AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165688**
Client ID: **ZZZZZZ** Batch ID: **R165688** TestNo: **EPA 218.6** Analysis Date: **9/14/2022** SeqNo: **4833425**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	41.782	1.0	25.00	16.84	99.8	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-046-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 11:25:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B**	QC Batch: **R165643**			PrepDate:			Analyst: **RAB**
Sulfate	1400	12	100		mg/L	200	9/14/2022 11:05 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A**	QC Batch: **R165642**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/14/2022 12:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-112-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B**	QC Batch: **R165643**			PrepDate:			Analyst: **RAB**
Sulfate	670	6.1	50		mg/L	100	9/14/2022 11:20 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A**	QC Batch: **R165642**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.92	0.095	0.50		mg/L	10	9/14/2022 01:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-168-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:12:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	570	3.0	25		mg/L	50	9/14/2022 11:35 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/14/2022 01:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052565-004

Client Sample ID: MW-925-Q322
Collection Date: 9/13/2022 10:22:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	570	3.0	25		mg/L	50	9/14/2022 11:51 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/14/2022 01:38 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-198-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	980	6.1	50		mg/L	100	9/15/2022 12:37 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	1.2	0.095	0.50		mg/L	10	9/14/2022 01:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-043-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 1:56:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	330	3.0	25		mg/L	50	9/15/2022 12:52 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	1.7	0.095	0.50		mg/L	10	9/14/2022 02:09 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-098-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 1:22:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	650	6.1	50		mg/L	100	9/14/2022 08:32 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	0.87	0.095	0.50		mg/L	10	9/14/2022 11:36 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-115-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:08:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	1000	6.1	50		mg/L	100	9/15/2022 01:07 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/14/2022 02:24 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-921-Q322
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:18:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	1200	6.1	50		mg/L	100	9/15/2022 01:23 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/14/2022 02:39 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-125-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:45:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	1300	6.1	50		mg/L	100	9/15/2022 01:38 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/14/2022 03:25 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-040-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 8:37:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	130	1.2	10		mg/L	20	9/15/2022 01:53 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	9/14/2022 03:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-920-Q322
Lab Order:	N052565	**Collection Date:**	9/13/2022 8:42:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	130	1.2	10		mg/L	20	9/15/2022 02:08 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	9/14/2022 03:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:25:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	200	1.2	10		mg/L	20	9/15/2022 02:24 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	9/14/2022 04:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-060-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 11:28:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	220	3.0	25		mg/L	50	9/14/2022 10:04 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.048	0.25		mg/L	5	9/14/2022 07:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-070-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 9:17:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	280	3.0	25		mg/L	50	9/15/2022 02:39 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/14/2022 04:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 9:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	580	3.0	25		mg/L	50	9/15/2022 02:54 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/14/2022 04:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:01:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-018		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	880	6.1	50		mg/L	100	9/15/2022 03:40 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914A** QC Batch: **R165642**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/14/2022 04:58 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-050-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:57:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-019		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Sulfate	230	1.2	10		mg/L	20	9/15/2022 03:56 AM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220914B** QC Batch: **R165643**				PrepDate:			Analyst: **RAB**
Nitrate as N	0.51	0.048	0.25		mg/L	5	9/14/2022 08:17 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **LCS-R165643_SO4**	SampType: **LCS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **165643**
Client ID: **LCSW**	Batch ID: **R165643**	TestNo: **EPA 300.0**		Analysis Date: **9/14/2022**	SeqNo: **4833563**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	4.347	0.50	4.000	0	109	90	110				

Sample ID: **MB-R165643_SO4**	SampType: **MBLK**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **165643**
Client ID: **PBW**	Batch ID: **R165643**	TestNo: **EPA 300.0**		Analysis Date: **9/14/2022**	SeqNo: **4833564**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	0.331	0.50									

Sample ID: **N052565-007DMS**	SampType: **MS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **165643**
Client ID: **ZZZZZZ**	Batch ID: **R165643**	TestNo: **EPA 300.0**		Analysis Date: **9/14/2022**	SeqNo: **4833566**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	1062.350	50	400.0	654.9	102	80	120				

Sample ID: **N052565-007DMSD**	SampType: **MSD**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **165643**
Client ID: **ZZZZZZ**	Batch ID: **R165643**	TestNo: **EPA 300.0**		Analysis Date: **9/14/2022**	SeqNo: **4833569**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	1110.410	50	400.0	654.9	114	80	120	1062	4.42	20	

Sample ID: **N052565-007DDUP**	SampType: **DUP**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **165643**
Client ID: **ZZZZZZ**	Batch ID: **R165643**	TestNo: **EPA 300.0**		Analysis Date: **9/14/2022**	SeqNo: **4833570**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	651.080	50						654.9	0.580	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID: **N052565-015DMS**	SampType: **MS**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **165643**
Client ID: **ZZZZZZ**	Batch ID: **R165643**	TestNo: **EPA 300.0**		Analysis Date: **9/14/2022**	SeqNo: **4833572**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	411.070	25	200.0	216.1	97.5	80	120				

Sample ID: **N052565-015DMSD**	SampType: **MSD**	TestCode: **300_W_SO4P**	Units: **mg/L**	Prep Date:	RunNo: **165643**
Client ID: **ZZZZZZ**	Batch ID: **R165643**	TestNo: **EPA 300.0**		Analysis Date: **9/14/2022**	SeqNo: **4833573**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	416.930	25	200.0	216.1	100	80	120	411.1	1.42	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: MB-R165642_NO3	SampType: MBLK	TestCode: 300WLLNO3P	Units: mg/L	Prep Date:	RunNo: 165642
Client ID: PBW	Batch ID: R165642	TestNo: EPA 300.0		Analysis Date: 9/14/2022	SeqNo: 4832431

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: LCS-R165642_NO3	SampType: LCS	TestCode: 300WLLNO3P	Units: mg/L	Prep Date:	RunNo: 165642
Client ID: LCSW	Batch ID: R165642	TestNo: EPA 300.0		Analysis Date: 9/14/2022	SeqNo: 4832432

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.288	0.050	1.250	0	103	90	110				

Sample ID: N052564-003BDUP	SampType: DUP	TestCode: 300WLLNO3P	Units: mg/L	Prep Date:	RunNo: 165642
Client ID: ZZZZZZ	Batch ID: R165642	TestNo: EPA 300.0		Analysis Date: 9/14/2022	SeqNo: 4832435

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	7.948	0.25						8.274	4.03	20	

Sample ID: N052558-006BMS	SampType: MS	TestCode: 300WLLNO3P	Units: mg/L	Prep Date:	RunNo: 165642
Client ID: ZZZZZZ	Batch ID: R165642	TestNo: EPA 300.0		Analysis Date: 9/14/2022	SeqNo: 4832436

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.554	0.25	6.250	0	105	80	120				

Sample ID: N052565-007DMS	SampType: MS	TestCode: 300WLLNO3P	Units: mg/L	Prep Date:	RunNo: 165642
Client ID: ZZZZZZ	Batch ID: R165642	TestNo: EPA 300.0		Analysis Date: 9/14/2022	SeqNo: 4832440

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	13.701	0.50	12.50	0.8730	103	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **N052565-007DMSD**	SampType: **MSD**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165642**
Client ID: **ZZZZZZ**	Batch ID: **R165642**	TestNo: **EPA 300.0**		Analysis Date: **9/14/2022**	SeqNo: **4832441**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	13.767	0.50	12.50	0.8730	103	80	120	13.70	0.481	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **LCS-R165643_NO3** SampType: **LCS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165643**
Client ID: **LCSW** Batch ID: **R165643** TestNo: **EPA 300.0** Analysis Date: **9/14/2022** SeqNo: **4833506**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.336	0.050	1.250	0	107	90	110				

Sample ID: **MB-R165643_NO3** SampType: **MBLK** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165643**
Client ID: **PBW** Batch ID: **R165643** TestNo: **EPA 300.0** Analysis Date: **9/14/2022** SeqNo: **4833507**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **N052565-015DDUP** SampType: **DUP** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165643**
Client ID: **ZZZZZZ** Batch ID: **R165643** TestNo: **EPA 300.0** Analysis Date: **9/14/2022** SeqNo: **4833509**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	0.159	0.25						0.1545	0	20	

Sample ID: **N052565-015DMS** SampType: **MS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165643**
Client ID: **ZZZZZZ** Batch ID: **R165643** TestNo: **EPA 300.0** Analysis Date: **9/14/2022** SeqNo: **4833510**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.644	0.25	6.250	0.1545	104	80	120				

Sample ID: **N052565-015DMSD** SampType: **MSD** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165643**
Client ID: **ZZZZZZ** Batch ID: **R165643** TestNo: **EPA 300.0** Analysis Date: **9/14/2022** SeqNo: **4833511**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	6.580	0.25	6.250	0.1545	103	80	120	6.644	0.968	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-046-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 11:25:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	1.6	0.14	1.0		mg/L	1	9/14/2022 04:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-112-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 05:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-168-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:12:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 05:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-925-Q322
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 05:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-198-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 06:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-043-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 1:56:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 06:17 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-098-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 1:22:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	2.7	20		mg/L	20	9/14/2022 12:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-115-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:08:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 06:32 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-921-Q322
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:18:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 06:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-125-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:45:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220914A**	QC Batch: **R165657**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/14/2022 07:34 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-040-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 8:37:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	2.6	0.14	1.0		mg/L	1	9/15/2022 11:52 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-920-Q322
Lab Order:	N052565	**Collection Date:**	9/13/2022 8:42:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	2.7	0.14	1.0		mg/L	1	9/15/2022 12:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:25:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 01:09 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-060-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 11:28:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.68	5.0		mg/L	5	9/15/2022 12:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-070-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 9:17:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 01:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 9:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 02:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:01:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-018		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 02:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-050-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:57:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-019		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 02:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R165657**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165657**
Client ID: **PBW**	Batch ID: **R165657**	TestNo: **SM 5310C**		Analysis Date: **9/14/2022**	SeqNo: **4832783**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R165657**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165657**
Client ID: **LCSW**	Batch ID: **R165657**	TestNo: **SM 5310C**		Analysis Date: **9/14/2022**	SeqNo: **4832784**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	4.816	1.0	5.000	0	96.3	85	115				

Sample ID: **N052565-007CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165657**
Client ID: **ZZZZZZ**	Batch ID: **R165657**	TestNo: **SM 5310C**		Analysis Date: **9/14/2022**	SeqNo: **4832791**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	78.408	20	100.0	0	78.4	75	125				

Sample ID: **N052565-007CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165657**
Client ID: **ZZZZZZ**	Batch ID: **R165657**	TestNo: **SM 5310C**		Analysis Date: **9/14/2022**	SeqNo: **4832792**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	77.448	20	100.0	0	77.4	75	125	78.41	1.23	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID: **MB-R165700**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165700**
Client ID: **PBW**	Batch ID: **R165700**	TestNo: **SM 5310C**		Analysis Date: **9/15/2022**	SeqNo: **4834043**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID: **LCS-R165700**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165700**
Client ID: **LCSW**	Batch ID: **R165700**	TestNo: **SM 5310C**		Analysis Date: **9/15/2022**	SeqNo: **4834044**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.065	1.0	5.000	0	101	85	115				

Sample ID: **N052565-015CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165700**
Client ID: **ZZZZZZ**	Batch ID: **R165700**	TestNo: **SM 5310C**		Analysis Date: **9/15/2022**	SeqNo: **4834050**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	26.585	5.0	25.00	1.875	98.8	75	125				

Sample ID: **N052565-015CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165700**
Client ID: **ZZZZZZ**	Batch ID: **R165700**	TestNo: **SM 5310C**		Analysis Date: **9/15/2022**	SeqNo: **4834051**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	26.787	5.0	25.00	1.875	99.6	75	125	26.58	0.755	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052565-001

Client Sample ID: MW-82-046-0922
Collection Date: 9/13/2022 11:25:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	5500	13	20		µg/L	1	9/20/2022 06:49 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-112-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C** QC Batch: **94713**				PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	35	13	20		µg/L	1	9/20/2022 06:54 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-168-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:12:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	35	13	20		µg/L	1	9/20/2022 06:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052565-004

Client Sample ID: MW-925-Q322
Collection Date: 9/13/2022 10:22:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	51	13	20		µg/L	1	9/20/2022 07:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052565-005

Client Sample ID: MW-82-198-0922
Collection Date: 9/13/2022 9:24:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 07:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-043-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 1:56:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	53	13	20		µg/L	1	9/20/2022 07:25 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-098-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 1:22:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	190	13	20		µg/L	1	9/20/2022 07:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-115-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:08:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	41	13	20		µg/L	1	9/20/2022 07:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *27-Sep-22*

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-921-Q322
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:18:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	37	13	20		µg/L	1	9/20/2022 08:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-125-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:45:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	410	13	20		µg/L	1	9/20/2022 08:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-040-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 8:37:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	260	13	20		µg/L	1	9/20/2022 08:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-920-Q322
Lab Order:	N052565	**Collection Date:**	9/13/2022 8:42:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	270	13	20		µg/L	1	9/20/2022 08:26 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-050-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:25:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	21	13	20		µg/L	1	9/20/2022 08:32 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052565-015

Client Sample ID: MW-39-060-0922
Collection Date: 9/13/2022 11:28:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**				PrepDate:	**9/14/2022**	Analyst: **DJ**
Iron	42	13	20		µg/L	1	9/20/2022 08:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-070-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 9:17:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 09:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 9:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 09:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:01:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-018		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 09:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-050-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:57:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-019		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C**	QC Batch: **94713**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 09:47 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-94713**	SampType: **MBLK**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/14/2022**	RunNo: **165864**
Client ID: **PBW**	Batch ID: **94713**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842761**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS-94713**	SampType: **LCS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/14/2022**	RunNo: **165864**
Client ID: **LCSW**	Batch ID: **94713**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842762**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	97.777	20	100.0	0	97.8	85	115				

Sample ID: **N052565-007BMS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/14/2022**	RunNo: **165864**
Client ID: **ZZZZZZ**	Batch ID: **94713**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842774**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	279.110	20	100.0	190.4	88.7	75	125				

Sample ID: **N052565-007BMSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/14/2022**	RunNo: **165864**
Client ID: **ZZZZZZ**	Batch ID: **94713**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842775**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	293.898	20	100.0	190.4	104	75	125	279.1	5.16	20	

Sample ID: **N052565-015BMS**	SampType: **MS**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/14/2022**	RunNo: **165864**
Client ID: **ZZZZZZ**	Batch ID: **94713**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842787**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	140.702	20	100.0	41.90	98.8	75	125				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **N052565-015BMSD**	SampType: **MSD**	TestCode: **6010_WDPGE**	Units: **µg/L**	Prep Date: **9/14/2022**	RunNo: **165864**
Client ID: **ZZZZZZ**	Batch ID: **94713**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **9/20/2022**	SeqNo: **4842788**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	146.959	20	100.0	41.90	105	75	125	140.7	4.35	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052565-001

Client Sample ID: MW-82-046-0922
Collection Date: 9/13/2022 11:25:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:		**9/14/2022**	Analyst: **DJ**
Arsenic	23	0.050	0.10		µg/L	1	9/15/2022 06:36 PM
Barium	51	0.083	1.0		µg/L	1	9/15/2022 06:36 PM
Manganese	260	0.13	2.5		µg/L	5	9/15/2022 11:09 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-112-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:54:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220915F** QC Batch: **94714**				PrepDate:	**9/14/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/15/2022 06:42 PM
Barium	38	0.083	1.0		µg/L	1	9/15/2022 06:42 PM
Manganese	84	0.026	0.50		µg/L	1	9/15/2022 06:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-82-168-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:12:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/15/2022 06:48 PM
Barium	38	0.083	1.0		µg/L	1	9/15/2022 06:48 PM
Manganese	42	0.026	0.50		µg/L	1	9/15/2022 06:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-925-Q322
Lab Order:	N052565	**Collection Date:**	9/13/2022 10:22:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/15/2022 06:54 PM
Barium	39	0.083	1.0		µg/L	1	9/15/2022 06:54 PM
Manganese	43	0.026	0.50		µg/L	1	9/15/2022 06:54 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052565-005

Client Sample ID: MW-82-198-0922
Collection Date: 9/13/2022 9:24:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:		**9/14/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/15/2022 07:00 PM
Barium	42	0.083	1.0		µg/L	1	9/15/2022 07:00 PM
Manganese	90	0.026	0.50		µg/L	1	9/15/2022 07:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-043-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 1:56:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220915F** QC Batch: **94714**				PrepDate:	**9/14/2022**		Analyst: **DJ**
Arsenic	2.4	0.050	0.10		µg/L	1	9/15/2022 07:06 PM
Barium	69	0.083	1.0		µg/L	1	9/15/2022 07:06 PM
Manganese	24	0.026	0.50		µg/L	1	9/15/2022 07:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-81-098-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 1:22:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/15/2022 07:29 PM
Barium	80	0.083	1.0		µg/L	1	9/15/2022 07:29 PM
Manganese	130	0.13	2.5		µg/L	5	9/15/2022 07:35 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-115-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:08:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917A**	QC Batch: **94714**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/17/2022 01:41 PM
Barium	21	0.083	1.0		µg/L	1	9/15/2022 07:59 PM
Manganese	18	0.026	0.50		µg/L	1	9/15/2022 07:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-921-Q322
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:18:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/15/2022 08:05 PM
Barium	20	0.083	1.0		µg/L	1	9/15/2022 08:05 PM
Manganese	18	0.026	0.50		µg/L	1	9/15/2022 08:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-44-125-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:45:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/15/2022 08:11 PM
Barium	47	0.083	1.0		µg/L	1	9/15/2022 08:11 PM
Manganese	560	0.13	2.5		µg/L	5	9/16/2022 01:37 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052565-012

Client Sample ID: MW-39-040-0922
Collection Date: 9/13/2022 8:37:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:		**9/14/2022**	Analyst: **DJ**
Arsenic	15	0.050	0.10		µg/L	1	9/15/2022 08:17 PM
Barium	66	0.083	1.0		µg/L	1	9/15/2022 08:17 PM
Manganese	99	0.026	0.50		µg/L	1	9/15/2022 08:17 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052565-013

Client Sample ID: MW-920-Q322
Collection Date: 9/13/2022 8:42:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:		**9/14/2022**	Analyst: **DJ**
Arsenic	15	0.050	0.10		µg/L	1	9/15/2022 08:40 PM
Barium	61	0.083	1.0		µg/L	1	9/15/2022 08:40 PM
Manganese	98	0.026	0.50		µg/L	1	9/15/2022 08:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052565-014

Client Sample ID: MW-39-050-0922
Collection Date: 9/13/2022 10:25:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:		**9/14/2022**	Analyst: **DJ**
Arsenic	1.6	0.050	0.10		µg/L	1	9/15/2022 08:46 PM
Barium	43	0.083	1.0		µg/L	1	9/15/2022 08:46 PM
Manganese	210	0.13	2.5		µg/L	5	9/16/2022 01:42 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052565-015

Client Sample ID: MW-39-060-0922
Collection Date: 9/13/2022 11:28:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:		**9/14/2022**	Analyst: **DJ**
Arsenic	2.0	0.050	0.10		µg/L	1	9/15/2022 08:52 PM
Barium	32	0.083	1.0		µg/L	1	9/15/2022 08:52 PM
Manganese	180	0.13	2.5		µg/L	5	9/15/2022 08:58 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-070-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 9:17:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917A** QC Batch: **94714**				PrepDate:	**9/14/2022**		Analyst: **DJ**
Arsenic	1.2	0.050	0.10		µg/L	1	9/17/2022 01:47 PM
Barium	36	0.083	1.0		µg/L	1	9/15/2022 09:22 PM
Manganese	12	0.026	0.50		µg/L	1	9/15/2022 09:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

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ANALYTICAL RESULTS

Print Date: *27-Sep-22*

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-080-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 9:53:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/15/2022 09:28 PM
Barium	32	0.083	1.0		µg/L	1	9/15/2022 09:28 PM
Manganese	7.8	0.026	0.50		µg/L	1	9/15/2022 09:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-39-100-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:01:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-018		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/15/2022 10:57 PM
Barium	31	0.083	1.0		µg/L	1	9/15/2022 10:57 PM
Manganese	8.9	0.026	0.50		µg/L	1	9/15/2022 10:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

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ANALYTICAL RESULTS

Print Date: *27-Sep-22*

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-30-050-0922
Lab Order:	N052565	**Collection Date:**	9/13/2022 12:57:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052565-019		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220915F**	QC Batch: **94714**			PrepDate:	**9/14/2022**		Analyst: **DJ**
Arsenic	2.9	0.050	0.10		µg/L	1	9/15/2022 11:03 PM
Barium	20	0.083	1.0		µg/L	1	9/15/2022 11:03 PM
Manganese	1.8	0.026	0.50		µg/L	1	9/15/2022 11:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94714** SampType: **MBLK** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **9/14/2022** RunNo: **165758**
Client ID: **PBW** Batch ID: **94714** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **9/15/2022** SeqNo: **4837263**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID: **LCS-94714** SampType: **LCS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **9/14/2022** RunNo: **165758**
Client ID: **LCSW** Batch ID: **94714** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **9/15/2022** SeqNo: **4837264**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.093	0.10	10.00	0	101	85	115				
Barium	10.748	1.0	10.00	0	107	85	115				
Manganese	108.372	0.50	100.0	0	108	85	115				

Sample ID: **N052565-007BMS** SampType: **MS** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **9/14/2022** RunNo: **165758**
Client ID: **ZZZZZZ** Batch ID: **94714** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **9/15/2022** SeqNo: **4837277**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	8.076	0.10	10.00	0	80.8	75	125				
Barium	95.302	1.0	10.00	79.93	154	75	125				S

Sample ID: **N052565-007BMSD** SampType: **MSD** TestCode: **6020_DIS_TP** Units: **µg/L** Prep Date: **9/14/2022** RunNo: **165758**
Client ID: **ZZZZZZ** Batch ID: **94714** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **9/15/2022** SeqNo: **4837278**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	7.902	0.10	10.00	0	79.0	75	125	8.076	2.17	20	
Barium	93.721	1.0	10.00	79.93	138	75	125	95.30	1.67	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052565-015BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/14/2022**	RunNo: **165758**
Client ID: **ZZZZZZ**	Batch ID: **94714**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/15/2022**	SeqNo: **4837290**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.694	0.10	10.00	1.977	107	75	125				
Barium	40.739	1.0	10.00	31.62	91.2	75	125				

Sample ID: **N052565-015BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/14/2022**	RunNo: **165758**
Client ID: **ZZZZZZ**	Batch ID: **94714**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/15/2022**	SeqNo: **4837291**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.115	0.10	10.00	1.977	101	75	125	12.69	4.67	20	
Barium	40.613	1.0	10.00	31.62	90.0	75	125	40.74	0.310	20	

Sample ID: **N052565-007BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/14/2022**	RunNo: **165758**
Client ID: **ZZZZZZ**	Batch ID: **94714**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/16/2022**	SeqNo: **4837321**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	244.313	2.5	100.0	133.8	111	75	125				

Sample ID: **N052565-007BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/14/2022**	RunNo: **165758**
Client ID: **ZZZZZZ**	Batch ID: **94714**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/16/2022**	SeqNo: **4837322**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	247.774	2.5	100.0	133.8	114	75	125	244.3	1.41	20	

Sample ID: **N052565-015BMS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/14/2022**	RunNo: **165758**
Client ID: **ZZZZZZ**	Batch ID: **94714**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/16/2022**	SeqNo: **4837327**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	284.679	2.5	100.0	181.8	103	75	125				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052565-015BMSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/14/2022**	RunNo: **165758**
Client ID: **ZZZZZZ**	Batch ID: **94714**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/16/2022**	SeqNo: **4837328**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	291.681	2.5	100.0	181.8	110	75	125	284.7	2.43	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052565
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **N052565-007B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165758**
Client ID: **ZZZZZZ**	Batch ID: **94714**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/15/2022**	SeqNo: **4837276**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	8.131	0.10	10.00	0	81.3	80	120				
Barium	93.633	1.0	10.00	79.93	137	80	120				S

Sample ID: **N052565-015B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165758**
Client ID: **ZZZZZZ**	Batch ID: **94714**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/15/2022**	SeqNo: **4837289**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	12.331	0.10	10.00	1.977	104	80	120				
Barium	39.997	1.0	10.00	31.62	83.8	80	120				

Sample ID: **N052565-007B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165758**
Client ID: **ZZZZZZ**	Batch ID: **94714**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/16/2022**	SeqNo: **4837320**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	242.344	2.5	100.0	133.8	109	80	120				

Sample ID: **N052565-015B-PS**	SampType: **PS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date:	RunNo: **165758**
Client ID: **ZZZZZZ**	Batch ID: **94714**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/16/2022**	SeqNo: **4837326**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	285.306	2.5	100.0	181.8	103	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

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CHAIN OF CUSTODY RECORD

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11050 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement: Excel EDD; Geotracker; Labspec; Others ✓; Specify: RWQCB; Global ID:
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	QA/QC: RTNE; RWQCB ✓; CalTrans; LEVEL III; LEVEL IV; Regulatory; Specify State:
Address: Roseville, CA 95678	Email: daniel.moore@arcadis-us.com	Address:	Sample Receipt Condition: 1. Chilled; 2. Headspace; 3. Container Intact; 4. Seal Present; 5. IR number 3; 6. Method of Cooling: Ice
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Sample Temp: 2.6°C / 5.4°C / 3.8°C
Submitted By:		Phone: 949-727-1400, ext 200 Fax:	
Title: Field Tech	Phone: 916-786-3302 Fax:		
Signature: Scott Moyer 9.13.22 Date:	Sampled By: Nara Tay		
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for		
Project Name: PG&E Topock - PCM	Signature: Date: 9/13/22		
Project Number: 30121866.3Q22GW			

Matrix: Ground X; Sediment; Potable; Soil; NPDES; Other Solid; Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrite, Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter, HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052565-01	MW-82-046-0922	9/13/2022	11:25		X		X			X			X	E	6	P	BNS	
2	-02	MW-82-112-0922	9/13/2022	10:54		X		X			X			X	E	6	P	BNS	
3	-03	MW-82-168-0922	9/13/2022	10:12		X		X			X			X	E	6	P	BNS	
4	-04	MW-925-Q322	9/13/2022	10:22		X		X			X			X	E	6	P	BNS	
5	-05	MW-82-198-0922	9/13/2022	9:24		X		X			X			X	E	6	P	BNS	
6	-06	MW-81-043-0922	9/13/2022	13:56		X		X			X			X	E	6	P	BNS	
7	-07	MW-81-098-0922	9/13/2022	13:22		X		X			X			X	E	9	P	BNS	MS/MSD
8	-08	MW-44-115-0922	9/13/2022	12:08		X		X			X			X	E	6	P	BNS	
9	-09	MW-921-Q322	9/13/2022	12:18		X		X			X			X	E	6	P	BNS	
10	-10	MW-44-125-0922	9/13/2022	12:45		X		X			X			X	E	6	P	BNS	
11	-11	EB-729-Q322	9/13/2022	14:10		X		X			X			X	E	1	P	BNS	
12	-12	MW-39-040-0922	9/13/2022	8:37		X		X			X			X	E	6	P	BNS	
13	-13	MW-920-Q322	9/13/2022	8:42		X		X			X			X	E	6	P	BNS	
14	-14	MW-39-050-0922	9/13/2022	10:25		X		X			X			X	E	6	P	BNS	

Relinquished by (Signature and Printed Name):	Date/Time:	Received by (Signature and Printed Name):	Date/Time:
Nara Tay	9/13/22 1530	NSCAYLEN	9/13/22@1530
NSCAYLEN	9/13/22 @1816	Jeandra Redinger	9/13/22 1816

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [X] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives: H=HCL; N=HNO_3; S=H_2SO_4; C=4°C; Z=Zn(AC)$_2$; O=NaOH; T=$Na_2S_2O_3$; Others/Specify: B (NH4)2SO4/NH4OH

Container Type: T=Tube; V=VOA; P=Pint; J=Jar; B=Tedlar; G=Glass; M=Metal; M=Metal; C=Can

White=Laboratory Copy
Yellow=Customer's Copy

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Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement	QA/QC	Sample Receipt Condition
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD	RTNE	Y N
Address: Roseville, CA 95678	Email: [illegible]@arcadis.com; daniel.moore@critigen.com	Address:	Geotracker	RWQCB ✓	1. Chilled
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Labspec	CalTrans	2. Headspace
Submitted By:		Phone: 949-727-1400, ext 200 Fax:	Others ✓	LEVEL III	3. Container Intact
Title:	Phone: 916-786-3302 Fax:		Specify: RWQCB	LEVEL IV	4. Seal Present
Signature: Date:	Sampled By: Nava Tay		Global ID:	Regulatory	5. IR number
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for			Specify State:	6. Method of Cooling: Ice
Project Name: PG&E Topock - PCM	Signature:	Date: 9/13/22			Sample Temp: 2.6°C / 5.4°C / 3.8°C
Project Number: 30121868.3Q22GW7					

Matrix: Ground X | Sediment | Potable | Soil | NPDES | Other Solid | Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrite, Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052565-15	MW-39-060-0922	9/13/2022	11:28		X		X			X			X	E	9	P	BNS	MS/MSD
2	-16	MW-39-070-0922	9/13/2022	9:17		X		X			X			X	E	6	P	BNS	
3	-17	MW-39-080-0922	9/13/2022	9:53		X		X			X			X	E	6	P	BNS	
4	-18	MW-39-100-0922	9/13/2022	12:01		X		X			X			X	E	6	P	BNS	
5	-19	MW-30-050-0922	9/13/2022	12:57		X		X			X			X	E	6	P	BNS	
6	-20	EB-730-Q322	9/13/2022	13:30		X									E	1	P	BNS	
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			

Courier:
Tracking No.:

Relinquished by (Signature and Printed Name)	Date/Time	Relinquished by (Signature and Printed Name)	Date/Time
Nava Tay	9/13/22 1530	MCARTIN	9/13/22@1530
MCARTIN	9/13/22 @1816	Yoanna Rodriguez	9/13/22 1816
Relinquished by (Signature and Printed Name)	Date/Time	Relinquished by (Signature and Printed Name)	Date/Time

Turn Around Time (TAT)

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- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [X] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

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2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
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8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:

H=HCL	N=HNO_3	S=H_2SO_4	C=4°C
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$	
Others/Specify:	B (NH4)2SO4/NH4OH		

Container Type:

T=Tube	V=VOA	P=Pint
J=Jar	B=Tedlar	G=Glass
M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	9/13/2022	Workorder:	N052565
Rep sample Temp (Deg C):	2.6/5.4 /3.8	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

9/14/2022

Checklist Completed By: YR YRodriguez

Reviewed By: for: MBC 9/23/2022

Subject: Re: PG&E Topock - PCM, 30121866.3Q22GW (ASSET Labs No. N052565)
From: "Madsen, Laura" <Laura.Madsen@arcadis.com>
Date: 9/14/2022, 11:17 AM
To: Yoandra Rodriguez <yoandra@assetlaboratories.com>
CC: "maryann.balilu@assetlaboratoriesph.com" <maryann.balilu@assetlaboratoriesph.com>, "rustico.aquino@assetlaboratoriesph.com" <rustico.aquino@assetlaboratoriesph.com>, "giselle@assetlaboratories.com" <giselle@assetlaboratories.com>, Tina Rice <Tina.Rice@critigen.com>

Hi
Sample 11 should be hex cr only

Thanks!

Get Outlook for iOS

From: Yoandra Rodriguez <yoandra@assetlaboratories.com>
Sent: Wednesday, September 14, 2022 1:24:15 PM
To: Madsen, Laura <Laura.Madsen@arcadis.com>
Cc: maryann.balilu@assetlaboratoriesph.com <maryann.balilu@assetlaboratoriesph.com>; rustico.aquino@assetlaboratoriesph.com <rustico.aquino@assetlaboratoriesph.com>; giselle@assetlaboratories.com <giselle@assetlaboratories.com>; Tina Rice <Tina.Rice@critigen.com>
Subject: PG&E Topock - PCM, 30121866.3Q22GW (ASSET Labs No. N052565)

Hi Laura,

Please confirm if sample 11 (EB-729-Q322) should be analyzed only for Hex Cr.

COC is attached for reference.

--
Thanks,

Yoandra Rodriguez
Project Manager

Nevada: 3151 W. Post Road, Las Vegas, NV 89118 | P: 702.307.2659 | F: 702.307.2691
California: 11110 Artesia Blvd., Ste. B, Cerritos, CA 90703 | P: 562.219.7435 | F: 562.219.7436

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Mary Ann Balilu

From: Yoandra Rodriguez <yoandra@assetlaboratories.com>
Sent: Tuesday, September 20, 2022 3:26 PM
To: maryann.balilu@assetlaboratoriesph.com; rustico.aquino@assetlaboratoriesph.com
Subject: Fwd: Topock - Duplicate IDs

-------- Forwarded Message --------
Subject: Topock - Duplicate IDs
Date: Tue, 20 Sep 2022 22:13:57 +0000
From: Tina Rice <Tina.Rice@locana.co>
To: Yoandra Rodriguez <yoandra@assetlaboratories.com>
CC: Nancy Sibucao <nancy@assetlaboratories.com>, Madsen, Laura <laura.madsen@arcadis.com>

Hi Yoandra,

Could you please update the following sample IDs?

WorkOrder	ClientSampID	New ClientSampID	DateCollected
N052565	EB-729-Q322	EB-729-Q322_20220913	9/13/2022 14:10
N052565	EB-730-Q322	EB-730-Q322_20220913	9/13/2022 13:30
N052606	EB-731-Q322	EB-731-Q322_20220914	9/14/2022 12:50
N052606	EB-732-Q322	EB-732-Q322_20220914	9/14/2022 14:15

Thank you,
Tina
--
Thanks,

Yoandra Rodriguez
Project Manager

Nevada: 3151 W. Post Road, Las Vegas, NV 89118 | P: 702.307.2659 | F: 702.307.2691
California: 11110 Artesia Blvd., Ste. B, Cerritos, CA 90703 | P: 562.219.7435 | F: 562.219.7436

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ASSET Laboratories

WORK ORDER Summary

27-Sep-22

WorkOrder: N052565

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/13/2022 6:16 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052565-001A	MW-82-046-0922	9/13/2022 11:25:00 AM	9/27/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-001B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-001C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-001D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-002A	MW-82-112-0922	9/13/2022 10:54:00 AM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-002B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-002C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-002D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-003A	MW-82-168-0922	9/13/2022 10:12:00 AM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-003B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-003C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

27-Sep-22

WorkOrder: N052565

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/13/2022 6:16 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052565-003D	MW-82-168-0922	9/13/2022 10:12:00 AM	9/27/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-004A	MW-925-Q322	9/13/2022 10:22:00 AM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-004B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-004C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-004D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-005A	MW-82-198-0922	9/13/2022 9:24:00 AM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-005B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-005C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-005D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-006A	MW-81-043-0922	9/13/2022 1:56:00 PM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-006B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW

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WORK ORDER Summary

27-Sep-22

WorkOrder: N052565

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/13/2022 6:16 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052565-006B	MW-81-043-0922	9/13/2022 1:56:00 PM	9/27/2022	Groundwater	EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-006C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-006D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-007A	MW-81-098-0922	9/13/2022 1:22:00 PM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☑	☐	WW
N052565-007B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☑	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☑	☐	WW
N052565-007C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☑	☐	VW
N052565-007D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
N052565-008A	MW-44-115-0922	9/13/2022 12:08:00 PM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-008B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-008C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-008D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-009A	MW-921-Q322	9/13/2022 12:18:00 PM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-009B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW

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WORK ORDER Summary

27-Sep-22

WorkOrder: N052565

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/13/2022 6:16 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052565-009B	MW-921-Q322	9/13/2022 12:18:00 PM	9/27/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-009C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-009D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-010A	MW-44-125-0922	9/13/2022 12:45:00 PM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-010B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-010C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-010D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-011A	EB-729-Q322_20220913	9/13/2022 2:10:00 PM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-012A	MW-39-040-0922	9/13/2022 8:37:00 AM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-012B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-012C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-012D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

27-Sep-22

WorkOrder: N052565

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/13/2022 6:16 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052565-012D	MW-39-040-0922	9/13/2022 8:37:00 AM	9/27/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-013A	MW-920-Q322	9/13/2022 8:42:00 AM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-013B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-013C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-013D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-014A	MW-39-050-0922	9/13/2022 10:25:00 AM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-014B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-014C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-014D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-015A	MW-39-060-0922	9/13/2022 11:28:00 AM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☑	☐	WW
N052565-015B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☑	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☑	☐	WW

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WORK ORDER Summary

27-Sep-22

WorkOrder: N052565

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/13/2022 6:16 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052565-015C	MW-39-060-0922	9/13/2022 11:28:00 AM	9/27/2022	Groundwater	SM 5310C	TOTAL ORGANIC CARBON	☐	☑	☐	VW
N052565-015D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
N052565-016A	MW-39-070-0922	9/13/2022 9:17:00 AM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-016B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-016C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-016D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-017A	MW-39-080-0922	9/13/2022 9:53:00 AM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-017B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-017C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-017D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-018A	MW-39-100-0922	9/13/2022 12:01:00 PM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-018B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW

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WORK ORDER Summary

27-Sep-22

WorkOrder: N052565

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/13/2022 6:16 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052565-018B	MW-39-100-0922	9/13/2022 12:01:00 PM	9/27/2022	Groundwater	EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-018C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-018D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-019A	MW-30-050-0922	9/13/2022 12:57:00 PM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-019B			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/27/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/27/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052565-019C			9/27/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052565-019D			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/27/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052565-020A	EB-730-Q322_20220913	9/13/2022 1:30:00 PM	9/27/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052565-021A	FOLDER	9/27/2022	9/27/2022		Folder	Folder	☐	☐	☐	LAB
			9/27/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/27/2022		Folder	Folder	☐	☐	☐	LAB

September 27, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052605

RE: PG&E Topock - RCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on September 14, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

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CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab Order: N052605

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Sample N052605-001 was diluted due to matrix. Sample has bright pink color.

Analytical Comments for EPA 6020_Dissolved:

Samples were diluted due to matrix. Digestates are colored.

Analytical Comments for EPA 300.0:

Sample N052605-001 was diluted due to matrix. Sample has bright pink color.

ASSET Laboratories

Date: *27-Sep-22*

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab Order: N052605
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052605-001A	MW-67-185-0922	Groundwater	9/14/2022 11:34:00 AM	9/14/2022	9/27/2022
N052605-001B	MW-67-185-0922	Groundwater	9/14/2022 11:34:00 AM	9/14/2022	9/27/2022
N052605-001C	MW-67-185-0922	Groundwater	9/14/2022 11:34:00 AM	9/14/2022	9/27/2022
N052605-002A	MW-68-180-0922	Groundwater	9/14/2022 12:30:00 PM	9/14/2022	9/27/2022
N052605-002B	MW-68-180-0922	Groundwater	9/14/2022 12:30:00 PM	9/14/2022	9/27/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-67-185-0922
Lab Order:	N052605	**Collection Date:**	9/14/2022 11:34:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052605-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A** QC Batch: **R165731**				PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	10	80		µg/L	400	9/15/2022 05:57 PM
DISSOLVED METALS BY ICP-MS							
		EPA 3010A			**EPA 6020**		
RunID: **NV00922-ICP8_220917E** QC Batch: **94794**				PrepDate:	**9/17/2022**		Analyst: **DJ**
Chromium	ND	0.18	5.0		µg/L	5	9/18/2022 07:16 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-68-180-0922
Lab Order:	N052605	**Collection Date:**	9/14/2022 12:30:00 PM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052605-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	36000	130	1000		µg/L	5000	9/15/2022 05:19 PM
DISSOLVED METALS BY ICP-MS							
	EPA 3010A		**EPA 6020**				
RunID: **NV00922-ICP8_220920B**	QC Batch: **94794**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Chromium	40000	22	620		µg/L	625	9/20/2022 03:33 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052605
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R165731**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165731**
Client ID: **PBW**	Batch ID: **R165731**	TestNo: **EPA 218.6**		Analysis Date: **9/15/2022**	SeqNo: **4835309**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R165731**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165731**
Client ID: **LCSW**	Batch ID: **R165731**	TestNo: **EPA 218.6**		Analysis Date: **9/15/2022**	SeqNo: **4835310**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.061	0.20	5.000	0	101	90	110				

Sample ID: **N052606-008AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165731**
Client ID: **ZZZZZZ**	Batch ID: **R165731**	TestNo: **EPA 218.6**		Analysis Date: **9/15/2022**	SeqNo: **4835312**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2723.060	40	1000	1728	99.5	90	110				

Sample ID: **N052606-008AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165731**
Client ID: **ZZZZZZ**	Batch ID: **R165731**	TestNo: **EPA 218.6**		Analysis Date: **9/15/2022**	SeqNo: **4835313**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2709.120	40	1000	1728	98.1	90	110	2723	0.513	20	

Sample ID: **N052606-009ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165731**
Client ID: **ZZZZZZ**	Batch ID: **R165731**	TestNo: **EPA 218.6**		Analysis Date: **9/15/2022**	SeqNo: **4835315**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1316.800	40						1336	1.43	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052605
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052606-009AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835316**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2293.040	40	1000	1336	95.7	90	110				

Sample ID: **N052606-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835318**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	810.435	10	250.0	559.8	100	90	110				

Sample ID: **N052606-002AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835322**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	230.274	4.0	100.0	131.1	99.1	90	110				

Sample ID: **N052606-003AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835324**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	786.260	10	250.0	551.9	93.8	90	110				

Sample ID: **N052606-006AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835326**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	43.328	1.0	25.00	19.31	96.1	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052605
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052606-007AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835328**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1068.760	20	500.0	564.8	101	90	110				

Sample ID: **N052606-013AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835330**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	40.881	1.0	25.00	16.15	98.9	90	110				

Sample ID: **N052606-015AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835334**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	44.064	1.0	25.00	19.42	98.6	90	110				

Sample ID: **N052606-014AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835336**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	946.330	20	500.0	461.9	96.9	90	110				

Sample ID: **N052606-016AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835338**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1162.090	20	500.0	665.9	99.2	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052605
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052606-010AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835340**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.004	0.20	1.000	0	100	90	110				

Sample ID: **N052606-004AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835346**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.004	0.20	1.000	0	100	90	110				

Sample ID: **N052606-012AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835348**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.978	0.20	1.000	0	97.8	90	110				

Sample ID: **N052605-002AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835350**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	60331.500	1000	25000	36410	95.7	90	110				

Sample ID: **N052605-001AMS** SampType: **MS** TestCode: **218.6_WPGE** Units: **µg/L** Prep Date: RunNo: **165731**
Client ID: **ZZZZZZ** Batch ID: **R165731** TestNo: **EPA 218.6** Analysis Date: **9/15/2022** SeqNo: **4835354**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	370.520	80	400.0	0	92.6	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052605
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052606-011AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165731**
Client ID: **ZZZZZZ**	Batch ID: **R165731**	TestNo: **EPA 218.6**		Analysis Date: **9/15/2022**	SeqNo: **4835355**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.013	0.20	1.000	0	101	90	110				

Sample ID: **N052606-005AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165731**
Client ID: **ZZZZZZ**	Batch ID: **R165731**	TestNo: **EPA 218.6**		Analysis Date: **9/15/2022**	SeqNo: **4835356**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	53.828	1.0	25.00	29.92	95.6	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052605
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020DIS_CrPGE_TPK

Sample ID: **MB-94794**	SampType: **MBLK**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165788**
Client ID: **PBW**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/18/2022**	SeqNo: **4839146**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.114	1.0									

Sample ID: **LCS-94794**	SampType: **LCS**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165788**
Client ID: **LCSW**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/18/2022**	SeqNo: **4839147**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.772	1.0	10.00	0	97.7	85	115				

Sample ID: **N052544-001B-MS**	SampType: **MS**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165788**
Client ID: **ZZZZZZ**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/18/2022**	SeqNo: **4839151**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	100.231	1.0	10.00	91.61	86.2	75	125				

Sample ID: **N052544-001B-MSD**	SampType: **MSD**	TestCode: **6020DIS_CrP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165788**
Client ID: **ZZZZZZ**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/18/2022**	SeqNo: **4839152**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	100.998	1.0	10.00	91.61	93.9	75	125	100.2	0.763	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-67-185-0922
Lab Order:	N052605	**Collection Date:**	9/14/2022 11:34:00 AM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052605-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A**	QC Batch: **R165707**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	3.8	20		mg/L	400	9/15/2022 03:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052605
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **MB-R165707_NO3**	SampType: **MBLK**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165707**
Client ID: **PBW**	Batch ID: **R165707**	TestNo: **EPA 300.0**		Analysis Date: **9/15/2022**	SeqNo: **4834552**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID: **LCS-R165707_NO3**	SampType: **LCS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165707**
Client ID: **LCSW**	Batch ID: **R165707**	TestNo: **EPA 300.0**		Analysis Date: **9/15/2022**	SeqNo: **4834553**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.249	0.050	1.250	0	99.9	90	110				

Sample ID: **N052606-005DMS**	SampType: **MS**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165707**
Client ID: **ZZZZZZ**	Batch ID: **R165707**	TestNo: **EPA 300.0**		Analysis Date: **9/15/2022**	SeqNo: **4834555**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.970	0.50	12.50	0.4960	99.8	80	120				

Sample ID: **N052606-005DMSD**	SampType: **MSD**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165707**
Client ID: **ZZZZZZ**	Batch ID: **R165707**	TestNo: **EPA 300.0**		Analysis Date: **9/15/2022**	SeqNo: **4834556**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	13.038	0.50	12.50	0.4960	100	80	120	12.97	0.523	20	

Sample ID: **N052606-009DDUP**	SampType: **DUP**	TestCode: **300WLLNO3P**	Units: **mg/L**	Prep Date:	RunNo: **165707**
Client ID: **ZZZZZZ**	Batch ID: **R165707**	TestNo: **EPA 300.0**		Analysis Date: **9/15/2022**	SeqNo: **4834558**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	4.041	0.50						4.149	2.64	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052605
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID: **N052606-009DMS** SampType: **MS** TestCode: **300WLLNO3P** Units: **mg/L** Prep Date: RunNo: **165707**
Client ID: **ZZZZZZ** Batch ID: **R165707** TestNo: **EPA 300.0** Analysis Date: **9/15/2022** SeqNo: **4834559**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	16.747	0.50	12.50	4.149	101	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052605
Project: PG&E Topock - RCM, 30121866.3Q22GW
Lab ID: N052605-001

Client Sample ID: MW-67-185-0922
Collection Date: 9/14/2022 11:34:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220920C**	QC Batch: **94794**			PrepDate:		**9/17/2022**	Analyst: **DJ**
Manganese	1100	0.66	12		µg/L	25	9/20/2022 03:10 PM
Molybdenum	41	0.60	2.5		µg/L	5	9/18/2022 07:16 AM
Selenium	81	0.22	2.5		µg/L	5	9/18/2022 07:16 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-68-180-0922
Lab Order:	N052605	**Collection Date:**	9/14/2022 12:30:00 PM
Project:	PG&E Topock - RCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052605-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:		**9/17/2022**	Analyst: **DJ**
Molybdenum	45	0.60	2.5		µg/L	5	9/18/2022 07:28 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052605
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94794**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165789**
Client ID: **PBW**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/18/2022**	SeqNo: **4839300**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	ND	0.50									
Selenium	ND	0.50									

Sample ID: **LCS-94794**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165789**
Client ID: **LCSW**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/18/2022**	SeqNo: **4839301**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	10.150	0.50	10.00	0	102	85	115				
Selenium	8.942	0.50	10.00	0	89.4	85	115				

Sample ID: **N052544-001B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165789**
Client ID: **ZZZZZZ**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/18/2022**	SeqNo: **4839305**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	32.432	0.50	10.00	21.63	108	75	125				
Selenium	11.325	0.50	10.00	2.655	86.7	75	125				

Sample ID: **N052544-001B-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165789**
Client ID: **ZZZZZZ**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/18/2022**	SeqNo: **4839306**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	32.764	0.50	10.00	21.63	111	75	125	32.43	1.02	20	
Selenium	11.524	0.50	10.00	2.655	88.7	75	125	11.32	1.74	20	

Sample ID: **MB-94794**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165854**
Client ID: **PBW**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/19/2022**	SeqNo: **4842176**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052605
Project: PG&E Topock - RCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-94794**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165854**
Client ID: **PBW**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/19/2022**	SeqNo: **4842176**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	0.036	0.50									

Sample ID: **LCS-94794**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165854**
Client ID: **LCSW**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/19/2022**	SeqNo: **4842177**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	103.673	0.50	100.0	0	104	85	115				

Sample ID: **N052544-001B-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165854**
Client ID: **ZZZZZZ**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/19/2022**	SeqNo: **4842181**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	128.929	0.50	100.0	32.15	96.8	75	125				

Sample ID: **N052544-001B-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **9/17/2022**	RunNo: **165854**
Client ID: **ZZZZZZ**	Batch ID: **94794**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **9/19/2022**	SeqNo: **4842182**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	130.434	0.50	100.0	32.15	98.3	75	125	128.9	1.16	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- Calculations are based on raw values

W052605

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CHAIN OF CUSTODY RECORD

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	
Address: 1410 Rocky Ridge Dr # 330	Company: Arcadis	Address:	
Address: Roseville, CA 95661	Email: dan.bush@arcadis.com daniel.moore@critigen.com	Address:	
Phone: 916-786-3302 Fax:	Address: 1410 Rocky Ridge Dr # 330 Roseville, CA 95661	Email to: mbloes@pivox.com	P.O.#
Submitted By:		Phone: 949-727-1400, ext 200	Fax:
Title: Field Tech	Phone: 916-786-3302 Fax:		
Signature: [signature] Date: 9.14.22	Sampled By: Nara Tay		
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for		
Project Name: PG&E Topock - RCM	Signature: [signature] Date: 9/14/22		
Project Number: 30121866.3Q22GW			

EDD Requirement		QA/QC	
Excel EDD		RTNE	
Geotracker		RWQCB	✓
Labspec		CalTrans	
Others	✓	LEVEL III	
Specify: RWQCB		LEVEL IV	
		Regulatory	
Global ID:		Specify State:	

Sample Receipt Condition	Y	N
1. Chilled	✓	
2. Headspace		
3. Container Intact	✓	
4. Seal Present		
5. IR number	3	
6. Method of Cooling: ICE		
Sample Temp: 3.1, 6.1°C		

Courier: ASSET
Tracking No.:

9/15/22

Matrix			
Ground	X	Sediment	
Potable		Soil	
NPDES		Other Solid	
Surface			

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Manganese, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Selenium (500mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052605-01	MW-67-185-0922	9/14/2022	11:34		X	X	X	X	X	X	E	3	P	BNS	
2	-02	MW-68-180-0922	9/14/2022	12:30		X			X	X		E	3	P	BNS	
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																

Reliquished by (Signature and Printed Name):	Date/Time:	Reliquished by (Signature and Printed Name):	Date/Time:
[signature] Nara Tay	9/14/22 1530	Dante Ortiz [signature]	9/14/22 15:30
Dante Ortiz	9/14/22 20:11	Dante Ortiz [signature] Dante Ortiz	9/14/22 20:11

Turn Around Time (TAT)

- [ ] A < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [X] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:

H=HCL	N=HNO_3	S=H_2SO_4	C=4°C
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$	
Others/Specify:	B	(NH4)2SO4/NH4OH	

Container Type:

T=Tube	V=VOA	P=Pint
J=Jar	B=Tedlar	G=Glass
M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	9/14/2022	Workorder:	N052605
Rep sample Temp (Deg C):	3.1	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: EF EFanegoF 9/15/2022

Reviewed By: for: MBC 9/17/2022

ASSET Laboratories

WORK ORDER Summary

15-Sep-22

WorkOrder: N052605

Client ID: ARCUS02

Project: PG&E Topock - RCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/14/2022 8:11 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052605-001A	MW-67-185-0922	9/14/2022 11:34:00 AM	9/28/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052605-001B			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052605-001C			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052605-002A	MW-68-180-0922	9/14/2022 12:30:00 PM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052605-002B			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052605-003A	FOLDER	9/28/2022	9/28/2022		Folder	Folder	☐	☐	☐	LAB
			9/28/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/28/2022		Folder	Folder	☐	☐	☐	LAB

September 30, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052606

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on September 14, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Method Blank (MB-R165707) has detect greater than 1/2 the reporting limit for Sulfate. Samples result for this analyte were greater than 5x the Method Blank detection therefore reanalysis of the samples was not necessary.

Analytical Comments for EPA 6010B_Dissolved:

Matrix Spike Duplicate (MSD) is outside recovery and RPD criteria for Iron in QC sample N052606-001B-MSD possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 6020_Dissolved:

Matrix Spike (MS) is outside recovery criteria for Barium in QC sample N052628-010BMS possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for SM 5310C:

Matrix Spike (MS) is outside recovery criteria in QC sample N052565-015CMS at lower dilution possibly due to matrix interference. QC sample was diluted and recovery passed criteria. Thus sample

reference N052565-015 and MS/MSD were reported at 5x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Matrix Spike (MS) is outside recovery criteria in QC sample N052628-010CMS at several dilutions possibly due to matrix interference. QC samples were further diluted and recovery passed criteria. Thus sample reference N052628-010 and MS/MSD were reported at 20x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052606
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052606-001A	TW-02D-0922	Groundwater	9/14/2022 8:48:00 AM	9/14/2022	9/30/2022
N052606-001B	TW-02D-0922	Groundwater	9/14/2022 8:48:00 AM	9/14/2022	9/30/2022
N052606-001C	TW-02D-0922	Groundwater	9/14/2022 8:48:00 AM	9/14/2022	9/30/2022
N052606-001D	TW-02D-0922	Groundwater	9/14/2022 8:48:00 AM	9/14/2022	9/30/2022
N052606-002A	TW-02S-0922	Groundwater	9/14/2022 8:14:00 AM	9/14/2022	9/30/2022
N052606-002B	TW-02S-0922	Groundwater	9/14/2022 8:14:00 AM	9/14/2022	9/30/2022
N052606-002C	TW-02S-0922	Groundwater	9/14/2022 8:14:00 AM	9/14/2022	9/30/2022
N052606-002D	TW-02S-0922	Groundwater	9/14/2022 8:14:00 AM	9/14/2022	9/30/2022
N052606-003A	TW-03D-0922	Groundwater	9/14/2022 9:24:00 AM	9/14/2022	9/30/2022
N052606-003B	TW-03D-0922	Groundwater	9/14/2022 9:24:00 AM	9/14/2022	9/30/2022
N052606-003C	TW-03D-0922	Groundwater	9/14/2022 9:24:00 AM	9/14/2022	9/30/2022
N052606-003D	TW-03D-0922	Groundwater	9/14/2022 9:24:00 AM	9/14/2022	9/30/2022
N052606-004A	EB-731-Q322_20220914	Groundwater	9/14/2022 12:50:00 PM	9/14/2022	9/30/2022
N052606-005A	MW-31-060-0922	Groundwater	9/14/2022 9:51:00 AM	9/14/2022	9/30/2022
N052606-005B	MW-31-060-0922	Groundwater	9/14/2022 9:51:00 AM	9/14/2022	9/30/2022
N052606-005C	MW-31-060-0922	Groundwater	9/14/2022 9:51:00 AM	9/14/2022	9/30/2022
N052606-005D	MW-31-060-0922	Groundwater	9/14/2022 9:51:00 AM	9/14/2022	9/30/2022
N052606-006A	MW-31-135-0922	Groundwater	9/14/2022 10:41:00 AM	9/14/2022	9/30/2022
N052606-006B	MW-31-135-0922	Groundwater	9/14/2022 10:41:00 AM	9/14/2022	9/30/2022
N052606-006C	MW-31-135-0922	Groundwater	9/14/2022 10:41:00 AM	9/14/2022	9/30/2022
N052606-006D	MW-31-135-0922	Groundwater	9/14/2022 10:41:00 AM	9/14/2022	9/30/2022
N052606-007A	MW-20-070-0922	Groundwater	9/14/2022 12:01:00 PM	9/14/2022	9/30/2022
N052606-007B	MW-20-070-0922	Groundwater	9/14/2022 12:01:00 PM	9/14/2022	9/30/2022
N052606-007C	MW-20-070-0922	Groundwater	9/14/2022 12:01:00 PM	9/14/2022	9/30/2022
N052606-007D	MW-20-070-0922	Groundwater	9/14/2022 12:01:00 PM	9/14/2022	9/30/2022
N052606-008A	MW-20-100-0922	Groundwater	9/14/2022 1:38:00 PM	9/14/2022	9/30/2022
N052606-008B	MW-20-100-0922	Groundwater	9/14/2022 1:38:00 PM	9/14/2022	9/30/2022
N052606-008C	MW-20-100-0922	Groundwater	9/14/2022 1:38:00 PM	9/14/2022	9/30/2022
N052606-008D	MW-20-100-0922	Groundwater	9/14/2022 1:38:00 PM	9/14/2022	9/30/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052606
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052606-009A	MW-20-130-0922	Groundwater	9/14/2022 12:49:00 PM	9/14/2022	9/30/2022
N052606-009B	MW-20-130-0922	Groundwater	9/14/2022 12:49:00 PM	9/14/2022	9/30/2022
N052606-009C	MW-20-130-0922	Groundwater	9/14/2022 12:49:00 PM	9/14/2022	9/30/2022
N052606-009D	MW-20-130-0922	Groundwater	9/14/2022 12:49:00 PM	9/14/2022	9/30/2022
N052606-010A	MW-36-090-0922	Groundwater	9/14/2022 8:03:00 AM	9/14/2022	9/30/2022
N052606-010B	MW-36-090-0922	Groundwater	9/14/2022 8:03:00 AM	9/14/2022	9/30/2022
N052606-010C	MW-36-090-0922	Groundwater	9/14/2022 8:03:00 AM	9/14/2022	9/30/2022
N052606-010D	MW-36-090-0922	Groundwater	9/14/2022 8:03:00 AM	9/14/2022	9/30/2022
N052606-011A	MW-36-100-0922	Groundwater	9/14/2022 8:39:00 AM	9/14/2022	9/30/2022
N052606-011B	MW-36-100-0922	Groundwater	9/14/2022 8:39:00 AM	9/14/2022	9/30/2022
N052606-011C	MW-36-100-0922	Groundwater	9/14/2022 8:39:00 AM	9/14/2022	9/30/2022
N052606-011D	MW-36-100-0922	Groundwater	9/14/2022 8:39:00 AM	9/14/2022	9/30/2022
N052606-012A	EB-732-Q322_20220914	Groundwater	9/14/2022 2:15:00 PM	9/14/2022	9/30/2022
N052606-013A	IRZ-09-100-0922	Groundwater	9/14/2022 11:15:00 AM	9/14/2022	9/30/2022
N052606-013B	IRZ-09-100-0922	Groundwater	9/14/2022 11:15:00 AM	9/14/2022	9/30/2022
N052606-013C	IRZ-09-100-0922	Groundwater	9/14/2022 11:15:00 AM	9/14/2022	9/30/2022
N052606-013D	IRZ-09-100-0922	Groundwater	9/14/2022 11:15:00 AM	9/14/2022	9/30/2022
N052606-013E	IRZ-09-100-0922	Groundwater	9/14/2022 11:15:00 AM	9/14/2022	9/30/2022
N052606-014A	IRZ-13D-210-0922	Groundwater	9/14/2022 10:25:00 AM	9/14/2022	9/30/2022
N052606-014B	IRZ-13D-210-0922	Groundwater	9/14/2022 10:25:00 AM	9/14/2022	9/30/2022
N052606-014C	IRZ-13D-210-0922	Groundwater	9/14/2022 10:25:00 AM	9/14/2022	9/30/2022
N052606-014D	IRZ-13D-210-0922	Groundwater	9/14/2022 10:25:00 AM	9/14/2022	9/30/2022
N052606-014E	IRZ-13D-210-0922	Groundwater	9/14/2022 10:25:00 AM	9/14/2022	9/30/2022
N052606-015A	IRZ-13S-095-0922	Groundwater	9/14/2022 10:10:00 AM	9/14/2022	9/30/2022
N052606-015B	IRZ-13S-095-0922	Groundwater	9/14/2022 10:10:00 AM	9/14/2022	9/30/2022
N052606-015C	IRZ-13S-095-0922	Groundwater	9/14/2022 10:10:00 AM	9/14/2022	9/30/2022
N052606-015D	IRZ-13S-095-0922	Groundwater	9/14/2022 10:10:00 AM	9/14/2022	9/30/2022
N052606-015E	IRZ-13S-095-0922	Groundwater	9/14/2022 10:10:00 AM	9/14/2022	9/30/2022
N052606-016A	IRZ-23-143-0922	Groundwater	9/14/2022 9:30:00 AM	9/14/2022	9/30/2022
N052606-016B	IRZ-23-143-0922	Groundwater	9/14/2022 9:30:00 AM	9/14/2022	9/30/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052606
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052606-016C	IRZ-23-143-0922	Groundwater	9/14/2022 9:30:00 AM	9/14/2022	9/30/2022
N052606-016D	IRZ-23-143-0922	Groundwater	9/14/2022 9:30:00 AM	9/14/2022	9/30/2022
N052606-016E	IRZ-23-143-0922	Groundwater	9/14/2022 9:30:00 AM	9/14/2022	9/30/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02D-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 8:48:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	560	1.3	10		µg/L	50	9/15/2022 11:17 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02S-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 8:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	130	0.50	4.0		µg/L	20	9/15/2022 11:54 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-03D-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	550	1.3	10		µg/L	50	9/15/2022 12:13 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-731-Q322_20220914
Lab Order:	N052606	**Collection Date:**	9/14/2022 12:50:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/15/2022 04:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-060-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 9:51:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	30	0.13	1.0		µg/L	5	9/15/2022 04:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-135-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:41:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	19	0.13	1.0		µg/L	5	9/15/2022 12:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-070-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 12:01:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	560	2.5	20		µg/L	100	9/15/2022 01:14 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-100-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 1:38:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	1700	5.0	40		µg/L	200	9/15/2022 10:16 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-130-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 12:49:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	1300	5.0	40		µg/L	200	9/15/2022 10:48 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-090-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 8:03:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/15/2022 03:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-100-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 8:39:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/15/2022 03:26 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-732-Q322_20220914
Lab Order:	N052606	**Collection Date:**	9/14/2022 2:15:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/15/2022 05:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-09-100-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 11:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	16	0.13	1.0		µg/L	5	9/15/2022 01:33 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-13D-210-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:25:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	460	2.5	20		µg/L	100	9/15/2022 02:29 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-13S-095-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	19	0.13	1.0		µg/L	5	9/15/2022 02:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-23-143-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 9:30:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220915A**	QC Batch: **R165731**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	670	2.5	20		µg/L	100	9/15/2022 02:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	MB-R165731	SampType:	MBLK	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731		
Client ID:	PBW	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835309		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Hexavalent Chromium		ND	0.20										

Sample ID	LCS-R165731	SampType:	LCS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731		
Client ID:	LCSW	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835310		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Hexavalent Chromium		5.061	0.20	5.000	0	101	90	110					

Sample ID	N052606-008AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731		
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835312		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Hexavalent Chromium		2723.060	40	1000	1728	99.5	90	110					

Sample ID	N052606-008AMSD	SampType:	MSD	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731		
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835313		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Hexavalent Chromium		2709.120	40	1000	1728	98.1	90	110	2723	0.513	20		

Sample ID	N052606-009ADUP	SampType:	DUP	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731		
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835315		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Hexavalent Chromium		1316.800	40						1336	1.43	20		

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052606-009AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835316

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2293.040	40	1000	1336	95.7	90	110				

Sample ID	N052606-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835318

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	810.435	10	250.0	559.8	100	90	110				

Sample ID	N052606-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835322

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	230.274	4.0	100.0	131.1	99.1	90	110				

Sample ID	N052606-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835324

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	786.260	10	250.0	551.9	93.8	90	110				

Sample ID	N052606-006AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835326

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	43.328	1.0	25.00	19.31	96.1	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052606-007AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835328

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1068.760	20	500.0	564.8	101	90	110				

Sample ID	N052606-013AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835330

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	40.881	1.0	25.00	16.15	98.9	90	110				

Sample ID	N052606-015AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835334

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	44.064	1.0	25.00	19.42	98.6	90	110				

Sample ID	N052606-014AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835336

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	946.330	20	500.0	461.9	96.9	90	110				

Sample ID	N052606-016AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835338

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1162.090	20	500.0	665.9	99.2	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052606-010AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835340

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.004	0.20	1.000	0	100	90	110				

Sample ID	N052606-004AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835346

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.004	0.20	1.000	0	100	90	110				

Sample ID	N052606-012AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835348

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.978	0.20	1.000	0	97.8	90	110				

Sample ID	N052605-002AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835350

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	60331.500	1000	25000	36410	95.7	90	110				

Sample ID	N052605-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835354

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	370.520	80	400.0	0	92.6	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052606-011AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731		
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835355		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	1.013	0.20	1.000	0	101	90	110						

Sample ID	N052606-005AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165731		
Client ID:	ZZZZZZ	Batch ID:	R165731	TestNo:	EPA 218.6			Analysis Date:	9/15/2022	SeqNo:	4835356		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	53.828	1.0	25.00	29.92	95.6	90	110						

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052606-001

Client Sample ID: TW-02D-0922
Collection Date: 9/14/2022 8:48:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Sulfate	740	6.1	50		mg/L	100	9/15/2022 06:56 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Nitrate as N	0.97	0.095	0.50		mg/L	10	9/15/2022 11:32 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02S-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 8:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Sulfate	230	1.2	10		mg/L	20	9/15/2022 07:11 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Nitrate as N	2.6	0.095	0.50		mg/L	10	9/15/2022 11:47 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-03D-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A**	QC Batch: **R165707**			PrepDate:			Analyst: **RAB**
Sulfate	790	6.1	50		mg/L	100	9/15/2022 07:26 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A**	QC Batch: **R165707**			PrepDate:			Analyst: **RAB**
Nitrate as N	1.0	0.095	0.50		mg/L	10	9/15/2022 12:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-060-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 9:51:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A**	QC Batch: **R165707**			PrepDate:			Analyst: **RAB**
Sulfate	570	6.1	50		mg/L	100	9/15/2022 04:38 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A**	QC Batch: **R165707**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/15/2022 10:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-135-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:41:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Sulfate	660	6.1	50		mg/L	100	9/15/2022 07:41 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Nitrate as N	1.3	0.095	0.50		mg/L	10	9/15/2022 01:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-070-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 12:01:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Sulfate	420	6.1	50		mg/L	100	9/15/2022 07:57 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Nitrate as N	25	0.19	1.0		mg/L	20	9/15/2022 12:33 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-100-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 1:38:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Sulfate	810	6.1	50		mg/L	100	9/15/2022 08:12 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Nitrate as N	9.1	0.095	0.50		mg/L	10	9/15/2022 01:19 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-130-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 12:49:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A**	QC Batch: **R165707**			PrepDate:			Analyst: **RAB**
Sulfate	1500	12	100		mg/L	200	9/15/2022 03:52 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A**	QC Batch: **R165707**			PrepDate:			Analyst: **RAB**
Nitrate as N	4.1	0.095	0.50		mg/L	10	9/15/2022 10:46 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052606-010

Client Sample ID: MW-36-090-0922
Collection Date: 9/14/2022 8:03:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Sulfate	290	1.2	10		mg/L	20	9/15/2022 08:27 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/15/2022 01:34 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052606-011

Client Sample ID: MW-36-100-0922
Collection Date: 9/14/2022 8:39:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Sulfate	350	1.2	10		mg/L	20	9/15/2022 08:43 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/15/2022 01:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-09-100-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 11:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Sulfate	520	3.0	25		mg/L	50	9/15/2022 08:58 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Nitrate as N	2.1	0.095	0.50		mg/L	10	9/15/2022 02:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-13D-210-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:25:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Sulfate	960	6.1	50		mg/L	100	9/15/2022 09:44 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Nitrate as N	2.1	0.095	0.50		mg/L	10	9/15/2022 02:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052606-015

Client Sample ID: IRZ-13S-095-0922
Collection Date: 9/14/2022 10:10:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Sulfate	400	3.0	25		mg/L	50	9/15/2022 09:59 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Nitrate as N	2.0	0.095	0.50		mg/L	10	9/15/2022 02:35 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052606-016

Client Sample ID: IRZ-23-143-0922
Collection Date: 9/14/2022 9:30:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A** QC Batch: **R165764**				PrepDate:			Analyst: **RAB**
Sulfate	470	3.0	25		mg/L	50	9/16/2022 04:26 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220915A** QC Batch: **R165707**				PrepDate:			Analyst: **RAB**
Nitrate as N	4.7	0.095	0.50		mg/L	10	9/15/2022 02:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	MB-R165707_SO4	SampType:	MBLK	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165707
Client ID:	PBW	Batch ID:	R165707	TestNo:	EPA 300.0			Analysis Date:	9/15/2022	SeqNo:	4834587

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	0.333	0.50									

Sample ID	LCS-R165707_SO4	SampType:	LCS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165707
Client ID:	LCSW	Batch ID:	R165707	TestNo:	EPA 300.0			Analysis Date:	9/15/2022	SeqNo:	4834588

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	4.026	0.50	4.000	0	101	90	110				

Sample ID	N052606-009DMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165707
Client ID:	ZZZZZZ	Batch ID:	R165707	TestNo:	EPA 300.0			Analysis Date:	9/15/2022	SeqNo:	4834594

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	2283.880	100	800.0	1470	102	80	120				

Sample ID	N052606-009DMSD	SampType:	MSD	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165707
Client ID:	ZZZZZZ	Batch ID:	R165707	TestNo:	EPA 300.0			Analysis Date:	9/15/2022	SeqNo:	4834595

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	2291.280	100	800.0	1470	103	80	120	2284	0.323	20	

Sample ID	N052606-005DDUP	SampType:	DUP	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165707
Client ID:	ZZZZZZ	Batch ID:	R165707	TestNo:	EPA 300.0			Analysis Date:	9/15/2022	SeqNo:	4834597

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	565.110	50						571.2	1.07	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	N052606-005DMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165707
Client ID:	ZZZZZZ	Batch ID:	R165707	TestNo:	EPA 300.0			Analysis Date:	9/15/2022	SeqNo:	4834598

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	968.850	50	400.0	571.2	99.4	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	LCS-R165764_SO4	SampType:	LCS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	LCSW	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838473

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	3.997	0.50	4.000	0	99.9	90	110				

Sample ID	MB-R165764_SO4	SampType:	MBLK	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	PBW	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838474

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.50									

Sample ID	N052628-010DMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	ZZZZZZ	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838480

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	1023.380	50	400.0	623.9	99.9	80	120				

Sample ID	N052628-010DMSD	SampType:	MSD	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	ZZZZZZ	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838481

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	1017.510	50	400.0	623.9	98.4	80	120	1023	0.575	20	

Sample ID	N052628-002DDUP	SampType:	DUP	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	ZZZZZZ	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838483

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	1519.600	100						1514	0.394	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	N052628-002DMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	ZZZZZZ	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838484

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	2332.900	100	800.0	1514	102	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	MB-R165707_NO3	SampType:	MBLK	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165707
Client ID:	PBW	Batch ID:	R165707	TestNo:	EPA 300.0			Analysis Date:	9/15/2022	SeqNo:	4834552

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID	LCS-R165707_NO3	SampType:	LCS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165707
Client ID:	LCSW	Batch ID:	R165707	TestNo:	EPA 300.0			Analysis Date:	9/15/2022	SeqNo:	4834553

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.249	0.050	1.250	0	99.9	90	110				

Sample ID	N052606-005DMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165707
Client ID:	ZZZZZZ	Batch ID:	R165707	TestNo:	EPA 300.0			Analysis Date:	9/15/2022	SeqNo:	4834555

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.970	0.50	12.50	0.4960	99.8	80	120				

Sample ID	N052606-005DMSD	SampType:	MSD	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165707
Client ID:	ZZZZZZ	Batch ID:	R165707	TestNo:	EPA 300.0			Analysis Date:	9/15/2022	SeqNo:	4834556

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	13.038	0.50	12.50	0.4960	100	80	120	12.97	0.523	20	

Sample ID	N052606-009DDUP	SampType:	DUP	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165707
Client ID:	ZZZZZZ	Batch ID:	R165707	TestNo:	EPA 300.0			Analysis Date:	9/15/2022	SeqNo:	4834558

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	4.041	0.50						4.149	2.64	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	N052606-009DMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165707
Client ID:	ZZZZZZ	Batch ID:	R165707	TestNo:	EPA 300.0			Analysis Date:	9/15/2022	SeqNo:	4834559

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	16.747	0.50	12.50	4.149	101	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02D-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 8:48:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 02:58 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02S-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 8:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 03:13 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-03D-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 03:29 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-060-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 9:51:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 03:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-135-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:41:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 04:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-070-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 12:01:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 04:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-100-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 1:38:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 05:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-130-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 12:49:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 05:17 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-090-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 8:03:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 05:33 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-100-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 8:39:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 05:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-09-100-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 11:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 06:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-13D-210-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:25:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220915A**	QC Batch: **R165700**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/15/2022 06:19 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-13S-095-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 12:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-23-143-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 9:30:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 12:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID **MB-R165700**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165700**
Client ID: **PBW**	Batch ID: **R165700**	TestNo: **SM 5310C**		Analysis Date: **9/15/2022**	SeqNo: **4834043**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID **LCS-R165700**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165700**
Client ID: **LCSW**	Batch ID: **R165700**	TestNo: **SM 5310C**		Analysis Date: **9/15/2022**	SeqNo: **4834044**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	5.065	1.0	5.000	0	101	85	115				

Sample ID **N052565-015CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165700**
Client ID: **ZZZZZZ**	Batch ID: **R165700**	TestNo: **SM 5310C**		Analysis Date: **9/15/2022**	SeqNo: **4834050**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	26.585	5.0	25.00	1.875	98.8	75	125				

Sample ID **N052565-015CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165700**
Client ID: **ZZZZZZ**	Batch ID: **R165700**	TestNo: **SM 5310C**		Analysis Date: **9/15/2022**	SeqNo: **4834051**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	26.787	5.0	25.00	1.875	99.6	75	125	26.58	0.755	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID	MB-R165755	SampType:	MBLK	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	165755		
Client ID:	PBW	Batch ID:	R165755	TestNo:	SM 5310C			Analysis Date:	9/16/2022	SeqNo:	4837063		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Organic Carbon, Total	ND	1.0											

Sample ID	LCS-R165755	SampType:	LCS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	165755		
Client ID:	LCSW	Batch ID:	R165755	TestNo:	SM 5310C			Analysis Date:	9/16/2022	SeqNo:	4837064		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Organic Carbon, Total	4.873	1.0	5.000	0	97.5	85	115						

Sample ID	N052628-010CMS	SampType:	MS	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	165755		
Client ID:	ZZZZZZ	Batch ID:	R165755	TestNo:	SM 5310C			Analysis Date:	9/16/2022	SeqNo:	4837070		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Organic Carbon, Total	80.822	20	100.0	0	80.8	75	125						

Sample ID	N052628-010CMSD	SampType:	MSD	TestCode:	5310C_W_T_	Units:	mg/L	Prep Date:		RunNo:	165755		
Client ID:	ZZZZZZ	Batch ID:	R165755	TestNo:	SM 5310C			Analysis Date:	9/16/2022	SeqNo:	4837075		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Organic Carbon, Total	80.406	20	100.0	0	80.4	75	125	80.82	0.516	20			

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052606-001

Client Sample ID: TW-02D-0922
Collection Date: 9/14/2022 8:48:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94833**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 10:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-02S-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 8:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94833**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 10:54 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-03D-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94833**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	95	13	20		µg/L	1	9/20/2022 10:59 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-060-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 9:51:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94833**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	170	13	20		µg/L	1	9/20/2022 11:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-135-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:41:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94833**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 11:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-070-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 12:01:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94833**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 11:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-100-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 1:38:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94833**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 11:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-130-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 12:49:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94833**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 11:26 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-090-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 8:03:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220920C**	QC Batch: **94833**			PrepDate:	**9/20/2022**		Analyst: **DJ**
Iron	38	13	20		µg/L	1	9/20/2022 11:31 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-36-100-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 8:39:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94833**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	170	13	20		µg/L	1	9/20/2022 11:36 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052606-013

Client Sample ID: IRZ-09-100-0922
Collection Date: 9/14/2022 11:15:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94833**			PrepDate:		**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/20/2022 11:42 PM
TOTAL METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220928B**	QC Batch: **94893**			PrepDate:		**9/22/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/28/2022 02:13 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-13D-210-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:25:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220929B**	QC Batch: **94833**			PrepDate:		**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/29/2022 02:42 PM
TOTAL METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220929B**	QC Batch: **94893**			PrepDate:		**9/22/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/29/2022 02:26 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-13S-095-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220929B**	QC Batch: **94833**			PrepDate:		**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/29/2022 03:02 PM
TOTAL METALS BY ICP							
EPA 3010A			**EPA 6010B**				
RunID: **NV00922-ICP2_220929B**	QC Batch: **94893**			PrepDate:		**9/22/2022**	Analyst: **DJ**
Iron	21	13	20		µg/L	1	9/29/2022 02:37 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit	
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified	
	DO	Surrogate Diluted Out			

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052606-016

Client Sample ID: IRZ-23-143-0922
Collection Date: 9/14/2022 9:30:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94833**			PrepDate:		**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/21/2022 12:07 AM
TOTAL METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220928B**	QC Batch: **94893**			PrepDate:		**9/22/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/28/2022 02:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	MB-94833	SampType:	MBLK	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	9/20/2022	RunNo:	165864
Client ID:	PBW	Batch ID:	94833	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/20/2022	SeqNo:	4842797

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID	LCS-94833	SampType:	LCS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	9/20/2022	RunNo:	165864
Client ID:	LCSW	Batch ID:	94833	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/20/2022	SeqNo:	4842798

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	95.646	20	100.0	0	95.6	85	115				

Sample ID	N052606-001B-MS	SampType:	MS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	9/20/2022	RunNo:	165864
Client ID:	ZZZZZZ	Batch ID:	94833	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/20/2022	SeqNo:	4842802

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	99.769	20	100.0	13.79	86.0	75	125				

Sample ID	N052606-001B-MSD	SampType:	MSD	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	9/20/2022	RunNo:	165864
Client ID:	ZZZZZZ	Batch ID:	94833	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/20/2022	SeqNo:	4842803

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	188.503	20	100.0	13.79	175	75	125	99.77	61.6	20	SR

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WPGEPPB

Sample ID	MB-94893	SampType:	MBLK	TestCode:	6010_WPGE	Units:	µg/L	Prep Date:	9/22/2022	RunNo:	166072
Client ID:	PBW	Batch ID:	94893	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/28/2022	SeqNo:	4853027

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID	LCS1-94893	SampType:	LCS	TestCode:	6010_WPGE	Units:	µg/L	Prep Date:	9/22/2022	RunNo:	166072
Client ID:	LCSW	Batch ID:	94893	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/28/2022	SeqNo:	4853028

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	94.780	20	100.0	0	94.8	85	115				

Sample ID	N052606-013E-MS1	SampType:	MS	TestCode:	6010_WPGE	Units:	µg/L	Prep Date:	9/22/2022	RunNo:	166072
Client ID:	ZZZZZZ	Batch ID:	94893	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/28/2022	SeqNo:	4853032

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	100.197	20	100.0	14.72	85.5	75	125				

Sample ID	N052606-013E-MSD	SampType:	MSD	TestCode:	6010_WPGE	Units:	µg/L	Prep Date:	9/22/2022	RunNo:	166072
Client ID:	ZZZZZZ	Batch ID:	94893	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/28/2022	SeqNo:	4853033

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	100.572	20	100.0	14.72	85.8	75	125	100.2	0.374	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	N052606-001B-PS	SampType:	PS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:		RunNo:	165864
Client ID:	ZZZZZZ	Batch ID:	94833	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/20/2022	SeqNo:	4842801

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	139.581	20	100.0	13.79	126	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WPGEPPB

Sample ID	N052606-013E-PS	SampType:	PS	TestCode:	6010_WPGE	Units:	µg/L	Prep Date:		RunNo:	166072
Client ID:	ZZZZZZ	Batch ID:	94893	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/28/2022	SeqNo:	4853031

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	99.725	20	100.0	14.72	85.0	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052606-001

Client Sample ID: TW-02D-0922
Collection Date: 9/14/2022 8:48:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:		**9/17/2022**	Analyst: **DJ**
Arsenic	3.1	0.050	0.10		µg/L	1	9/18/2022 07:40 AM
Barium	23	0.083	1.0		µg/L	1	9/18/2022 07:40 AM
Manganese	7.7	0.026	0.50		µg/L	1	9/20/2022 03:39 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052606-002

Client Sample ID: TW-02S-0922
Collection Date: 9/14/2022 8:14:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220919C**	QC Batch: **94794**			PrepDate:		**9/17/2022**	Analyst: **DJ**
Arsenic	0.81	0.050	0.10		µg/L	1	9/19/2022 06:36 PM
Barium	110	0.083	1.0		µg/L	1	9/19/2022 06:36 PM
Manganese	ND	0.026	0.50		µg/L	1	9/20/2022 03:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	TW-03D-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 9:24:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	1.8	0.050	0.10		µg/L	1	9/18/2022 08:03 AM
Barium	29	0.083	1.0		µg/L	1	9/19/2022 06:42 PM
Manganese	19	0.026	0.50		µg/L	1	9/20/2022 03:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-060-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 9:51:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220927B**	QC Batch: **94794**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/27/2022 05:04 PM
Barium	99	0.083	1.0		µg/L	1	9/19/2022 06:48 PM
Manganese	980	0.66	12		µg/L	25	9/20/2022 04:24 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-31-135-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:41:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220919C**	QC Batch: **94794**			PrepDate:		**9/17/2022**	Analyst: **DJ**
Arsenic	1.1	0.050	0.10		µg/L	1	9/19/2022 07:18 PM
Barium	41	0.083	1.0		µg/L	1	9/19/2022 07:18 PM
Manganese	3.1	0.026	0.50		µg/L	1	9/20/2022 04:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-070-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 12:01:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	1.3	0.050	0.10		µg/L	1	9/18/2022 08:21 AM
Barium	32	0.083	1.0		µg/L	1	9/19/2022 07:24 PM
Manganese	ND	0.026	0.50		µg/L	1	9/20/2022 04:36 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-20-100-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 1:38:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 08:27 AM
Barium	77	0.083	1.0		µg/L	1	9/19/2022 07:29 PM
Manganese	ND	0.026	0.50		µg/L	1	9/20/2022 04:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052606-009

Client Sample ID: MW-20-130-0922
Collection Date: 9/14/2022 12:49:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220917F**	QC Batch: **94794**			PrepDate:		**9/17/2022**	Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 08:33 AM
Barium	33	0.083	1.0		µg/L	1	9/19/2022 07:35 PM
Manganese	16	0.026	0.50		µg/L	1	9/20/2022 04:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052606-010

Client Sample ID: MW-36-090-0922
Collection Date: 9/14/2022 8:03:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220919C**	QC Batch: **94794**			PrepDate:		**9/17/2022**	Analyst: **DJ**
Arsenic	2.0	0.050	0.10		µg/L	1	9/19/2022 07:41 PM
Barium	43	0.083	1.0		µg/L	1	9/19/2022 07:41 PM
Manganese	160	0.026	0.50		µg/L	1	9/20/2022 04:54 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052606-011

Client Sample ID: MW-36-100-0922
Collection Date: 9/14/2022 8:39:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_220917F**	QC Batch: **94795**			PrepDate:		**9/17/2022**	Analyst: **DJ**
Arsenic	10	0.050	0.10		µg/L	1	9/18/2022 09:20 AM
Barium	40	0.083	1.0		µg/L	1	9/20/2022 05:36 PM
Manganese	340	0.13	2.5		µg/L	5	9/20/2022 05:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-09-100-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 11:15:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220920C**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Manganese	1.6	0.026	0.50		µg/L	1	9/20/2022 05:47 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-13D-210-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:25:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220920C**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Manganese	ND	0.026	0.50		µg/L	1	9/20/2022 05:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-13S-095-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 10:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220920C**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Manganese	ND	0.026	0.50		µg/L	1	9/20/2022 05:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	IRZ-23-143-0922
Lab Order:	N052606	**Collection Date:**	9/14/2022 9:30:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052606-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220920C**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Manganese	ND	0.026	0.50		µg/L	1	9/20/2022 06:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	MB-94794	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165789
Client ID:	PBW	Batch ID:	94794	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839300

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Barium	ND	1.0									

Sample ID	LCS-94794	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165789
Client ID:	LCSW	Batch ID:	94794	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839301

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.472	0.10	10.00	0	94.7	85	115				
Barium	10.073	1.0	10.00	0	101	85	115				

Sample ID	N052544-001B-MS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165789
Client ID:	ZZZZZZ	Batch ID:	94794	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839305

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.573	0.10	10.00	0.09992	94.7	75	125				
Barium	68.259	1.0	10.00	59.08	91.7	75	125				

Sample ID	N052544-001B-MSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165789
Client ID:	ZZZZZZ	Batch ID:	94794	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839306

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.547	0.10	10.00	0.09992	94.5	75	125	9.573	0.275	20	
Barium	69.558	1.0	10.00	59.08	105	75	125	68.26	1.89	20	

Sample ID	MB-94794	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165854
Client ID:	PBW	Batch ID:	94794	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/19/2022	SeqNo:	4842176

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	MB-94794	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165854
Client ID:	PBW	Batch ID:	94794	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/19/2022	SeqNo:	4842176

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	0.036	0.50									

Sample ID	LCS-94794	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165854
Client ID:	LCSW	Batch ID:	94794	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/19/2022	SeqNo:	4842177

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	103.673	0.50	100.0	0	104	85	115				

Sample ID	N052544-001B-MS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165854
Client ID:	ZZZZZZ	Batch ID:	94794	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/19/2022	SeqNo:	4842181

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	128.929	0.50	100.0	32.15	96.8	75	125				

Sample ID	N052544-001B-MSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165854
Client ID:	ZZZZZZ	Batch ID:	94794	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/19/2022	SeqNo:	4842182

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	130.434	0.50	100.0	32.15	98.3	75	125	128.9	1.16	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	MB-94795	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165789
Client ID:	PBW	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839336

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									

Sample ID	LCS-94795	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165789
Client ID:	LCSW	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839337

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.323	0.10	10.00	0	93.2	85	115				

Sample ID	N052628-010BMS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165789
Client ID:	ZZZZZZ	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839359

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.690	0.10	10.00	1.092	86.0	75	125				

Sample ID	N052628-010BMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165789
Client ID:	ZZZZZZ	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839360

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.070	0.10	10.00	1.092	89.8	75	125	9.690	3.85	20	

Sample ID	N052628-010BMS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165854
Client ID:	ZZZZZZ	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/19/2022	SeqNo:	4842252

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	47.209	1.0	10.00	40.90	63.1	75	125				S
Manganese	103.705	0.50	100.0	7.234	96.5	75	125				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N052628-010BMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165854
Client ID:	ZZZZZZ	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/19/2022	SeqNo:	4842253

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	50.188	1.0	10.00	40.90	92.9	75	125	47.21	6.12	20	
Manganese	105.952	0.50	100.0	7.234	98.7	75	125	103.7	2.14	20	

Sample ID	MB-94795	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165884
Client ID:	PBW	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/20/2022	SeqNo:	4843861

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID	LCS-94795	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165884
Client ID:	LCSW	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/20/2022	SeqNo:	4843862

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	9.245	1.0	10.00	0	92.4	85	115				
Manganese	97.617	0.50	100.0	0	97.6	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N052544-001B-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	165789
Client ID:	ZZZZZZ	Batch ID:	94794	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839304

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.441	0.10	10.00	0.09992	93.4	80	120				
Barium	68.878	1.0	10.00	59.08	97.9	80	120				

Sample ID	N052544-001B-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	165854
Client ID:	ZZZZZZ	Batch ID:	94794	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/19/2022	SeqNo:	4842180

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	126.563	0.50	100.0	32.15	94.4	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052606
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N052628-010B-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	165789
Client ID:	ZZZZZZ	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839358

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.063	0.10	10.00	1.092	89.7	80	120				

Sample ID	N052628-010B-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	165854
Client ID:	ZZZZZZ	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/19/2022	SeqNo:	4842251

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	48.105	1.0	10.00	40.90	72.0	80	120				S
Manganese	102.585	0.50	100.0	7.234	95.4	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

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P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement: Excel EDD; Geotracker; Labspec; Others ✓ Specify: RWQCB
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	QA/QC: RTNE; RWQCB ✓; CalTrans; LEVEL III ✓; LEVEL IV; Regulatory
Address: Roseville, CA 95678	Email: [redacted] dan.bush@arcadis.com	Address:	Sample Receipt Condition: 1. Chilled ✓; 2. Headspace; 3. Container Intact ✓; 4. Seal Present; 5. IR number 7
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	6. Method of Cooling: ICE
Submitted By:		Phone: 949-727-1400, ext 200 Fax:	Sample Temp: 3.1°C, 2.1°C
Title: Field Tech	Phone: 916-786-3302 Fax:	Global ID:	Specify State:
Signature: Date: 9.14.22	Sampled By: Nara Tay		Courier: ASSET
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for		Tracking No.:
Project Name: PG&E Topock - PCM	Signature:	Date: 9/14/22	
Project Number: 30121866.3Q22GW			

Matrix: Ground | X | Sediment; Potable | Soil; NPDES | Other Solid; Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrite, Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052606-01	TW-02D-0922	9/14/2022	8:48		X		X			X			X	E	6	P	BNS	
2	-02	TW-02S-0922	9/14/2022	8:14		X		X			X			X	E	6	P	BNS	
3	-03	TW-03D-0922	9/14/2022	9:24		X		X			X			X	E	6	P	BNS	
4	-04	EB-731-Q322	9/14/2022	12:50		X									E	6	P	BNS	
5	-05	MW-31-060-0922	9/14/2022	9:51		X		X			X			X	E	6	P	BNS	
6	-06	MW-31-135-0922	9/14/2022	10:41		X		X			X			X	E	6	P	BNS	
7	-07	MW-20-070-0922	9/14/2022	12:01		X		X			X			X	E	6	P	BNS	MS/MSD
8	-08	MW-20-100-0922	9/14/2022	13:38		X		X			X			X	E	6	P	BNS	
9	-09	MW-20-130-0922	9/14/2022	12:49		X		X			X			X	E	6	P	BNS	
10	-10	MW-36-090-0922	9/14/2022	8:03		X		X			X			X	E	6	P	BNS	
11	-11	MW-36-100-0922	9/14/2022	8:39		X		X			X			X	E	6	P	BNS	
12	-12	EB-732-Q322	9/14/2022	14:15		X									E	6	P	BNS	
13															E	6	P	BNS	
14															E	6	P	BNS	

Relinquished by (Signature and Printed Name):	Date/Time:	Received by (Signature and Printed Name):	Date/Time:
Nara Tay	9/14/22 1530	Dante Ortiz Dante Ortiz	9/14/22 15:30
Dante Ortiz	9/14/22 20:11	Dante Ortiz Dante Ortiz	9/14/22 20:11

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [X] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

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California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes		EDD Requirement		QA/QC	
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:		Excel EDD		RTNE	
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com daniel.moore@critigen.com	Address:		Geotracker		RWQCB	✓
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com	P.O.#	Labspec		CalTrans	
Submitted By: Kevin A. Ashley		Phone: 949-727-1400. ext 200	Fax:	Others	✓	LEVEL III	
Title: O&M operators	Phone: 916-786-3302 Fax:			Specify: RWQCB		LEVEL IV	
Signature: Date: 9/14/22	Sampled By: Kevin Ashley			Global ID:		Regulatory	
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may					Specify State:	
Project Name: PG&E Topock - PCM	Signature: Date: 9/14/22						
Project Number: 30121866.3Q22GW							

Sample Receipt Condition	Y	N
1. Chilled	✓	
2. Headspace		
3. Container Intact	✓	
4. Seal Present	✓	
5. IR number		
6. Method of Cooling: ICE		
Sample Temp: 3.1°C, 2.1°C		
Courier: ASET		
Tracking No.:		

Matrix: Ground | X | Sediment | Potable | | Soil | NPDES | | Other Solid | Surface | | |

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) Field Filtered (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrate, sulfate (EPA 300.0) No filter (1 L poly)	Dissolved metals (SW6020) Field Filtered; HNO3 Iron, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); No filter; H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter; HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052606-13	IRZ-09-100-0922	9/14/22	11:15		X	X	X			X	X		E	7	P	BNS	
2	-14	IRZ-13D-210-0922	9/14/22	10:25		X	X	X			X	X		E	7	P	BNS	
3	-15	IRZ-13S-095-0922	9/14/22	10:10		X	X	X			X	X		E	7	P	BNS	
4	-16	IRZ-23-143-0922	9/14/22	9:30		X	X	X			X	X		E	7	P	BNS	
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
K. Ashley K. Ashley	9/14/22 1530	Dante Ortiz Dante Ortiz	9/14/22 15:30
Dante Ortiz Dante Ortiz	9/14/22 20:11	Dante Ortiz Dante Ortiz	9/14/22 20:11

Turn Around Time (TAT)

	A	< 24 Hrs or Same Day TAT
	B	= Next Workday
	C	= 2 Workdays
	D	= 3 Workdays
X	E	= Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis.
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology
7. Terms are net30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B	(NH4)2SO4/NH4OH		M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	9/14/2022	Workorder:	N052606
Rep sample Temp (Deg C):	3.1 / 2.1	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☐	No ☑	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☑	No ☐	NA ☐
Was Client notified?	Yes ☑	No ☐	NA ☐

Comments: See Correspondence.

For:

Checklist Completed By: EF YRJ 9/15/2022

for:

Reviewed By: MBC 9/26/2022

Subject: RE: PG&E Topock - PCM, 30121866.3Q22GW (ASSET Labs No. N052606)
From: "Madsen, Laura" <Laura.Madsen@arcadis.com>
Date: 9/15/2022, 12:10 PM
To: Yoandra Rodriguez <yoandra@assetlaboratories.com>
CC: "maryann.balilu@assetlaboratoriesph.com" <maryann.balilu@assetlaboratoriesph.com>, "rustico.aquino@assetlaboratoriesph.com" <rustico.aquino@assetlaboratoriesph.com>

Hello,
The sample 12 ID should be EB-732-Q322

Thanks,
Laura

Laura Madsen PG
Project Geologist
Arcadis U.S., Inc.
M +1 303 653 5749

From: Yoandra Rodriguez <yoandra@assetlaboratories.com>
Sent: Thursday, September 15, 2022 2:09 PM
To: Madsen, Laura <Laura.Madsen@arcadis.com>
Cc: maryann.balilu@assetlaboratoriesph.com; rustico.aquino@assetlaboratoriesph.com
Subject: PG&E Topock - PCM, 30121866.3Q22GW (ASSET Labs No. N052606)

Hi Laura,

Please confirm correct ID for sample 12 on the attached COC:

- COC: EB-732-Q322

- Label: EB-732-0922

--
Thanks,

Yoandra Rodriguez
Project Manager

Nevada: 3151 W. Post Road, Las Vegas, NV 89118 | P: 702.307.2659 | F: 702.307.2691
California: 11110 Artesia Blvd., Ste. B, Cerritos, CA 90703 | P: 562.219.7435 | F: 562.219.7436

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Mary Ann Balilu

From: Yoandra Rodriguez <yoandra@assetlaboratories.com>
Sent: Tuesday, September 20, 2022 3:26 PM
To: maryann.balilu@assetlaboratoriesph.com; rustico.aquino@assetlaboratoriesph.com
Subject: Fwd: Topock - Duplicate IDs

-------- Forwarded Message --------
Subject: Topock - Duplicate IDs
Date: Tue, 20 Sep 2022 22:13:57 +0000
From: Tina Rice <Tina.Rice@locana.co>
To: Yoandra Rodriguez <yoandra@assetlaboratories.com>
CC: Nancy Sibucao <nancy@assetlaboratories.com>, Madsen, Laura <laura.madsen@arcadis.com>

Hi Yoandra,

Could you please update the following sample IDs?

WorkOrder	ClientSampID	New ClientSampID	DateCollected
N052565	EB-729-Q322	EB-729-Q322_20220913	9/13/2022 14:10
N052565	EB-730-Q322	EB-730-Q322_20220913	9/13/2022 13:30
N052606	EB-731-Q322	EB-731-Q322_20220914	9/14/2022 12:50
N052606	EB-732-Q322	EB-732-Q322_20220914	9/14/2022 14:15

Thank you,
Tina
--
Thanks,

Yoandra Rodriguez
Project Manager

Nevada: 3151 W. Post Road, Las Vegas, NV 89118 | P: 702.307.2659 | F: 702.307.2691
California: 11110 Artesia Blvd., Ste. B, Cerritos, CA 90703 | P: 562.219.7435 | F: 562.219.7436

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ASSET Laboratories

WORK ORDER Summary

27-Sep-22

WorkOrder: N052606

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/14/2022 8:11 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052606-001A	TW-02D-0922	9/14/2022 8:48:00 AM	9/28/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-001B			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-001C			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052606-001D			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-002A	TW-02S-0922	9/14/2022 8:14:00 AM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-002B			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-002C			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052606-002D			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-003A	TW-03D-0922	9/14/2022 9:24:00 AM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-003B			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-003C			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

27-Sep-22

WorkOrder: N052606

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/14/2022 8:11 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052606-003D	TW-03D-0922	9/14/2022 9:24:00 AM	9/28/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-004A	EB-731-Q322_20220914	9/14/2022 12:50:00 PM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-005A	MW-31-060-0922	9/14/2022 9:51:00 AM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-005B			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-005C			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052606-005D			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-006A	MW-31-135-0922	9/14/2022 10:41:00 AM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-006B			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-006C			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052606-006D			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-007A	MW-20-070-0922	9/14/2022 12:01:00 PM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-007B			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

27-Sep-22

WorkOrder: N052606

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/14/2022 8:11 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052606-007B	MW-20-070-0922	9/14/2022 12:01:00 PM	9/28/2022	Groundwater	EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-007C			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052606-007D			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-008A	MW-20-100-0922	9/14/2022 1:38:00 PM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-008B			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-008C			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052606-008D			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-009A	MW-20-130-0922	9/14/2022 12:49:00 PM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-009B			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-009C			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052606-009D			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-010A	MW-36-090-0922	9/14/2022 8:03:00 AM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

27-Sep-22

WorkOrder: N052606

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/14/2022 8:11 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052606-010B	MW-36-090-0922	9/14/2022 8:03:00 AM	9/28/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-010C			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052606-010D			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-011A	MW-36-100-0922	9/14/2022 8:39:00 AM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-011B			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-011C			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052606-011D			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-012A	EB-732-Q322_20220914	9/14/2022 2:15:00 PM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-013A	IRZ-09-100-0922	9/14/2022 11:15:00 AM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-013B			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-013C			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

27-Sep-22

WorkOrder: N052606

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/14/2022 8:11 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052606-013C	IRZ-09-100-0922	9/14/2022 11:15:00 AM	9/28/2022	Groundwater	EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-013D			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052606-013E			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	TOTAL METALS BY ICP	☐	☐	☐	WW
N052606-014A	IRZ-13D-210-0922	9/14/2022 10:25:00 AM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-014B			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-014C			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-014D			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052606-014E			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	TOTAL METALS BY ICP	☐	☐	☐	WW
N052606-015A	IRZ-13S-095-0922	9/14/2022 10:10:00 AM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-015B			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-015C			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-015D			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

27-Sep-22

WorkOrder: N052606

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/14/2022 8:11 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052606-015E	IRZ-13S-095-0922	9/14/2022 10:10:00 AM	9/28/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	TOTAL METALS BY ICP	☐	☐	☐	WW
N052606-016A	IRZ-23-143-0922	9/14/2022 9:30:00 AM	9/28/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052606-016B			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/28/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052606-016C			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/28/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052606-016D			9/28/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052606-016E			9/28/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/28/2022		EPA 6010B	TOTAL METALS BY ICP	☐	☐	☐	WW
N052606-017A	FOLDER	9/28/2022	9/28/2022		Folder	Folder	☐	☐	☐	LAB
			9/28/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/28/2022		Folder	Folder	☐	☐	☐	LAB

September 29, 2022

Dan Bush
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052628

RE: PG&E Topock - PCM, 30121866.3Q22GW

Attention: Dan Bush

Enclosed are the results for sample(s) received on September 15, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Dilution was necessary for sample N052628-003 due to matrix interference. Sample was analyzed at lower dilution however matrix spike recovery and/or retention time criteria were not met indicating possible matrix interference. Sample was reported at dilution that meets matrix spike recovery limit and the detected peak within retention time window.

Analytical Comments for EPA 300.0:

Dilution was necessary due to precipitation of samples upon the addition of eluent.

Analytical Comments for EPA 6020_Dissolved:

Matrix Spike (MS) is outside recovery criteria for Barium in QC sample N052628-010BMS possibly due to matrix interference. Post Spike (PS) and Dilution Test (DT) were performed however, PS failed acceptance criteria. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for SM 5310C:

Matrix Spike (MS) is outside recovery criteria in QC sample N052628-010CMS at several dilutions possibly due to matrix interference. QC samples were diluted and recovery passed criteria. Thus sample reference N052628-010 and MS/MSD were reported at 20x dilution. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052628
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052628-001A	MW-45-095a-0922	Groundwater	9/15/2022 10:14:00 AM	9/15/2022	9/29/2022
N052628-001B	MW-45-095a-0922	Groundwater	9/15/2022 10:14:00 AM	9/15/2022	9/29/2022
N052628-001C	MW-45-095a-0922	Groundwater	9/15/2022 10:14:00 AM	9/15/2022	9/29/2022
N052628-001D	MW-45-095a-0922	Groundwater	9/15/2022 10:14:00 AM	9/15/2022	9/29/2022
N052628-002A	MW-21-0922	Groundwater	9/15/2022 11:56:00 AM	9/15/2022	9/29/2022
N052628-002B	MW-21-0922	Groundwater	9/15/2022 11:56:00 AM	9/15/2022	9/29/2022
N052628-002C	MW-21-0922	Groundwater	9/15/2022 11:56:00 AM	9/15/2022	9/29/2022
N052628-002D	MW-21-0922	Groundwater	9/15/2022 11:56:00 AM	9/15/2022	9/29/2022
N052628-003A	MW-71-035-0922	Groundwater	9/15/2022 11:10:00 AM	9/15/2022	9/29/2022
N052628-003B	MW-71-035-0922	Groundwater	9/15/2022 11:10:00 AM	9/15/2022	9/29/2022
N052628-003C	MW-71-035-0922	Groundwater	9/15/2022 11:10:00 AM	9/15/2022	9/29/2022
N052628-003D	MW-71-035-0922	Groundwater	9/15/2022 11:10:00 AM	9/15/2022	9/29/2022
N052628-004A	MW-34-080-0922	Groundwater	9/15/2022 9:26:00 AM	9/15/2022	9/29/2022
N052628-004B	MW-34-080-0922	Groundwater	9/15/2022 9:26:00 AM	9/15/2022	9/29/2022
N052628-004C	MW-34-080-0922	Groundwater	9/15/2022 9:26:00 AM	9/15/2022	9/29/2022
N052628-004D	MW-34-080-0922	Groundwater	9/15/2022 9:26:00 AM	9/15/2022	9/29/2022
N052628-005A	EB-733-Q322	Groundwater	9/15/2022 1:55:00 PM	9/15/2022	9/29/2022
N052628-006A	MW-78-070-0922	Groundwater	9/15/2022 7:42:00 AM	9/15/2022	9/29/2022
N052628-006B	MW-78-070-0922	Groundwater	9/15/2022 7:42:00 AM	9/15/2022	9/29/2022
N052628-006C	MW-78-070-0922	Groundwater	9/15/2022 7:42:00 AM	9/15/2022	9/29/2022
N052628-006D	MW-78-070-0922	Groundwater	9/15/2022 7:42:00 AM	9/15/2022	9/29/2022
N052628-007A	MW-923-Q322	Groundwater	9/15/2022 7:46:00 AM	9/15/2022	9/29/2022
N052628-007B	MW-923-Q322	Groundwater	9/15/2022 7:46:00 AM	9/15/2022	9/29/2022
N052628-007C	MW-923-Q322	Groundwater	9/15/2022 7:46:00 AM	9/15/2022	9/29/2022
N052628-007D	MW-923-Q322	Groundwater	9/15/2022 7:46:00 AM	9/15/2022	9/29/2022
N052628-008A	MW-78-142-0922	Groundwater	9/15/2022 8:37:00 AM	9/15/2022	9/29/2022
N052628-008B	MW-78-142-0922	Groundwater	9/15/2022 8:37:00 AM	9/15/2022	9/29/2022
N052628-008C	MW-78-142-0922	Groundwater	9/15/2022 8:37:00 AM	9/15/2022	9/29/2022
N052628-008D	MW-78-142-0922	Groundwater	9/15/2022 8:37:00 AM	9/15/2022	9/29/2022

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab Order: N052628
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052628-009A	MW-79-058-0922	Groundwater	9/15/2022 1:40:00 PM	9/15/2022	9/29/2022
N052628-009B	MW-79-058-0922	Groundwater	9/15/2022 1:40:00 PM	9/15/2022	9/29/2022
N052628-009C	MW-79-058-0922	Groundwater	9/15/2022 1:40:00 PM	9/15/2022	9/29/2022
N052628-009D	MW-79-058-0922	Groundwater	9/15/2022 1:40:00 PM	9/15/2022	9/29/2022
N052628-010A	MW-79-102-0922	Groundwater	9/15/2022 1:00:00 PM	9/15/2022	9/29/2022
N052628-010B	MW-79-102-0922	Groundwater	9/15/2022 1:00:00 PM	9/15/2022	9/29/2022
N052628-010C	MW-79-102-0922	Groundwater	9/15/2022 1:00:00 PM	9/15/2022	9/29/2022
N052628-010D	MW-79-102-0922	Groundwater	9/15/2022 1:00:00 PM	9/15/2022	9/29/2022
N052628-011A	MW-80-057-0922	Groundwater	9/15/2022 9:45:00 AM	9/15/2022	9/29/2022
N052628-011B	MW-80-057-0922	Groundwater	9/15/2022 9:45:00 AM	9/15/2022	9/29/2022
N052628-011C	MW-80-057-0922	Groundwater	9/15/2022 9:45:00 AM	9/15/2022	9/29/2022
N052628-011D	MW-80-057-0922	Groundwater	9/15/2022 9:45:00 AM	9/15/2022	9/29/2022
N052628-012A	MW-924-Q322	Groundwater	9/15/2022 10:28:00 AM	9/15/2022	9/29/2022
N052628-012B	MW-924-Q322	Groundwater	9/15/2022 10:28:00 AM	9/15/2022	9/29/2022
N052628-012C	MW-924-Q322	Groundwater	9/15/2022 10:28:00 AM	9/15/2022	9/29/2022
N052628-012D	MW-924-Q322	Groundwater	9/15/2022 10:28:00 AM	9/15/2022	9/29/2022
N052628-013A	MW-80-082-0922	Groundwater	9/15/2022 10:23:00 AM	9/15/2022	9/29/2022
N052628-013B	MW-80-082-0922	Groundwater	9/15/2022 10:23:00 AM	9/15/2022	9/29/2022
N052628-013C	MW-80-082-0922	Groundwater	9/15/2022 10:23:00 AM	9/15/2022	9/29/2022
N052628-013D	MW-80-082-0922	Groundwater	9/15/2022 10:23:00 AM	9/15/2022	9/29/2022
N052628-014A	MW-21-EB-0922	Groundwater	9/15/2022 11:30:00 AM	9/15/2022	9/29/2022
N052628-015A	MW-51-0922	Groundwater	9/15/2022 12:54:00 PM	9/15/2022	9/29/2022
N052628-015B	MW-51-0922	Groundwater	9/15/2022 12:54:00 PM	9/15/2022	9/29/2022
N052628-015C	MW-51-0922	Groundwater	9/15/2022 12:54:00 PM	9/15/2022	9/29/2022
N052628-015D	MW-51-0922	Groundwater	9/15/2022 12:54:00 PM	9/15/2022	9/29/2022
N052628-016A	MW-26-0922	Groundwater	9/15/2022 11:42:00 AM	9/15/2022	9/29/2022
N052628-016B	MW-26-0922	Groundwater	9/15/2022 11:42:00 AM	9/15/2022	9/29/2022
N052628-016C	MW-26-0922	Groundwater	9/15/2022 11:42:00 AM	9/15/2022	9/29/2022
N052628-016D	MW-26-0922	Groundwater	9/15/2022 11:42:00 AM	9/15/2022	9/29/2022
N052628-017A	EB-734-Q322	Groundwater	9/15/2022 2:00:00 PM	9/15/2022	9/29/2022

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-45-095a-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	0.23	0.025	0.20		µg/L	1	9/16/2022 11:58 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:56:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/16/2022 01:55 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-71-035-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	5.6	0.13	1.0		µg/L	5	9/16/2022 05:47 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-080-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 9:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/16/2022 12:17 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-733-Q322
Lab Order:	N052628	**Collection Date:**	9/15/2022 1:55:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-005		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/16/2022 04:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-070-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 7:42:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	110	0.50	4.0		µg/L	20	9/16/2022 02:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-923-Q322
Lab Order:	N052628	**Collection Date:**	9/15/2022 7:46:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	110	0.50	4.0		µg/L	20	9/16/2022 03:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-142-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 8:37:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	4600	25	200		µg/L	1000	9/16/2022 10:33 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-058-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 1:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	1200	2.5	20		µg/L	100	9/16/2022 10:14 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-102-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 1:00:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	880	2.5	20		µg/L	100	9/16/2022 10:03 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-057-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 9:45:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	880	2.5	20		µg/L	100	9/16/2022 10:23 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-924-Q322
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:28:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220923A**	QC Batch: **R165956**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	160	0.50	4.0		µg/L	20	9/23/2022 11:02 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-082-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:23:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	160	0.50	4.0		µg/L	20	9/16/2022 03:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-EB-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:30:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-014		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/16/2022 04:31 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-51-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 12:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	710	5.0	40		µg/L	200	9/16/2022 12:36 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-26-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:42:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	19	0.13	1.0		µg/L	5	9/16/2022 06:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	EB-734-Q322
Lab Order:	N052628	**Collection Date:**	9/15/2022 2:00:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-017		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220916A**	QC Batch: **R165800**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	ND	0.025	0.20		µg/L	1	9/16/2022 04:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	MB-R165800	SampType:	MBLK	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165800
Client ID:	PBW	Batch ID:	R165800	TestNo:	EPA 218.6			Analysis Date:	9/16/2022	SeqNo:	4839690

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID	LCS-R165800	SampType:	LCS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165800
Client ID:	LCSW	Batch ID:	R165800	TestNo:	EPA 218.6			Analysis Date:	9/16/2022	SeqNo:	4839691

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.996	0.20	5.000	0	99.9	90	110				

Sample ID	N052628-008ADUP	SampType:	DUP	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165800
Client ID:	ZZZZZZ	Batch ID:	R165800	TestNo:	EPA 218.6			Analysis Date:	9/16/2022	SeqNo:	4839696

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4547.500	200						4558	0.220	20	

Sample ID	N052628-008AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165800
Client ID:	ZZZZZZ	Batch ID:	R165800	TestNo:	EPA 218.6			Analysis Date:	9/16/2022	SeqNo:	4839697

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	9651.500	200	5000	4558	102	90	110				

Sample ID	N052628-010AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165800
Client ID:	ZZZZZZ	Batch ID:	R165800	TestNo:	EPA 218.6			Analysis Date:	9/16/2022	SeqNo:	4839701

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1358.330	20	500.0	877.0	96.3	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **N052628-010AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165800**
Client ID: **ZZZZZZ**	Batch ID: **R165800**	TestNo: **EPA 218.6**		Analysis Date: **9/16/2022**	SeqNo: **4839702**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1358.420	20	500.0	877.0	96.3	90	110	1358	0.00663	20	

Sample ID **N052628-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165800**
Client ID: **ZZZZZZ**	Batch ID: **R165800**	TestNo: **EPA 218.6**		Analysis Date: **9/16/2022**	SeqNo: **4839704**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.219	0.20	1.000	0.2259	99.4	90	110				

Sample ID **N052628-004AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165800**
Client ID: **ZZZZZZ**	Batch ID: **R165800**	TestNo: **EPA 218.6**		Analysis Date: **9/16/2022**	SeqNo: **4839706**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.013	0.20	1.000	0	101	90	110				

Sample ID **N052628-015AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165800**
Client ID: **ZZZZZZ**	Batch ID: **R165800**	TestNo: **EPA 218.6**		Analysis Date: **9/16/2022**	SeqNo: **4839708**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1733.940	40	1000	709.5	102	90	110				

Sample ID **N052628-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165800**
Client ID: **ZZZZZZ**	Batch ID: **R165800**	TestNo: **EPA 218.6**		Analysis Date: **9/16/2022**	SeqNo: **4839712**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.090	0.20	1.000	0	109	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID **N052628-009AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165800**
Client ID: **ZZZZZZ**	Batch ID: **R165800**	TestNo: **EPA 218.6**		Analysis Date: **9/16/2022**	SeqNo: **4839713**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1652.010	20	500.0	1181	94.1	90	110				

Sample ID **N052628-011AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165800**
Client ID: **ZZZZZZ**	Batch ID: **R165800**	TestNo: **EPA 218.6**		Analysis Date: **9/16/2022**	SeqNo: **4839714**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1375.920	20	500.0	878.8	99.4	90	110				

Sample ID **N052628-006AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165800**
Client ID: **ZZZZZZ**	Batch ID: **R165800**	TestNo: **EPA 218.6**		Analysis Date: **9/16/2022**	SeqNo: **4839716**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	207.402	4.0	100.0	106.8	101	90	110				

Sample ID **N052628-007AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165800**
Client ID: **ZZZZZZ**	Batch ID: **R165800**	TestNo: **EPA 218.6**		Analysis Date: **9/16/2022**	SeqNo: **4839718**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	214.142	4.0	100.0	113.9	100	90	110				

Sample ID **N052628-013AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **165800**
Client ID: **ZZZZZZ**	Batch ID: **R165800**	TestNo: **EPA 218.6**		Analysis Date: **9/16/2022**	SeqNo: **4839722**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	255.354	4.0	100.0	160.1	95.3	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052628-005AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165800
Client ID:	ZZZZZZ	Batch ID:	R165800	TestNo:	EPA 218.6			Analysis Date:	9/16/2022	SeqNo:	4839724

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.047	0.20	1.000	0	105	90	110				

Sample ID	N052628-014AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165800
Client ID:	ZZZZZZ	Batch ID:	R165800	TestNo:	EPA 218.6			Analysis Date:	9/16/2022	SeqNo:	4839726

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.019	0.20	1.000	0	102	90	110				

Sample ID	N052628-017AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165800
Client ID:	ZZZZZZ	Batch ID:	R165800	TestNo:	EPA 218.6			Analysis Date:	9/16/2022	SeqNo:	4839728

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.018	0.20	1.000	0	102	90	110				

Sample ID	N052628-003AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165800
Client ID:	ZZZZZZ	Batch ID:	R165800	TestNo:	EPA 218.6			Analysis Date:	9/16/2022	SeqNo:	4839734

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	10.713	1.0	5.000	5.630	102	90	110				

Sample ID	N052628-016AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165800
Client ID:	ZZZZZZ	Batch ID:	R165800	TestNo:	EPA 218.6			Analysis Date:	9/16/2022	SeqNo:	4839737

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	42.679	1.0	25.00	18.73	95.8	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	MB-R165956	SampType:	MBLK	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165956		
Client ID:	PBW	Batch ID:	R165956	TestNo:	EPA 218.6			Analysis Date:	9/23/2022	SeqNo:	4847432		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	ND	0.20											

Sample ID	LCS-R165956	SampType:	LCS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165956		
Client ID:	LCSW	Batch ID:	R165956	TestNo:	EPA 218.6			Analysis Date:	9/23/2022	SeqNo:	4847433		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	5.035	0.20	5.000	0	101	90	110						

Sample ID	N052628-012AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165956		
Client ID:	ZZZZZZ	Batch ID:	R165956	TestNo:	EPA 218.6			Analysis Date:	9/23/2022	SeqNo:	4847436		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	258.004	4.0	100.0	157.1	101	90	110						

Sample ID	N052628-012AMSD	SampType:	MSD	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165956		
Client ID:	ZZZZZZ	Batch ID:	R165956	TestNo:	EPA 218.6			Analysis Date:	9/23/2022	SeqNo:	4847437		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	260.342	4.0	100.0	157.1	103	90	110	258.0	0.902	20			

Sample ID	N052748-001BDUP	SampType:	DUP	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165956		
Client ID:	ZZZZZZ	Batch ID:	R165956	TestNo:	EPA 218.6			Analysis Date:	9/23/2022	SeqNo:	4847438		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Hexavalent Chromium	564.280	40						555.4	1.58	20			

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID	N052748-001BMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165956
Client ID:	ZZZZZZ	Batch ID:	R165956	TestNo:	EPA 218.6			Analysis Date:	9/23/2022	SeqNo:	4847439

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1602.840	40	1000	555.4	105	90	110				

Sample ID	N052713-001AMS	SampType:	MS	TestCode:	218.6_WPGE	Units:	µg/L	Prep Date:		RunNo:	165956
Client ID:	ZZZZZZ	Batch ID:	R165956	TestNo:	EPA 218.6			Analysis Date:	9/23/2022	SeqNo:	4847441

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.021	0.20	1.000	0	102	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-45-095a-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A** QC Batch: **R165764**				PrepDate:			Analyst: **RAB**
Sulfate	470	3.0	25		mg/L	50	9/16/2022 05:43 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A** QC Batch: **R165764**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/16/2022 10:50 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:56:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Sulfate	1500	12	100		mg/L	200	9/16/2022 03:40 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/16/2022 11:36 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-71-035-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Sulfate	1500	6.1	50		mg/L	100	9/16/2022 04:42 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.80	0.095	0.50		mg/L	10	9/16/2022 11:51 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-080-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 9:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A** QC Batch: **R165764**				PrepDate:			Analyst: **RAB**
Sulfate	620	3.0	25		mg/L	50	9/16/2022 05:58 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A** QC Batch: **R165764**				PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/16/2022 12:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-070-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 7:42:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Sulfate	540	3.0	25		mg/L	50	9/16/2022 06:13 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.54	0.095	0.50		mg/L	10	9/16/2022 10:04 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-923-Q322
Lab Order:	N052628	**Collection Date:**	9/15/2022 7:46:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
EPA 300.0							
RunID: **NV00922-IC8_220916A** QC Batch: **R165764** PrepDate: Analyst: **RAB**							
Sulfate	540	3.0	25		mg/L	50	9/16/2022 06:29 PM
ANIONS BY ION CHROMATOGRAPHY							
EPA 300.0							
RunID: **NV00922-IC8_220916A** QC Batch: **R165764** PrepDate: Analyst: **RAB**							
Nitrate as N	ND	0.095	0.50		mg/L	10	9/16/2022 12:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-142-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 8:37:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Sulfate	830	6.1	50		mg/L	100	9/16/2022 04:57 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Nitrate as N	7.4	0.095	0.50		mg/L	10	9/16/2022 12:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW
Lab ID: N052628-009

Client Sample ID: MW-79-058-0922
Collection Date: 9/15/2022 1:40:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A** QC Batch: **R165764**				PrepDate:			Analyst: **RAB**
Sulfate	510	3.0	25		mg/L	50	9/16/2022 06:44 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A** QC Batch: **R165764**				PrepDate:			Analyst: **RAB**
Nitrate as N	4.2	0.095	0.50		mg/L	10	9/16/2022 12:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-102-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 1:00:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Sulfate	620	6.1	50		mg/L	100	9/16/2022 02:55 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Nitrate as N	1.5	0.095	0.50		mg/L	10	9/16/2022 09:18 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-057-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 9:45:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A** QC Batch: **R165764**				PrepDate:			Analyst: **RAB**
Sulfate	510	3.0	25		mg/L	50	9/16/2022 06:59 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A** QC Batch: **R165764**				PrepDate:			Analyst: **RAB**
Nitrate as N	11	0.095	0.50		mg/L	10	9/16/2022 01:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-924-Q322
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:28:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Sulfate	600	3.0	25		mg/L	50	9/16/2022 07:15 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.87	0.095	0.50		mg/L	10	9/16/2022 01:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-082-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:23:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Sulfate	610	3.0	25		mg/L	50	9/16/2022 07:30 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Nitrate as N	0.81	0.095	0.50		mg/L	10	9/16/2022 01:38 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-51-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 12:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Sulfate	530	3.0	25		mg/L	50	9/16/2022 07:45 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Nitrate as N	2.6	0.095	0.50		mg/L	10	9/16/2022 01:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-26-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:42:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Sulfate	550	3.0	25		mg/L	50	9/16/2022 08:01 PM
ANIONS BY ION CHROMATOGRAPHY							
			EPA 300.0				
RunID: **NV00922-IC8_220916A**	QC Batch: **R165764**			PrepDate:			Analyst: **RAB**
Nitrate as N	ND	0.095	0.50		mg/L	10	9/16/2022 02:39 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	LCS-R165764_SO4	SampType:	LCS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	LCSW	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838473

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	3.997	0.50	4.000	0	99.9	90	110				

Sample ID	MB-R165764_SO4	SampType:	MBLK	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	PBW	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838474

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.50									

Sample ID	N052628-010DMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	ZZZZZZ	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838480

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	1023.380	50	400.0	623.9	99.9	80	120				

Sample ID	N052628-010DMSD	SampType:	MSD	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	ZZZZZZ	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838481

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	1017.510	50	400.0	623.9	98.4	80	120	1023	0.575	20	

Sample ID	N052628-002DDUP	SampType:	DUP	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	ZZZZZZ	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838483

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	1519.600	100						1514	0.394	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W_SO4PGE

Sample ID	N052628-002DMS	SampType:	MS	TestCode:	300_W_SO4P	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	ZZZZZZ	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838484

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	2332.900	100	800.0	1514	102	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	LCS-R165764_NO3	SampType:	LCS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	LCSW	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838441

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	1.229	0.050	1.250	0	98.3	90	110				

Sample ID	MB-R165764_NO3	SampType:	MBLK	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	PBW	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838442

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	ND	0.050									

Sample ID	N052628-010DMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	ZZZZZZ	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838444

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	14.105	0.50	12.50	1.470	101	80	120				

Sample ID	N052628-010DMSD	SampType:	MSD	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	ZZZZZZ	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838445

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	14.031	0.50	12.50	1.470	100	80	120	14.10	0.526	20	

Sample ID	N052628-006DDUP	SampType:	DUP	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	ZZZZZZ	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838447

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	0.534	0.50						0.5370	0.560	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Calculations are based on raw values

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 300WLLNO3PGE

Sample ID	N052628-006DMS	SampType:	MS	TestCode:	300WLLNO3	Units:	mg/L	Prep Date:		RunNo:	165764
Client ID:	ZZZZZZ	Batch ID:	R165764	TestNo:	EPA 300.0			Analysis Date:	9/16/2022	SeqNo:	4838448

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate as N	12.694	0.50	12.50	0.5370	97.3	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-45-095a-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 07:07 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:56:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 07:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-71-035-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 03:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-080-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 9:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 04:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-070-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 7:42:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 04:16 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-923-Q322
Lab Order:	N052628	**Collection Date:**	9/15/2022 7:46:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 04:32 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-142-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 8:37:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 04:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-058-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 1:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 05:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-102-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 1:00:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	2.7	20		mg/L	20	9/16/2022 01:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-057-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 9:45:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 05:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-924-Q322
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:28:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 06:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-082-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:23:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 06:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-51-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 12:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 06:36 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-26-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:42:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON							
			SM 5310C				
RunID: **TOC2_220916A**	QC Batch: **R165755**			PrepDate:			Analyst: **RAB**
Organic Carbon, Total	ND	0.14	1.0		mg/L	1	9/16/2022 06:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 5310C_W_T_PGE

Sample ID **MB-R165755**	SampType: **MBLK**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165755**
Client ID: **PBW**	Batch ID: **R165755**	TestNo: **SM 5310C**		Analysis Date: **9/16/2022**	SeqNo: **4837063**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	ND	1.0									

Sample ID **LCS-R165755**	SampType: **LCS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165755**
Client ID: **LCSW**	Batch ID: **R165755**	TestNo: **SM 5310C**		Analysis Date: **9/16/2022**	SeqNo: **4837064**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	4.873	1.0	5.000	0	97.5	85	115				

Sample ID **N052628-010CMS**	SampType: **MS**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165755**
Client ID: **ZZZZZZ**	Batch ID: **R165755**	TestNo: **SM 5310C**		Analysis Date: **9/16/2022**	SeqNo: **4837070**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	80.822	20	100.0	0	80.8	75	125				

Sample ID **N052628-010CMSD**	SampType: **MSD**	TestCode: **5310C_W_T_**	Units: **mg/L**	Prep Date:	RunNo: **165755**
Client ID: **ZZZZZZ**	Batch ID: **R165755**	TestNo: **SM 5310C**		Analysis Date: **9/16/2022**	SeqNo: **4837075**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	80.406	20	100.0	0	80.4	75	125	80.82	0.516	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-45-095a-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94834**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/21/2022 12:21 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:56:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94834**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	130	13	20		µg/L	1	9/21/2022 12:26 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-71-035-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94834**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/21/2022 12:32 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-080-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 9:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94834**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	410	13	20		µg/L	1	9/21/2022 12:37 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-070-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 7:42:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94834**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/21/2022 12:42 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-923-Q322
Lab Order:	N052628	**Collection Date:**	9/15/2022 7:46:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94834**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/21/2022 01:17 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-142-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 8:37:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94834**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/21/2022 01:22 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-058-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 1:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94834**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/21/2022 01:27 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-102-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 1:00:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94834**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/21/2022 01:32 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-057-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 9:45:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94834**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/21/2022 02:08 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-924-Q322
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:28:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94834**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/21/2022 02:13 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-082-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:23:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220920C**	QC Batch: **94834**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/21/2022 02:19 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-51-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 12:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A			**EPA 6010B**			
RunID: **NV00922-ICP2_220920C**	QC Batch: **94834**			PrepDate:	**9/20/2022**		Analyst: **DJ**
Iron	ND	13	20		µg/L	1	9/21/2022 02:24 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-26-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:42:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_220928B**	QC Batch: **94834**				PrepDate:	**9/20/2022**	Analyst: **DJ**
Iron	38	13	20		µg/L	1	9/28/2022 03:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID	MB-94834	SampType:	MBLK	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	9/20/2022	RunNo:	165864
Client ID:	PBW	Batch ID:	94834	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/21/2022	SeqNo:	4843301

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID	LCS-94834	SampType:	LCS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	9/20/2022	RunNo:	165864
Client ID:	LCSW	Batch ID:	94834	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/21/2022	SeqNo:	4843302

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	93.168	20	100.0	0	93.2	85	115				

Sample ID	N052628-010BMS	SampType:	MS	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	9/20/2022	RunNo:	165864
Client ID:	ZZZZZZ	Batch ID:	94834	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/21/2022	SeqNo:	4843318

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	105.486	20	100.0	13.82	91.7	75	125				

Sample ID	N052628-010BMSD	SampType:	MSD	TestCode:	6010_WDPG	Units:	µg/L	Prep Date:	9/20/2022	RunNo:	165864
Client ID:	ZZZZZZ	Batch ID:	94834	TestNo:	EPA 6010B	EPA 3010A		Analysis Date:	9/21/2022	SeqNo:	4843319

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	107.966	20	100.0	13.82	94.2	75	125	105.5	2.32	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-45-095a-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:14:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 09:50 AM
Barium	27	0.083	1.0		µg/L	1	9/19/2022 08:58 PM
Manganese	180	0.026	0.50		µg/L	1	9/20/2022 06:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-21-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:56:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	12	0.050	0.10		µg/L	1	9/18/2022 09:56 AM
Barium	24	0.083	1.0		µg/L	1	9/19/2022 09:04 PM
Manganese	260	0.13	2.5		µg/L	5	9/20/2022 07:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-71-035-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:10:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-003		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 10:02 AM
Barium	41	0.083	1.0		µg/L	1	9/19/2022 09:28 PM
Manganese	440	0.13	2.5		µg/L	5	9/20/2022 07:18 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-34-080-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 9:26:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 10:20 AM
Barium	36	0.083	1.0		µg/L	1	9/19/2022 09:40 PM
Manganese	140	0.026	0.50		µg/L	1	9/20/2022 07:24 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-070-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 7:42:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-006		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 10:26 AM
Barium	180	0.083	1.0		µg/L	1	9/19/2022 09:46 PM
Manganese	120	0.026	0.50		µg/L	1	9/20/2022 07:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-923-Q322
Lab Order:	N052628	**Collection Date:**	9/15/2022 7:46:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-007		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 10:32 AM
Barium	200	0.42	5.0		µg/L	5	9/19/2022 09:58 PM
Manganese	120	0.026	0.50		µg/L	1	9/20/2022 07:36 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-78-142-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 8:37:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-008		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220919C**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	1.9	0.050	0.10		µg/L	1	9/19/2022 10:04 PM
Barium	27	0.083	1.0		µg/L	1	9/19/2022 10:04 PM
Manganese	3.7	0.026	0.50		µg/L	1	9/20/2022 07:47 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-058-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 1:40:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-009		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 10:50 AM
Barium	210	0.42	5.0		µg/L	5	9/19/2022 10:45 PM
Manganese	5.2	0.026	0.50		µg/L	1	9/20/2022 07:59 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-79-102-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 1:00:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-010		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	1.1	0.050	0.10		µg/L	1	9/18/2022 10:56 AM
Barium	41	0.083	1.0		µg/L	1	9/19/2022 10:51 PM
Manganese	7.2	0.026	0.50		µg/L	1	9/19/2022 10:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-057-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 9:45:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220919C**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	0.61	0.050	0.10		µg/L	1	9/19/2022 11:21 PM
Barium	65	0.083	1.0		µg/L	1	9/18/2022 11:37 AM
Manganese	9.9	0.026	0.50		µg/L	1	9/19/2022 11:21 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-924-Q322
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:28:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	1.8	0.050	0.10		µg/L	1	9/18/2022 11:43 AM
Barium	44	0.083	1.0		µg/L	1	9/18/2022 11:43 AM
Manganese	5.1	0.026	0.50		µg/L	1	9/19/2022 11:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-80-082-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 10:23:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-013		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	1.8	0.050	0.10		µg/L	1	9/18/2022 11:49 AM
Barium	42	0.083	1.0		µg/L	1	9/18/2022 11:49 AM
Manganese	3.4	0.026	0.50		µg/L	1	9/19/2022 11:33 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-51-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 12:54:00 PM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-015		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220919C**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	1.3	0.050	0.10		µg/L	1	9/19/2022 11:39 PM
Barium	84	0.083	1.0		µg/L	1	9/18/2022 11:55 AM
Manganese	17	0.026	0.50		µg/L	1	9/19/2022 11:39 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	MW-26-0922
Lab Order:	N052628	**Collection Date:**	9/15/2022 11:42:00 AM
Project:	PG&E Topock - PCM, 30121866.3Q22GW	**Matrix:**	GROUNDWATER
Lab ID:	N052628-016		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_220917F**	QC Batch: **94795**			PrepDate:	**9/17/2022**		Analyst: **DJ**
Arsenic	ND	0.050	0.10		µg/L	1	9/18/2022 12:01 PM
Barium	73	0.083	1.0		µg/L	1	9/18/2022 12:01 PM
Manganese	770	0.13	2.5		µg/L	5	9/20/2022 12:03 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	MB-94795	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165789
Client ID:	PBW	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839336

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									

Sample ID	LCS-94795	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165789
Client ID:	LCSW	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839337

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.323	0.10	10.00	0	93.2	85	115				

Sample ID	N052628-010BMS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165789
Client ID:	ZZZZZZ	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839359

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.690	0.10	10.00	1.092	86.0	75	125				

Sample ID	N052628-010BMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165789
Client ID:	ZZZZZZ	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839360

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.070	0.10	10.00	1.092	89.8	75	125	9.690	3.85	20	

Sample ID	N052628-010BMS	SampType:	MS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165854
Client ID:	ZZZZZZ	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/19/2022	SeqNo:	4842252

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	47.209	1.0	10.00	40.90	63.1	75	125				S
Manganese	103.705	0.50	100.0	7.234	96.5	75	125				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N052628-010BMSD	SampType:	MSD	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165854
Client ID:	ZZZZZZ	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/19/2022	SeqNo:	4842253

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	50.188	1.0	10.00	40.90	92.9	75	125	47.21	6.12	20	
Manganese	105.952	0.50	100.0	7.234	98.7	75	125	103.7	2.14	20	

Sample ID	MB-94795	SampType:	MBLK	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165884
Client ID:	PBW	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/20/2022	SeqNo:	4843861

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	ND	1.0									
Manganese	ND	0.50									

Sample ID	LCS-94795	SampType:	LCS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:	9/17/2022	RunNo:	165884
Client ID:	LCSW	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/20/2022	SeqNo:	4843862

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	9.245	1.0	10.00	0	92.4	85	115				
Manganese	97.617	0.50	100.0	0	97.6	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052628
Project: PG&E Topock - PCM, 30121866.3Q22GW

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID	N052628-010B-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	165789
Client ID:	ZZZZZZ	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/18/2022	SeqNo:	4839358

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.063	0.10	10.00	1.092	89.7	80	120				

Sample ID	N052628-010B-PS	SampType:	PS	TestCode:	6020_DIS_TP	Units:	µg/L	Prep Date:		RunNo:	165854
Client ID:	ZZZZZZ	Batch ID:	94795	TestNo:	EPA 6020	EPA 3010A		Analysis Date:	9/19/2022	SeqNo:	4842251

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	48.105	1.0	10.00	40.90	72.0	80	120				S
Manganese	102.585	0.50	100.0	7.234	95.4	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement	QA/QC	Sample Receipt Condition	Y	N
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD	RTNE	1. Chilled	✓	
Address: Roseville, CA 95678	Email: daniel.moore@arcadis.com	Address:	Geotracker	RWQCB ✓	2. Headspace		
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Labspec	CalTrans	3. Container Intact	✓	
Submitted By:		Phone: 949-727-1400, ext 200 Fax:	Others ✓	LEVEL III	4. Seal Present	✓	
Title: Field Tech	Phone: 916-786-3302 Fax:		Specify: RWQCB	LEVEL IV	5. IR number	3	
Signature: Date: Scott Morgan 9.15.22	Sampled By: Nana Tey		Global ID:	Regulatory	6. Method of Cooling: ICE		
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for			Specify State:	Sample Temp: 2.8°C, 3.4°C		
Project Name: PG&E Topock - PCM	Signature: Date: 9/15/22	Matrix: Ground X Sediment; Potable Soil; NPDES Other Solid; Surface					

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH (250 mL poly)	Nitrite, Nitrate, sulfate (EPA 300.0) (1 L poly)	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, (500mL poly)	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium (500mL poly)	Total Organic Carbon (SM5310C); H2SO4 (3x40 mL VOA)	Total metals (SW6010) No filter, HNO3 Total Iron (500mL poly)	Ammonia as Nitrogen (SM4500NH3); H2SO4 (1 L poly)	Nitrate, sulfate (EPA 300.0) (1 L poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052628-01	MW-45-095a-0922	9/15/2022	10:14		X		X			X			X	E	6	P	BNS	
2	-02	MW-21-0922	9/15/2022	11:56		X		X			X			X	E	6	P	BNS	
3	-03	MW-71-035-0922	9/15/2022	11:10		X		X			X			X	E	6	P	BNS	
4	-04	MW-34-080-0922	9/15/2022	9:26		X		X			X			X	E	6	P	BNS	
5	-05	EB-733-Q322	9/15/2022	13:55		X									E	1	P	BNS	
6	-06	MW-78-070-0922	9/15/2022	7:42		X		X			X			X	E	6	P	BNS	
7	-07	MW-923-Q322	9/15/2022	7:46		X		X			X			X	E	6	P	BNS	
8	-08	MW-78-142-0922	9/15/2022	8:37		X		X			X			X	E	6	P	BNS	
9	-09	MW-79-058-0922	9/15/2022	13:40		X		X			X			X	E	6	P	BNS	
10	-10	MW-79-102-0922	9/15/2022	13:00		X		X			X			X	E	9	P	BNS	MS/MSD
11	-11	MW-80-057-0922	9/15/2022	9:45		X		X			X			X	E	6	P	BNS	
12	-12	MW-924-Q322	9/15/2022	10:28		X		X			X			X	E	6	P	BNS	
13	-13	MW-80-082-0922	9/15/2022	10:23		X		X			X			X	E	6	P	BNS	
14	-14	MW-21-EB-0922	9/15/2022	11:30		X									E	1	P	BNS	

Courier:
Tracking No.:

Relinquished by (Signature and Printed Name): Nana Tey	Date/Time: 9/15/22 1520	Reliquished by (Signature and Printed Name): Dante Ortiz	Date/Time: 9/15/22 Bonde cmz 15:20
Reliquished by (Signature and Printed Name): Dante Ortiz Bonde cmz 9/15/22	Date/Time:	Reliquished by (Signature and Printed Name): Bonde cmz ← 18:57 Dante Ortiz cmz	Date/Time: 18:57 9/15/22
Reliquished by (Signature and Printed Name):	Date/Time:	Reliquished by (Signature and Printed Name):	Date/Time:

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [X] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs.=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B (NH4)2SO4/NH4OH			M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

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California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Dan Bush	Bill to: Marty Bloes	EDD Requirement	QA/QC	Sample Receipt Condition
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD	RTNE	Y N
Address: Roseville, CA 95678	Email: dan.bush@arcadis.com daniel.monroe@critigen.com	Address:	Geotracker	RWQCB ✓	1. Chilled ✓
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.#	Labspec	CalTrans	2. Headspace
Submitted By:		Phone: 949-727-1400, ext 200 Fax:	Others ✓	LEVEL III	3. Container Intact ✓
Title:	Phone: 916-786-3302 Fax:		Specify: RWQCB	LEVEL IV	4. Seal Present
Signature: Date:	Sampled By: Nara Ty		Global ID:	Regulatory	5. IR number 3
I hereby authorize ASSET Labs to perform the tests indicated below.	*I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for*			Specify State:	6. Method of Cooling: ICE
Project Name: PG&E Topock - PCM	Signature:	Date: 9/15/22			Sample Temp: 2.8°C, 3.4°C
Project Number: 30121886.3Q22GW					Courier:
					Tracking No.:

Matrix: Ground X Sediment; Potable; Soil; NPDES; Other Solid; Surface

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH 250 mL poly	Nitrite, Nitrate, sulfate (EPA 300.0) 1 L poly	Dissolved metals (SW6020) FF; HNO3 Arsenic, Iron, Barium, Manganese 500mL poly	Dissolved metals (SW6020) FF; HNO3 Total Dissolved Chromium, 500mL poly	Dissolved metals (SW6020) FF; HNO3 Molybdenum, Selenium 500mL poly	Total Organic Carbon (SM5310C); H2SO4 3x40 mL VOA	Total metals (SW6010) No filter, HNO3 Total Iron 500mL poly	Ammonia as Nitrogen (SM4500NH3); H2SO4 1 L poly	Nitrate, sulfate (EPA 300.0) 1 L poly	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052628-15	MW-51-0922	9/15/2022	12:54		X		X			X			X	E	6	P	BNS	
2	-16	MW-26-0922	9/15/2022	11:42		X		X			X			X	E	6	P	BNS	
3	-17	EB-734-Q322	9/15/2022	14:00		X									E	1	P	BNS	
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Nara Ty	9/15/22 1520	Dante Ortiz Dante Ortiz	9/15/22 15:20
Dante Ortiz Dante Ortiz	9/15/22 18:57	Dante Ortiz	9/15/22 18:57

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [X] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs=200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:				Container Type:		
H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	T=Tube	V=VOA	P=Pint
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$		J=Jar	B=Tedlar	G=Glass
Others/Specify:	B	(NH4)2SO4/NH4OH		M=Metal	M=Metal	C=Can

White=Laboratory Copy

Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	9/15/2022	Workorder:	N052628
Rep sample Temp (Deg C):	2.8 / 3.4	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For:

Checklist Completed By: EF YRJ 9/16/2022

for:

Reviewed By: MBC 9/16/2022

ASSET Laboratories

WORK ORDER Summary

16-Sep-22

WorkOrder: N052628

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/15/2022 6:57 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052628-001A	MW-45-095a-0922	9/15/2022 10:14:00 AM	9/29/2022	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-001B			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052628-001C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052628-001D			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052628-002A	MW-21-0922	9/15/2022 11:56:00 AM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-002B			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052628-002C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052628-002D			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052628-003A	MW-71-035-0922	9/15/2022 11:10:00 AM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-003B			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052628-003C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

16-Sep-22

WorkOrder: N052628

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/15/2022 6:57 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052628-003D	MW-71-035-0922	9/15/2022 11:10:00 AM	9/29/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052628-004A	MW-34-080-0922	9/15/2022 9:26:00 AM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-004B			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052628-004C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052628-004D			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052628-005A	EB-733-Q322	9/15/2022 1:55:00 PM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-006A	MW-78-070-0922	9/15/2022 7:42:00 AM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-006B			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052628-006C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052628-006D			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052628-007A	MW-923-Q322	9/15/2022 7:46:00 AM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-007B			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

16-Sep-22

WorkOrder: N052628

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/15/2022 6:57 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052628-007B	MW-923-Q322	9/15/2022 7:46:00 AM	9/29/2022	Groundwater	EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052628-007C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052628-007D			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052628-008A	MW-78-142-0922	9/15/2022 8:37:00 AM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-008B			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052628-008C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052628-008D			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052628-009A	MW-79-058-0922	9/15/2022 1:40:00 PM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-009B			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052628-009C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052628-009D			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052628-010A	MW-79-102-0922	9/15/2022 1:00:00 PM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☑	☐	WW

ASSET Laboratories

WORK ORDER Summary

16-Sep-22

WorkOrder: N052628

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/15/2022 6:57 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052628-010B	MW-79-102-0922	9/15/2022 1:00:00 PM	9/29/2022	Groundwater	EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☑	☐	WW
			9/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☑	☐	WW
			9/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☑	☐	WW
N052628-010C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☑	☐	VW
N052628-010D			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☑	☐	WW
N052628-011A	MW-80-057-0922	9/15/2022 9:45:00 AM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-011B			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052628-011C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052628-011D			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052628-012A	MW-924-Q322	9/15/2022 10:28:00 AM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-012B			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052628-012C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052628-012D			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

16-Sep-22

WorkOrder: N052628

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/15/2022 6:57 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052628-012D	MW-924-Q322	9/15/2022 10:28:00 AM	9/29/2022	Groundwater	EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052628-013A	MW-80-082-0922	9/15/2022 10:23:00 AM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-013B			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052628-013C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052628-013D			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052628-014A	MW-21-EB-0922	9/15/2022 11:30:00 AM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-015A	MW-51-0922	9/15/2022 12:54:00 PM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-015B			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			9/29/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052628-015C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052628-015D			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052628-016A	MW-26-0922	9/15/2022 11:42:00 AM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-016B			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			9/29/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

16-Sep-22

WorkOrder: N052628

Client ID: ARCUS02

Project: PG&E Topock - PCM, 30121866.3Q22GW **QC Level:** Level IV **Date Received:** 9/15/2022 6:57 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052628-016B	MW-26-0922	9/15/2022 11:42:00 AM	9/29/2022	Groundwater	EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052628-016C			9/29/2022		SM 5310C	TOTAL ORGANIC CARBON	☐	☐	☐	VW
N052628-016D			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
			9/29/2022		EPA 300.0	ANIONS BY ION CHROMATOGRAPHY	☐	☐	☐	WW
N052628-017A	EB-734-Q322	9/15/2022 2:00:00 PM	9/29/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052628-018A	FOLDER	9/29/2022	9/29/2022		Folder	Folder	☐	☐	☐	LAB
			9/29/2022		Folder	Level IV Report	☐	☐	☐	LAB
			9/29/2022		Folder	Folder	☐	☐	☐	LAB

October 11, 2022

Brian Prowd
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052819

RE: PG&E Topock - OMM TCS PWTF, 30106892

Attention: Brian Prowd

Enclosed are the results for sample(s) received on September 27, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

ASSET Laboratories

Date: *11-Oct-22*

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - OMM TCS PWTF, 30106892
Lab Order: N052819
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052819-001A	Backwash Pre-filter-092722	Water	9/27/2022 8:15:00 AM	9/27/2022	10/11/2022
N052819-001B	Backwash Pre-filter-092722	Water	9/27/2022 8:15:00 AM	9/27/2022	10/11/2022
N052819-001C	Backwash Pre-filter-092722	Water	9/27/2022 8:15:00 AM	9/27/2022	10/11/2022
N052819-002A	Backwash Post-filter-092722	Water	9/27/2022 8:30:00 AM	9/27/2022	10/11/2022
N052819-002B	Backwash Post-filter-092722	Water	9/27/2022 8:30:00 AM	9/27/2022	10/11/2022
N052819-002C	Backwash Post-filter-092722	Water	9/27/2022 8:30:00 AM	9/27/2022	10/11/2022

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052819
Project: PG&E Topock - OMM TCS PWTF, 30106892
Lab ID: N052819-001

Client Sample ID: Backwash Pre-filter-092722
Collection Date: 9/27/2022 8:15:00 AM
Matrix: WATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220930A**	QC Batch: **R166109**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	410	1.3	10		µg/L	50	9/30/2022 10:00 AM
TOTAL METALS BY ICPMS							
		EPA 3010A		**EPA 6020**			
RunID: **NV00922-ICP8_221004B**	QC Batch: **95010**			PrepDate:	**10/3/2022**		Analyst: **DJ**
Chromium	430	0.18	5.0		µg/L	5	10/4/2022 03:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052819
Project: PG&E Topock - OMM TCS PWTF, 30106892
Lab ID: N052819-002

Client Sample ID: Backwash Post-filter-092722
Collection Date: 9/27/2022 8:30:00 AM
Matrix: WATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220930A**	QC Batch: **R166109**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	400	1.3	10		µg/L	50	9/30/2022 10:10 AM
TOTAL METALS BY ICPMS							
		EPA 3010A		**EPA 6020**			
RunID: **NV00922-ICP8_221004B**	QC Batch: **95010**			PrepDate:	**10/3/2022**		Analyst: **DJ**
Chromium	430	0.18	5.0		µg/L	5	10/4/2022 03:36 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052819
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R166109**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **PBW**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854258**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R166109**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **LCSW**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854259**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.134	0.20	5.000	0	103	90	110				

Sample ID: **N052841-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854265**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2015.520	40	1000	1016	100	90	110				

Sample ID: **N052841-001AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854266**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2007.380	40	1000	1016	99.2	90	110	2016	0.405	20	

Sample ID: **N052841-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854270**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2624.420	40	1000	1572	105	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052819
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052841-002ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854271**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1611.560	40						1572	2.49	20	

Sample ID: **N052843-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854273**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	3094.300	40	1000	2089	101	90	110				

Sample ID: **N052843-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854275**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.897	0.20	1.000	0.9642	93.3	90	110				

Sample ID: **N052819-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854276**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	676.255	10	250.0	413.1	105	90	110				

Sample ID: **N052819-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854277**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	669.895	10	250.0	404.0	106	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052819
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052822-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854278**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	715.705	10	250.0	456.4	104	90	110				

Sample ID: **N052822-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854279**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	710.010	10	250.0	455.9	102	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052819
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_W_CRPGE_TPK

Sample ID: **MB-95010**	SampType: **MBLK**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166195**
Client ID: **PBW**	Batch ID: **95010**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/3/2022**	SeqNo: **4857708**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									

Sample ID: **LCS-95010**	SampType: **LCS**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166195**
Client ID: **LCSW**	Batch ID: **95010**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/3/2022**	SeqNo: **4857709**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10.209	1.0	10.00	0	102	85	115				

Sample ID: **N052843-001F-MS**	SampType: **MS**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166195**
Client ID: **ZZZZZZ**	Batch ID: **95010**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/3/2022**	SeqNo: **4857731**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	2287.928	25	250.0	2007	112	75	125				

Sample ID: **N052843-001F-MSD**	SampType: **MSD**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166195**
Client ID: **ZZZZZZ**	Batch ID: **95010**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/3/2022**	SeqNo: **4857732**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	2302.251	25	250.0	2007	118	75	125	2288	0.624	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Pre-filter-092722
Lab Order:	N052819	**Collection Date:**	9/27/2022 8:15:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052819-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_221005B**	QC Batch: **95023**				PrepDate:	**10/4/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	10/5/2022 02:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Post-filter-092722
Lab Order:	N052819	**Collection Date:**	9/27/2022 8:30:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052819-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_221005B**	QC Batch: **95023**				PrepDate:	**10/4/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	10/5/2022 02:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052819
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-95023**	SampType: **MBLK**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **10/4/2022**	RunNo: **166225**
Client ID: **PBW**	Batch ID: **95023**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **10/5/2022**	SeqNo: **4858803**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS1-95023**	SampType: **LCS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **10/4/2022**	RunNo: **166225**
Client ID: **LCSW**	Batch ID: **95023**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **10/5/2022**	SeqNo: **4858804**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	90.909	20	100.0	0	90.9	85	115				

Sample ID: **N052843-001E-MS1**	SampType: **MS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **10/4/2022**	RunNo: **166225**
Client ID: **ZZZZZZ**	Batch ID: **95023**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **10/5/2022**	SeqNo: **4858814**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	98.139	20	100.0	0	98.1	75	125				

Sample ID: **N052843-001E-MSD**	SampType: **MSD**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **10/4/2022**	RunNo: **166225**
Client ID: **ZZZZZZ**	Batch ID: **95023**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **10/5/2022**	SeqNo: **4858815**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	98.093	20	100.0	0	98.1	75	125	98.14	0.0472	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Pre-filter-092722
Lab Order:	N052819	**Collection Date:**	9/27/2022 8:15:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052819-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_221004A**	QC Batch: **95009**			PrepDate:	**10/3/2022**		Analyst: **DJ**
Manganese	ND	0.026	0.50		µg/L	1	10/4/2022 01:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Post-filter-092722
Lab Order:	N052819	**Collection Date:**	9/27/2022 8:30:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052819-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_221004A**	QC Batch: **95009**			PrepDate:		**10/3/2022**	Analyst: **DJ**
Manganese	1.5	0.026	0.50		µg/L	1	10/4/2022 01:26 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052819
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-95009**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166205**
Client ID: **PBW**	Batch ID: **95009**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/4/2022**	SeqNo: **4858023**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	ND	0.50									

Sample ID: **LCS-95009**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166205**
Client ID: **LCSW**	Batch ID: **95009**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/4/2022**	SeqNo: **4858024**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	94.414	0.50	100.0	0	94.4	85	115				

Sample ID: **N052843-001E-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166205**
Client ID: **ZZZZZZ**	Batch ID: **95009**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/4/2022**	SeqNo: **4858043**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	2938.966	12	2500	675.3	90.5	75	125				

Sample ID: **N052843-001E-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166205**
Client ID: **ZZZZZZ**	Batch ID: **95009**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/4/2022**	SeqNo: **4858044**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	2928.119	12	2500	675.3	90.1	75	125	2939	0.370	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F:562.219.7436
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Arcadis	Report to: Brian Prowd	Bill to: Marty Bloes	EDD Requirement		QA/QC		Sample Receipt Condition
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	Excel EDD		RTNE		Y N
Address: Roseville, CA 95678	Email: brian.prowd@arcadis.com; daniel.moore@crtiseen.com	Address:	Geotracker		RWQCB	✓	1. Chilled /
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.# SWA-ASSET-C9817-051	Labspec		CalTrans		2. Headspace /
Submitted By: Kevin Ashley		Phone: 949-727-1400. ext 200 Fax:	Others	✓	LEVEL III		3. Container Intact /
Title: O&M Operator	Phone: 916-786-3302 Fax:		Specify: RWQCB		LEVEL IV		4. Seal Present 3 /
Signature: Date: 9/27/22	Sampled By: Kevin A.		Global ID:		Regulatory		5. IR number
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may				Specify State:		6. Method of Cooling: Ice
Project Name: PG&E Topock - OMM TCS PWTF	Signature: Date: 9-27-22	Matrix: Ground / Sediment; Potable / Soil; NPDES / Other Solid; Surface / Water X					Sample Temp: 4.7°C
Project Number: 30108882							Courier: ASSET
							Tracking No.:

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH, Filtered (250 mL poly)	Dissolved metals Iron, Manganese (SW6020) FF; HNO3; Filtered (500mL poly)	Total chromium (SW6020) No filter; HNO3 (500mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052819-01	Backwash Pre-filter-092722	9/27/22	815A		X	X	X	E	3	PV	BNS	
2	-02	Backwash Post-filter-092722	9/27/22	830A		X	X	X	E	3	PV	BNS	
3													
4													
5													
7													
8													
9													
10													
11													
12													
13													
14													

Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Kevin Ashley	9/27/22 19:45	Dante Ortiz Dante Ortiz	9/27/22 14:45
Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:
Dante Ortiz Dante Ortiz	9/27/22 18:08	Yoandra Rodriguez	9/27/22 1808
Relinquished by (Signature and Printed Name):	Date/Time:	Relinquished by (Signature and Printed Name):	Date/Time:

Turn Around Time (TAT)

- [ ] A = < 24 Hrs or Same Day TAT
- [ ] B = Next Workday
- [ ] C = 2 Workdays
- [ ] D = 3 Workdays
- [x] E = Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms

1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
   Less than 24 Hrs.=200% NextDay=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 5% of the total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives:

H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	
Z=Zn(AC)$_2$	O=NaOH	T=$Na_2S_2O_3$		
Others/Specify:	B	(NH4)2SO4/NH4OH		

Container Type:

T=Tube	V=VOA	P=Pint
J=Jar	B=Tedlar	G=Glass
M=Metal	M=Metal	C=Can

White=Laboratory Copy
Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	9/27/2022	Workorder:	N052819
Rep sample Temp (Deg C):	4.7	IR Gun ID:	3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For:

Checklist Completed By: YR EFanegoF 9/28/2022

for:

Reviewed By: MBC 9/29/2022

ASSET Laboratories

WORK ORDER Summary

28-Sep-22

WorkOrder: N052819

Client ID: ARCUS02

Project: PG&E Topock - OMM TCS PWTF, 30106892 **QC Level:** Level IV **Date Received:** 9/27/2022 6:08 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052819-001A	Backwash Pre-filter-092722	9/27/2022 8:15:00 AM	10/12/2022	Water	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052819-001B			10/12/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			10/12/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			10/12/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			10/12/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052819-001C			10/12/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			10/12/2022		EPA 6020	TOTAL METALS BY ICPMS	☐	☐	☐	WW
N052819-002A	Backwash Post-filter-092722	9/27/2022 8:30:00 AM	10/12/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052819-002B			10/12/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			10/12/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			10/12/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			10/12/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052819-002C			10/12/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			10/12/2022		EPA 6020	TOTAL METALS BY ICPMS	☐	☐	☐	WW
N052819-003A	FOLDER	10/12/2022	10/12/2022		Folder	Folder	☐	☐	☐	LAB
			10/12/2022		Folder	Level IV Report	☐	☐	☐	LAB
			10/12/2022		Folder	Folder	☐	☐	☐	LAB

October 11, 2022

Brian Prowd
ARCADIS U.S., Inc. - California
1410 Rocky Ridge Dr #330
Roseville, CA 95661

TEL: (916) 786-3302
FAX:

Workorder No.: N052822

RE: PG&E Topock - OMM TCS PWTF, 30106892

Attention: Brian Prowd

Enclosed are the results for sample(s) received on September 27, 2022 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

CLIENT: ARCADIS U.S., Inc. - California
Project: PG&E Topock - OMM TCS PWTF, 30106892
Lab Order: N052822
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N052822-001A	Backwash Pre-filter-092122	Water	9/21/2022 9:05:00 AM	9/27/2022	10/11/2022
N052822-001B	Backwash Pre-filter-092122	Water	9/21/2022 9:05:00 AM	9/27/2022	10/11/2022
N052822-001C	Backwash Pre-filter-092122	Water	9/21/2022 9:05:00 AM	9/27/2022	10/11/2022
N052822-002A	Backwash Post-filter-092122	Water	9/21/2022 9:15:00 AM	9/27/2022	10/11/2022
N052822-002B	Backwash Post-filter-092122	Water	9/21/2022 9:15:00 AM	9/27/2022	10/11/2022
N052822-002C	Backwash Post-filter-092122	Water	9/21/2022 9:15:00 AM	9/27/2022	10/11/2022

CLIENT: ARCADIS U.S., Inc. - California
Lab Order: N052822
Project: PG&E Topock - OMM TCS PWTF, 30106892
Lab ID: N052822-001

Client Sample ID: Backwash Pre-filter-092122
Collection Date: 9/21/2022 9:05:00 AM
Matrix: WATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220930A**	QC Batch: **R166109**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	460	1.3	10		µg/L	50	9/30/2022 10:19 AM
TOTAL METALS BY ICPMS							
			EPA 3010A		**EPA 6020**		
RunID: **NV00922-ICP8_221004B**	QC Batch: **95010**			PrepDate:	**10/3/2022**		Analyst: **DJ**
Chromium	440	0.18	5.0		µg/L	5	10/4/2022 03:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Post-filter-092122
Lab Order:	N052822	**Collection Date:**	9/21/2022 9:15:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052822-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM BY IC							
			EPA 218.6				
RunID: **NV00922-IC7_220930A**	QC Batch: **R166109**			PrepDate:			Analyst: **RAB**
Hexavalent Chromium	460	1.3	10		µg/L	50	9/30/2022 10:29 AM
TOTAL METALS BY ICPMS							
	EPA 3010A			**EPA 6020**			
RunID: **NV00922-ICP8_221004B**	QC Batch: **95010**			PrepDate:	**10/3/2022**		Analyst: **DJ**
Chromium	440	0.18	5.0		µg/L	5	10/4/2022 03:48 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052822
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **MB-R166109**	SampType: **MBLK**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **PBW**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854258**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R166109**	SampType: **LCS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **LCSW**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854259**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.134	0.20	5.000	0	103	90	110				

Sample ID: **N052841-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854265**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2015.520	40	1000	1016	100	90	110				

Sample ID: **N052841-001AMSD**	SampType: **MSD**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854266**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2007.380	40	1000	1016	99.2	90	110	2016	0.405	20	

Sample ID: **N052841-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854270**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	2624.420	40	1000	1572	105	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052822
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052841-002ADUP**	SampType: **DUP**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854271**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1611.560	40						1572	2.49	20	

Sample ID: **N052843-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854273**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	3094.300	40	1000	2089	101	90	110				

Sample ID: **N052843-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854275**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	1.897	0.20	1.000	0.9642	93.3	90	110				

Sample ID: **N052819-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854276**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	676.255	10	250.0	413.1	105	90	110				

Sample ID: **N052819-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854277**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	669.895	10	250.0	404.0	106	90	110				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052822
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_WPGE

Sample ID: **N052822-001AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854278**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	715.705	10	250.0	456.4	104	90	110				

Sample ID: **N052822-002AMS**	SampType: **MS**	TestCode: **218.6_WPGE**	Units: **µg/L**	Prep Date:	RunNo: **166109**
Client ID: **ZZZZZZ**	Batch ID: **R166109**	TestNo: **EPA 218.6**		Analysis Date: **9/30/2022**	SeqNo: **4854279**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	710.010	10	250.0	455.9	102	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052822
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_W_CRPGE_TPK

Sample ID: **MB-95010**	SampType: **MBLK**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166195**
Client ID: **PBW**	Batch ID: **95010**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/3/2022**	SeqNo: **4857708**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									

Sample ID: **LCS-95010**	SampType: **LCS**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166195**
Client ID: **LCSW**	Batch ID: **95010**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/3/2022**	SeqNo: **4857709**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10.209	1.0	10.00	0	102	85	115				

Sample ID: **N052843-001F-MS**	SampType: **MS**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166195**
Client ID: **ZZZZZZ**	Batch ID: **95010**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/3/2022**	SeqNo: **4857731**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	2287.928	25	250.0	2007	112	75	125				

Sample ID: **N052843-001F-MSD**	SampType: **MSD**	TestCode: **6020_W_CRP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166195**
Client ID: **ZZZZZZ**	Batch ID: **95010**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/3/2022**	SeqNo: **4857732**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	2302.251	25	250.0	2007	118	75	125	2288	0.624	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- Calculations are based on raw values

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Pre-filter-092122
Lab Order:	N052822	**Collection Date:**	9/21/2022 9:05:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052822-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_221005B**	QC Batch: **95023**				PrepDate:	**10/4/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	10/5/2022 03:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Post-filter-092122
Lab Order:	N052822	**Collection Date:**	9/21/2022 9:15:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052822-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP							
	EPA 3010A				**EPA 6010B**		
RunID: **NV00922-ICP2_221005B**	QC Batch: **95023**				PrepDate:	**10/4/2022**	Analyst: **DJ**
Iron	ND	13	20		µg/L	1	10/5/2022 03:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052822
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDPGEPPB

Sample ID: **MB-95023**	SampType: **MBLK**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **10/4/2022**	RunNo: **166225**
Client ID: **PBW**	Batch ID: **95023**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **10/5/2022**	SeqNo: **4858803**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	20									

Sample ID: **LCS1-95023**	SampType: **LCS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **10/4/2022**	RunNo: **166225**
Client ID: **LCSW**	Batch ID: **95023**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **10/5/2022**	SeqNo: **4858804**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	90.909	20	100.0	0	90.9	85	115				

Sample ID: **N052843-001E-MS1**	SampType: **MS**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **10/4/2022**	RunNo: **166225**
Client ID: **ZZZZZZ**	Batch ID: **95023**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **10/5/2022**	SeqNo: **4858814**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	98.139	20	100.0	0	98.1	75	125				

Sample ID: **N052843-001E-MSD**	SampType: **MSD**	TestCode: **6010_WDPG**	Units: **µg/L**	Prep Date: **10/4/2022**	RunNo: **166225**
Client ID: **ZZZZZZ**	Batch ID: **95023**	TestNo: **EPA 6010B**	**EPA 3010A**	Analysis Date: **10/5/2022**	SeqNo: **4858815**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	98.093	20	100.0	0	98.1	75	125	98.14	0.0472	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Pre-filter-092122
Lab Order:	N052822	**Collection Date:**	9/21/2022 9:05:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052822-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_221004A**	QC Batch: **95009**			PrepDate:	**10/3/2022**		Analyst: **DJ**
Manganese	2.2	0.026	0.50		µg/L	1	10/4/2022 01:32 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	ARCADIS U.S., Inc. - California	**Client Sample ID:**	Backwash Post-filter-092122
Lab Order:	N052822	**Collection Date:**	9/21/2022 9:15:00 AM
Project:	PG&E Topock - OMM TCS PWTF, 30106892	**Matrix:**	WATER
Lab ID:	N052822-002		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **NV00922-ICP8_221004A**	QC Batch: **95009**			PrepDate:	**10/3/2022**		Analyst: **DJ**
Manganese	2.3	0.026	0.50		µg/L	1	10/4/2022 01:38 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: ARCADIS U.S., Inc. - California
Work Order: N052822
Project: PG&E Topock - OMM TCS PWTF, 30106892

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS_TPK

Sample ID: **MB-95009**	SampType: **MBLK**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166205**
Client ID: **PBW**	Batch ID: **95009**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/4/2022**	SeqNo: **4858023**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	ND	0.50									

Sample ID: **LCS-95009**	SampType: **LCS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166205**
Client ID: **LCSW**	Batch ID: **95009**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/4/2022**	SeqNo: **4858024**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	94.414	0.50	100.0	0	94.4	85	115				

Sample ID: **N052843-001E-MS**	SampType: **MS**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166205**
Client ID: **ZZZZZZ**	Batch ID: **95009**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/4/2022**	SeqNo: **4858043**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	2938.966	12	2500	675.3	90.5	75	125				

Sample ID: **N052843-001E-MSD**	SampType: **MSD**	TestCode: **6020_DIS_TP**	Units: **µg/L**	Prep Date: **10/3/2022**	RunNo: **166205**
Client ID: **ZZZZZZ**	Batch ID: **95009**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **10/4/2022**	SeqNo: **4858044**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	2928.119	12	2500	675.3	90.1	75	125	2939	0.370	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

ASSET LABORATORIES

ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

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California: 11060 Artesia Blvd., Ste C, Cerritos, CA 90703
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Page 1 of 1

Client: Arcadis	Report to: Brian Prowd	Bill to: Marty Bloes	EDD Requirement: Excel EDD; Geotracker; Labspec; Others ✓; Specify: RWQCB; Global ID:
Address: 101 Creekside Ridge Court, Suite 200	Company: Arcadis	Address:	QA/QC: RTNE; RWQCB ✓; CalTrans; LEVEL III; LEVEL IV; Regulatory; Specify State:
Address: Roseville, CA 95678	Email: brian.prowd@arcadis.com; daniel.moore@citigen.com	Address:	Sample Receipt Condition: 1. Chilled Y; 2. Headspace; 3. Container Intact Y; 4. Seal Present Y; 5. IR number 3; 6. Method of Cooling: Ice
Phone: 916-786-3302 Fax:	Address: 101 Creekside Ridge Court, Roseville, CA 95678	Email to: mbloes@pivox.com P.O.# SWA-ASSET-C9817-051	Sample Temp: 4.7°C
Submitted By: Mark Galloway	Phone: 916-786-3302 Fax:	Phone: 949-727-1400. ext 200 Fax:	Courier: ASSET
Title: O&M OPERATOR			Tracking No.:
Signature: Date: 9/21/22	Sampled By: KEVIN ASHLEY		
I hereby authorize ASSET Labs to perform the tests indicated below.	I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may		
Project Name: PG&E Topock - OMM TCS PWTF	Signature: Date: 9/21/22		
Project Number: 30106892			

Matrix: Ground; Sediment; Potable; Soil; NPDES; Other Solid; Surface; Water X

Item No.	Laboratory Work Order No.	Sample ID/Location	Sample Date	Sample Time	Others	Cr(VI) FF (E218.6) (NH4)2, SO4, NH4, OH, Filtered (250 mL poly)	Dissolved metals Iron, Manganese (SW6020) FF; HNO3; Filtered (500mL poly)	Total chromium (SW6020) No filter; HNO3 (500mL poly)	Turn Around Time	No. of Container	Container Type	PRESERVATION	Remarks
1	N052822-01	Backwash Pre-filter-092122	9/21/22	905		X	X	X	E	3	PV	BNS	
2	-02	Backwash Post-filter-092122	9/21/22	915		X	X	X	E	3	PV	BNS	
3													
4													
5													
7													
8													
9													
10													
11													
12													
13													
14													

Relinquished by (Signature and Printed Name): Mark Galloway Date/Time: 9/21/22 14:45	Relinquished by (Signature and Printed Name): Santa Cruz Parte Ortiz Date/Time: 9/21/22 14:45
Relinquished by (Signature and Printed Name): Santa Cruz Parte Ortiz Date/Time: 9/21/22 18:08	Relinquished by (Signature and Printed Name): Yoandra Rodriguez Date/Time: 9/21/22 1808
Relinquished by (Signature and Printed Name): Date/Time:	Relinquished by (Signature and Printed Name): Date/Time:

Turn Around Time (TAT)

	A	< 24 Hrs or Same Day TAT
	B	= Next Workday
	C	= 2 Workdays
	D	= 3 Workdays
X	E	= Routine 5-7 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00PM.

Special Instruction:

Terms
1. All samples will be disposed in 45 days and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
Less than 24 Hrs =200% Next Day=100% 2 Workdays=50% 3 Workdays=35 % 4 Workdays=20%
3. Custom EDD formats will be an additional 3% of the total project price.
5. Trip Blanks and Equipment Blanks are billable sample
6. Asset Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of reports needed.
9. For subcontracted analysis, TAT and Surcharges will vary.

White=Laboratory Copy

Preservatives:

H=HCL	N=HNO_3	S=H_2SO_4	C=4°C	
Z=$Zn(AC)_2$	O=NaOH	T=$Na_2S_2O_3$		
Others/Specify:	B	(NH4)2SO4/NH4OH		

Container Type:

T=Tube	V=VOA	P=Pint
J=Jar	B=Tedlar	G=Glass
M=Metal	M=Metal	C=Can

Yellow=Customer's Copy

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On: 9/27/2022 Workorder: N052822

Rep sample Temp (Deg C): 4.7 IR Gun ID: 3

Temp Blank: ☑ Yes ☐ No

Carrier name: ASSET

Last 4 digits of Tracking No.: NA Packing Material Used: None

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

For:

Checklist Completed By: YR EFanegoF 9/28/2022

Reviewed By: for: MBC 9/29/2022

ASSET Laboratories

WORK ORDER Summary

29-Sep-22

WorkOrder: N052822

Client ID: ARCUS02

Project: PG&E Topock - OMM TCS PWTF, 30106892 **QC Level:** Level IV **Date Received:** 9/27/2022 6:08 PM

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N052822-001A	Backwash Pre-filter-092122	9/21/2022 9:05:00 AM	10/12/2022	Water	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052822-001B			10/12/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			10/12/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			10/12/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			10/12/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052822-001C			10/12/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			10/12/2022		EPA 6020	TOTAL METALS BY ICPMS	☐	☐	☐	WW
N052822-002A	Backwash Post-filter-092122	9/21/2022 9:15:00 AM	10/12/2022		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N052822-002B			10/12/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			10/12/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			10/12/2022		EPA 6010B	DISSOLVED METALS BY ICP	☐	☐	☐	WW
			10/12/2022		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N052822-002C			10/12/2022		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			10/12/2022		EPA 6020	TOTAL METALS BY ICPMS	☐	☐	☐	WW
N052822-003A	FOLDER	10/12/2022	10/12/2022		Folder	Folder	☐	☐	☐	LAB
			10/12/2022		Folder	Level IV Report	☐	☐	☐	LAB
			10/12/2022		Folder	Folder	☐	☐	☐	LAB

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