Curt Russell
Topock Project Manager
Environmental Remediation

Topock Compressor Station
145453 National Trails Hwy
Needles, CA 92363

Mailing Address
P.O. Box 337
Needles, CA 92363

760.791.5884
Email: gcr4@pge.com

March 10, 2022

Ms. Pamela Innis
U.S. Department of the Interior
CHF Remedial Project Manager
One North Central Avenue, Suite 800
Phoenix, AZ 85004-4427

Mr. Aaron Yue
California Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, CA 90630

Subject: **February 2022 Monthly Progress Report for the Final Groundwater Remedy Construction and Startup, PG&E Topock Compressor Station, Needles, California**
(Document ID: TPK_Monthly_Progress_Rpt_February_2022_20220310)

Dear Ms. Innis and Mr. Yue:

In compliance with the *1996 Corrective Action Consent Agreement* (CACA) (Attachment 6, Part E, Section 9a and Attachment 7) and the *2013 Remedial Design/Remedial Action Consent Decree* (CD) (Paragraph 32 and Appendix C, Section 5), and pursuant to the *Construction/Remedial Action Work Plan* (C/RAWP) (Section 2.6.3.1), this monthly report describes activities taken at Pacific Gas and Electric Company's (PG&E's) Topock Compressor Station in February 2022, as well as activities planned for the next six weeks (March 6 to April 16, 2022), and presents available results from sampling and testing performed in the reporting period.

This report also discusses material deviations from the approved design documents and/or the C/RAWP, if any, that PG&E has proposed to DTSC and DOI, or that have been approved by DTSC and DOI. This report highlights key personnel changes, if any, and summarizes activities performed and activities planned in support of DOI's 2012 Community Involvement Plan and DTSC's 2019 Community Outreach Plan, as well as contacts with the local community, representatives of the press, and/or public interest groups, if any. This report also includes data from samples collected as part of the sitewide groundwater monitoring program within 60 days of sample collection, as required by the Condition of Approval # xi in DTSC's approval letter dated August 24, 2018.

Please note that since activities conducted to comply with the project's Applicable or Relevant and Appropriate Requirement (ARARs) and the Subsequent Environmental Impact Report (SEIR) mitigation measures are currently reported in separate compliance reports, this information is not repeated in the monthly reports. Monthly progress reports will be submitted to DTSC and DOI by the 10th day of the following month during construction and start-up of the groundwater remedy at the Topock Compressor Station which officially began on October 2, 2018. This is the 41st monthly progress report. Please contact me at (760) 791-5884 if you have any questions or comments regarding this submittal.

Sincerely,

Curt Russell
Topock Project Manager

Topock Project Executive Abstract

Document Title: *February 2022 Monthly Progress Report for the Groundwater Remedy Construction and Startup, PG&E Topock Compressor Station, Needles, California* Submitting Agency: DOI, DTSC Final Document? X Yes __ No	Date of Document: 03/10/2022 Who Created this Document?: (i.e. PG&E, DTSC, DOI, Other) PG&E
Priority Status: __ HIGH __ MED X LOW	Is this time critical?__ Yes X No
Type of Document: __ Draft X Report __ Letter __ Memo __ Other / Explain:	Action Required: X Information Only __Review and Input __Other / Explain:
What does this information pertain to? __ Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA)/Preliminary Assessment (PA) __ RCRA Facility Investigation (RFI)/Remedial Investigation (RI) (including Risk Assessment) __ Corrective Measures Study (CMS)/Feasibility Study (FS) X Corrective Measures Implementation (CMI)/ Remedial Action (RA) __ California Environmental Quality Act (CEQA)/ Environmental Impact Report (EIR) __ Interim Measures __ Other / Explain:	Is this a Regulatory Requirement? X Yes __ No If no, why is the document needed?
What is the consequence of NOT doing this item? What is the consequence of DOING this item? The consequence for not doing this item is PG&E will be out of compliance with the 1996 Corrective Action Consent Agreement (CACA) and the 2013 Remedial Design/ Remedial Action Consent Decree (CD), as well as the Construction/Remedial Action Work Plan (C/RAWP).	Other Justification/s: __ Permit __ Other / Explain:

Brief Summary of attached document:

This monthly report describes activities taken in February 2022 as well as activities planned for the next six weeks (March 6 to April 16, 2022) and presents available results from sampling and testing in the reporting period. In addition, this report discusses material deviations from the approved design documents and/or the *Construction/ Remedial Action Work Plan* (C/RAWP), if any, that PG&E has proposed to the California Department of Toxic Substances Control (DTSC) and the U.S. Department of the Interior (DOI) or that have been approved by DTSC and DOI. This report also highlights key personnel changes, if any, and summarizes activities performed and activities planned at the Topock Compressor Station in support of DOI's 2012 Community Involvement Plan and DTSC's 2019 Community Outreach Plan, as well as contacts with local community, representatives of the press, and/or public interest groups, if any.

Written by: Pacific Gas and Electric Company

Recommendations:
Provide input to PG&E.

How is this information related to the Final Remedy or Regulatory Requirements:
This submittal is required in compliance with the CACA, CD, and pursuant to the C/RAWP.

Other requirements of this information?
None.

JACOBS

February 2022
Monthly Progress Report for the Final Groundwater Remedy Construction and Startup

PG&E Topock Compressor Station
Needles, California

Document ID: TPK_Monthly_Progress_Rpt_February_20220310

March 2022

Prepared for
U.S. Department of the Interior and California Department of Toxic Substances Control

On Behalf of
Pacific Gas and Electric Company

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Acronyms and Abbreviations

Acronym	Definition
µg/m^3	microgram(s) per cubic meter
AOC	Area of Concern
ARAR	applicable or relevant and appropriate requirement
BLM	U.S. Bureau of Land Management
BMP	best management practice
CACA	Corrective Action Consent Agreement
C/RAWP	Construction/Remedial Action Work Plan
CD	Consent Decree
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CH2M	CH2M HILL, Inc.
CHQ	Construction Headquarters
COC	Constituents of Concern
CRWQCB	California Regional Water Quality Control Board, Colorado River Basin Region
DOI	United States Department of the Interior
DTSC	California Department of Toxic Substances Control
ERTC	Environmental Release to Construct
FCR	field contact representative
IM-3	Interim Measure No. 3
IRZ	in-situ reactive zone
LOC	level of concern
NTH	National Trails Highway
PG&E	Pacific Gas and Electric Company
RCRA	Resource Conservation and Recovery Act
RPWC	Remedy-Produced Water Conditioning
SEIR	Subsequent Environmental Impact Report
SMP	Soil Management Plan
SPY	Soil Processing Yard
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TCS	Topock Compressor Station
TRC	Technical Review Committee
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
WEAT	Worker Environmental Awareness Training
WVR	Work Variance Request

1. Introduction

Pacific Gas and Electric Company (PG&E) is implementing the final groundwater remedy to address chromium in groundwater near the PG&E Topock Compressor Station (TCS), located in eastern San Bernardino County 15 miles southeast of the city of Needles, California. The U.S. Department of the Interior (DOI) is the lead federal agency overseeing remedial actions at the TCS. PG&E and the United States executed a Remedial Design/Remedial Action Consent Decree (CD), on behalf of the DOI, under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) in 2012, which was approved by the U.S. District Court for the Central District of California in November 2013 (DOI, 2013). Paragraph 32 and Appendix C (Section 5) of the CD requires PG&E to submit to DOI monthly electronic progress reports during construction of the remedial action, and to submit progress reports on a quarterly basis after the selected remedy has been implemented and demonstrated to be operating as intended.

The California Department of Toxic Substances Control (DTSC) is the lead state agency overseeing corrective actions at the TCS. Remedial activities are being performed in conformance with the requirements of the Resource Conservation and Recovery Act (RCRA) Corrective Action pursuant to a Corrective Action Consent Agreement (CACA) entered into by PG&E and the DTSC in February 1996 (DTSC, 1996). Attachment 6, Part E, Section 9a and Attachment 7 of the CACA require PG&E to provide certain information in monthly progress reports during construction of the corrective action.

In compliance with the CACA and CD requirements, PG&E proposed a template for the monthly progress reports in Exhibit 2.6-2 of the Construction/Remedial Action Work Plan (C/RAWP) (CH2M HILL, Inc. [CH2M], 2015b). The C/RAWP was approved by DOI on April 3, 2018 (DOI, 2018) and DTSC on April 24, 2018 (DTSC, 2018a).

This is the 41st of the monthly progress reports that will be submitted to DOI and DTSC for the duration of the remedy construction and startup. This monthly progress report documents activities during February 2022, and follows the content and format described in Exhibit 2.6-2 of the approved C/RAWP. The report is organized as follows:

- Sections 2.1 through 2.7 describe completed construction activities; data collected, generated or received; nature and volume of waste generated; waste handling/disposal; issues encountered; actions taken to rectify problems/issues; personnel changes; and Work Variance Requests (WVRs; i.e., material deviations from the design documents, the C/RAWP, or other approved work plans), if any, as well as agencies' actions on those requests, and potential schedule impacts.
- Sections 2.8 through 2.9 summarize key project personnel changes, if any, contacts with representatives of the press, local community, or public interest groups during the reporting period, other activities provided to assist DTSC and/or DOI in support of the Community Outreach Plan (DTSC, 2019) and/or Community Involvement Plan (DOI, 2012), respectively, and anticipated near-term (approximately next six weeks) activities in support of the Community Outreach and Community Involvement Plans.
- Section 2.10 provides information relating to the construction schedule progress, sequencing of activities, information regarding percentage of completion, unresolved delays encountered or anticipated that may affect the future schedule, and a description of efforts made to mitigate those delays or anticipated delays, if any.
- Section 2.11 presents validated data from samples collected as part of the sitewide groundwater monitoring program within 60 days of sample collection, as required by the Condition of Approval # xi in DTSC's approval letter dated August 24, 2018 (DTSC, 2018a).
- Section 3 lists the references cited in this report.

Please note that since activities conducted to comply with the project's Applicable or Relevant and Appropriate Requirement (ARARs) and the Subsequent Environmental Impact Report (SEIR) (DTSC, 2018b) mitigation measures are currently reported in separate compliance reports, the same information is not repeated in the monthly reports.

2. Monthly Update

2.1 Work Completed

Phase 1 remedy construction, which began on October 2, 2018, is substantially complete in January 2022. Phase 1 includes the National Trail Highway (NTH) Insitu Reactive Zone (IRZ) with 22 remediation wells (for injection and/or extraction) and a robust network of 75 monitoring wells (for measuring water levels and quality), as well as a network of over 74,000 linear feet of water conveyance piping and 41,000 feet of electrical conduits that connect the remediation wells to the power supply system, the carbon amendment building, and the Remedy-Produced Water Conditioning (RPWC) system.

Phase 1 systems and components have been integrated and tested to make sure they function properly. On December 22, 2021, PG&E initiated injection of ethanol into the groundwater at select NTH IRZ wells using temporary power (i.e., portable generator). As of February 28, 2022, the permanent power system (i.e., power from the TCS) is undergoing commissioning and testing and is anticipated to be fully commissioned by March 2022. At that time, PG&E will switch the remedy system to permanent power and turn on the full NTH IRZ system and the RPWC system.

Concurrently, after receipt of DTSC's and DOI's approvals, PG&E turned off the IM-3 extraction wells (TW-2D and TW-3D) on December 21, 2021 and started to prepare IM-3 for layup. The preparation for lay-up is anticipated to last about 3 months, target completion in March 2022. Once the preparation is complete, PG&E will notify the agencies that IM-3 is ready for lay-up. When the IM-3 system is in a lay-up condition, the system will be left in a safe, secure, and preserved state and will not operate again until agency approval is received for decommissioning and removal of the system. A summary of activities at IM-3 is presented in Section 2.12 of this monthly report.

Starting in February 2022, PG&E initiated the planning for Phase 2 remedy construction. An online Phase 2 Construction Project Initiation Meeting was conducted on February 23, 2022 with representatives from PG&E, PG&E contractors, agencies, and other stakeholders. A second version of the Phase 2 Construction Project Initiation Meeting was scheduled for March 2, 2022 as a face-to-face onsite meeting. Phase 2 includes additional wells (located in Bat Cave Wash/East Ravine/TCS, on the Transwestern Bench, and along historic route 66), and pipelines connecting some of the additional wells as well as a pipeline connecting the previously installed Riverbank (RB) wells.

Additional highlights of key activities related to the construction of the groundwater remedy completed during the reporting period include the following (in chronological order):

- On July 13, 2018, PG&E sent via email the first weekly six-week look-ahead schedule for the remedy construction field work. The weekly emails provide highlights of field activities in the previous week, field activities scheduled for the next week, and planned activities for the next six weeks. Recipients of the weekly emails are DOI, DTSC, the U.S. Fish and Wildlife Service (USFWS), the California Regional Water Quality Control Board, Colorado River Basin Region (CRWQCB), the Metropolitan Water District of Southern California, Tribes, and the Technical Review Committee (TRC). PG&E continues to send these weekly emails to date. As of February 28, 2022, a total of 192 six-week look-ahead schedule emails have been sent. Of those, four six-week look-ahead schedule emails were sent in February 2022 (on February 6, 13, 19, and 27).
- On August 10, 2018, PG&E issued the first Environmental Release to Construct (ERTC) to contractors. As of February 28, 2022, a total of 84 ERTCs were issued for mobilization, construction, site restoration, and revegetation/mitigation planting activities. The ERTCs are listed in Tables 2-1a and 2-1b. In February 2022, the following ERTCs and Addendums were issued:

- On February 1, Addendum 3 to ERTC #11a was issued for the rebuild of C8-Alt/C9 cover and the continuation of the floodplain access road from south of BNSF RR bridge to north of C8-Alt. A Last Look was conducted on February 3 and work started on February 3.
- On February 15, ERTC #22 was issued for the removal of bollards and fence posts around IM3 injection well control panels (included a solar panel and a Programmable Logic Controller, both of which were removed). A Last Look was conducted on March 1 and work started on March 2.
- On February 15, Addendum 2 to ERTC #11b was issued for the installation of stormwater erosion control measures along Pipeline B. A Last Look was conducted on February 16 and work started on February 21.
- On February 22, ERTC #5aq was issued for the site preparation for and drilling of freshwater injection well FW-2 along the access road to Bat Cave Wash. A Last Look was conducted on March 2.
- On February 23, ERTC #5ar was issued for the site preparation at the TW Bench for drilling of wells TWB-1 and TWB-2. A Last Look was conducted on March 3 prior to the start of work on March 3.

- Starting on October 4, 2018, PG&E has published a daily construction activities list and discussed the list at the morning tailboards with Tribes and agency representatives. This daily list is intended to inform and facilitate observation by Tribes and agency representatives on site on that day. PG&E continues to publish these daily lists and discuss the list at the daily morning tailboards to date. In February 2022, a total of 22 daily construction activities lists were published and discussed at the morning tailboards.
- In February 2022, PG&E performed the following construction activities (note that Figures 2-1 and 2-2 show the locations of key areas and wells, and Table 2-2 presents the changes in well nomenclature):
  - **Attachment A** includes select photos of activities during this reporting period.
  - **Attachment B** presents all water analytical results from Phase 1 well drilling. Phase 1 well drilling is complete. Groundwater sampling to establish baseline concentrations at those wells is ongoing and their results are reported **Attachment G** of this report.
  - January 30 to February 5 activities:
    - Continued system electrical installation and evaluation. Continued diagnosing issues related to the commissioning the connection of the remedy grid with the TCS electrical system.
    - Commenced installation of canopies at Nodes 2 and 4.
    - Continued functional testing of MW-20 Bench controls and IRZ well controls.
    - Continued SCADA configuration and testing.
    - Continued installation of chemical system at Remedy-produced Water Conditioning (RPWC) tank farm inside TCS.
    - Continued IRZ circulation and ethanol injection O&M activities.
    - Continued vegetation debris removal and irrigation system installation activities at mitigation planting area.
    - Conducted IM-3 tank cleaning, moat cleaning, and various waste management tasks.
    - Conducted groundwater sampling and transducer downloads at various locations.
  - February 6 to 12 activities:
    - Continued system electrical installation and evaluation. Continued diagnosing issues related to the commissioning the connection of the remedy grid with the TCS electrical system.
    - Continued installation of canopies at Nodes 2 and 4.

- Continued functional testing of MW-20 Bench controls and IRZ well controls.
- Continued SCADA configuration and testing.
- Continued IRZ circulation and ethanol injection O&M activities.
- Continued vegetation debris removal and irrigation system installation activities (including pressure testing and startup).
- Conducted IM-3 tank cleaning.
- Completed asphalt repairs along National Trails Highway.
- Commenced installation of roadway in C8Alt area.
- Recommenced processing soil in the SPY.

- February 13 to 19 activities:
  - Continued system electrical installation and evaluation. Prepared for testing of Remedy electrical system in advance of the commissioning the connection of the remedy grid with the TCS electrical system.
  - Poured slurry at Nodes 2 and 4.
  - Continued functional testing of MW-20 Bench controls and IRZ well controls.
  - Continued SCADA configuration and testing.
  - Continued IRZ circulation and ethanol injection O&M activities.
  - Continued irrigation system O&M activities.
  - Conducted IM-3 tank cleaning.
  - Continued installation of roadway in C8Alt area.
  - Continued processing soil in the Soil Processing Yard.
  - Prepared for new office trailer installation at Soil Processing yard.
  - Prepared for office trailer and conex box removal from Transwestern Bench.
  - Removed mats from the floodplain area.
  - Conducted pond, river water, and groundwater sampling.
- February 20 to 26 activities:
  - Continued system electrical installation and evaluation. Commenced Remedy electrical system testing by powering with a generator at TCS.
  - Commenced installing canopy panels at Nodes 2 and 4.
  - Continued functional testing of MW-20 Bench controls and IRZ well controls.
  - Continued IRZ circulation and ethanol injection O&M activities.
  - Continued irrigation system O&M activities.
  - Conducted IM-3 tank and microfilter cleaning.
  - Continued installation of roadway in C8Alt area.
  - Commenced stormwater improvement project for Pipeline B area
  - Completed processing soil in the Soil Processing Yard.
  - Prepared for new office trailer installation and yard grading at SPY.
  - Prepared for office trailer and conex box removal from Transwestern Bench.

- Removed mats from the floodplain area and groomed floodplain.
- Conducted surveying for the stormwater project and Phase 2A construction.
- Conduct groundwater sampling at various locations.

– Remedy Baseline/Opportunistic Soil Sampling in February 2022:

  - No baseline or opportunistic sampling during remedy construction was conducted since May 2021.
  - **Attachment C** includes a figure showing all soil sampling locations (since the start of remedy construction) and an excel spreadsheet with soil analytical results available to date.

– Fugitive Dust Monitoring/Perimeter Air Sampling in February 2022 (below are highlights, details are in **Attachment D**):

  - In February 2022, 24 real time dust observation/monitoring events were conducted at the perimeter of the work areas (outside of the exclusion zone). No exceedance of the action level for fugitive dust monitoring (100 µg/m^3) was observed in February 2022.
  - Tables D-1a and D-1b of **Attachment D** present all analytical results from air sampling events. All results are below the project level of concern (LOC) for hexavalent chromium which is 0.00094 µg/m3.

– Noise Monitoring in February 2022 (below are highlights, details are in **Attachment E**):

  Sound monitoring was not conducted in February 2022 as heavy construction is substantially complete and remaining work (primarily revegetation/mitigation planting in the floodplain and miscellaneous post-Phase 1 construction site restoration) did not occur in new areas.

2.2 Freshwater Usage, Waste Generation, and Management

As of February 28, 2022, the volumes of freshwater used for remedy construction and waste streams generated from remedy construction (starting on October 2, 2018), IRZ start-up and initial operation (starting on December 22, 2021), and revegetation/mitigation planting (starting with site preparation on December 20, 2021) are as follows:

2.2.1 Freshwater and Wastewater

- As of February 28, 2022, an approximate total of 8,252,958 gallons (25.33 acre-feet) of freshwater have been used, of which approximately 28.5 percent was for pilot boring/well installation/well testing and general construction, 8 percent was for hydrostatic testing of pipeline and piping/mechanical components inside well vaults, 61.1 percent was for fugitive dust suppression, and 2.4 percent for revegetation (salt leaching). Of this amount, approximately 200,391 gallons of freshwater was used for leaching of soluble salts from soil at the revegetation areas in the floodplain, 169,080 gallons of freshwater for fugitive dust control (specifically for floodplain revegetation areas, stormwater erosion work along Pipeline B, and soil processing at the Soil Processing Yard [SPY]), and 425 gallons of freshwater for general construction (specifically for electrical nodes 2 and 4 concrete work, backfill, and compaction) in February 2022.
- As of February 28, 2022, an approximate total of 112,325 gallons of hydrostatic testing water has been discharged to land (used for dust control). All water discharged to land was in compliance with the substantive requirements of State Water Resources Control Board (SWRCB) Water Quality Order 2003-0003-DWQ.

  No hydrostatic testing activity occurred in February 2022, therefore, there was no discharge to land from hydrostatic testing.
- As of February 2022, approximately 154,893 gallons of injectivity testing water has been discharged to land. No injection testing was conducted in February 2022.

- IM-3 treated an approximate total of 22,241,409 gallons of remedy wastewater (generated from drilling operations, well testing, aquifer testing) up to December 28, 2021. The treatment at IM-3 was terminated on December 28, 2021.
- As of February 28, 2022, an approximate total of 1,387,952 gallons of wastewater generated from drilling operations were discharged to Compressor Station evaporation pond #4. Between November 2020 and the week of July 19, 2021, no remedy wastewater was transported to Pond #4 as PG&E prepared for and removed sludge from the pond. After sludge was removed from the pond, during the week of July 26, 2021, PG&E disposed of approximately 14,000 gallons of wastewater generated from PGE-9 wells (part of SEIR Hydro-6 wells) to Pond #4. No remedy wastewater has been discharged to TCS ponds since August 2021.
- An approximate 37,200 gallons of IRZ backwash water was generated since December 22, 2021. Of which, an approximate 14,900 gallons of backwash water was generated in February 2022.

  Backwash water was stored in the frac tanks at the MW-20 Bench. While construction of the Remedy-produced Water Conditioning system at the TCS is being finalized, the IRZ backwash water is filtered at the MW-20 Bench, through the same filter as in the final design. The filtered water is stored in the conditioned water frac tank at the MW-20 Bench and per the remedy O&M contractor, the filter water is sampled in accordance with the approved sampling plan in the O&M Plan.

  Per the remedy O&M contractor, an approximate 494 gallons of purge water from well sampling was put into one of the MW-20 Bench frac tanks and reinjected along with the IRZ backwash water. Therefore, in February 2022, a total of 15,494 gallons (i.e., 14,900 gallons of IRZ backwash water plus 494 gallons of well purge water) was reinjected.

2.2.2 Displaced Materials/Soils/Clay

- As of February 28, 2022, approximately 13,031 cubic yards of displaced materials/excess soils were generated from remedy construction activities. Of those, approximately 333 cubic yards was generated from the removal of the soil cover at C8-Alt in February 2022. That soil was brought back to the SPY and placed in Soil Pile #159 (which was the soil pile that the material originally came from).

  The displaced materials/soils are tested, processed (if needed), and managed in accordance with the Soil Management Plan (which is Appendix L of the C/RAWP). To date, approximately 89.8% of the materials were classified as clean, suitable for reuse onsite. The remaining 10.2% of the materials (total weight of 1,517 tons or 1,250 cubic yards) were deemed not suitable for reuse onsite and were disposed of at US Ecology in Beatty, Nevada.
- Clean materials are often processed to remove rocks/boulders and plastics prior to reuse. Approximately 82% was fine materials and 18% was rocks/boulders.
- During the sorting of soil piles at the SPY (starting in October 2021), approximately 3 cubic yards of clay from Soil Pile #139 were identified, recovered, and stockpiled in the vicinity of the existing clay pile. In addition, approximately 1 cubic yard of clay from Soil Pile #140 was also recovered and stockpiled. Soil sorting and processing at the SPY was temporarily paused when the vegetation and debris cleanup started for the revegetation project. The recovered clay will be sampled after the completion of sorting of Soil Pile #139 in accordance with the Soil Management Plan.
- It is noted that during the soil processing/screening activities at the SPY, concrete debris was removed and separated from the processed soil. Encased, non-friable transite pipes are present inside several concrete chunks. Therefore, the concrete debris was properly profiled and will be disposed of in accordance with the profile approved by PG&E and US Ecology in Beatty, Nevada.

2.2.3 General Construction Waste, Sanitary Waste, and Recyclables

- As of February 28, 2022, approximately 2,039 cubic yards or 1,835 tons of general construction waste (assume density of 1800 pounds (0.9 tons) per cubic yard for dump debris, wetted for dust suppression), 277 tons of construction debris, 38 cubic yards of milled asphalt from NTH repair work, 2,062 tons of green waste, and 276 cubic yards of recyclables were generated from remedy

construction activities. Of which, an approximate 25 tons of general construction waste/trash and 830 tons of green waste were hauled offsite for disposal by Republic Services in February 2022. In addition, about 38 cubic yards of milled asphalt were generated and will be hauled offsite to US Ecology in Beatty, Nevada, in March 2022.

- In April 2021, approximately 40 cubic yards of asphalt was sent offsite for recycling at Kern Asphalt facility in Bakersfield, California. In September 2021, an approximate 27 cubic yards of old asphalt was removed from paving work along NTH. In addition, an approximate 1 cubic yard of old asphalt was removed from recent stormwater BMPs work at the TWB. These old asphalts were sent offsite for recycling on November 2, 2021.
- A total of nine tires were recovered during construction along Pipeline B/J and disposed of at Mohave Valley landfill in Fort Mohave, Arizona for disposal. No additional tires were encountered since February 2020.
- Sanitary waste from construction trailers/portable toilets is hauled offsite as needed.
- Starting in September 2019, recycling at the site was ceased due to the high costs of local recycling.

2.3 Worker Training and Education

- In February 2022, PG&E continues to implement health-protective practices at the site in response to the emergent broader public health threat posed by the COVID-19 virus, in accordance with guidance received from federal and state public health departments, and included, for example, implementation of social distancing protocols and increasing the frequency of cleaning of the common work areas. In addition, during the morning tailboards, on-site workers were provided with updated guidance relating to the mitigation of the risks of viral exposure and transmission. All new or returning workers or visitors are required to take a mandatory COVID-19 protocol briefing and complete a daily self-declaration form. As of February 28, 2022, a total of 594 personnel (including employees, contractors, and visitors) received the mandatory briefing.
- PG&E continues to provide the mandatory Site Health and Safety Training for its employees and contractors on a daily basis. As of February 28, 2022, a total of 320 health and safety training sessions were held and 852 employees and contractors received the training. Of those, in February 2022, 9 sessions were conducted and 24 employees/contractors/visitors were trained. After the training, the attendees signed the training roster.
- PG&E continues to provide the mandatory Worker Environmental Awareness Training (WEAT) to its employees and contractors that will be involved in the remedy construction project. In February 2022, a self-administered version of the WEAT was beta tested, similar to a self-study course that covers the same material as the previous WEAT. However, unlike the previous WEAT, the self-administered WEAT is available 24/7 and can be taken anywhere at any time. After the training, the WEAT attendees took a quiz and signed the WEAT Completion Form. As of February 28, 2022, 887 employees and contractors received the training. Of those, in February 2022, 27 employees/ contractors were trained or retrained. Educational brochures are made available to attendees of the training; they are designed to reinforce the key topics and highlight the take-aways discussed during the training.
- PG&E's onsite biologist also trained Field Contact Representatives (FCRs), who will be responsible for compliance with biological avoidance and mitigation measures. As of February 28, 2022, a total of 21 FCR training sessions were conducted. No FCR session was conducted in February 2022.
- Training records are kept electronically and at the temporary construction trailer at the SPY. The records are available upon request.

2.4 Status of Work Variance Requests (WVRs)

There were no proposed WVRs in February 2022. For reference, Table 2-3 includes information regarding activities related to approved and proposed WVRs (i.e., material deviations from the design documents, the C/RAWP, or other approved work plans), and agencies' actions on those requests.

2.5 Use of Future Activity Allowance

There was no proposed use of Future Activity Allowance (FAA) in February 2022. To date, the only use of FAA was associated with the TW-01 Aquifer Test, which is documented below.

In May 2021, DTSC prepared and adopted an addendum to the Groundwater Subsequent Environmental Impact Report (SEIR) for the TW-01 aquifer test activities. As part of the approval of the TW-01 aquifer test work plan, DTSC has also determined that the proposed additional water conveyance pipeline and power pole are considered future activities allowance (FAA) considered in the SEIR. DTSC and DOI approved the TW-01 aquifer test work plan on April 8, 2021. DTSC directed PG&E to track and record the additional infrastructures associated with TW-01 aquifer test as required by the SEIR mitigation measure CUL-1a-14. To date, the following additional infrastructures were associated with implementation of the TW-01 aquifer test:

- An approximate 2,090 linear feet (lf) of aboveground and 56 lf of belowground conveyance pipeline were installed. In addition, a trench (50 ft long x 3 ft deep x 3 ft wide) was excavated for piping installation under the access road on the MW-24 bench. A trench (6 ft long x 4.5 ft deep x 4 ft wide) was excavated to connect with the IM-3 spare pipe on the MW-20 bench. One temporary electrical pole was installed by Needles Electrical to provide electrical power needed for the TW-01 aquifer test.

2.6 Issues Encountered and Actions Taken to Rectify Issues/Problems

- PG&E continues to commission the electrical system to provide permanent power (from TCS) to the groundwater remedy. After an effort to bring on the permanent power system was unsuccessful in January 2022, PG&E continued to test the entire remedy electrical system during February using portable generators. Some failed electrical parts were identified and repaired or replaced. PG&E continues to evaluate the electrical system and will continue to use portable generators to operate the NTH IRZ until reconnected to the permanent power (from TCS).

- On February 17, 2022, PG&E submitted a request to USFWS, BLM, and CDFW for approval of various upland areas, east of the TCS, where work associated with the Pipeline B stormwater erosion control measures installation would occur outside of the designated work area. There would be no impact to jurisdictional water. All of these additional areas are still within the previously approved Action Area (2017 Updated PBA Action Area). PG&E received approvals for the agencies on February 18.

- On February 24, 2022, PG&E submitted another request to USFWS, BLM, and CDFW for approval of various areas in Bat Cave Wash and on the Transwestern Bench, where work associated with site preparation for installation of wells FW-2, TWB-1, and TWB-2 would occur outside of the designated work area. There would be no impacts to jurisdictional waters. All these areas occur outside the designated construction footprint, but still within the previously approved Action Area (2017 Updated PBA Action Area).

2.7 Key Personnel Changes

In February 2022, Colton Gerrard was added to the onsite PG&E team as Deputy Site Operations Manager, reporting to David Diaz.

2.8 Communication with the Public

There was no communication with the public in February 2022.

2.9 Planned Activities for Next Six Weeks

The planned activities for next six weeks (March 6 to April 16, 2022) include the following:

- Switch to TCS power from portable power.
- Full system start-up including start-up of the Remedy-produced Water Conditioning System.
- Start fence installation and planting in the floodplain revegetation areas.
- Continue site preparation for Phase 2 well drilling, specifically at wells TWB-1, TCS-1, and FW-2.
- Start Phase 2 well installation.
- With the start of Phase 2 remedy construction, recommence baseline soil sampling in accordance with the approved Groundwater Remedy Baseline Soil Sampling and Analysis Plan.
- Continue preparation for IM-3 lay-up.
- Continue to conduct noise and dust monitoring and inspection of SWPPP BMPs, as needed.
- Continue to manage displaced soil per the approved SMP.

Attachment G contains the six-week look-ahead schedule available at this time. Any adjustments to the schedule will occur as needed via the weekly emails (sent at the end of each week) and/or the daily list of construction activities (published daily and discussed with agency and Tribal representatives on site on that day).

2.10 Construction Schedule Review

Table 2-4 presents a summary of the percent completeness for key construction and site restoration activities as of February 28, 2022. In addition, the latest project schedule including remedy construction can be downloaded from the project website.

2.11 Available Sitewide Groundwater Monitoring Data (DTSC Condition of Approval xi)

Pursuant to Condition of Approval # xi in DTSC's approval letter dated August 24, 2018 (DTSC, 2018a), PG&E is required to report data from samples collected as part of the sitewide groundwater monitoring program within 60 days of sample collection. In compliance with this requirement, PG&E submitted validated data to DTSC via monthly emails. For ease of recordkeeping and to minimize the number of ad-hoc compliance reports/emails, PG&E has included validated data in each monthly progress report starting with the November 2018 monthly report. The validated data are included in Attachment H of this report.

2.12 IM-3 Shutdown and Preparation for Layup

On December 20, 2021, pursuant to the 2012 Settlement Agreement between the California Department of Toxic Substances Control (DTSC) and the Fort Mojave Indian Tribe (FMIT), Article 5b of Exhibit A, Additional Settlement Terms – Criteria for Decommissioning of IM-3, PG&E notified the FMIT that the IM-3 system is ready to be turned off since Phase 1 groundwater remedy equipment and facilities are in place, and ready to begin start-up.

Subsequent to the notification to the FMIT, pursuant to Section 7.3.3 (Implementation of Transition Plan) of the approved *Basis of Design Report for the Final Groundwater Remedy*, on December 20, 2021, PG&E requested DTSC's and DOI's approvals for turning off the IM system (also called IM No. 3) as Phase 1 groundwater remedy equipment and systems are in place and ready to begin start-up. PG&E received written approvals from DTSC and DOI on December 20 and 21, respectively.

After receipt of the agencies' approvals, PG&E turned off the IM No. 3 extraction wells (TW-2D and TW-3D) at 2:20 pm pacific standard time on December 21 and started to prepare IM-3 for layup. The treatment at IM3 was terminated on December 28, 2021. Below is a summary of key activities conducted in February to prepare IM-3 for layup:

- 1/20: Completed the preparation of the extraction well system equipment and instrumentation for long-term storage.

- 1/22: Disconnected each injection pipeline from each injection well head and removed the conduit from IM-3 Treatment Plant to the injection wells.

- Ongoing: Remove and drain wastes and flush lines, return rental equipment including the emergency diesel generator, etc.

3. References

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United States Department of the Interior (DOI). 2018. *Approval of PG&E Topock Compressor Station Remediation Site – Basis of Design Report/Final (100%) Design Submittal and Construction/Remedial Action Work Plan for the Final Groundwater Remedy and the Supplemental and Errata Information for the Final (100%) Design for the Final Groundwater Remedy, PG&E Topock Compressor Station, Needles, California.* Letter from Pamela Innis/DOI to Curt Russell/PG&E. April 3.

Tables

Table 2-1a. Summary of Non-Well Environmental Release-To-Constructions (ERTCs)

February 2022 Monthly Progress Report for the Final Groundwater Remedy Construction and Startup
PG&E Topock Compressor Station, Needles, California

ERTC No.	Brief Description of Covered Areas and Scope of Authorized Activities	Original Issue Date
1	Initial mobilization activities at the Construction Headquarters (CHQ), Soil Processing Yard (SPY), and three staging areas (#9 Parking area off I-40, #18 MW-20 Bench, and #23 Transwestern Bench). Scope included installation of temporary construction trailers, portable generators, SWPPP BMPs, construction signages, and temporary construction fencing, as well as equipment staging and truck inspections.	August 10, 2018
Addendum 1 to ERTC #1	Scope included setup of wastewater and freshwater storage tanks at MW-20 Bench, improvement of the access road at the CHQ, installation of perimeter fence at the SPY, and grading at SPY.	September 21, 2018
Addendum 2 to ERTC #1	Scope included grading for drill rig setup at IRZ-20.	October 4, 2018
Addendum 3 to ERTC #1	Scope included geotechnical investigation in the footprint of the future Carbon Amendment building at the MW-20 Bench.	October 9, 2018
Addendum 4 to ERTC #1	Scope included the installation of a temporary handrail along the walkway from the MW-20 Bench to the floodplain.	December 28, 2018
Addendum 5 to ERTC #1	Scope included civil work on MW-20 Bench and asphalt repair along the portion of NTH associated with the MW-20 Bench.	June 2, 2021
2	Scope included the installation of the temporary construction water system and construction water tanks at Area #25 Route 66 Welcome Sign.	September 28, 2018
3	Scope included the installation of the Public Information Trailer, a fugitive dust sign, an information kiosk, and a construction delivery sign at the northwest corner of Park Moabi Road and National Trails Highway (NTH).	September 4, 2018
4	Scope included the installation of a truck containment pad at the Topock Compressor Station (TCS) evaporation ponds and maintenance of the access road to the ponds.	September 24, 2018
6	Scope included the geotechnical investigation along Pipeline F alignment (on the Compressor Station entrance road).	October 3, 2018
7	Scope included the installation of traffic control along the southern end of NTH per the Traffic Control Plan.	September 17, 2018
Addendum 1 to ERTC #7	Scope included the removal of traffic control along NTH (i.e., K-rails, traffic signals, and signages), the repair of the roadway asphalt where the K-rail spikes were installed, and the painting of the edge of the roadway where the roadway width is less than 12 feet.	January 25, 2022
9	Scope included the transplantation and planting of sensitive plants.	November 9, 2018
10	Scope included potholing activities along approved pipeline alignments and in building footprints, that are also in AOCs/SMWUs. The purpose is to pre-characterize soil in preparation for construction.	March 29, 2019
11	Scope included preparation of temporary staging areas, vegetation clearance, placement of stabilization mats, potholing in select locations, and installation of Pipeline C segments C1 through C6 in the floodplain.	January 3, 2019
11a	Scope included preparation of temporary staging areas, vegetation clearance, placement of stabilization mats, potholing in select locations, and installation of Pipeline C segments C7-C10, and C17 in the floodplain.	February 11, 2019
Addendum 1 to ERTC #11a	Scope included installation of Pipeline C Segment C14 along the southern access road to the floodplain (between BNSF railroad and I-40 bridges).	October 3, 2019
Addendum 2 to ERTC #11a	Scope included earthwork along Pipeline C Segment C8-Alt and C9 north in the floodplain.	October 29, 2021

ERTC No.	Brief Description of Covered Areas and Scope of Authorized Activities	Original Issue Date
Addendum 3 to ERTC #11a	Scope included the rebuild of C8-Alt/C9 cover and the continuation of the floodplain access road from south of BNSF RR bridge to north of C8-Alt	February 1, 2022
ERTC #11b	Scope included installation of Pipelines B, F, and J.	May 31, 2019
Addendum 1 to ERTC #11b	Scope included details for installation of Pipeline B/F/J inside TCS.	July 25, 2019
Addendum 2 to ERTC #11b	Scope included the installation of stormwater erosion control measures along Pipeline B.	February 15, 2022
ERTC #11c	Scope included details for installation of Pipeline C Segments C13, C15, C16, C19, and C20, along NTH.	July 27, 2020
12	Scope included non-intrusive site preparation work for the brine tanks containment upgrade on the MW-20 Bench (per Work Variance Request #1, refer to Table 2-3). A forthcoming addendum to this ERTC will be issued to include the actual upgrade activities.	January 10, 2019
12a	Scope included the actual brine tanks containment upgrade activities which include intrusive work on the MW-20 Bench (per Work Variance Request #1, refer to Table 2-3).	February 6, 2019
13	Scope included the installation of remedy facilities on MW-20 Bench.	November 21, 2019
14	Scope included site preparation for the installation of Pipeline M inside TCS.	December 11, 2019
Addendum 1 to ERTC #14	Scope included site preparation for the Phase 1 Remedy-produced Water Conditioning System and associated piping.	February 27, 2020
Addendum 2 to ERTC #14	Scope included the installation of the Phase 1 Remedy-produced Water Conditioning System and associated piping, as well as the secondary containment pad for the water conditioning system.	June 17, 2020
Addendum 3 to ERTC #14	Scope included the installation of X2-X3 conduits inside TCS.	September 30, 2020
15	Scope included the installation of Pipeline M2-M6 and X1 Installation Inside TCS	December 13, 2019
16	Scope included soil resistivity survey and the installation of pipeline C9 (Jack and Bore) and pipeline C8b.	December 29, 2019
17	Scope included the implementation of the TW-01 aquifer test.	April 8, 2021
18	Scope included the installation of erosion control measures at TW Bench and along Pipeline F.	February 12, 2021
19	Scope included the installation of a stormwater water sampling location on the MW-20 Bench.	August 27, 2021
OM-1	Scope included the removal of soil accumulated behind the gabions at the confluence of AOC4 and Bat Cave Wash.	September 2, 2021
20	Scope included the installation of stormwater BMPs at the CHQ.	September 18, 2021
21	Scope included site preparation for mitigation planting which involve the removal of tamarisk debris and root balls, off-site disposal of debris, installation of irrigation system, and leaching of soluble salts from the soil.	December 15, 2021
22	Scope included the removal of bollards and fence posts around IM3 injection well control panels (included a solar panel and a Programmable Logic Controller, both of which were removed).	February 15, 2022

Notes:

- ERTC #8 was intended for wastewater management. However, it was cancelled as the management of wastewater is integrated into each ERTC as applicable.
* A time extension for this ERTC was granted to allow for the removal of fill along C8-Alt pipeline.

Table 2-1b. Summary of Well Environmental Release-To-Constructions (ERTCs)

February 2022 Monthly Progress Report for the Final Groundwater Remedy Construction and Startup
PG&E Topock Compressor Station, Needles, California

ERTC No.	Brief Description of Covered Areas and Scope of Authorized Activities	Original Issue Date
5a	Scope included the site setup, drilling, testing, and demobilization at MW-L.	September 27, 2018
5b	Scope included the placement of soil stabilization mats in the floodplain, setup of a temporary staging area near the north end of the access route in the floodplain, rig setup, installation of snow fence to protect plants, drilling, testing, and demobilization at IRZ-15.	October 12, 2018
5c	Scope included the site setup, drilling, testing, and demobilization at IRZ-20 on the MW-20 Bench.	October 15, 2018
5d	Scope included the site setup, drilling, testing, and demobilization at MW-E on the MW-20 Bench.	October 29, 2018
5e	Scope included the site setup, drilling, testing, and demobilization at MW-N in the upland.	November 15, 2018
5f	Scope included the site setup, drilling, testing, and demobilization at IRZ-13 in the floodplain.	November 7, 2018
5g	Scope included the site setup, drilling, testing, and demobilization at IRZ-23 on the MW-20 Bench.	November 8, 2018
5h	Scope included the site setup, drilling, testing, and demobilization at MW-M in the upland.	January 15, 2019
5i	Scope included the site setup, drilling, testing, and demobilization at IRZ-9 in the floodplain.	November 28, 2018
5j	Scope included the site setup, drilling, testing, and demobilization at IRZ-25 on the MW-20 Bench.	December 3, 2018
5k	Scope included the site setup, drilling, testing, and demobilization at IRZ-21 on the MW-20 Bench.	December 9, 2018
5l	Scope included the site setup, drilling, testing, and demobilization at MW-B in the floodplain.	December 10, 2018
Addendum to ERTC #5l	Scope included the setup of an additional temporary equipment and material staging area in the floodplain.	December 13, 2018
5m	Scope included the site setup, drilling, testing, and demobilization at MW-F along NTH.	December 17, 2018
5n	Scope included the site setup, drilling, testing, and demobilization at IRZ-11 in the floodplain.	December 17, 2018
5o	Scope included the site setup, drilling, testing, and demobilization at MW-X and MW-Y' in Arizona.	April 23, 2019
5p	Scope included the site setup, drilling, testing, and demobilization at MW-G along NTH.	January 14, 2019
5q	Scope included the site setup, drilling, testing, and demobilization at IRZ-16 and IRZ-17 in the floodplain.	February 14, 2019
5r	Scope included the site setup, drilling, testing, and demobilization at IRZ-27 and IRZ-29 along NTH. Also included in the scope are potholing activities along Pipeline C Segments C13, C15, and C16 and on the MW-20 Bench.	March 9, 2019
Addendum #1 to ERTC #5r	Scope included the potholing to locate Transwestern Gas Pipeline within NTH (in support of Pipeline C installation).	April 24, 2019
Addendum #2 to ERTC #5r	Scope included the installation of NTH IRZ-27/29/31/33/35 and the temporary Frontier bypass.	November 19, 2019
5s	Scope included the site setup, drilling, testing, and demobilization at IRZ-39 in the low area, north of the Transwestern Bench.	March 12, 2019

ERTC No.	Brief Description of Covered Areas and Scope of Authorized Activities	Original Issue Date
5t	Scope included the site setup, drilling, testing, and demobilization at IRZ-27 along NTH.	March 19, 2019
5u	Scope included the site setup, drilling, testing, and demobilization at MW-U in I-40 median.	March 22, 2019
5v	Scope included the site setup, drilling, testing, and demobilization at MW-10D in Bat Cave Wash.	March 27, 2019
5w	Scope included the site setup, drilling, testing, and demobilization at MW-W in the floodplain.	March 22, 2019
5x	Scope included the site setup, drilling, testing, and demobilization at RB-1 through 5 wells and MW-O in the floodplain.	March 30, 2019
5y	Scope included the site setup, drilling, testing, and demobilization at MW-S on the access road to Bat Cave Wash.	April 12, 2019
5z	Scope included the site setup, drilling, testing, and demobilization at MW-R in the Upland.	May 8, 2019
5aa	Scope included the site setup, drilling, testing, and demobilization at MW-C, MW-D, and MW-H in the floodplain	June 6, 2019
5ab	Scope included the site setup, drilling, testing, and demobilization at IRZ-19 (sonic drilling) in the floodplain	July 22, 2019
5ac	Scope included the site setup, drilling, testing, and demobilization at MW-11D (sonic drilling) in Bat Cave Wash	September 25, 2019
5ad	Scope included the site setup, drilling, testing, and demobilization at Hydro-6a monitoring well in Arizona	October 16, 2019
5ae	Scope included the site setup, drilling, testing, and demobilization at MW-70BRd in East Ravine	October 4, 2019
5af	Scope included the site setup, drilling, testing, and demobilization at MW-Z	January 22, 2020
5ag	Scope included the site setup, drilling, testing, and demobilization at IRZ-18 on MW-20 Bench	November 15, 2019
5ah	Scope included the site setup, drilling, testing, and demobilization at MW-V	February 10, 2020
Addendum #1 to ERTC #5ah	Scope included the preparation of the access road to the existing Site B well for sampling	December 11, 2020
5ai	Scope included vegetation removal at PGE-9S, 9N, and HNWR-1A	February 14, 2020
5aj	Scope included the site setup, drilling, testing, and demobilization at MW-96 (former MW-A, relocated) and MW-97 (former IRZ-11, repurposed) in the floodplain	June 29, 2020
5ak	Scope included activities related to the 72-Hour aquifer test at TW-3D	May 22, 2020
5al	Scope included the site setup, drilling, testing, and demobilization at MW-99 (aka, the second Hydro-6 well)	August 17, 2020
5am	Scope included the site setup, access road preparation, drilling, testing, and demobilization at MW-K	September 11, 2020
5an	Scope included the preparation of access to the existing Site B well for purposes of sampling	December 11, 2020
5ao	Scope included the development of MW-38.	November 19, 2020
5ap	Scope included the installation of downhole equipment at IRZ wells.	March 26, 2021
5aq	Scope included the site preparation for and drilling of freshwater injection well FW-2 along the access road to Bat Cave Wash.	February 22, 2022

ERTC No.	Brief Description of Covered Areas and Scope of Authorized Activities	Original Issue Date
5ar	Scope included the site preparation at the TW Bench for drilling of wells TWB-1 and TWB-2.	February 23, 2022

Table 2-2. Monitoring Wells Nomenclature Changes

February 2022 Monthly Progress Report for the Final Groundwater Remedy Construction and Startup
PG&E Topock Compressor Station, Needles, California

Previous Well Name	New Monitoring Well Name
MW-70BR-D	MW-70BR-289
MW-B-033	MW-75-033
MW-B-117	MW-75-117
MW-B-202	MW-75-202
MW-B-267R	MW-75-267
MW-B-337	MW-75-337
MW-C-039	MW-76-039
MW-C-156	MW-76-156
MW-C-181	MW-76-181
MW-C-218	MW-76-218
MW-D-046R	MW-77-046
MW-D-102	MW-77-102
MW-D-158	MW-77-158
MW-D-187	MW-77-187
MW-E-072	MW-78-072
MW-E-142	MW-78-142
MW-F-060	MW-79-060
MW-F-104	MW-79-104
MW-G-057	MW-80-057
MW-G-082	MW-80-082
Former IRZ-19	MW-81-43
Former IRZ-19	MW-81-98
MW-H-046	MW-82-046
MW-H-112	MW-82-112
MW-H-168	MW-82-168
MW-H-198	MW-82-198
MW-L-090	MW-83-090
MW-L-180	MW-83-180
MW-L-225	MW-83-225
MW-L-245	MW-83-245
MW-M-057	MW-84-057
MW-M-095	MW-84-095
MW-M-132	MW-84-132
MW-M-193	MW-84-193

Previous Well Name	New Monitoring Well Name
MW-N-129	MW-85-129
MW-N-217	MW-85-217
MW-N-237	MW-85-237
MW-O-030	MW-86-030
MW-O-066	MW-86-066
MW-O-120	MW-86-120
MW-O-140	MW-86-140
MW-R-109	MW-87-109
MW-R-139	MW-87-139
MW-R-192	MW-87-192
MW-R-275	MW-87-275
MW-S-109	MW-88-109
MW-U-183	MW-89-183
MW-U-273	MW-89-273
MW-W-031	MW-90-031
MW-X-045	MW-91-045
MW-X-120	MW-91-120
MW-X-170	MW-91-170
MW-X-320	MW-91-320
MW-Y-037	MW-92-037
MW-Y-072	MW-92-072
MW-Y-102	MW-92-102
MW-Y-122	MW-92-122
MW-Z	MW-93
HYDRO-6 (deep)	MW-94-30
HYDRO-6 (mid)	MW-94-100
HYDRO-6 (shallow)	MW-94-175
MW-V	MW-95
MW-A	MW-96-045 MW-96-217
Former IRZ-11	MW-97-042 MW-97-202
Relocated MW-K	MW-98-055 MW-98-077
Second HYDRO-6	MW-99-40 MW-99-140

Table 2-3. Summary of Work Variance Requests (WVRs)

February 2022 Monthly Progress Report for the Final Groundwater Remedy Construction and Startup
PG&E Topock Compressor Station, Needles, California

WVR No.	Brief Description of Work Variance Request	Approval Dates
1	This WVR addressed PG&E's proposed modification to the brine tanks containment for use by the remedy, specifically: • **Upgrade the existing lined containment to concrete** - The original synthetic liner material has degraded from exposure to UV light, heat, and abrasion and must be replaced. PG&E proposed to replace the synthetic-lined containment (including K-rails) with a concrete containment to support the groundwater remedy. The concrete color will be desert tan, and information on this proposed concrete color will be submitted to the agencies for review. The proposed concrete material will be similar to the material of the truck lane in the final remedy design (refer to Appendix E of the Final Basis of Design Report (CH2M, 2015a),* Section 033 00, Cast-In-Place Concrete). • **Shorten the length of the containment** - This containment will have the same height as the existing containment, but with a slightly smaller footprint (the length is 5 feet shorter). This smaller footprint still meets the required volume for a secondary containment and allows for more space for remedy construction at the tight MW-20 bench.	DOI approved WVR #1 on June 22, 2018 DTSC approved WVR #1 on July 5, 2018
2	PG&E proposed to relocate the tie-in point for remedy construction water to an aboveground location inside Topock Compressor Station (TCS) and below the TCS Water Storage Tanks. This is to eliminate the risk of damaging the existing pressurized 6-inch water line and to avoid any interference with PG&E Gas Operations control of the Station's water supply. The WVR addressed this relocation, specifically: • Relocate the construction water tie-in point to an aboveground location below the TCS Water Storage Tanks, inside TCS – The final design calls for the temporary construction water line to hot-tap into the existing 6-inch steel water line just as the line turns southwest to continue to TCS. PG&E proposed to move the tie-in point to an aboveground valve manifold, located below the TCS Water Storage Tanks in the boneyard area. • Extend the temporary construction water line to the new tie-in point, along Pipeline 300A access road – The planned 4-inch high-density polyethylene (HDPE) temporary construction water line will be extended, following the route of the Pipeline 300A access road, to the new tie-in point inside TCS. This pipeline extension is approximately 1,950 feet and is also made of 4-inch HDPE. The pipe will be laid on ground surface and to the south of the 6-inch water line where possible. At the crossing with the SoCal Gas pipeline access road, the pipeline will be at grade with fill to allow for vehicle crossing.	DOI/DTSC approved WVR #2 on August 29, 2018
3	PG&E proposed changes within the CHQ fence line to avoid/minimize the overall amount of soil disturbance during construction, reduce the number of truck trips to haul wastewater, and allow for additional working space within the yard. There are no proposed changes to the CHQ footprint nor its fence line. The specifics are described below: • Relocate the decontamination pad from the western fence to the northern fence (near the western corner). Based on recent survey data collected during construction, the difference in ground elevation between northern and southern end of the pad is about 4 feet. Moving the pad to the northern fence would eliminate the difference in ground elevation and reduce the amount of soil disturbance by at least 80 cubic yards. • Bring the remedy-produced wastewater tank from belowground to aboveground, increase the tank volume from 1,000 to 2,500 gallons, and place the aboveground, double-walled tank adjacent to the decontamination pad. The change from belowground to aboveground reduces the amount of soil disturbance by at least 50 cubic yards. The change to a bigger tank will reduce the amount of truck trips needed to haul wastewater. The placement of the tank adjacent to the decontamination pad allows for the pad to function as a secondary containment for the haul truck during off-loading of the wastewater. • Defer construction of the underground sewage tanks. Deferral of the underground tanks reduces the overall amount of soil disturbance by at least 800 cubic yards. All sanitary wastes will be managed in aboveground sewage tanks (similar to the ones currently used for the SPY trailers) or portable toilets. • Swap the location of the construction trailers and the sunshade and change the configuration of the sunshade from a rectangle to a square. This change will allow for more working space within the CHQ. All functions that would occur in the Workshop/Sampling Processing building will be conducted in the construction trailers.	DOI/DTSC approved WVR #3 on January 4, 2019

WVR No.	Brief Description of Work Variance Request	Approval Dates
4	PG&E proposed to revise a segment of Pipeline C near the I-40 bridge, to meet the permit requirement in Caltrans Encroachment Permit No. 08-18-6-MW-0533. The revision involves relocating a small segment of Pipeline C to within National Trails Highway to meet a minimum distance of 10 feet from current and future I-40 bridge footings. The treatment measure specified for Segment X of National Trails Highway in the Cultural and Historic Property Management Plan will be implemented during installation of this pipeline segment.	DOI/DTSC approved WVR #4 on May 14, 2019
5	PG&E proposed to phase the remedy produced water conditioning system within the approved footprint inside TCS.	DOI and DTSC approved WVR #5 on July 19 and July 22, 2019, respectively.
6	In early October 2018, PG&E conducted a geotechnical investigation along the Pipeline F alignment on the entrance road to the TCS and the adjacent hill side. Based on the geotechnical results, the construction contractor (PIVOX) indicated that soldier piles and lagging would be required for temporary shoring. Over 40 soldier piles would be installed by drilling using a 330-sized excavator or larger. A 330-sized excavator has a general width of 11 feet, and counter weight clearance of approximately 4 feet. During operation, this rig would occupy a minimum 15 to 16 feet width of the TCS entrance road for about 12 days. The paved width of the road is between 22 to 24 feet in the area of shoring (per review of the location via Google Earth). Assuming a minimum clearance of 1 foot (which is still less than the recommended clearance) from any operating equipment, there will be approximately 5 to 8 feet of available lane width for access by TCS traffic. Large vehicles (tractor-trailers, delivery trucks, construction equipment) will likely not be able to pass by the active operation, and passenger vehicles may also not be able to pass the active operation in locations where the road narrows. Also, the excavator cannot be repositioned while soldier piles are being drilled. In sum, access to TCS will be severely restricted for about 12 days. This is not acceptable for Compressor Station operations. Therefore, PG&E proposed to realign Pipeline F (starting from segment F3) along the approved alignment of Pipelines B and J. Construction of Pipelines F, B, and J would occur in the same alignment and at the same time.	DOI and DTSC approved WVR #6 on May 21 and May 22, 2019, respectively.
7	This WVR proposed the following changes to remedy infrastructure at the CHQ and SPY. a) Locate all temporary office and break trailers at the SPY. PG&E proposed to keep the three existing office trailers at their current locations in the SPY and add two additional office trailers and one break trailer for workers. The additional trailers will be equipped with aboveground sewage tanks, similar to the existing trailers. They will also be powered by Needles Electric. This will require the original SPY fence line to be extended south/southwest to encompass these trailers and the original truck entrance from National Trails Highway to the access road east of SPY. Neither changes reduce the overall area available for soil storage. b) Eliminate the workshop/sample processing building at the CHQ. The function planned for this building will be moved to the Carbon Amendment building at the MW-20 Bench. Removal of this building reduces the amount of soil disturbance by approximately 334 cubic yards. c) Eliminate the sunshade at the CHQ. The function for the sunshade will be replaced by the break trailer for the workers. Removal of the sunshade reduces the amount of soil distance (i.e., installation of the footings) by approximately 14 cubic yards. d) Convert the utility pad at the CHQ to a smaller transformer/electrical panel pad. With the relocation of the six trailers to SPY and elimination of the workshop/sample processing building, PG&E proposed to convert the utility pad to smaller pad for a smaller transformer/electrical panel to serve the remaining trailers at the CHQ. This reduces the amount of soil disturbance by approximately 61 cubic yards.	DOI and DTSC approved WVR #7 on June 14, 2019.
8	On September 12, 2019, PG&E proposed a WVR to change the alignment of pipeline segment C6 on the eastern slope of the MW-20 Bench. The purpose of the WVR is to reduce the amount of soil disturbance, reduce the number of plants to be removed, reduce the safety risks associated with construction atop the MW-20 bench, and reduce the hazards associated with operation at the MW-20 bench during construction.	DTSC and DOI approved WVR #8 on October 4 and 8, 2019, respectively.
9	On March 20, 2020 and at DTSC's direction, PG&E submitted a WVR to relocate MW-A and convert IRZ-11 to a monitoring well.	DTSC and DOI approved WVR #9 on April 24, 2020.
10	On December 1, 2021, PG&E proposed a WVR to revise the following pipeline alignments for constructability and safety during Phase 2A construction, as well as future O&M: 1. Outside the Compressor Station	DTSC and DOI approved WVR #10

WVR No.	Brief Description of Work Variance Request	Approval Dates
	i. Realign Pipeline C18 in East Ravine. ii. Realign Pipeline I1 in Bat Cave Wash. 2. Inside the Compressor Station i. Consolidate piping/conduits (L1/L2/D1/D2) in the southern area of TCS into a common utility corridor ii. Realign Pipeline L3 to connect to Pipeline K.	on January 6 and 7, 2022, respectively.
11	On January 11, 2022, PG&E proposed a WVR for new mitigation planting areas in the floodplain. The purpose of the WVR is to propose new mitigation planting areas that are better suited for the mitigation plantings than some earlier identified areas.	DOI and DTSC approved WVR #11 on January 14 and 19, 2022, respectively.

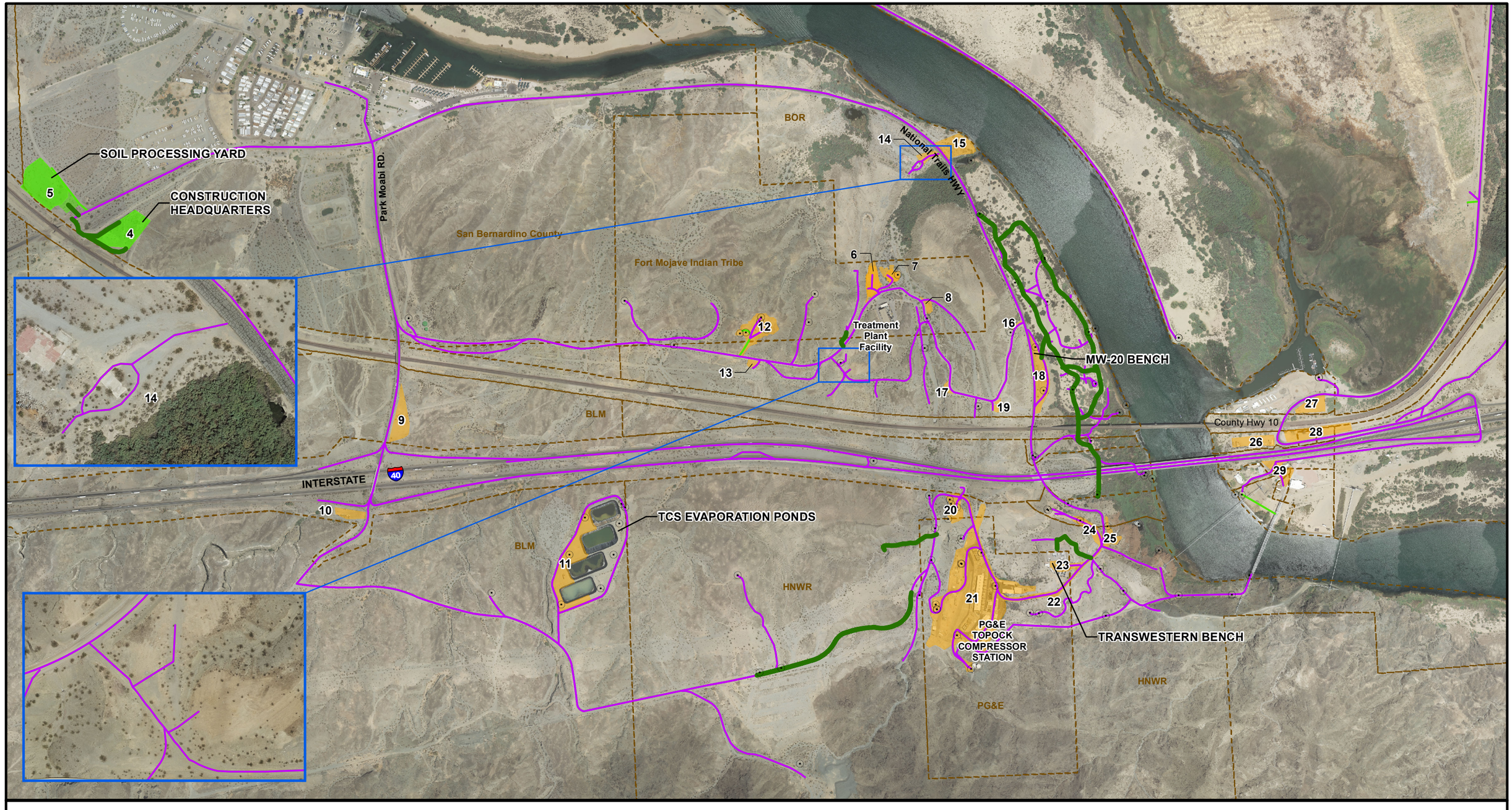
Note:
* CH2M HILL, Inc. (CH2M). 2015a. Basis of Design Report/Final (100%) Design Submittal for the Final Groundwater Remedy, PG&E Topock Compressor Station, Needles, California. November 18.

Table 2-4. Summary of Cumulative Percent Completeness of Key Construction Activities
February 2022 Monthly Progress Report for the Final Groundwater Remedy Construction and Startup
PG&E Topock Compressor Station, Needles, California

Activity	% Complete	Cumulative Status of Construction Activities (as of February 28, 2022)
Project signage & Public Information Office	100%	Complete.
Staging Areas 9, 18, and 23 set-up	100%	Complete.
Temporary construction offices at Soil Processing Yard	100%	Complete.
Soil Processing Yard including security fence	100%	Complete.
National Trails Highway lane closure and traffic control installation	100%	Complete.
Temporary construction water line	100%	Complete.
TCS Ponds concrete containment pad	100%	Complete.
Construction Headquarters (CHQ) access road and security fence	100%	Complete.
Brine Tanks containment upgrade	100%	Complete.
MW-L, N, E, W, O, R, M, U, 10D, 11D, B, C, D, H, S, Hydro-6, X, Y', G, F, V, and Z, and MW-99.	100%	Complete.
MW-70BR (damaged)	100%	Bentonite grout had entered the well casing. The conductor casing was damaged and the well was repaired in June 2020. The repair consisted of cleaning out the borehole to approximately 246 feet bgs, set a 4-inch PVC sleeve to approximately 240 feet, and cement to approximately 230 feet. Well development was completed in July 2020. Well surface completion was completed in October 2020.
MW-97 (former IRZ-11 MW)	100%	Complete.
MW-96 (relocated MW-A)	100%	Complete.
Pilot borings for wells RB-5, RB-4, RB-3, RB-2, IRZ-9, 13, 15, 16, 17, 18, 21, 23, 25, 27, 29, 31, 35, 37, and 39.	100%	Complete.
RB-2, RB-3, RB-4, and RB-5	100%	Complete.
IRZ-9, IRZ-13S/D, IRZ-15, IRZ-16, IRZ-17, IRZ-18, IRZ-21, IRZ-23, IRZ-25, IRZ-27, IRZ-29, IRZ-31, IRZ-33, IRZ-35, IRZ-37, and IRZ-39	100%	Complete.
Pipeline B Erosion Control Measures	10%	Pipeline Complete. Installation of permanent erosion control measures started on February 22, 2022.
Pipeline C Floodplain Segments C3, C4, C5, C6, C7, C8, C8-Alt, C14 including aggregate-based access road in floodplain	100%	Complete with the exception of C8-Alt. On November 2-4, 2021, additional soil cover was added to meet Caltrans permit requirement of 42 inches above the concrete pipe encasement. On November 11, 2021, FMIT tribal monitors notified PG&E of concerns about the presence of asphalt debris in the new soil cover at C8-Alt. Various field inspections and discussions occurred to address the FMIT monitors' concern. In late November 2021, PG&E informed FMIT Project Manager that the soil cover will be replaced with different soil materials. PG&E removed the soil cover on December 14, 2021, and rebuilt the soil cover with new fill in February 2022 (see description in Phase 1 Work Site Closeout line item below).
Pipeline C NTH Segments C13, C15, C16, C19, C20	100%	Complete.

Activity	% Complete	Cumulative Status of Construction Activities (as of February 28, 2022)
Pipeline C9, C10, C17	100%	Complete.
Pipeline F	100%	Complete.
Pipeline J Segments J1 and J2	100%	Asphalt paving complete.
Pipeline J Segments J3 and J4	100%	Complete.
Pipeline M2-M6 (inside TCS)	100%	Complete.
Pipeline/Conduit F8/M1/X (inside TCS)	100%	Complete.
Phase 1 Remedy-produced water conditioning system and associated facilities (TCS)	100%	Substantially complete.
MW-20 Bench carbon amendment facility and associated piping	100%	Building structure, mechanical work, fencing and site earthwork, HVAC, and final electrical complete.
Remediation well vaults and well buildout	100%	Substantially complete.
Underground electrical and controls cable installation	100%	Substantially complete.
Electrical installation at transformer nodes 99 (TCS), 2 (south floodplain), 3 (MW-20 Bench), and 4 (north floodplain)	98%	All Node electrical installation complete. Node 2/4 sunshades and site-wide power testing/final remedy power-up in February 2022.
Controls installation and programming at Phase 1 Remedy-Produced water conditioning facility (TCS)	99%	In Progress, Node 99 controls terminations to be completed in February 2022.
Controls installation and programming at MW-20 Bench carbon amendment facility	100%	Substantially complete.
System Integration, Functional Testing, and Startup	80%	IRZ functional testing and startup completed in December 2021 under temporary power. RPWC system functional testing and Full system (including Remedy power system and RPWC system) startup to be completed in March 2022.
Site preparation for revegetation	75%	Irrigation system installation complete. Irrigation operation to leach soluble salts from soils to start on February 7, 2022.
Phase 1 Work Site Closeout (Exclude Pipeline B stormwater erosion control measures)	90%	A walk down of Phase 1 pipelines and TWB/CHQ stormwater erosion control measures with agencies and Tribes on March 1. Punch list items scheduled for March 2022.

Figures



LEGEND

- Existing Access Route (will continue to be used for remedial activities)
- Existing Route (to be used as is for access to remedial activities)
- Roads to be improved or constructed for groundwater remedy
- Soil Processing (Area #5) and Construction Headquarters (Area #4) for Remediation Project
- Staging Areas for Remediation Project
- 5 Area # referenced in the Notes

Notes:

1. Decontamination pads will be located in Area #21 (Topock Compressor Station), and Area #23 (Transwestern Bench).
2. Areas #15, 16, 17, 19, and 20 will not be used as staging areas. Areas #16, 17, and 19 may be part of the primary work zones for remedy infrastructure along the access road.
3. Area #20 may be part of the primary work zone for installation of future provisional well IRL-6 (if determined to be needed in the future) and associated piping/concrete/vault.
4. Public roadways outside of the EIR project area and the APE can also be used for remedy implementation.

N

0 900

Feet

FIGURE 2-1
CONSTRUCTION SITE PLAN AND ACCESS ROUTES

GROUNDWATER REMEDY PHASE 1 CONSTRUCTION
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

JACOBS

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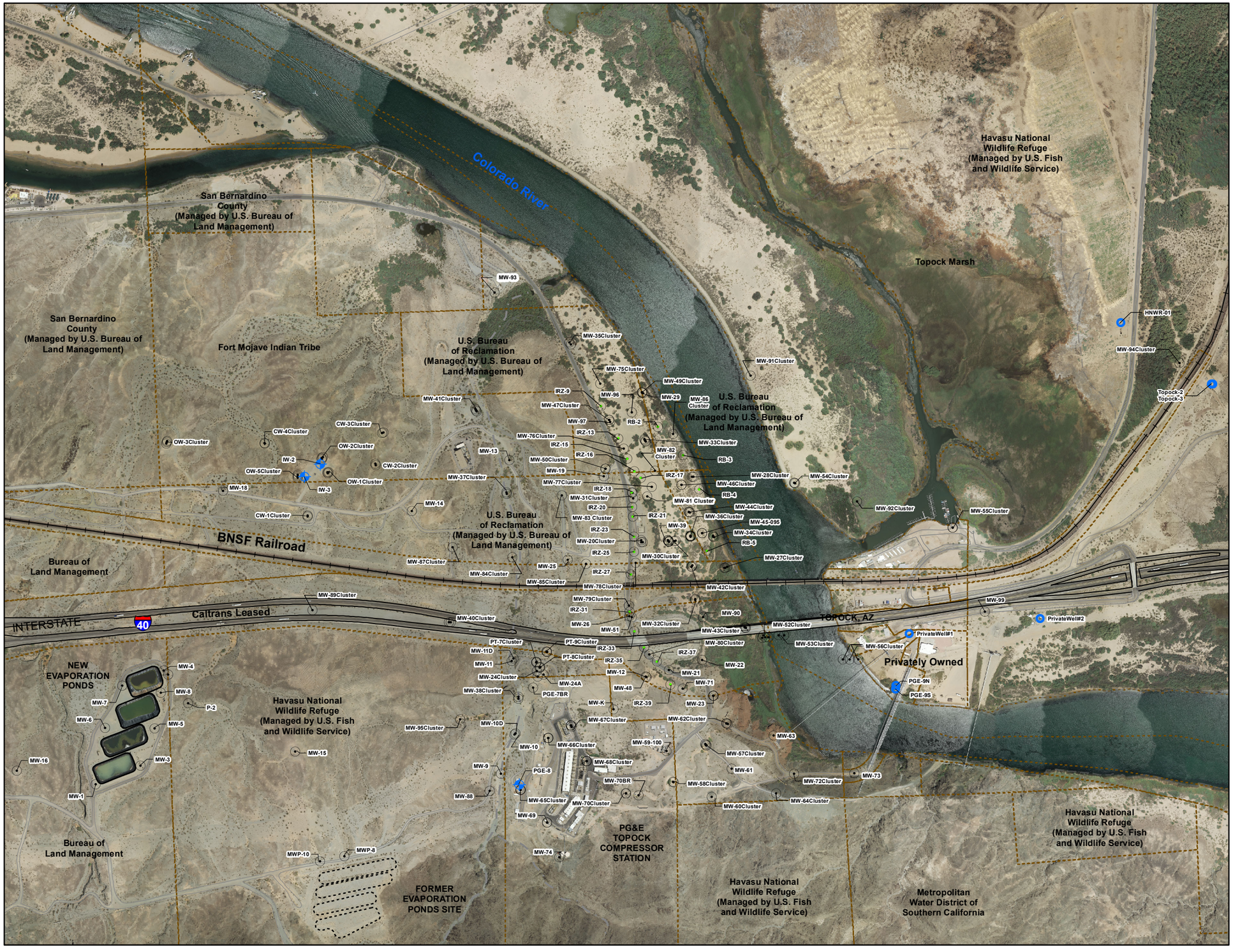

Figure 2-2
Well Locations
Groundwater Remedy Phase 1 Construction
PG&E Topock Compressor Station Needles, California

Attachment A
Photographs

Photo showing road repair from K-rails pins strike.

Photos showing removal of the soil cover and rework at C8-Alt.

Photos showing slurry pour at Electrical Node 4 in the floodplain.

Attachment B
Available Boring and Well Construction Logs, Groundwater Sample Results from Well Drilling, and Well Testing Activities

(Logs and Well Testing Plans/Results are Presented in Separate PDFs)

Table B-1. Groundwater Sampling Results

February 2022 Monthly Progress Report for the Final Groundwater Remedy Construction and Startup
PG&E Topock Compressor Station, Needles, California

Location	Sample ID	Sample Date	Sample Depth Interval in feet below ground surface	Total Dissolved Chromium Concentration in microgram per liter	Hexavalent Chromium Concentration in microgram per liter
MW-10D	MW-10D-041119	04/11/19	Vertical aquifer sample collected at 108 to 123 feet	160	160
MW-10D	MW-10D-VAS-107-112	04/01/19	Vertical aquifer sample collected at 107 to 112 feet	95	96
MW-10D	MW-10D-VAS-118-123	04/02/19	Vertical aquifer sample collected at 118 to 123 feet	200	190
MW-11D	MW-11D-VAS-122-127	10/07/19	Vertical aquifer sample collected at 122 to 127 feet	120	92
MW-11D	MW-11D-VAS-152-157	10/07/19	Vertical aquifer sample collected at 152 to 157 feet	1.1	10
MW-11D	MW-11D-VAS-177-182	10/08/19	Vertical aquifer sample collected at 177 to 182 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-11D	MW-11D-VAS-67-72	10/06/19	Vertical aquifer sample collected at 67 to 72 feet	370	370
MW-11D	MW-11D-VAS-92-97	10/06/19	Vertical aquifer sample collected at 92 to 97 feet	99	72
MW-11D	MW-11D-110219	11/02/19	Sample collected from well development	26	17
MW-94 (formerly Hydro-6)	MW-94-175-120419	12/04/19	Sample collected from well development	5.2	5.7
MW-75 (former MW-B)	MW-B-VAS-27-32	01/06/19	Vertical aquifer sample collected at 27 to 32 feet	Estimated concentration of 5.9 micrograms per liter	Estimated concentration of 7.7 micrograms per liter
MW-75 (former MW-B)	MW-B-VAS-47-52	01/09/19	Vertical aquifer sample collected at 47 to 52 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-75 (former MW-B)	MW-B-VAS-67-72	01/09/19	Vertical aquifer sample collected at 67 to 72 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-75 (former MW-B)	MW-B-VAS-102-107	01/10/19	Vertical aquifer sample collected at 102 to 107 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-75 (former MW-B)	MW-B-VAS-142-147	01/15/19	Vertical aquifer sample collected at 142 to 147 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-75 (former MW-B)	MW-B-VAS-182-187	02/13/19	Vertical aquifer sample collected at 182 to 187 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter

Location	Sample ID	Sample Date	Sample Depth Interval in feet below ground surface	Total Dissolved Chromium Concentration in microgram per liter	Hexavalent Chromium Concentration in microgram per liter
MW-75 (former MW-B)	MW-B-VAS-207-212	02/14/19	Vertical aquifer sample collected at 207 to 212 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-75 (former MW-B)	MW-B-VAS-247-252	02/17/19	Vertical aquifer sample collected at 247 to 252 feet	Estimated concentration of 11 micrograms per liter	Not detected below reporting limit of 0.83 microgram per liter
MW-75 (former MW-B)	MW-B-VAS-264-269	02/18/19	Vertical aquifer sample collected at 264 to 269 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.33 microgram per liter
MW-75 (former MW-B)	MW-B-VAS-287-292	02/20/19	Vertical aquifer sample collected at 287 to 292 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-75 (former MW-B)	MW-B-VAS-317-322	02/21/19	Vertical aquifer sample collected at 317 to 322 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-75 (former MW-B)	MW-B-VAS-339-344	02/27/19	Vertical aquifer sample collected at 339 to 344 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.33 microgram per liter
MW-75 (former MW-B)	MW-B-VAS-352-357	02/28/19	Vertical aquifer sample collected at 352 to 357 feet	Estimated concentration of 0.603 microgram per liter	Not detected below reporting limit of 0.33 microgram per liter
MW-75 (former MW-B)	MW-B-117-033019	03/30/19	Sample collected from well development at 117 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-75 (former MW-B)	MW-B-33-033119	03/31/19	Sample collected from well development at 33 feet	3.7	2.3
MW-75 (former MW-B)	MW-B-337-062619-INTERIM	6/26/19	Sample collected from well development	Estimated concentration of 0.255 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-75 (former MW-B)	MW-B-337-090719	9/7/2019	Sample collected from well development	Estimated concentration of 0.251 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-75 (former MW-B)	MW-B-267R-101619	10/16/19	Sample collected from well development	Estimated concentration of 0.147 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-75 (former MW-B)	MW-B-202-101819	10/18/19	Sample collected from well development	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-76 (former MW-C)	MW-C-VAS-26-31	6/19/19	Vertical aquifer sample collected at 26 to 31 feet	360	380
MW-76 (former MW-C)	MW-C-VAS-51-56	6/25/19	Vertical aquifer sample collected at 51 to 56 feet	Estimated concentration of 0.13 microgram per liter	Estimated concentration of 0.146 microgram per liter

Location	Sample ID	Sample Date	Sample Depth Interval in feet below ground surface	Total Dissolved Chromium Concentration in microgram per liter	Hexavalent Chromium Concentration in microgram per liter
MW-76 (former MW-C)	DUP-01-062519	6/25/19	Vertical aquifer sample collected at 51 to 56 feet	Not detected below reporting limit of 0.13 microgram per liter	Estimated concentration of 0.0931 microgram per liter
MW-76 (former MW-C)	MW-C-VAS-66-71	6/26/19	Vertical aquifer sample collected at 66 to 71 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-76 (former MW-C)	MW-C-VAS-81-86	6/27/19	Vertical aquifer sample collected at 81 to 86 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-76 (former MW-C)	MW-C-VAS-117-122	6/28/19	Vertical aquifer sample collected at 117 to 122 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-76 (former MW-C)	MW-C-VAS-147-152	6/29/19	Vertical aquifer sample collected at 147 to 152 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-76 (former MW-C)	MW-C-VAS-165-170	6/30/19	Vertical aquifer sample collected at 165 to 170 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-76 (former MW-C)	MW-C-VAS-176-181	7/1/19	Vertical aquifer sample collected at 176 to 181 feet	380	410
MW-76 (former MW-C)	MW-C-VAS-186-191	7/1/19	Vertical aquifer sample collected at 186 to 191 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-76 (former MW-C)	MW-C-VAS-200-205	7/2/19	Vertical aquifer sample collected at 200 to 205 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-76 (former MW-C)	MW-C-VAS-216-221	7/3/19	Vertical aquifer sample collected at 216 to 221 feet	Estimated concentration of 0.448 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-76 (former MW-C)	MW-C-156-081519	8/15/2019	Sample collected from well development	Data not available	Not detected below reporting limit of 0.17 microgram per liter
MW-76 (former MW-C)	MW-C-181-082019	8/20/2019	Sample collected from well development	280	280
MW-76 (former MW-C)	MW-C-218-082219	8/22/2019	Sample collected from well development	39	40
MW-76 (former MW-C)	MW-C-39-090519	9/5/2019	Sample collected from well development	14	16
MW-77 (former MW-D)	MW-D-VAS-30-35	08/10/19	Vertical aquifer sample collected at 30 to 35	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter

Location	Sample ID	Sample Date	Sample Depth Interval in feet below ground surface	Total Dissolved Chromium Concentration in microgram per liter	Hexavalent Chromium Concentration in microgram per liter
MW-77 (former MW-D)	MW-D-VAS-46-51	08/11/19	Vertical aquifer sample collected at 46 to 51 feet	Estimated concentration of 0.558 microgram per liter	0.47
MW-77 (former MW-D)	MW-D-VAS-91-96	08/12/19	Vertical aquifer sample collected at 91 to 96 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-77 (former MW-D)	MW-D-VAS-131-136	08/21/19	Vertical aquifer sample collected at 131 to 136 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.066 microgram per liter
MW-77 (former MW-D)	MW-D-VAS-141-146	08/22/19	Vertical aquifer sample collected at 141 to 146 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-77 (former MW-D)	MW-D-VAS-151-156	08/22/19	Vertical aquifer sample collected at 151 to 156 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-77 (former MW-D)	MW-D-VAS-161-166	08/23/19	Vertical aquifer sample collected at 161 to 166 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-77 (former MW-D)	MW-D-VAS-171-176	08/23/19	Vertical aquifer sample collected at 171 to 176 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-77 (former MW-D)	MW-D-VAS-181-186	08/24/19	Vertical aquifer sample collected at 181 to 186 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-77 (former MW-D)	MW-D-VAS-191-196	08/25/19	Vertical aquifer sample collected at 191 to 196 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-77 (former MW-D)	MW-D-158-092419	09/24/19	Sample collected from well development	Estimated concentration of 0.203 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-77 (former MW-D)	MW-D-187-092519	09/25/19	Sample collected from well development	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-77 (former MW-D)	MW-D-102-100219	10/02/19	Sample collected from well development	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-77 (former MW-D)	MW-D-46R-103119	10/31/19	Sample collected from well development	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-78 (former MW-E)	MW-E-VAS-52-57	11/05/18	Vertical aquifer sample collected at 52 to 57 feet	7800	7000
MW-78 (former MW-E)	MW-E-VAS-82-87	11/06/18	Vertical aquifer sample collected at 82 to 87 feet	190	200

Location	Sample ID	Sample Date	Sample Depth Interval in feet below ground surface	Total Dissolved Chromium Concentration in microgram per liter	Hexavalent Chromium Concentration in microgram per liter
MW-78 (former MW-E)	MW-E-VAS-112-117	11/06/18	Vertical aquifer sample collected at 112 to 117 feet	3000	3100
MW-78 (former MW-E)	MW-E-VAS-137-142	11/07/18	Vertical aquifer sample collected at 137 to 142 feet	7900	7300
MW-78 (former MW-E)	MW-E-70-121418	12/14/18	Sample collected from well development at a depth of 70 feet	--	3000
MW-78 (former MW-E)	MW-E-142-121418	12/14/18	Sample collected from well development at a depth of 142 feet	4500	4200
MW-79 (former MW-F)	MW-F-VAS-52-57	01/06/19	Vertical aquifer sample collected at 52 to 57 feet	2700	2500
MW-79 (former MW-F)	MW-F-VAS-82-87	01/07/19	Vertical aquifer sample collected at 82 to 87 feet	120	110
MW-79 (former MW-F)	MW-F-VAS-97-102	01/07/19	Vertical aquifer sample collected at 97 to 102 feet	1900	1800
MW-79 (former MW-F)	MW-F-VAS-112-117	01/08/19	Vertical aquifer sample collected at 112 to 117 feet	790	740
MW-79 (former MW-F)	MW-F-104-022719	02/27/19	Sample collected from well development at a depth of 104 feet	1800	1700
MW-79 (former MW-F)	MW-F-60-022819	02/28/19	Sample collected from well development at a depth of 60 feet	2300	2200
MW-80 (former MW-G)	MW-G-VAS-52-57	02/13/19	Vertical aquifer sample collected at 52 to 57 feet	790	680
MW-80 (former MW-G)	MW-G-VAS-67-72	02/14/19	Vertical aquifer sample collected at 67 to 72 feet	1000	920
MW-80 (former MW-G)	MW-G-VAS-77-82	02/15/19	Vertical aquifer sample collected at 77 to 82 feet	710	600
MW-80 (former MW-G)	MW-G-82-030219	03/02/19	Sample collected from well development at a depth of 82 feet	1500	1500
MW-80 (former MW-G)	MW-G-57-030219	03/02/19	Sample collected from well development at a depth of 57 feet	510	560
MW-81 (former IRZ-19)	MW-81-98-121919	12/19/19	Sample collected from well development	Estimated concentration of 0.145 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter

Location	Sample ID	Sample Date	Sample Depth Interval in feet below ground surface	Total Dissolved Chromium Concentration in microgram per liter	Hexavalent Chromium Concentration in microgram per liter
MW-81 (former IRZ-19)	MW-81-43-010820	01/08/20	Sample collected from well development	Estimated concentration of 0.202 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-82 (former MW-H)	MW-H-VAS-32-37	8/7/2019	Vertical aquifer sample collected at 32 to 37 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-82 (former MW-H)	MW-H-VAS-47-52	8/7/2019	Vertical aquifer sample collected at 47 to 52 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-82 (former MW-H)	MW-H-VAS-82-87	08/08/19	Vertical aquifer sample collected at 82 to 87 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-82 (former MW-H)	MW-H-VAS-112-117	08/09/19	Vertical aquifer sample collected at 112 to 117 feet	8.1	Not detected below reporting limit of 0.17 microgram per liter
MW-82 (former MW-H)	MW-H-VAS-142-147	08/10/19	Vertical aquifer sample collected at 142 to 147 feet	Estimated concentration of 18 micrograms per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-82 (former MW-H)	MW-H-VAS-152-157	08/10/19	Vertical aquifer sample collected at 152 to 157 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-82 (former MW-H)	MW-H-VAS-162-167	08/11/19	Vertical aquifer sample collected at 162 to 167 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-82 (former MW-H)	MW-H-VAS-172-177	08/12/19	Vertical aquifer sample collected at 172 to 177 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-82 (former MW-H)	MW-H-VAS-182-187	08/13/19	Vertical aquifer sample collected at 182 to 187 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-82 (former MW-H)	MW-H-VAS-192-197	08/14/19	Vertical aquifer sample collected at 192 to 197 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-82 (former MW-H)	MW-H-112-092019	09/20/19	Sample collected from well development	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-82 (former MW-H)	MW-H-168-092119	09/21/19	Sample collected from well development	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-82 (former MW-H)	MW-H-198-092219	09/22/19	Sample collected from well development	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-82 (former MW-H)	MW-H-46-091919	09/19/19	Sample collected from well development	19	1.4
MW-83 (former MW-L)	MW-L-VAS-76-81	10/06/18	Vertical aquifer sample collected at 76 to 81 feet	8.1	31

Location	Sample ID	Sample Date	Sample Depth Interval in feet below ground surface	Total Dissolved Chromium Concentration in microgram per liter	Hexavalent Chromium Concentration in microgram per liter
MW-83 (former MW-L)	MW-L-VAS-106-111	10/09/18	Vertical aquifer sample collected at 106 to 111 feet	Estimated concentration of 0.697 microgram per liter	0.84
MW-83 (former MW-L)	MW-L-VAS-141-146	10/10/18	Vertical aquifer sample collected at 141 to 146 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-83 (former MW-L)	MW-L-VAS-181-186	10/20/18	Vertical aquifer sample collected at 181 to 186 feet	3.8	3.3
MW-83 (former MW-L)	MW-L-VAS-218-223	10/21/18	Vertical aquifer sample collected at 218 to 223 feet	68	66
MW-83 (former MW-L)	MW-L-VAS-261-266	10/22/18	Vertical aquifer sample collected at 261 to 266 feet	0.284 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-83 (former MW-L)	MW-L-180-032819	03/28/19	Sample collected from well development at a depth of 180 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-83 (former MW-L)	MW-L-245-030319	03/03/19	Sample collected from well development at a depth of 245 feet	14	15
MW-83 (former MW-L)	MW-L-90-032919	03/29/19	Sample collected from well development at a depth of 90 feet	19	18
MW-83 (former MW-L)	MW-L-225-032919	03/29/19	Sample collected from well development at a depth of 225 feet	410	380
MW-84 (former MW-M)	MW-M-VAS-52-57	03/28/19	Vertical aquifer sample collected at 52 to 57 feet	29	28
MW-84 (former MW-M)	MW-M-VAS-72-77	03/29/19	Vertical aquifer sample collected at 72 to 77 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-84 (former MW-M)	MW-M-VAS-107-112	03/30/19	Vertical aquifer sample collected at 107 to 112 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-84 (former MW-M)	MW-M-VAS-147-152	03/31/19	Vertical aquifer sample collected at 147 to 152 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-84 (former MW-M)	MW-M-VAS-172-177	04/02/19	Vertical aquifer sample collected at 172 to 177 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-84 (former MW-M)	MW-M-VAS-190-195	04/10/19	Vertical aquifer sample collected at 190 to 195 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter

Location	Sample ID	Sample Date	Sample Depth Interval in feet below ground surface	Total Dissolved Chromium Concentration in microgram per liter	Hexavalent Chromium Concentration in microgram per liter
MW-84 (former MW-M)	MW-M-132-061519	6/16/19	Sample collected from well development	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-84 (former MW-M)	MW-M-193-061419	6/14/19	Sample collected from well development	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-84 (former MW-M)	MW-M-57-061719	6/17/19	Sample collected from well development	Estimated concentration of 0.715 microgram per liter	0.72
MW-84 (former MW-M)	MW-M-95-061619	6/16/19	Sample collected from well development	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-85 (former MW-N)	MW-N-VAS-121-126	02/14/19	Vertical aquifer sample collected at 121 to 126 feet	Estimated concentration of 0.699 microgram per liter	0.51
MW-85 (former MW-N)	MW-N-VAS-142-147	02/16/19	Vertical aquifer sample collected at 142 to 147 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-85 (former MW-N)	MW-N-VAS-173-178	02/18/19	Vertical aquifer sample collected at 173 to 178 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-85 (former MW-N)	MW-N-VAS-210-215	02/21/19	Vertical aquifer sample collected at 210 to 215 feet	320	290
MW-85 (former MW-N)	MW-N-VAS-228-233	02/26/19	Vertical aquifer sample collected at 228 to 233 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-85 (former MW-N)	MW-N-217-040219	04/02/19	Sample collected from well development at a depth of 217 feet	110	110
MW-85 (former MW-N)	MW-N-237-040119	04/01/19	Sample collected from well development at a depth of 237 feet	1600	1500
MW-85 (former MW-N)	MW-N-129-040319	04/03/19	Sample collected from well development at a depth of 129 feet	45	46
MW-86 (former MW-O)	MW-O-VAS-101-106	05/10/19	Vertical aquifer sample collected at 101 to 106 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-86 (former MW-O)	MW-O-VAS-106-111	05/11/19	Vertical aquifer sample collected at 106 to 111 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-86 (former MW-O)	MW-O-VAS-12.5-17.5	05/08/19	Vertical aquifer sample collected at 12 to 18 feet	Not detected below reporting limit of 0.13 microgram per liter	Estimated concentration of 0.163 J

Location	Sample ID	Sample Date	Sample Depth Interval in feet below ground surface	Total Dissolved Chromium Concentration in microgram per liter	Hexavalent Chromium Concentration in microgram per liter
MW-86 (former MW-O)	MW-O-VAS-136-141	05/11/19	Vertical aquifer sample collected at 136 to 141 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-86 (former MW-O)	MW-O-VAS-51-56	05/09/19	Vertical aquifer sample collected at 51 to 56 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-86 (former MW-O)	MW-O-VAS-66-71	05/09/19	Vertical aquifer sample collected at 66 to 71 feet	Not detected below reporting limit of 0.13 microgram per liter	Estimated concentration of 0.178 J
MW-86 (former MW-O)	MW-O-140-071819	7/18/19	Sample collected from well development	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-86 (former MW-O)	MW-O-30-071719	7/17/19	Sample collected from well development	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-86 (former MW-O)	MW-O-66-071519	7/15/19	Sample collected from well development	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-87 (former MW-R)	MW-R-VAS-92-97	05/13/19	Vertical aquifer sample collected at 92 to 97 feet	42	45
MW-87 (former MW-R)	MW-R-VAS-117-122	05/14/19	Vertical aquifer sample collected at 117 to 122 feet	4.6	5.8
MW-87 (former MW-R)	MW-R-VAS-151-156	05/15/19	Vertical aquifer sample collected at 151 to 156 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-87 (former MW-R)	MW-R-VAS-192-197	05/16/19	Vertical aquifer sample collected at 192 to 197 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-87 (former MW-R)	MW-R-VAS-227-232	05/17/19	Vertical aquifer sample collected at 227 to 232 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-87 (former MW-R)	MW-R-VAS-255-260	05/29/19	Vertical aquifer sample collected at 255 to 260 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-87 (former MW-R)	MW-R-VAS-269-274	05/30/19	Vertical aquifer sample collected at 269 to 274 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-87 (former MW-R)	MW-R-109-062819	6/28/19	Sample collected from well development	2.6	2.5
MW-87 (former MW-R)	MW-R-139-071319	7/13/19	Sample collected from well development	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter

Location	Sample ID	Sample Date	Sample Depth Interval in feet below ground surface	Total Dissolved Chromium Concentration in microgram per liter	Hexavalent Chromium Concentration in microgram per liter
MW-87 (former MW-R)	MW-R-192-070219	7/2/19	Sample collected from well development	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-87 (former MW-R)	MW-R-275-070919	7/9/19	Sample collected from well development	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-88 (former MW-S)	MW-S-VAS-107-112	09/24/19	Vertical aquifer sample collected at 107 to 112 feet	20	15
MW-88 (former MW-S)	MW-S-VAS-92-97	09/22/19	Vertical aquifer sample collected at 92 to 97 feet	25	26
MW-90 (former MW-W)	MW-W-VAS-7-12	03/27/19	Vertical aquifer sample collected at 7 to 12 feet	Estimated concentration of 0.266 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-90 (former MW-W)	MW-W-VAS-22-27	03/28/19	Vertical aquifer sample collected at 22 to 27 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-90 (former MW-W)	MW-W-31-040419	04/04/19	Sample collected from well development at a depth of 31 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-91 (former MW-X)	MW-X-VAS-12-17	06/25/19	Vertical aquifer sample collected at 12 to 17 feet	1.2	Not detected below reporting limit of 0.033 microgram per liter
MW-91 (former MW-X)	MW-X-VAS-32-37	06/26/19	Vertical aquifer sample collected at 32 to 37 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-91 (former MW-X)	MW-X-VAS-71-76	6/27/19	Vertical aquifer sample collected at 71 to 76 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-91 (former MW-X)	MW-X-VAS-107-112	6/27/19	Vertical aquifer sample collected at 107 to 112 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-91 (former MW-X)	MW-X-VAS-112-117	6/28/19	Vertical aquifer sample collected at 112 to 117 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-91 (former MW-X)	MW-X-VAS-152-157	6/29/19	Vertical aquifer sample collected at 152 to 157 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-91 (former MW-X)	MW-X-VAS-182-187	6/29/19	Vertical aquifer sample collected at 182 to 187 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter

Location	Sample ID	Sample Date	Sample Depth Interval in feet below ground surface	Total Dissolved Chromium Concentration in microgram per liter	Hexavalent Chromium Concentration in microgram per liter
MW-91 (former MW-X)	MW-X-VAS-207-212	6/30/19	Vertical aquifer sample collected at 207 to 212 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-91 (former MW-X)	MW-X-VAS-245-250	7/1/19	Vertical aquifer sample collected at 245 to 250 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-91 (former MW-X)	MW-X-VAS-292-297	7/2/19	Vertical aquifer sample collected at 292 to 297 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-91 (former MW-X)	MW-X-VAS-337-342	7/11/19	Vertical aquifer sample collected at 337 to 342 feet	Estimated concentration of 0.564 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-91 (former MW-X)	MW-X-VAS-382-387	7/13/19	Vertical aquifer sample collected at 382 to 387 feet	Estimated concentration of 0.582 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-91 (former MW-X)	MW-X-VAS-412-417	7/15/19	Vertical aquifer sample collected at 412 to 417 feet	38	Not detected below reporting limit of 0.17 microgram per liter
MW-91 (former MW-X)	MW-X-120-112019	11/20/19	Sample collected from well development	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-91 (former MW-X)	MW-X-170-112319	11/23/19	Sample collected from well development	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-91 (former MW-X)	MW-X-320-112219	11/22/19	Sample collected from well development	Estimated concentration of 0.912 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-91 (former MW-X)	MW-X-45-111819	11/18/19	Sample collected from well development	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-92 (former MW-Y')	MW-Y-122-103119	10/31/19	Sample collected from well development	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-92 (former MW-Y')	MW-Y-102-102319	10/23/19	Sample collected from well development	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-92 (former MW-Y')	MW-Y-72-102219	10/22/19	Sample collected from well development	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-92 (former MW-Y')	MW-Y-37-102019	10/20/19	Sample collected from well development	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter

Location	Sample ID	Sample Date	Sample Depth Interval in feet below ground surface	Total Dissolved Chromium Concentration in microgram per liter	Hexavalent Chromium Concentration in microgram per liter
MW-92 (former MW-Y')	MW-Y-VAS-92-97	08/22/19	Vertical aquifer sample collected at 92 to 97 feet	Estimated concentration of 0.620 microgram per liter	0.31
MW-92 (former MW-Y')	MW-Y-VAS-98-103	08/23/19	Vertical aquifer sample collected at 98 to 103 feet	Estimated concentration of 0.521 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-92 (former MW-Y')	MW-Y-VAS-112-117	08/23/19	Vertical aquifer sample collected at 112 to 117 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-92 (former MW-Y')	MW-Y-VAS-52-57	08/21/19	Vertical aquifer sample collected at 52 to 57 feet	Estimated concentration of 0.378 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-92 (former MW-Y')	MW-Y-VAS-12-17	08/20/19	Vertical aquifer sample collected at 12 to 17 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-93 (former MW-Z)	MW-93-VAS-57-61.1	02/06/20	Vertical aquifer sample collected at 57 to 61 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-93 (former MW-Z)	MW-93-VAS-42-46.3	02/06/20	Vertical aquifer sample collected at 42 to 46 feet	7.1	8.5
MW-93 (former MW-Z)	MW-93-VAS-32-37	02/06/20	Vertical aquifer sample collected at 32 to 37 feet	4.9	2.5
MW-93 (former MW-Z)	MW-93-VAS-72-77	2/7/2020	Vertical aquifer sample collected at 72 to 77 feet	Estimated concentration of 0.161 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-93 (former MW-Z)	MW-93-VAS-112-117	2/8/2020	Vertical aquifer sample collected at 112 to 117 feet	Estimated concentration of 0.452 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-93 (former MW-Z)	MW-93-VAS-142-147	2/8/2020	Vertical aquifer sample collected at 142 to 147 feet	Estimated concentration of 0.254 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-93 (former MW-Z)	MW-93-VAS-152-157	2/9/2020	Vertical aquifer sample collected at 152 to 157 feet	Estimated concentration of 0.198 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-93 (former MW-Z)	MW-93-VAS-172-177	2/10/2020	Vertical aquifer sample collected at 172 to 177 feet	Estimated concentration of 0.241 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter

Location	Sample ID	Sample Date	Sample Depth Interval in feet below ground surface	Total Dissolved Chromium Concentration in microgram per liter	Hexavalent Chromium Concentration in microgram per liter
MW-93 (former MW-Z)	MW-93-VAS-192-197	2/10/2020	Vertical aquifer sample collected at 192 to 197 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-93 (former MW-Z)	MW-93-VAS-212-217	2/11/2020	Vertical aquifer sample collected at 212 to 217 feet	Estimated concentration of 0.412 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-93 (former MW-Z)	MW-93-213-060420	06/04/20	Sample from well development at 213 feet	Estimated concentration of 0.188 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-93 (former MW-Z)	MW-93-50-060320	06/03/20	Sample from well development at 50 feet	Estimated concentration of 0.554 microgram per liter	0.29
MW-94 (former HYDRO-6)	MW-94-175-120419	12/4/19	Sample collected from well development	5.2	5.7
MW-95 (former MW-V)	MW-95-VAS-122-127	03/10/20	Vertical aquifer sample collected at 122 to 127 feet	Estimated concentration of 0.855 microgram per liter	0.87
MW-95 (former MW-V)	MW-95-VAS-97-102	03/10/20	Vertical aquifer sample collected at 97 to 102 feet	Estimated concentration of 0.44 microgram per liter	0.79
MW-95 (former MW-V)	MW-95-VAS-152-157	03/12/20	Vertical aquifer sample collected at 152 to 157 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-95 (former MW-V)	MW-95-VAS-182-187	03/20/20	Vertical aquifer sample collected at 182 to 187 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-95 (former MW-V)	MW-95-113-061020	06/10/20	Sample collected from well development at a depth of 113 feet	Estimated concentration of 0.29 microgram per liter	Estimated concentration of 0.0771 microgram per liter
MW-95 (former MW-V)	MW-95-157-060920	06/09/20	Sample collected from well development at a depth of 157 feet	Estimated concentration of 0.421 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-96 (Relocated MW-A)	MW-96-VAS-132-137	08/07/20	Vertical aquifer sample collected at 132 to 137 feet	Estimated concentration of 0.702 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-96 (Relocated MW-A)	MW-96-VAS-182-187	08/08/20	Vertical aquifer sample collected at 182 to 187 feet	Estimated concentration of 0.227 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-96 (Relocated MW-A)	MW-96-VAS-192-197	08/08/20	Vertical aquifer sample collected at 192 to 197 feet	Estimated concentration of 0.238 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter

Location	Sample ID	Sample Date	Sample Depth Interval in feet below ground surface	Total Dissolved Chromium Concentration in microgram per liter	Hexavalent Chromium Concentration in microgram per liter
MW-96 (Relocated MW-A)	MW-96-VAS-202-207	08/09/20	Vertical aquifer sample collected at 202 to 207 feet	Estimated concentration of 0.217 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-96 (Relocated MW-A)	MW-96-VAS-212-217	08/09/20	Vertical aquifer sample collected at 212 to 217 feet	Estimated concentration of 0.26 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-96 (Relocated MW-A)	MW-96-VAS-222-227	08/10/20	Vertical aquifer sample collected at 222 to 227 feet	Estimated concentration of 0.151 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-96 (Relocated MW-A)	MW-96-VAS-37-42	08/05/20	Vertical aquifer sample collected at 37 to 42 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-96 (Relocated MW-A)	MW-96-VAS-45-50	08/05/20	Vertical aquifer sample collected at 45 to 50 feet	Estimated concentration of 0.905 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-96 (Relocated MW-A)	MW-96-VAS-82-87	08/06/20	Vertical aquifer sample collected at 82 to 87 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-97 (IRZ-11 MW)	MW-97-VAS-27-32	07/09/20	Vertical aquifer sample collected at 27 to 32 feet	280	270
MW-97 (IRZ-11 MW)	MW-97-VAS-82-87	07/10/20	Vertical aquifer sample collected at 82 to 87 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-97 (IRZ-11 MW)	MW-97-VAS-132-137	07/12/20	Vertical aquifer sample collected at 132 – 137 feet	Estimated concentration of 0.977 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-97 (IRZ-11 MW)	MW-97-VAS-172-177	07/13/20	Vertical aquifer sample collected at 172 to 177 feet	Estimated concentration of 0.462 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-97 (IRZ-11 MW)	MW-97-VAS-177-182	07/14/20	Vertical aquifer sample collected at 177 to 182 feet	Estimated concentration of 0.244 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-97 (IRZ-11 MW)	MW-97-VAS-182-187	07/14/20	Vertical aquifer sample collected at 182 to 187 feet	Estimated concentration of 0.313 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-97 (IRZ-11 MW)	MW-97-VAS-189-194	07/15/20	Vertical aquifer sample collected at 189 to 194 feet	Estimated concentration of 0.534 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-97 (IRZ-11 MW)	MW-97-VAS-197-202	07/16/20	Vertical aquifer sample collected at 197 to 202 feet	4.4	1.1

Location	Sample ID	Sample Date	Sample Depth Interval in feet below ground surface	Total Dissolved Chromium Concentration in microgram per liter	Hexavalent Chromium Concentration in microgram per liter
MW-97 (IRZ-11 MW)	MW-97-VAS-207-212	07/21/20	Vertical aquifer sample collected at 207 to 212 feet	Estimated concentration of 0.321 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-98 (MW-K)	MW-98-VAS-44-49	10/10/20	Vertical aquifer sample collected at 44 to 49 feet	430	430
MW-98 (MW-K)	MW-98-VAS-72-77	10/11/20	Vertical aquifer sample collected at 72 to 77 feet	14	24
MW-U	MW-U-VAS-137-142	04/12/19	Vertical aquifer sample collected at 137 to 142 feet	Estimated concentration of 0.818 microgram per liter	1.4
MW-U	MW-U-VAS-181-186	04/13/19	Vertical aquifer sample collected at 181 to 186 feet	Not detected below reporting limit of 0.13 microgram per liter	Estimated concentration of 0.112 J
MW-U	MW-U-VAS-222-227	04/14/19	Vertical aquifer sample collected at 222 to 227 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-U	MW-U-VAS-257-262	04/16/19	Vertical aquifer sample collected at 257 to 262 feet	Not detected below reporting limit of 0.13 microgram per liter	Estimated concentration of 0.0896 J
MW-U	MW-U-VAS-287-292	04/17/19	Vertical aquifer sample collected at 287 to 292 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-U	MW-U-VAS-317-322	04/24/19	Vertical aquifer sample collected at 317 to 322 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
MW-U	MW-U-183-050819	05/08/19	Sample collected from well development at a depth of 183 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
MW-U	MW-U-273-051019	05/10/19	Sample collected from well development at a depth of 273 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
IRZ-9	IRZ-9-VAS-27-32	12/03/18	Vertical aquifer sample collected at 27 to 32 feet	120	120
IRZ-9	IRZ-9-VAS-47-52	12/04/18	Vertical aquifer sample collected at 47 to 52 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
IRZ-9	IRZ-9-VAS-62-67	12/04/18	Vertical aquifer sample collected at 62 to 67 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter

Location	Sample ID	Sample Date	Sample Depth Interval in feet below ground surface	Total Dissolved Chromium Concentration in microgram per liter	Hexavalent Chromium Concentration in microgram per liter
IRZ-9	IRZ-9-VAS-182-187	12/11/18	Vertical aquifer sample collected at 182 to 187 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-9	IRZ-9-VAS-207-212	12/13/18	Vertical aquifer sample collected at 207 to 212 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-9	IRZ-9-VAS-232-237	12/13/18	Vertical aquifer sample collected at 232 to 237 feet	Estimated concentration of 0.811 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-9	IRZ-9-VAS-264-269	12/15/18	Vertical aquifer sample collected at 264 to 269 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-9	IRZ-9-VAS-276-281	12/16/18	Vertical aquifer sample collected at 276 to 281 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-9	IRZ-9-VAS-292-297	12/18/18	Vertical aquifer sample collected at 292 to 297 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-13	IRZ-13-VAS-32-37	11/17/18	Vertical aquifer sample collected at 32 to 37 feet	170	220
IRZ-13	IRZ-13-VAS-57-62	11/18/18	Vertical aquifer sample collected at 57 to 62 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-13	IRZ-13-VAS-102-107	11/19/18	Vertical aquifer sample collected at 102 to 107 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-13	IRZ-13-VAS-142-147	11/19/18	Vertical aquifer sample collected at 142 to 147 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-13	IRZ-13-VAS-180-185	11/27/18	Vertical aquifer sample collected at 180 to 185 feet	230	190
IRZ-13	IRZ-13-VAS-197-202	11/28/18	Vertical aquifer sample collected at 197 to 202 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.83 microgram per liter
IRZ-13	IRZ-13-VAS-224-229	11/28/18	Vertical aquifer sample collected at 224 to 229 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.83 microgram per liter
IRZ-13	IRZ-13-VAS-237-242	11/29/18	Vertical aquifer sample collected at 237 to 242 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-15	IRZ-15-VAS-32-37	11/01/18	Vertical aquifer sample collected at 32 to 37 feet	13	13
IRZ-15	IRZ-15-VAS-62-67	11/02/18	Vertical aquifer sample collected at 62 to 67 feet	Not detected below reporting limit of 0.65 microgram per liter	Estimated concentration of 0.459 J

Location	Sample ID	Sample Date	Sample Depth Interval in feet below ground surface	Total Dissolved Chromium Concentration in microgram per liter	Hexavalent Chromium Concentration in microgram per liter
IRZ-15	IRZ-15-VAS-102-107	11/03/18	Vertical aquifer sample collected at 102 to 107 feet	Not detected below reporting limit of 0.65 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-15	IRZ-15-VAS-132-137	11/04/18	Vertical aquifer sample collected at 132 to 137 feet	Estimated concentration of 0.228 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-15	IRZ-15-VAS-162-167	11/05/18	Vertical aquifer sample collected at 162 to 167 feet	3400	3200
IRZ-15	IRZ-15-VAS-182-187	11/06/18	Vertical aquifer sample collected at 182 to 187 feet	130	140
IRZ-15	IRZ-15-VAS-222-227	11/07/18	Vertical aquifer sample collected at 222 to 227 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-15	IRZ-15-200-063020	06/30/20	Sample from well development at 200 feet	790	800
IRZ-15	IRZ-15-55-063020	06/30/20	Sample from well development at 55 feet	39	36
IRZ-16	IRZ-16-VAS-27-32	02/20/19	Vertical aquifer sample collected at 27 to 32 feet	480	480
IRZ-16	IRZ-16-VAS-57-62	02/20/19	Vertical aquifer sample collected at 57 to 62 feet	Not detected below reporting limit of 0.033 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
IRZ-16	IRZ-16-VAS-102-107	02/21/19	Vertical aquifer sample collected at 102 to 107 feet	Not detected below reporting limit of 0.033 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
IRZ-16	IRZ-16-VAS-132-137	02/26/19	Vertical aquifer sample collected at 132 to 137 feet	Not detected below reporting limit of 0.17 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-16	IRZ-16-VAS-147-152	02/27/19	Vertical aquifer sample collected at 147 to 152 feet	Not detected below reporting limit of 0.17 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-16	IRZ-16-VAS-172-177	02/27/19	Vertical aquifer sample collected at 172 to 177 feet	110	110
IRZ-16	IRZ-16-VAS-192-197	02/28/19	Vertical aquifer sample collected at 192 to 197 feet	Not detected below reporting limit of 0.17 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-17	IRZ-17-165-012420	1/24/2020	Sample collected from well development	120	130
IRZ-17	IRZ-17-52-011620	1/16/2020	Sample collected from well development	20	20

Location	Sample ID	Sample Date	Sample Depth Interval in feet below ground surface	Total Dissolved Chromium Concentration in microgram per liter	Hexavalent Chromium Concentration in microgram per liter
IRZ-17	IRZ-17-VAS-32-37	03/02/19	Vertical aquifer sample collected at 32 to 37 feet	78	67
IRZ-17	IRZ-17-VAS-62-67	03/02/19	Vertical aquifer sample collected at 62 to 67 feet	Estimated concentration of 0.750 microgram per liter	Estimated concentration of 0.604 microgram per liter
IRZ-17	IRZ-17-VAS-102-107	03/03/19	Vertical aquifer sample collected at 102 to 107 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-17	IRZ-17-VAS-132-137	03/13/19	Vertical aquifer sample collected at 132 to 137 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-17	IRZ-17-VAS-137-142	03/12/19	Vertical aquifer sample collected at 137 to 142 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.13 microgram per liter
IRZ-17	IRZ-17-VAS-142-147	03/04/19	Vertical aquifer sample collected at 142 to 147 feet	68	84
IRZ-17	IRZ-17-VAS-147-152	03/12/19	Vertical aquifer sample collected at 147 to 152 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
IRZ-17	IRZ-17-VAS-152-157	03/04/19	Vertical aquifer sample collected at 152 to 157 feet	16	7.0
IRZ-17	IRZ-17-VAS-162-167	03/04/19	Vertical aquifer sample collected at 162 to 167 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-17	IRZ-17-VAS-172-177	03/05/19	Vertical aquifer sample collected at 172 to 177 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-18	IRZ-18-VAS-42-47	11/19/19	Vertical aquifer sample collected at 42 to 47 feet	520	580
IRZ-18	IRZ-18-VAS-62-67	11/19/19	Vertical aquifer sample collected at 62 to 67 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
IRZ-18	IRZ-18-VAS-67-72	11/19/19	Vertical aquifer sample collected at 67 to 72 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
IRZ-18	IRZ-18-VAS-102-107	11/20/19	Vertical aquifer sample collected at 102 to 107 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-18	IRZ-18-VAS-112-117	11/20/19	Vertical aquifer sample collected at 112 to 117 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter

Location	Sample ID	Sample Date	Sample Depth Interval in feet below ground surface	Total Dissolved Chromium Concentration in microgram per liter	Hexavalent Chromium Concentration in microgram per liter
IRZ-18	IRZ-18-VAS-137-142	11/21/19	Vertical aquifer sample collected at 137 to 142 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-18	IRZ-18-VAS-147-152	11/21/19	Vertical aquifer sample collected at 147 to 152 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-18	IRZ-18-VAS-152-157	11/22/19	Vertical aquifer sample collected at 152 to 157 feet	Estimated concentration of 0.267 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-18	IRZ-18-VAS-157-162	11/22/19	Vertical aquifer sample collected at 157 to 162 feet	1100	870
IRZ-18	IRZ-18-VAS-162-167	11/22/19	Vertical aquifer sample collected at 162 to 167 feet	3400	3300
IRZ-18	IRZ-18-VAS-167-172	11/23/19	Vertical aquifer sample collected at 167 to 172 feet	4800	4700
IRZ-18	IRZ-18-VAS-172-177	12/03/19	Vertical aquifer sample collected at 172 to 177 feet	740	660
IRZ-18	IRZ-18-VAS-177-182	12/03/19	Vertical aquifer sample collected at 177 to 182 feet	360	390
IRZ-18	IRZ-18-VAS-182-187	12/04/19	Vertical aquifer sample collected at 182 to 187 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-18	IRZ-18-VAS-187-192	12/04/19	Vertical aquifer sample collected at 187 to 192 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-18	IRZ-18-VAS-202-207	12/05/19	Vertical aquifer sample collected at 202 to 207 feet	Estimated concentration of 0.204 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-19	IRZ-19-VAS-122-127	9/8/2019	Vertical aquifer sample collected at 122 to 127 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-19	IRZ-19-131-136	9/9/2019	Vertical aquifer sample collected at 131 to 136 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-19	IRZ-19-142-147	9/9/2019	Vertical aquifer sample collected at 142 to 147 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-19	IRZ-19-VAS-152-157	9/10/2019	Vertical aquifer sample collected at 152 to 157 feet	Estimated concentration of 0.187 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-19	IRZ-19-VAS-162-167	9/11/2019	Vertical aquifer sample collected at 162 to 167 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter

Location	Sample ID	Sample Date	Sample Depth Interval in feet below ground surface	Total Dissolved Chromium Concentration in microgram per liter	Hexavalent Chromium Concentration in microgram per liter
IRZ-19	IRZ-19-VAS-177-182	9/12/2019	Vertical aquifer sample collected at 177 to 182 feet	Estimated concentration of 0.275 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-19	IRZ-19-VAS-27-32	9/6/2019	Vertical aquifer sample collected at 27 to 32 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
IRZ-19	IRZ-19-VAS-37-42	9/6/2019	Vertical aquifer sample collected at 37 to 42 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
IRZ-19	IRZ-19-VAS-82-87	9/7/2019	Vertical aquifer sample collected at 82 to 87 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
IRZ-20	IRZ-17-VAS-197-202	03/06/19	Vertical aquifer sample collected at 197 to 202 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-20	IRZ-17-VAS-217-222	03/06/19	Vertical aquifer sample collected at 217 to 222 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-20	IRZ-20-VAS-112-117	10/22/18	Vertical aquifer sample collected at 112 to 117 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-20	IRZ-20-VAS-131-136	10/23/18	Vertical aquifer sample collected at 131 to 136 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-20	IRZ-20-VAS-173-178	10/24/18	Vertical aquifer sample collected at 173 to 178 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.83 microgram per liter
IRZ-21	IRZ-21-VAS-52-57	12/15/18	Vertical aquifer sample collected at 52 to 57 feet	100	97
IRZ-21	IRZ-21-VAS-77-82	12/16/18	Vertical aquifer sample collected at 77 to 82 feet	1.3	1.1
IRZ-21	IRZ-21-VAS-112-117	12/16/18	Vertical aquifer sample collected at 112 to 117 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-21	IRZ-21-VAS-132-137	12/17/18	Vertical aquifer sample collected at 132 to 137 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-21	IRZ-21-VAS-147-152	12/18/18	Vertical aquifer sample collected at 147 to 152 v	4000	3600
IRZ-23	IRZ-23-VAS-67-72	12/01/18	Vertical aquifer sample collected at 67 to 72 feet	86	85

Location	Sample ID	Sample Date	Sample Depth Interval in feet below ground surface	Total Dissolved Chromium Concentration in microgram per liter	Hexavalent Chromium Concentration in microgram per liter
IRZ-23	IRZ-23-VAS-92-97	12/01/18	Vertical aquifer sample collected at 92 to 97 feet	Estimated concentration of 0.453 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
IRZ-23	IRZ-23-VAS-122-127	12/02/18	Vertical aquifer sample collected at 122 to 127 feet	2100	2000
IRZ-23	IRZ-23-VAS-139-144	12/02/18	Vertical aquifer sample collected at 139 to 144 feet	3400	3000
IRZ-25	IRZ-25-VAS-52-57	12/05/18	Vertical aquifer sample collected at 52 to 57 feet	4300	3500
IRZ-25	IRZ-25-VAS-67-72	12/05/18	Vertical aquifer sample collected at 67 to 72 feet	750	620
IRZ-25	IRZ-25-VAS-92-97	12/06/18	Vertical aquifer sample collected at 92 to 97 feet	140	130
IRZ-25	IRZ-25-VAS-112-117	12/11/18	Vertical aquifer sample collected at 112 to 117 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-25	IRZ-25-VAS-147-152	12/11/18	Vertical aquifer sample collected at 147 to 152 feet	3800	3600
IRZ-25	IRZ-25-VAS-162-167	12/13/18	Vertical aquifer sample collected at 162 to 167 feet	3000	3000
IRZ-27	IRZ-27-VAS-52-57	03/15/19	Vertical aquifer sample collected at 52 to 57 feet	4500	4400
IRZ-27	IRZ-27-VAS-72-77	03/17/19	Vertical aquifer sample collected at 72 to 77 feet	Estimated concentration of 0.338 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
IRZ-27	IRZ-27-VAS-102-107	03/18/19	Vertical aquifer sample collected at 102 to 107 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
IRZ-27	IRZ-27-VAS-132-137	03/20/19	Vertical aquifer sample collected at 132 to 137 feet	1200	1300
IRZ-27	IRZ-27-67-030720	03/07/20	Sample collected from well development	2300	2300
IRZ-27	IRZ-27-100-030720	03/07/20	Sample collected from well development	490	510
IRZ-27	IRZ-27-134-030320	03/03/20	Sample collected from well development	5500	5400
IRZ-29	IRZ-29-VAS-47-52	12/16/19	Vertical aquifer sample collected at 47 to 52 feet	4400	4500

Location	Sample ID	Sample Date	Sample Depth Interval in feet below ground surface	Total Dissolved Chromium Concentration in microgram per liter	Hexavalent Chromium Concentration in microgram per liter
IRZ-29	IRZ-29-VAS-62-67	12/17/19	Vertical aquifer sample collected at 62 to 67 feet	2500	2400
IRZ-29	IRZ-29-VAS-87-92	12/17/19	Vertical aquifer sample collected at 87 to 92 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
IRZ-29	IRZ-29-VAS-112-117	12/18/19	Vertical aquifer sample collected at 112 to 117 feet	730	760
IRZ-29	IRZ-29-VAS-116-120.5	12/19/19	Vertical aquifer sample collected at 116 to 120 feet	18	23
IRZ-29	IRZ-29-77-032820	03/28/20	Sample collected from well development	1700	1600
IRZ-29	IRZ-29-121-032820	03/28/20	Sample collected from well development	2500	2500
IRZ-31	IRZ-31-VAS-48-53	01/08/20	Vertical aquifer sample collected at 48 to 53 feet	2000	2000
IRZ-31	IRZ-31-VAS-72-77	01/09/20	Vertical aquifer sample collected at 72 to 77 feet	570	480
IRZ-31	IRZ-31-VAS-102-107	01/10/20	Vertical aquifer sample collected at 102 to 107 feet	2300	2300
IRZ-31	IRZ-31-VAS-115-120	01/11/20	Vertical aquifer sample collected at 115 to 120 feet	2500	2500
IRZ-31	IRZ-31-77-032920	03/29/20	Sample collected from well development	2000	2100
IRZ-31	IRZ-31-121-032920	03/29/20	Sample collected from well development	3100	3100
IRZ-33	IRZ-33-VAS-49-54	01/21/20	Vertical aquifer sample collected at 49 to 54 feet	1900	2100
IRZ-33	IRZ-33-VAS-72-77	01/22/20	Vertical aquifer sample collected at 72 to 77 feet	1600	1600
IRZ-33	IRZ-33-VAS-105-110	01/23/20	Vertical aquifer sample collected at 105 to 110 feet	1400	1300
IRZ-33	IRZ-33-111-071320	07/13/20	Sample collected from well development	2200	2100
IRZ-35	IRZ-35-VAS-52-57	01/13/20	Vertical aquifer sample collected at 52 to 57 feet	850	810

Location	Sample ID	Sample Date	Sample Depth Interval in feet below ground surface	Total Dissolved Chromium Concentration in microgram per liter	Hexavalent Chromium Concentration in microgram per liter
IRZ-35	IRZ-35-VAS-67-72	01/13/20	Vertical aquifer sample collected at 67 to 72 feet	990	920
IRZ-35	IRZ-35-VAS-82-87	01/14/20	Vertical aquifer sample collected at 82 to 87 feet	2300	2500
IRZ-35	IRZ-35-88-072420	07/24/20	Sample collected from well development	1700	1500
IRZ-37	IRZ-37-VAS-52-57	10/06/19	Vertical aquifer sample collected at 52 to 57 feet	1100	1000
IRZ-37	IRZ-37-VAS-57-62	10/07/19	Vertical aquifer sample collected at 57 to 62 feet	1200	1100
IRZ-39	IRZ-39-VAS-27-32	03/30/19	Vertical aquifer sample collected at 27 to 32 feet	31	29
IRZ-39	IRZ-39-110419	11/04/19	Sample collected from well development	38	36
RB-2	RB-2-VAS-102-107	7/1/19	Vertical aquifer sample collected at 102 to 107 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
RB-2	RB-2-VAS-142-147	7/9/19	Vertical aquifer sample collected at 142 to 147 feet	Estimated concentration of 0.270 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
RB-2	RB-2-VAS-172-177	7/12/19	Vertical aquifer sample collected at 172 to 177 feet	Estimated concentration of 0.233 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
RB-2	RB-2-VAS-202-207	7/14/19	Vertical aquifer sample collected at 202 to 207 feet	Estimated concentration of 0.218 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
RB-2	RB-2-VAS-237-242	7/15/19	Vertical aquifer sample collected at 237 to 242 feet	Estimated concentration of 0.233 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
RB-2	RB-2-VAS-274-279	7/18/19	Vertical aquifer sample collected at 274 to 279 feet	Estimated concentration of 0.514 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
RB-2	RB-2-VAS-287-292	7/26/19	Vertical aquifer sample collected at 287 to 292 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
RB-2	RB-2-VAS-36.5-41.5	6/29/19	Vertical aquifer sample collected at 36 to 42 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter

Location	Sample ID	Sample Date	Sample Depth Interval in feet below ground surface	Total Dissolved Chromium Concentration in microgram per liter	Hexavalent Chromium Concentration in microgram per liter
RB-2	RB-2-VAS-72-77	6/30/19	Vertical aquifer sample collected at 72 to 77 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
RB-3	RB-3-VAS-15-20	04/26/19	Vertical aquifer sample collected at 15 to 20 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
RB-3	RB-3-VAS-50-55	04/27/19	Vertical aquifer sample collected at 50 to 55 feet	Not detected below reporting limit of 0.13 microgram per liter	Estimated concentration of 0.100 microgram per liter
RB-3	RB-3-VAS-80-85	04/27/19	Vertical aquifer sample collected at 80 to 85 feet	Not detected below reporting limit of 0.13 microgram per liter	Estimated concentration of 0.132 microgram per liter
RB-3	RB-3-VAS-120-125	04/28/19	Vertical aquifer sample collected at 120 to 125 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
RB-3	RB-3-VAS-150-155	04/29/19	Vertical aquifer sample collected at 150 to 155 feet	Estimated concentration of 0.257 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
RB-3	RB-3-VAS-180-185	04/29/19	Vertical aquifer sample collected at 180 to 185 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
RB-3	RB-3-VAS-205-210	04/30/19	Vertical aquifer sample collected at 205 to 210 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
RB-3	RB-3-193.5-061620	06/16/20	Sample collected from well development at 193 to 194 feet	Estimated concentration of 0.809 microgram per liter	Estimated concentration of 0.156 microgram per liter
RB-3	RB-3-91-061720	06/17/20	Sample collected from well development at 91 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
RB-4	RB-4-VAS-15-20	04/12/19	Vertical aquifer sample collected at 15 to 20 feet	Not detected below reporting limit of 0.13 microgram per liter	Estimated concentration of 0.0556 microgram per liter
RB-4	RB-4-VAS-41-46	04/12/19	Vertical aquifer sample collected at 41 to 46 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
RB-4	RB-4-VAS-81-86	04/12/19	Vertical aquifer sample collected at 81 to 86 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter

Location	Sample ID	Sample Date	Sample Depth Interval in feet below ground surface	Total Dissolved Chromium Concentration in microgram per liter	Hexavalent Chromium Concentration in microgram per liter
RB-4	RB-4-VAS-121-126	04/13/19	Vertical aquifer sample collected at 121 to 126	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
RB-4	RB-4-VAS-136-141	04/13/19	Vertical aquifer sample collected at 136 to 141 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
RB-4	RB-4-VAS-155-160	04/17/19	Vertical aquifer sample collected at 155 to 160 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.17 microgram per liter
RB-4	RB-4-138-102019	10/20/19	Sample collected from well development	Not detected below reporting limit of 0.13 microgram per liter	Estimated concentration of 0.135 microgram per liter
RB-4	RB-4-58-102119	10/21/19	Sample collected from well development	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
RB-5	RB-5-VAS-12-17	04/04/19	Vertical aquifer sample collected at 12 to 17 feet	Estimated concentration of 0.235 microgram per liter	Estimated concentration of 0.125 microgram per liter
RB-5	RB-5-VAS-42-47	04/09/19	Vertical aquifer sample collected at 42 to 47 feet	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
RB-5	RB-5-VAS-82-87	04/09/19	Vertical aquifer sample collected at 82 to 87 feet	Estimated concentration of 0.769 microgram per liter	Estimated concentration of 0.127 microgram per liter
RB-5	RB-5-44-102419	10/24/19	Sample collected from well development	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter
RB-5	RB-5-89-102319	10/23/19	Sample collected from well development	Not detected below reporting limit of 0.13 microgram per liter	Not detected below reporting limit of 0.033 microgram per liter

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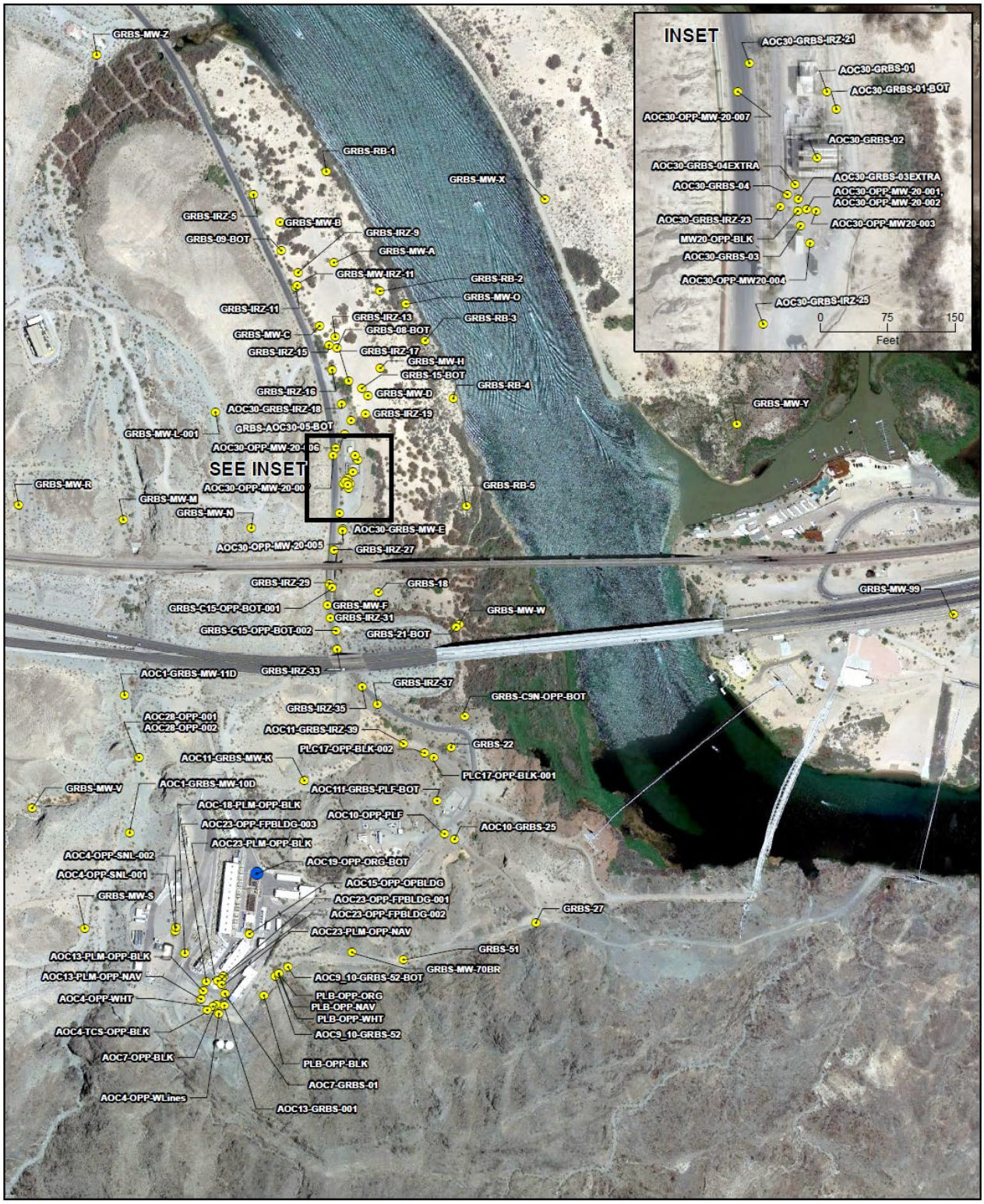
Attachment C
Soil Sampling Locations and Available Soil Analytical Results
(Soil Data Presented in Excel File)



LEGEND

- Soil Sample Location
- Soil Sample Collected from this Location in May 2021

0 300 600 Feet

N

Baseline and Opportunistic Soil Sampling Locations

Monthly Progress Report
Groundwater Remedy Phase 1 Construction
PG&E Topock Compressor Station, Needles, California

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Attachment D
Perimeter Air Sampling Analytical Results

Attachment D. Perimeter Air Sampling Analytical Results

In conformance with the approved *Construction/Remedial Action Work Plan for the Final Groundwater Remedy, PG&E Topock Compressor Station, Needles, California* (CH2M, 2015), air monitoring has been conducted during construction to evaluate the ongoing effectiveness of the dust control program, to guide modifications to field activities and engineering control measures, if necessary, and to document that construction activities do not result in the migration of soil contaminants beyond the work area boundaries.

Perimeter air monitoring has been performed if construction activities have the potential to generate visible dust. The air monitoring program consists of both real-time fugitive dust monitoring and perimeter air sampling for select soil contaminants. Locations to be monitored and sampled are as follows:

- Real-time fugitive dust monitoring is performed at the perimeter of the work areas (outside of the exclusion zone) that have the potential to generate visible dust, including the Construction Headquarters (CHQ) and the Soil Processing Yard (SPY).
- Perimeter air sampling for hexavalent chromium is performed at the perimeter of the work areas (outside of the exclusion zone) that are inside Areas of Concern (AOCs) within the construction footprint where hexavalent chromium concentrations in soil have been historically reported. Air sampling for hexavalent chromium in the SPY will be performed when soil from AOCs with reported concentrations of hexavalent chromium is actively being processed. Air sampling may also be performed at other work areas at the site based on hexavalent chromium concentrations reported from new soil data or based on field observations during construction activities.
- Air sampling for asbestos will be limited to work areas where asbestos-containing material (ACM) has been observed in prior field investigations, including two areas in AOC 12 and one area in AOC 4. Perimeter air monitoring may also be performed at other work areas at the site if ACM is discovered during construction activities.

Project-specific levels of concern (LOCs) and action levels were developed as an indicator to determine whether additional dust control measures, as presented in the project's Dust Control Plan required by the Mojave Desert Air Quality Management District (MDAQMD), are necessary.

- The LOCs, which represent conservative concentrations of compounds that receptors outside the work area could be safely exposed to during construction, have been evaluated for all compounds that have been detected in soil samples collected at the site in the prior investigations. The LOCs were developed using standard U.S. Environmental Protection Agency (USEPA) and California Environmental Protection Agency risk assessment methodology, toxicology data, and exposure assumptions (USEPA, 2009, 2017; California Department of Toxic Substances Control [DTSC], 2018). Both cancer and noncancer health effects were considered. For each type of health effect, the LOC was back-calculated from an established target or from acceptable cancer risk or noncancer hazard where USEPA or DTSC toxicity values are available. The LOCs for cancer effects are based on a target excess cancer risk of one in a million (1×10^{-6}). The LOCs for noncancer effects are based on a target hazard quotient of 1. The LOCs were developed using these assumptions:
  - Receptors are present outside the perimeter of the work areas
  - Exposure via inhalation is 10 hours per day for a 10 days on/4 days off schedule
  - Duration of Phase 1 of the final groundwater remedy construction is 20 months
- The action level for fugitive dust monitoring is 100 micrograms per cubic meter ($\mu g/m^3$) for a net (downwind minus upwind) dust concentration. This action level is based on MDAQMD Rule 403, Part C. A 10-hour time-weighted average of readings collected throughout the work day will be used to document compliance with MDAQMD Rule 403.
- For analytes detected in soil, the following equation was used to calculate maximum allowable airborne particulate concentrations for receptor exposure outside the work area (based on the approach presented by Marlowe (1999):

$$AL = \frac{LOC\ x\ 1{,}000{,}000\ mg/kg}{CS}$$

Where:

AL = action level for airborne particulates (µg/m^3)

LOC = Project specific risk-based level of concern (µg/m^3)

CS = maximum detected concentration of compound in site soil (milligrams per kilogram [mg/kg])

Action levels were determined as follows:

- Soil data from prior investigations were gathered for the entire site.
- Sample locations within the maximum construction footprint were evaluated. Some sample locations were removed from evaluation as they were within the compressor station in locations where no construction activities will actually occur.
- The maximum reported soil concentration for each compound was determined and then used to calculate an airborne particulate action level.
- All compounds had allowable airborne particulate action levels greater than 100 µg/m^3 except for hexavalent chromium at a few locations.
- Lead does not have USEPA or DTSC toxicity values; however, an action level was calculated using the DTSC (2011) LeadSpread 8 model. This is based on the maximum reported soil concentration for lead of 1,400 mg/kg from samples collected within the construction footprint and a blood level of concern through inhalation of 1 microgram per deciliter. The resulting action level for lead is 548 µg/m^3.
- Therefore, keeping fugitive dust below the action level 100 µg/m^3 will result in airborne particulate concentrations of contaminants (other than hexavalent chromium) remaining below their respective LOCs.
- Fugitive dust monitoring will be used to evaluate airborne contaminants in dust for all compounds except for hexavalent chromium.

In February 2022, 24 real time dust observation/monitoring events were conducted at the perimeter of the work areas (outside of the exclusion zone). No exceedance of the action level for fugitive dust monitoring (100 µg/m^3) was observed in February 2022.

Tables D-1a and D-1b of **Attachment D** present all analytical results from air sampling events to date. All results are below the project level of concern (LOC) for hexavalent chromium which is 0.00094 µg/m3.

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Table D-1a. Perimeter Air Sampling Results – Hexavalent Chromium

February 2022 Monthly Progress Report for the Final Groundwater Remedy Construction and Startup
PG&E Topock Compressor Station, Needles, California

Location ID	Location	Sampling Date	Hexavalent Chromium Concentration in micrograms per cubic meter
GRAM TWB-D1	GRAM TWB Downwind1	3/24/2021	Not detected at a reporting limit of 0.0000285 micrograms per cubic meter
GRAM TWB-D2	GRAM TWB Downwind2	3/24/2021	Not detected at a reporting limit of 0.0000294 micrograms per cubic meter
GRAM TWB-U1	GRAM TWB Upwind	3/24/2021	Not detected at a reporting limit of 0.0000285 micrograms per cubic meter
GRAM TWB-D1	GRAM TWB Downwind1	3/23/2021	Not detected at a reporting limit of 0.0000323 micrograms per cubic meter
GRAM TWB-D2	GRAM TWB Downwind2	3/23/2021	Not detected at a reporting limit of 0.0000324 micrograms per cubic meter
GRAM TWB-U1	GRAM TWB Upwind	3/23/2021	Not detected at a reporting limit of 0.0000312 micrograms per cubic meter
GRAM TWB-D1	GRAM TWB Downwind1	3/22/2021	Not detected at a reporting limit of 0.0000354 micrograms per cubic meter
GRAM TWB-D2	GRAM TWB Downwind2	3/22/2021	Not detected at a reporting limit of 0.0000353 micrograms per cubic meter
GRAM TWB-U1	GRAM TWB Upwind	3/22/2021	Not detected at a reporting limit of 0.0000354 micrograms per cubic meter
GRAM TWB-D1	GRAM TWB Downwind1	3/18/2021	Not detected at a reporting limit of 0.0000342 micrograms per cubic meter
GRAM TWB-D2	GRAM TWB Downwind2	3/18/2021	Not detected at a reporting limit of 0.0000347 micrograms per cubic meter
GRAM TWB-U1	GRAM TWB Upwind	3/18/2021	Not detected at a reporting limit of 0.0000338 micrograms per cubic meter
GRAM TWB-D1	GRAM TWB Downwind1	3/17/2021	Not detected at a reporting limit of 0.0000284 micrograms per cubic meter
GRAM TWB-D1	GRAM TWB Downwind1 - DUP	3/17/2021	Not detected at a reporting limit of 0.0000284 micrograms per cubic meter
GRAM TWB-D2	GRAM TWB Downwind2	3/17/2021	Not detected at a reporting limit of 0.0000289 micrograms per cubic meter
GRAM TWB-U1	GRAM TWB Upwind	3/17/2021	Not detected at a reporting limit of 0.0000283 micrograms per cubic meter
GRAM TWB-D1	GRAM TWB Downwind1	3/16/2021	0.000289 – concentration reported by laboratory in micrograms per cubic meter
GRAM TWB-D2	GRAM TWB Downwind2	3/16/2021	Not detected at a reporting limit of 0.0000334 micrograms per cubic meter
GRAM TWB-U1	GRAM TWB Upwind	3/16/2021	Not detected at a reporting limit of 0.0000332 micrograms per cubic meter
GRAM TWB-D1	GRAM TWB Downwind1	3/15/2021	Not detected at a reporting limit of 0.0000291 micrograms per cubic meter
GRAM TWB-D2	GRAM TWB Downwind2	3/15/2021	Not detected at a reporting limit of 0.0000290 micrograms per cubic meter

Location ID	Location	Sampling Date	Hexavalent Chromium Concentration in micrograms per cubic meter
GRAM TWB-U1	GRAM TWB Upwind	3/15/2021	Not detected at a reporting limit of 0.0000297 micrograms per cubic meter
GRAM TWB-D1	GRAM TWB Downwind1	3/11/2021	Not detected at a reporting limit of 0.0000256 micrograms per cubic meter
GRAM TWB-D2	GRAM TWB Downwind2	3/11/2021	Not detected at a reporting limit of 0.0000254 micrograms per cubic meter
GRAM TWB-U1	GRAM TWB Upwind	3/11/2021	Not detected at a reporting limit of 0.0000261 micrograms per cubic meter
GRAM TWB-D1	GRAM TWB Downwind1	3/10/2021	Not detected at a reporting limit of 0.0000278 micrograms per cubic meter
GRAM TWB-D2	GRAM TWB Downwind2	3/10/2021	Not detected at a reporting limit of 0.0000281 micrograms per cubic meter
GRAM TWB-U1	GRAM TWB Upwind	3/10/2021	Not detected at a reporting limit of 0.0000281 micrograms per cubic meter
GRAM SPY-D1	GRAM SPY Downwind 1	11/09/2020	Not detected at a reporting limit of 0.0000248 micrograms per cubic meter
GRAM SPY-D2	GRAM SPY Downwind 2	11/09/2020	Not detected at a reporting limit of 0.000025 micrograms per cubic meter
GRAM SPY-U1	GRAM SPY Upwind	11/09/2020	Not detected at a reporting limit of 0.0000241 micrograms per cubic meter
GRAM SPY-D1	GRAM SPY Downwind 1	11/11/2020	Not detected at a reporting limit of 0.0000254 micrograms per cubic meter
GRAM SPY-D2	GRAM SPY Downwind 2	11/11/2020	Not detected at a reporting limit of 0.0000248 micrograms per cubic meter
GRAM SPY-U1	GRAM SPY Upwind	11/11/2020	Not detected at a reporting limit of 0.0000247 micrograms per cubic meter
GRAM SPY-D1	GRAM SPY Downwind 1	11/13/2020	Not detected at a reporting limit of 0.0000278 micrograms per cubic meter
GRAM SPY-D2	GRAM SPY Downwind 2	11/13/2020	Not detected at a reporting limit of 0.0000279 micrograms per cubic meter
GRAM SPY-U1	GRAM SPY Upwind	11/13/2020	Not detected at a reporting limit of 0.0000278 micrograms per cubic meter
AOC12-D1	AOC12 Downwind 1	9/17/2020	Not detected at a reporting limit of 0.0000274 micrograms per cubic meter
AOC12-D2	AOC12 Downwind 2	9/17/2020	0.0000527 - concentration estimated by laboratory or data validation
AOC12-U1	AOC12 Upwind	9/17/2020	Not detected at a reporting limit of 0.0000266 micrograms per cubic meter
AOC12-D1	AOC12 Downwind 1	9/16/2020	Not detected at a reporting limit of 0.0000261 micrograms per cubic meter
AOC12-D2	AOC12 Downwind 2	9/16/2020	0.0000707 - concentration estimated by laboratory or data validation
AOC12-U1	AOC12 Upwind	9/16/2020	Not detected at a reporting limit of 0.0000256 micrograms per cubic meter
AOC10d-D1	AOC10d Downwind 1	7/6/2020	0.000139 - concentration estimated by laboratory or data validation

Location ID	Location	Sampling Date	Hexavalent Chromium Concentration in micrograms per cubic meter
AOC10d-D2	AOC10d Downwind 2	7/6/2020	0.000133 - concentration estimated by laboratory or data validation
AOC10d-U1	AOC10d Upwind	7/6/2020	0.000125 - concentration estimated by laboratory or data validation
AOC11f-D1	AOC11f Downwind 1	6/18/2020	0.0000777 - concentration estimated by laboratory or data validation
AOC11f-D2	AOC11f Downwind 2	6/18/2020	0.0000473 - concentration estimated by laboratory or data validation
AOC11f-U1	AOC11f Upwind	6/18/2020	0.0000373 - concentration estimated by laboratory or data validation
AOC7-D1	AOC7 Downwind 1	6/4/2020	Not detected at a reporting limit of 0.0000325 micrograms per cubic meter
AOC7-D2	AOC7 Downwind 2	6/4/2020	0.00011 - concentration estimated by laboratory or data validation
AOC7-U1	AOC7 Upwind	6/4/2020	0.000088 - concentration estimated by laboratory or data validation
AOC7-D1	AOC7 Downwind 1	3/17/2020	0.0000511 - concentration estimated by laboratory or data validation
AOC7-D2	AOC7 Downwind 2	3/17/2020	0.000121 - concentration estimated by laboratory or data validation
AOC7-U1	AOC7 Upwind	3/17/2020	Not detected at a reporting limit of 0.0000338 micrograms per cubic meter
AOC30-D1	AOC30 Downwind 1	12/16/2019	0.0000871 - concentration estimated by laboratory or data validation
AOC30-D2	AOC30 Downwind 2	12/16/2019	Not detected at a reporting limit of 0.0000271 micrograms per cubic meter
AOC30-U1	AOC30 Upwind 1	12/16/2019	0.0000782 - concentration estimated by laboratory or data validation
AOC08-D1	AOC08 Downwind 1	12/17/2019	0.000106 - concentration estimated by laboratory or data validation
AOC08-D2	AOC08 Downwind 2	12/17/2019	0.000151 – concentration reported by laboratory
AOC08-U1	AOC08 Upwind 1	12/17/2019	0.000063 - concentration estimated by laboratory or data validation
AOC30-D1	AOC30 Downwind 1	12/17/2019	0.0000584 - concentration estimated by laboratory or data validation
AOC30-D2	AOC30 Downwind 2	12/17/2019	0.0000537 - concentration estimated by laboratory or data validation
AOC30-U1	AOC30 Upwind 1	12/17/2019	0.0000644 - concentration estimated by laboratory or data validation
AOC30-D1	AOC30 Downwind 1	12/18/2019	0.0000601 - concentration estimated by laboratory or data validation
AOC30-D2	AOC30 Downwind 2	12/18/2019	0.0000806 - concentration estimated by laboratory or data validation
AOC30-U1	AOC30 Upwind 1	12/18/2019	Not detected at a reporting limit of 0.000031 micrograms per cubic meter
AOC08-D1	AOC08 Downwind 1	12/18/2019	0.000233 – concentration reported by laboratory

Location ID	Location	Sampling Date	Hexavalent Chromium Concentration in micrograms per cubic meter
AOC08-D2	AOC08 Downwind 2	12/18/2019	0.000123 - concentration estimated by laboratory or data validation
AOC08-U1	AOC08 Upwind 1	12/18/2019	Not detected at a reporting limit of 0.000027 micrograms per cubic meter
AOC30-D1	AOC30 Downwind 1	12/19/2019	0.0000648 - concentration estimated by laboratory or data validation
AOC30-D2	AOC30 Downwind 2	12/19/2019	0.0000584 - concentration estimated by laboratory or data validation
AOC30-U1	AOC30 Upwind 1	12/19/2019	0.0000749 - concentration estimated by laboratory or data validation
AOC08-D1	AOC08 Downwind 1	12/19/2019	0.0000806 - concentration estimated by laboratory or data validation
AOC08-D2	AOC08 Downwind 2	12/19/2019	0.0000837 - concentration estimated by laboratory or data validation
AOC08-U1	AOC08 Upwind 1	12/19/2019	Not detected at a reporting limit of 0.00003 micrograms per cubic meter
AOC10-D1	AOC10 Downwind 1	11/04/2019	0.0000696 - concentration estimated by laboratory or data validation
AOC10-D2	AOC10 Downwind 2	11/04/2019	0.0000781 - concentration estimated by laboratory or data validation
AOC10-U1	AOC10 Upwind	11/04/2019	0.0000609 - concentration estimated by laboratory or data validation
AOC10-D1	AOC10 Downwind 1	11/06/2019	0.0000602 - concentration estimated by laboratory or data validation
AOC10-D2	AOC10 Downwind 2	11/06/2019	0.0000582 - concentration estimated by laboratory or data validation
AOC10-U1	AOC10 Upwind	11/06/2019	0.0000401 - concentration estimated by laboratory or data validation
AOC10-D1	AOC10 Downwind 1	10/18/2019	Not detected at a reporting limit of 0.0000347 micrograms per cubic meter
AOC10-D2	AOC10 Downwind 2	10/18/2019	Not detected at a reporting limit of 0.0000375 micrograms per cubic meter
AOC10-U1	AOC10 Upwind	10/18/2019	Not detected at a reporting limit of 0.0000386 micrograms per cubic meter
AOC10-D1	AOC10 Downwind 1	10/17/2019	0.0000321 - concentration estimated by laboratory or data validation
AOC10-D2	AOC10 Downwind 2	10/17/2019	Not detected at a reporting limit of 0.0000321 micrograms per cubic meter
AOC10-U1	AOC10 Upwind	10/17/2019	Not detected at a reporting limit of 0.0000322 micrograms per cubic meter
AOC10-D1	AOC10 Downwind 1	10/15/2019	Not detected at a reporting limit of 0.0000324 micrograms per cubic meter
AOC10-D2	AOC10 Downwind 2	10/15/2019	Not detected at a reporting limit of 0.0000331 micrograms per cubic meter
AOC10-U1	AOC10 Upwind	10/15/2019	Not detected at a reporting limit of 0.0000316 micrograms per cubic meter

Location ID	Location	Sampling Date	Hexavalent Chromium Concentration in micrograms per cubic meter
PIPE B-D1	PIPE B Downwind 1	8/13/2019	Not detected at a reporting limit of 0.0000276 micrograms per cubic meter
PIPE B-D2	PIPE B Downwind 2	8/13/2019	Not detected at a reporting limit of 0.0000276 micrograms per cubic meter
PIPE B-U1	PIPE B Upwind	8/13/2019	Not detected at a reporting limit of 0.0000276 micrograms per cubic meter
PIPE B-D1	PIPE B Downwind 1	8/12/2019	Not detected at a reporting limit of 0.0000278 micrograms per cubic meter
PIPE B-D2	PIPE B Downwind 2	8/12/2019	0.000035 - concentration estimated by laboratory or data validation
PIPE B-U1	PIPE B Upwind	8/12/2019	Not detected at a reporting limit of 0.0000279 micrograms per cubic meter
AOC30-D1	AOC30 Downwind 1	6/18/2019	0.0000407 - concentration estimated by laboratory or data validation
AOC30-D2	AOC30 Downwind 2	6/18/2019	Not detected at a reporting limit of 0.0000313 micrograms per cubic meter
AOC30-U1	AOC30 Upwind	6/18/2019	Not detected at a reporting limit of 0.000031 micrograms per cubic meter
AOC30-D1	AOC30 Downwind 1	6/17/2019	Not detected at a reporting limit of 0.0000633 micrograms per cubic meter
AOC30-D2	AOC30 Downwind 2	6/17/2019	Not detected at a reporting limit of 0.0000636 micrograms per cubic meter
AOC30-U1	AOC30 Upwind	6/17/2019	Not detected at a reporting limit of 0.0000589 micrograms per cubic meter
AOC4-D1	AOC4 Downwind 1	5/16/2019	0.0000423 - concentration estimated by laboratory or data validation
AOC4-D2	AOC4 Downwind 2	5/16/2019	Not detected at a reporting limit of 0.0000385 micrograms per cubic meter
AOC4-U	AOC4 Upwind	5/16/2019	Not detected at a reporting limit of 0.0000378 micrograms per cubic meter
AOC11-D1	AOC11 Downwind 1	5/15/2019	Not detected at a reporting limit of 0.0000392 micrograms per cubic meter
AOC11-D2	AOC11 Downwind 2	5/15/2019	0.0001262 - concentration estimated by laboratory or data validation
AOC11-U	AOC11 Upwind	5/15/2019	Not detected at a reporting limit of 0.0000386 micrograms per cubic meter
AOC4-D1	AOC4 Downwind 1	5/14/2019	Not detected at a reporting limit of 0.000148 micrograms per cubic meter
AOC4-D2	AOC4 Downwind 2	5/14/2019	Not detected at a reporting limit of 0.000155 micrograms per cubic meter
AOC4-U	AOC4 Upwind	5/14/2019	Not detected at a reporting limit of 0.000148 micrograms per cubic meter
AOC30-IRZ-23-D1	AOC30-IRZ-23 Downwind 1	2/20/2019	Not detected at a reporting limit of 0.0000859 micrograms per cubic meter
AOC30-IRZ-23-D2	AOC30-IRZ-23 Downwind 2	2/20/2019	Not detected at a reporting limit of 0.0000862 micrograms per cubic meter

Location ID	Location	Sampling Date	Hexavalent Chromium Concentration in micrograms per cubic meter
AOC30-IRZ-23-U1	AOC30-IRZ-23 Upwind	2/20/2019	0.000104 - concentration estimated by laboratory or data validation
AOC13-D1	AOC13 Downwind 1	10/09/18	0.000732 - concentration estimated by laboratory or data validation
AOC13-D2	AOC13 Downwind 2	10/09/18	0.000709 - concentration estimated by laboratory or data validation
AOC13-U	AOC13 Upwind	10/09/18	Not detected at a reporting limit of 0.000172 micrograms per cubic meter

Table D-1b. Perimeter Air Sampling Results – Asbestos

February 2022 Monthly Progress Report for the Final Groundwater Remedy Construction and Startup
PG&E Topock Compressor Station, Needles, California

Location ID	Location	Sampling Date	Asbestos Concentration in fibers per cubic meter
AOC11f-D1	AOC11f Downwind 1	6/18/2020	Not detected at a reporting limit of 0.0006 fibers per cubic centimeter
AOC11f-D2	AOC11f Downwind 2	6/18/2020	Not detected at a reporting limit of 0.0007 fibers per cubic centimeter
AOC11f-U1	AOC11f Upwind	6/18/2020	Not detected at a reporting limit of 0.0007 fibers per cubic centimeter

Attachment E
Noise Monitoring Results
(SEIR NOISE-2 Requirement)

Attachment E. Noise Monitoring Results

In conformance with the Supplemental Environmental Impact Report (SEIR) Mitigation Measure NOISE-2, noise monitoring has been conducted with ANSI S1.4 Type 1, precision sound level meters when construction activities are within the specified distance (e.g., 1,850 feet from sensitive receptors in California) at approved monitoring locations previously determined in coordination with the Tribes and land owners/managers. The goal of the noise monitoring is to identify if noise levels from project construction activities exceed applicable standards of the San Bernardino and Mohave County codes. Exceedance of standards would require coordination with the Tribes and land owners/managers to evaluate the potential constraints and locations for temporary engineered acoustical barriers. Consistent with the request of the Tribes, monitoring equipment is not left at the approved monitoring locations; rather, it is mounted on a tripod for attended representative measurements and removed when the monitoring event is complete.

When a new construction activity is conducted or a previously monitored construction activity is conducted closer to a noise-sensitive area, monitoring is conducted at more frequent intervals to evaluate the potential need for an acoustical barrier. As the activities continue in the same location and multiple attended measurements indicate that the applicable standard has not been exceeded by the construction activity, periodic attending monitoring events are conducted to confirm continued compliance.

The attended monitoring events document the A-weighted equivalent continuous sound level (L_{eq}) at periodic intervals (e.g., 5, 10, 15, 20, 30, 40, 50 and 60 minutes). The trend of the data at these intervals is evaluated in the field to assess the stability in the sound level to determine the duration of the monitoring event. When the interval data are relatively stable or clearly below the standard, the attended monitoring event will typically be 15 to 30 minutes in duration. As the applicable standards are expressed in terms of the 24-hour average day-night sound level (L_{dn}) which is based on the L_{eq} metric, the measured L_{eq} is compared to the applicable L_{dn} standard for mobile noise sources (i.e., 60 A-weighted decibels [dBA] for Park Moabi, 65 dBA at all other locations). This results in a reasonable and conservative assessment given construction activities are not emitting noise continuously over a 24-hour period, nor are they occurring frequently during the nighttime hours (10 p.m. to 7 a.m.).

Sound monitoring was not conducted in February 2022 as heavy construction is substantially complete and remaining work (primarily revegetation/mitigation planting in the floodplain and miscellaneous post-Phase 1 construction site restoration) did not occur in new areas.

Sound monitoring will continue as work progresses and moves into new areas to identify when an acoustical barrier needs to be considered.

Attachment F
Six-Week Look-Ahead Schedule

Six-Week Look-Ahead Schedule

PG&E Topock Compressor Station Remedial Activities

Activity	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Primary Planned Activities	**3/6/2022**	**3/7/2022**	**3/8/2022**	**3/9/2022**	**3/10/2022**	**3/11/2022**	**3/12/2022**
Start Time (PST)	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM
Pipeline Surface Improvements **G5***	No Work	^Pipeline B Stormwater Improvements	^Pipeline B Stormwater Improvements	^Pipeline B Stormwater Improvements	^Pipeline B Stormwater Improvements	No Work	No Work
Site Wide Groundwater Sampling **G3*, F3*, E4*, F4*, G4*, D5*, E5*, F5*, G5*, D6*, E6*, F6*, & G6***	No Work	Quarterly Groundwater sampling Monthly PCM Samples	Quarterly Groundwater sampling Monthly PCM Samples	Quarterly Groundwater sampling	Quarterly Groundwater sampling	Quarterly Groundwater sampling	No Work
Site Wide Revegetation **F5***	Irrigation	No Work	No Work	No Work	^Revegetation Soil Sampling - Tentative*	^Revegetation Soil Sampling - Tentative* Irrigation O&M	Irrigation
Site Wide Electrical & Controls Construction **E5*, F5*, G5***	No Work	IRZ O&M Support PSI Punchlist Node 99 Functional Testing	IRZ O&M Support PSI Punchlist Node 99 Functional Testing	IRZ O&M Support PSI Punchlist Node 99 Functional Testing	IRZ O&M Support PSI Punchlist Node 99 Functional Testing	IRZ O&M Support Node 99 Functional Testing	*Tentative* - Node 99 Functional Testing
IM-3 Layup Activities **E4*, E5***	T-603 Cleaning	T-701 Cleaning	T-701 Cleaning	No Work	No Work	No Work	No Work
Phase 2 Drilling **G5***	No Work	TWB-1 Site prep	TWB-1 Site Prep	TWB-1 Site Prep	TWB-1 Site Prep	No Work	No Work
Primary Planned Activities	**3/13/2022**	**3/14/2022**	**3/15/2022**	**3/16/2022**	**3/17/2022**	**3/18/2022**	**3/19/2022**
Start Time (PST)	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM
Pipeline Surface Improvements **G5***	No Work	No Work	^Pipeline B Stormwater Improvements	^Pipeline B Stormwater Improvements	^Pipeline B Stormwater Improvements	^Pipeline B Stormwater Improvements	^Pipeline B Stormwater Improvements
Site Wide Groundwater Sampling **G3*, F3*, E4*, F4*, G4*, D5*, E5*, F5*, G5*, D6*, E6*, F6*, & G6***	No Work	Quarterly Groundwater sampling Transducer Downloads	Quarterly Groundwater sampling Transducer Downloads	Quarterly Groundwater sampling Transducer Downloads	Quarterly Groundwater sampling	Quarterly Groundwater sampling	No Work
Site Wide Revegetation **F5***	Irrigation	^ Planting Prep & initial Weed Abatement. Fence Installation	^ Planting Prep & initial Weed Abatement. Fence Installation	^ Planting Prep & initial Weed Abatement. Fence Installation	^ Planting Prep & initial Weed Abatement. Fence Installation	^ Irrigation O&M Planting Prep & initial Weed Abatement. Fence Installation	Irrigation
Site Wide Electrical & Controls Construction **E5*, F5*, G5***	No Work	IRZ O&M Support *Tentative* - PG&E Power Connection & Testing	IRZ O&M Support *Tentative* - PG&E Power Connection & Testing	IRZ O&M Support *Tentative* - PG&E Power Connection & Testing	IRZ O&M Support *Tentative* - Full System Operation PG&E Power	IRZ O&M Support *Tentative* - Full System Operation PG&E Power	No Work
IM-3 Layup Activities **E4*, E5***	No Work	No Work	RO cleaning	RO cleaning	RO cleaning	T-402 Cleaning	T-402 Cleaning
Phase 2 Drilling **G5***	No Work	TWB-1 Site Prep tentative, Drillers mobilize	Pot holing TWB-1, Rig inspections, Drilling Support	Last look TCS-1; TCS-1 site prep; TWB-1 Drilling, Drilling Support	TWB-1 Drilling, Drilling Support, TCS-1 Site Prep	TWB-1 Drilling, Drilling Support, TCS-1 Site Prep	TWB-1 Drilling, Drilling Support, TCS-1 Site Prep
Primary Planned Activities	**3/20/2022**	**3/21/2022**	**3/22/2022**	**3/23/2022**	**3/24/2022**	**3/25/2022**	**3/26/2022**
Start Time (PST)	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM
Pipeline Surface Improvements **G5***	^Pipeline B Stormwater Improvements	^Pipeline B Stormwater Improvements	^Pipeline B Stormwater Improvements	^Pipeline B Stormwater Improvements	^Pipeline B Stormwater Improvements	No Work	No Work
Site Wide Groundwater Sampling **G3*, F3*, E4*, F4*, G4*, D5*, E5*, F5*, G5*, D6*, E6*, F6*, & G6***	No Work	No Work	No Work	No Work	No Work	No Work	No Work
Site Wide Revegetation **F5***	Irrigation	^Planting and Initial Weed Abatement	^Planting and Initial Weed Abatement	^Planting and Initial Weed Abatement	^Planting and Initial Weed Abatement	^ Irrigation O&M	Irrigation
Site Wide Electrical & Controls Construction **E5*, F5*, G5***	No Work	IRZ O&M Support I&C Closeout - Tentative	IRZ O&M Support I&C Closeout - Tentative	IRZ O&M Support I&C Closeout - Tentative	IRZ O&M Support I&C Closeout - Tentative	IRZ O&M Support I&C Closeout - Tentative	No Work
IM-3 Layup Activities **E4*, E5***	Miscellaneous cleaning activities	Clean up complete	No Work	No Work	No Work	No Work	No Work
Phase 2 Drilling **G5***	TWB-1 Drilling, Drilling Support, TCS-1 Site Prep	TWB-1 Drilling, Drilling Support, TCS-1 Site Prep; ER-1/-2 Last look; ER-1/-2 Site Prep	TWB-1 Drilling, Drilling Support, TCS-1 Site Prep; ER-1/-2 Site Prep	TWB-1 Drilling, Drilling Support, TCS-1 Site Prep; ER-1/-2 Site Prep	TWB-1 Drilling, Drilling Support, TCS-1 Site Prep; ER-1/-2 Site Prep	No Work	No Work
Primary Planned Activities	**3/27/2022**	**3/28/2022**	**3/29/2022**	**3/30/2022**	**3/31/2022**	**4/1/2022**	**4/2/2022**
Start Time (PST)	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM
Pipeline Surface Improvements **G5***	No Work	No Work	^Pipeline B Stormwater Improvements	^Pipeline B Stormwater Improvements	^Pipeline B Stormwater Improvements	^Pipeline B Stormwater Improvements	^Pipeline B Stormwater Improvements
Site Wide Groundwater Sampling **G3*, F3*, E4*, F4*, G4*, D5*, E5*, F5*, G5*, D6*, E6*, F6*, & G6***	No Work	No Work	No Work	No Work	No Work	No Work	No Work
Site Wide Revegetation **F5***	Irrigation	No Work	^Planting and Initial Weed Abatement	^Planting and Initial Weed Abatement	^Planting and Initial Weed Abatement	^Planting and Initial Weed Abatement	Irrigation
Site Wide Electrical & Controls Construction **E5*, F5*, G5***	No Work	No Work	No Work	No Work	No Work	No Work	No Work
IM-3 Layup Activities **E4*, E5***	No Work	No Work	No Work	No Work	No Work	No work	No work

Six-Week Look-Ahead Schedule

PG&E Topock Compressor Station Remedial Activities

Activity	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Phase 2 Drilling **G5***	No Work	Drillers mobilize	TCS-1 Drilling, FW-2 Site prep, ER-1/-2 Rig Inspections and potholing, Drilling Support	TCS-1 Drilling, ER-1 Drilling, Drilling Support, and FW-2 Site Prep	TCS-1 Drilling, ER-1 Drilling, Drilling Support, and FW-2 Site Prep	TCS-1 Drilling, ER-1 Drilling, Drilling Support, and FW-2 Site Prep	TCS-1 Drilling, ER-1 Drilling, Drilling Support, and FW-2 Site Prep
Primary Planned Activities	**4/3/2022**	**4/4/2022**	**4/5/2022**	**4/6/2022**	**4/7/2022**	**4/8/2022**	**4/9/2022**
Start Time (PST)	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM
Pipeline Surface Improvements **G5***	^Pipeline B Stormwater Improvements	^Pipeline B Stormwater Improvements	^Pipeline B Stormwater Improvements	^Pipeline B Stormwater Improvements	^Pipeline B Stormwater Improvements	No Work	No Work
Site Wide Groundwater Sampling **G3*, F3*, E4*, F4*, G4*, D5*, E5*, F5*, G5*, D6*, E6*, F6*, & G6***	No Work	No Work	No Work	No Work	No Work	No Work	No Work
Site Wide Revegetation **F5***	No Work	^Planting and Initial Weed Abatement	^Planting and Initial Weed Abatement	^Planting and Initial Weed Abatement	^Planting and Initial Weed Abatement	No Work	No Work
Site Wide Electrical & Controls Construction **E5*, F5*, G5***	No Work	No Work	No Work	No Work	No Work	No Work	No Work
IM-3 Layup Activities **E4*, E5***	No work	No work	No work	No work	No work	No work	No work
Phase 2 Drilling **G5***	TCS-1 Drilling, ER-1 Drilling, Drilling Support, and FW-2 Site Prep	TCS-1 Drilling, ER-1 Drilling, Drilling Support, and FW-2 Site Prep	TCS-1 Drilling, ER-1 Drilling, Drilling Support, and FW-2 Site Prep	TCS-1 Drilling, ER-1 Drilling, Drilling Support, and FW-2 Site Prep	TCS-1 Drilling, ER-1 Drilling, Drilling Support, and FW-2 Site Prep	No Work	No Work
Primary Planned Activities	**4/10/2022**	**4/11/2022**	**4/12/2022**	**4/13/2022**	**4/14/2022**	**4/15/2022**	**4/16/2022**
Start Time (PST)	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM
Pipeline Surface Improvements **G5***	No Work	No Work	No Work	No Work	No Work	No Work	No Work
Site Wide Groundwater Sampling **G3*, F3*, E4*, F4*, G4*, D5*, E5*, F5*, G5*, D6*, E6*, F6*, & G6***	No Work	'Tentative - Monthly PCM samples and transducer downloads	'Tentative - Monthly PCM samples and transducer downloads	'Tentative - Monthly PCM samples and transducer downloads	'Tentative - Monthly PCM samples and transducer downloads	No Work	No Work
Site Wide Revegetation **F5***	No Work	No Work	No Work	No Work	No Work	No Work	No Work
Site Wide Electrical & Controls Construction **E5*, F5*, G5***	No Work	No Work	No Work	No Work	No Work	No Work	No Work
IM-3 Layup Activities **E4*, E5***	No work	No work	No work	No work	No work	No work	No work
Phase 2 Drilling **G5***	No Work	No Work	TCS-1 Drilling, ER-1 Drilling, Drilling Support, and FW-2 Site Prep; Potholing FW-2	FW-2 Drilling, ER-1 Drilling, Drilling Support, TCS-2 Site Prep	FW-2 Drilling, ER-1 Drilling, Drilling Support, TCS-2 Site Prep	FW-2 Drilling, ER-1 Drilling, Drilling Support, TCS-2 Site Prep	FW-2 Drilling, ER-1 Drilling, Drilling Support, TCS-2 Site Prep

Notes:

The timing of field activities is estimated and may change day-to-day based on site conditions, field progress, or other factors.

When planning to visit the site to observe a specific activity or area, please contact Curt Russell (760.791.5884) for the latest schedule information.

*** Bold font =** Work location as described on the Project Grid Map. See Project Grid Map tab for location of grid positions provided on the Look-Ahead.

^ = Intrusive/Ground-Disturbing work activity

Figure showing a grid superimposed on the Topock site map. Each grid position is denotated by an letter followed by a number.

Attachment G
Validated Groundwater Monitoring Data
(DTSC Condition of Approval xi)

(Groundwater Data Presented in Separate PDF)