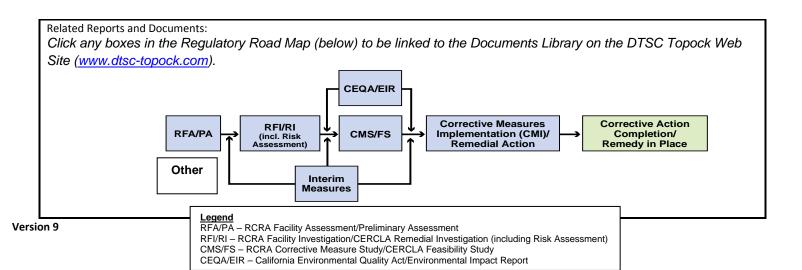
Topock Project I	Executive Abstract
Document Title:	Date of Document: April 15, 2009
Topock IM No. 3 WDR First Quarter 2009 Monitoring Report	Who Created this Document?: (i.e. PG&E, DTSC, DOI, Other)
Submitting Agency/Authored by: RWQCB	PG&E
Final Document? Xes No	
Priority Status: HIGH MED LOW Is this time critical? Yes No	Action Required: Information Only Review & Comment Return to:
Type of Document: Draft Report Letter Memo	By Date: Other / Explain:
	Is this a Regulatory Requirement? Yes No If no, why is the document needed?
☐ Other / Explain:	
What is the consequence of NOT doing this item? What is the consequence of DOING this item?	Other Justification/s: Permit Other / Explain:
Submittal of this report is a compliance requirement of RWQCB Waste Discharge Requirements/Order No. R7-2006-0060	
Brief Summary of attached document:	
This report covers the IM No. 3 groundwater treatment system groundwater monitoring results for wells OW-1S/M/D, OW-2S/will be submitted under separate cover, as part of the Complian Written by: PG&E	M/D, OW-5S/M/D, CW-1M/D, CW-2M/D, CW-3M/D, and CW-4M/D
Recommendations: This report is for your information only.	
How is this information related to the Final Remedy or Regulatory Requ	uirements:
The IM No. 3 WDR First Quarter 2009 Report is related to the Interim Noischarge Requirements/Order No. R7-2006-0060.	Measure, and is designed to monitor compliance with RWQCB Waste
Other requirements of this information? None	





Curt Russell

Topock Site Manager GT&D Remediation

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April 15, 2009

Robert Perdue
Executive Officer
California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring Drive, Suite 100
Palm Desert, CA 92260

Subject: First Quarter 2009 Monitoring Report - Board Order R7-2006-0060

PG&E Topock Compressor Station, Needles, California Interim Measure No. 3 Groundwater Treatment System

Discharge to Injection Wells

Dear Mr. Perdue:

Enclosed is the First Quarter 2009 Monitoring Report for the Pacific Gas and Electric Company (PG&E) Topock Compressor Station, Interim Measure (IM) No. 3 Groundwater Treatment System.

This report is being submitted in compliance with the Waste Discharge Requirements (WDRs) issued September 20, 2006 by the California Regional Water Quality Control Board, Colorado River Basin Region (Water Board) under Order R7-2006-0060 and in compliance with the revised Monitoring and Reporting Program for Order R7-2006-0060, issued August 28, 2008. The WDRs apply to IM No. 3 Treatment System discharge by subsurface injection.

The groundwater monitoring results for wells OW-1S/M/D, OW-2S/M/D, OW-5S/M/D, CW-1M/D, CW-2M/D, CW-3M/D, and CW-4M/D will be submitted under separate cover, as part of the Compliance Monitoring Program.

If you have any questions regarding this report, please call me at (760) 326-5582.

Sincerely,

Curt Russell

Topock Site Manager

Enclosures:

First Quarter 2009 Monitoring Report for the IM No. 3 Groundwater Treatment System

cc: Tom Vandenberg, State Water Resources Control Board Cliff Raley, State Water Resources Control Board Aaron Yue, DTSC

First Quarter 2009 Monitoring Report for Interim Measure No. 3 Groundwater Treatment System

Waste Discharge Requirements Board Order No. R7-2006-0060 PG&E Topock Compressor Station Needles, California

Prepared for

California Regional Water Quality Control Board Colorado River Basin Region

on behalf of

Pacific Gas and Electric Company

April 15, 2009

CH2MHILL 155 Grand Avenue, Suite 1000 Oakland, CA 94612

First Quarter 2009 Monitoring Report for Interim Measure No. 3 Groundwater Treatment System Waste Discharge Requirements Order No. R7-2006-0060 PG&E Topock Compressor Station Needles, California

Prepared for Pacific Gas and Electric Company

April 15, 2009

No. C68986

This report was prepared under the super constraint of a California Certified Professional Engage of Figure 2015

Dennis Fink, P.E. No. 68986

Project Engineer

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First Quarter 2009 Laboratory Analytical Reports

A

Acronyms and Abbreviations

IM Interim Measure

MRP Monitoring and Reporting Program

PG&E Pacific Gas and Electric Company

Truesdail Laboratories, Inc.

Water Board California Regional Water Quality Control Board, Colorado River Basin

Regior

WDR Waste Discharge Requirements

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1.0 Introduction

Pacific Gas and Electric Company (PG&E) is implementing an Interim Measure (IM) to address chromium concentrations in groundwater at the Topock Compressor Station near Needles, California. The IM consists of groundwater extraction for hydraulic control of the plume boundaries in the Colorado River floodplain and management of extracted groundwater. The groundwater extraction, treatment, and injection systems collectively are referred to as IM No. 3. Figure 1 provides a map of the project area. All figures are located at the end of this report.

California Regional Water Quality Control Board, Colorado River Basin Region (Water Board) Board Order No. R7-2006-0060 authorizes PG&E to inject treated groundwater into injection wells located on San Bernardino County Assessor's Parcel No. 650-151-06. Order No. R7-2006-0060 was issued September 20, 2006 and is the successor to Order No. R7-2004-0103. The revised Monitoring and Reporting Program (MRP) under the Order, issued August 28, 2008, requires quarterly monitoring reports to be submitted by the fifteenth day of the month following the end of the quarter.

This report covers monitoring activities related to operation of the IM No. 3 groundwater treatment system during the First Quarter 2009. The groundwater monitoring results for wells OW-1S/M/D, OW-2S/M/D, OW-5S/M/D, CW-1M/D, CW-2M/D, CW-3M/D, and CW-4M/D will be submitted under separate cover, as part of the Compliance Monitoring Program.

2.0 Sampling Station Locations

Table 1 lists the locations of sampling stations. (All tables are located at the end of this report.) Sampling station locations are shown on the process and instrumentation diagrams, Figures TP-PR-10-10-04, TP-PR-10-10-08, and TP-PR-10-10-06, provided at the end of this report.

3.0 Description of Activities

The treatment system was initially operated between July 25 and July 28, 2005 for the Waste Discharge Requirement (WDR)-mandated startup phase. Discharge to the injection wells was initiated July 31, 2005 after successfully completing the startup phase in accordance with Order R7-2004-0103. Full-time operation of the treatment system commenced in August 2005.

Influent to the treatment facility, permitted by Order R7-2006-0060 (successor to Order R7-2004-0103), includes:

- Groundwater from extraction wells TW-2S, TW-2D, TW-3D, and PE-1.
- Purged groundwater and water generated from rinsing field equipment during monitoring events.
- Groundwater generated during well installation, well development, and aquifer testing.

During the First Quarter 2009, extraction wells TW-3D and PE-1 operated at a target pump rate of 135 gallons per minute, excluding periods of planned and unplanned downtime. Extraction well TW-2D ran for a short period on February 11, 2009 during a sampling event; otherwise it was not operated during the First Quarter 2009. Extraction well TW-2S was not operated during First Quarter 2009. The operational run time for the IM groundwater extraction system (combined or individual pumping), by month, was approximately:

- 93.6 percent during January 2009
- 98.5 percent during February 2009
- 94.7 percent during March 2009

Operation of the groundwater treatment system results in the following three out-flow components:

- Treated Effluent: Treated water that is discharged to the injection well(s).
- **Reverse Osmosis Concentrate (brine)**: Treatment byproduct that is transported and disposed of offsite at a permitted facility.
- **Sludge:** Treatment byproduct that is transported offsite for disposal at a permitted facility. Disposal occurs each time a sludge waste storage bin reaches capacity or within 90 days of the start date for accumulation in the storage container.

4.0 Groundwater Treatment System Flow Rates

The First Quarter 2009 treatment system monthly average flow rates (influent, effluent, and reverse osmosis concentrate) are presented in Table 2.

The system influent flow rate was measured by flow meters at groundwater extraction wells TW-2S, TW-2D, TW-3D, and PE-1 (Figure TP-RP-10-10-03). The treatment system effluent flow rate was measured by flow meters in the piping into injection wells IW-2 and IW-3 (Figure TP-RP-10-10-11). The reverse osmosis concentrate flow rate was measured by a flow meter at the piping carrying water from reverse osmosis concentrate tank T-701 to the truck load-out station (Figure TP-RP-10-10-08).

The IM No. 3 facility treated approximately 16,700,883 gallons of extracted groundwater during First Quarter 2009. The IM No. 3 facility also treated approximately 13,944 gallons of water generated from the groundwater monitoring program and 51,800 gallons of injection well development water.

Four containers of solids were transported offsite from the IM No. 3 facility during First Quarter 2009.

Periods of planned and unplanned extraction system downtime (that together resulted in approximately 4.4 percent of downtime during First Quarter 2009) are summarized below. The times shown are in Pacific Standard Time to be consistent with other data collected (e.g., water level data) at the site.

4.1 January 2009

January 8, 2009 (planned): The extraction well system was offline from 1:29 p.m. to 1:30 p.m. and from 1:46 p.m. to 1:47 p.m. when the extraction wells were shut down temporarily for testing of leak detection system. Extraction well downtime was 2 minutes.

January 10, 2009 (unplanned): The extraction well system was offline from approximately 3:10 p.m. to 3:23 p.m. due to a power outage. The data historian battery backup failed during this outage and did not come back online until January 12, 2009 at 9:54 a.m. Extraction system downtime was 13 minutes.

January 15, 2009 (planned): The extraction well system was offline from 11:54 a.m. to 11:59 a.m. for inspection of leak detection system. Extraction system downtime was 5 minutes.

January 19, 2009 (unplanned): The extraction well system was offline from 11:49 a.m. to 12:09 p.m., due to plugging of the low flow switch on the chemical mixing loop. Extraction system downtime was 20 minutes.

January 19, 2009 (unplanned): The extraction well system was offline from 12:26 p.m. to 1:35 p.m., when the system shut down due to low flow. Extraction system downtime was 69 minutes.

January 20, 2009 (planned): The extraction well system was offline from 7:40 a.m. to 8:20 a.m. to perform plant maintenance. Extraction system downtime was 40 minutes.

January 20, 2009 – January 21, 2009 (planned): The extraction well system was offline from 8:37 a.m. on January 20 to January 21, 2009 at 5:27 p.m. during the scheduled monthly maintenance outage. Extraction system downtime was 32 hours and 50 minutes.

January 21, 2009 (unplanned): The extraction well system was offline from 7:07 p.m. to 8:44 p.m., and again from 9:11 p.m. to 11:25 p.m., because the plant staff was managing water inventory during the plant start-up after the maintenance outage. Extraction system downtime was 3 hours and 51 minutes.

January 23, 2009 (planned): The extraction well system was offline from 11:05 a.m. to 3:56 p.m. for plant maintenance. Extraction well system downtime was 4 hours and 51 minutes.

January 29, 2009 (unplanned): The extraction well system was offline from 8:23 a.m. to 10:53 a.m., and again from 7:00 p.m. to 7:10 p.m. due to a leak in the microfiltration system. Extraction well system downtime was 2 hours and 40 minutes.

January 29, 2009 (unplanned): The extraction well system was offline from 10:05 p.m. to 10:15 p.m. due to low level in extraction well PE-1. Extraction well system downtime was 10 minutes.

January30, 2009 (planned): The extraction well system was offline from 8:55 a.m. to 9:16 a.m. for microfiltration system maintenance. Extraction well system downtime was 21 minutes.

January 31, 2009 (unplanned): The extraction well system was offline from 12:19 p.m. to 12:34 p.m. due to problems associated with the microfiltration system. Extraction well system downtime was 15 minutes.

4.2 February 2009

February 18, 2009 (planned): The extraction well system was offline from 9:24 a.m. to 5:23 p.m. during the scheduled monthly maintenance outage. Extraction well downtime was 7 hours and 59 minutes.

February 18, 2009 (planned): The extraction well system was offline from approximately 5:41 p.m. to 6:25 p.m. due to switching from the emergency generator to City of Needles power. Extraction system downtime was 44 minutes.

February 23, 2009 (unplanned): The extraction well system was offline from 6:47 a.m. to 7:00 a.m. and again from 7:53 a.m. to 8:48 a.m. due to maintenance on the ferrous chloride system. Extraction system downtime was 1 hour and 8 minutes.

February 23, 2009 (planned): The extraction well system was offline from 11:53 a.m. to 11:55 a.m., 12:02 p.m. to 12:05 p.m., and again from 12:10 p.m. to 12:11 p.m., due to testing of extraction well piping leak detection system. Extraction system downtime was 4 minutes.

February 24, 2009 (planned): The extraction well system was offline from 4:06 p.m. to 4:08 p.m., and again from 4:18 p.m. to 4:23 p.m., when the system was shut down for the annual change out of the emergency generator. Extraction system downtime was 7 minutes.

February 27, 2009 (planned): The extraction well system was offline from 12:30 p.m. to 12:31 p.m. to test leak detection system in valve vault 1. Extraction system downtime was 1 minute.

4.3 March 2009

March 4, 2009 (planned): The extraction well system was offline from 8:20 a.m. to 8:36 a.m. when the extraction wells were shutdown temporarily to measure the level of each extraction well. Extraction well downtime was 16 minutes.

March 13-14, 2009 (unplanned): The extraction well system was offline from 10:01 p.m. on March 13 to 1:38 a.m. on March 14 due to a pump flow sensor failure in the raw water feed pump. Extraction system downtime was 3 hours and 37 minutes.

March 16, 2009 (unplanned): The extraction well system was offline from 5:38 p.m. to 6:58 p.m. due to a hose disconnection at the microfilter. Extraction system downtime was 1 hour and 20 minutes.

March 18, 2009 (planned): The extraction well system was offline from 6:51 a.m. to 4:59 p.m. and again from 5:20 p.m. to 7:21 p.m. during the scheduled monthly maintenance outage. Extraction system downtime was 12 hours and 9 minutes.

March 20, 2009 (planned): The extraction well system was offline from 8:21 a.m. to 8:23 a.m., 11:01 a.m. to 11:02 a.m., 11:09 a.m. to 11:10 a.m., 11:17 a.m. to 11:18 a.m., 11:25 a.m. to 11:26 a.m., 11:33 a.m. to 11:34 a.m., 11:40 a.m. to 11:41 a.m., and 12:00 p.m. to 12:01p.m when the system was shut down for testing of the leak detection system. Extraction system downtime was 9 minutes.

March 22, 2009 (unplanned): The extraction well system was offline from 8:49 a.m. to 9:03 a.m. due to a leak at the microfilter. Extraction system downtime was 14 minutes.

March 23, 2009 (planned): The extraction well system was offline from 7:48 a.m. to 8:43 p.m. due to plant testing. Extraction system downtime was 55 minutes.

March 27, 2009 (unplanned): The extraction well system was offline from 5:01 a.m. to 6:51 a.m., 7:03 a.m. to 7:54 a.m., 9:08 a.m. to 9:41 a.m., 12:28 p.m. to 12:44 p.m., and 12:45 p.m. to 1:52 p.m. due to maintenance on the ferrous chloride system. Extraction system downtime was 4 hours and 37 minutes.

March 28, 2009 (unplanned): The extraction well system was offline from 1:12 a.m. to 4:54 a.m. and again from 6:56 a.m. to 7:37 a.m. due to maintenance on the ferrous chloride system. Extraction system downtime was 4 hours and 23 minutes.

March 28, 2009 (unplanned): The extraction well system was offline from 10:28 a.m. to 12:36 p.m. due to high pH at AIT606. Extraction system downtime was 2 hours and 8 minutes.

March 29, 2009 (unplanned): The extraction well system was offline from 5:40 a.m. to 6:23 a.m. due to maintenance on the ferrous chloride system. Extraction system downtime was 42 minutes.

March 29-30, 2009 (unplanned): The extraction well system was offline from 11:15 p.m. on March 29 to 2:50 a.m. on March 30 due to a power outage. Extraction system downtime was 3 hours and 55 minutes.

March 30, 2009 (unplanned): The extraction well system was offline from 5:12 a.m. to 7:22 a.m. and 9:21 a.m. to 9:23 a.m. due to maintenance on the ferrous chloride system. Extraction system downtime was 2 hours and 12 minutes.

March 31, 2009 (unplanned): The extraction well system was offline from 1:23 a.m. to 1:42 a.m., from 3:49 a.m. to 5:19 a.m. and 6:29 a.m. to 7:53 a.m. due to maintenance on the ferrous chloride system. Extraction system downtime was 2 hours and 53 minutes.

5.0 Sampling and Analytical Procedures

With the exception of pH, all samples were collected at the designated sampling locations and placed directly into containers provided by Truesdail Laboratories, Inc. (Truesdail). Sample containers were labeled and packaged according to standard sampling procedures.

The samples were stored in a sealed container chilled with ice and transported to Truesdail via courier under chain-of-custody documentation. The laboratories confirmed the samples were received in chilled condition upon arrival.

Truesdail is certified by the California Department of Health Services (Certification No. 1237) under the State of California's Environmental Laboratory Accreditation Program. California-certified laboratory analyses were performed in accordance with the latest edition of the *Guidelines Establishing Test Procedures for Analysis of Pollutants* (40 Code of Federal Regulations Part 136), promulgated by the United States Environmental Protection Agency.

During the First Quarter 2009, analysis of pH was conducted by field method pursuant to the Water Board letter dated October 16, 2007 (subject: Clarification of Monitoring and Reporting Program Requirements) authorizing pH measurements to be conducted in the field. The field method pH samples were collected at the designated sampling locations and field tested within 15 minutes of sampling.

As required by the MRP, the analytical method selected for total chromium has a method detection limit of 1 part per billion, and the analytical method selected for hexavalent chromium has a method detection limit of 0.2 part per billion.

Influent, effluent, reverse osmosis concentrate, and sludge sampling frequency was conducted in accordance with the revised MRP, issued August 28, 2008.

Groundwater quality is being monitored in observation and compliance wells according to Order R7-2006-0060, the procedures and schedules approved in the *Groundwater Compliance Monitoring Plan for Interim Measures No. 3 Injection Area* submitted to the Water Board on June 17, 2005, and the revised Monitoring and Reporting Program (MRP) under Order R7-2006-0060 issued August 28, 2008. Quarterly groundwater monitoring analytical results for the injection area (wells OW-1S/M/D, OW-2S/M/D, OW-5S/M/D, CW-1M/D, CW-2M/D, CW-3M/D, and CW-4M/D) are reported in a separate document, in conjunction with groundwater level maps of the same monitoring wells.

6.0 Analytical Results

Laboratory reports for samples collected in First Quarter 2009 were prepared by certified analytical laboratories, and are presented in Appendix A.

Samples were collected in accordance with the WDR sampling frequency requirements. See Table 3 for sample collection dates.

The influent sampling analytical results are presented in Table 4. The effluent sampling analytical results are presented in Table 5. The reverse osmosis concentrate sampling analytical results are presented in Table 6. The sludge sampling analytical results are presented in Table 7.

Table 8 identifies the laboratory that performed each analysis and lists the following required information:

- Sample location
- Sample identification number
- Sampler name
- Sample date
- Sample time
- Laboratory performing analysis
- Analysis method
- Analysis date
- Laboratory technician

7.0 Conclusions

There were no exceedances of effluent limitations during the reporting period.

In addition, no incidents of non-compliance were identified during the reporting period. No events that caused an immediate or potential threat to human health or the environment, or new releases of hazardous waste or hazardous waste constituents, or new solid waste management units were identified during the reporting period.

8.0 Certification

On August 12, 2005, PG&E submitted a signature delegation letter to the Water Board, delegating PG&E signature authority to Mr. Curt Russell and Ms. Yvonne Meeks for correspondence regarding Board Order R7-2004-0103. Order R7-2006-0060 is the successor to Order R7-2004-0103; an additional signature authority delegation is not required, as confirmed in an email from Jose Cortez dated December 12, 2006.

Certification Statement:

I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Signature:	behum
Name:	Curt Russell
Company: _	Pacific Gas and Electric Company
Title:	Topock Site Manager
Date:	April 15, 2009



TABLE 1
Sampling Station Descriptions
First Quarter 2009 Monitoring Report for Interim Measure No. 3 Groundwater Treatment System

Sample Station	Sample ID ^a	Location
Sampling Station A: Groundwater Treatment System Influent	SC-100B-WDR-###	Sample collected from tap on pipe into T-100 (see Figure TP-RP-10-10-04).
Sampling Station B: Groundwater Treatment System Effluent	SC-700B-WDR-###	Sample collected from tap on pipe downstream from T-700 (see Figure TP-RP-10-10-04).
Sampling Station D: Groundwater Treatment System Reverse Osmosis Concentrate	SC-701-WDR-###	Sample collected from tap on pipe into T-701 (see Figure TP-RP-10-10-08).
Sampling Station E: Groundwater Treatment System Sludge	SC-SLUDGE-WDR-###	Sample collected from sludge accumulated in the phase separator used this quarter (see Figure TP-RP-10-10-06).

Note:

= Sequential sample identification number at each sample station.

BAO\091040001 TABLES-1

^a The sample event number is included at the end of the sample ID (e.g., SC-100B-WDR-015).

TABLE 2
Flow Monitoring Results
First Quarter 2009 Monitoring Report for Interim Measure No. 3 Groundwater Treatment System

Parameter	System Influent ^{a,b} (gpm)	System Effluent ^{b,c} (gpm)	Reverse Osmosis Concentrate ^b (gpm)
January 2009 Average Monthly Flowrate	125.8	123.6	2.6
February 2009 Average Monthly Flowrate	133.5	131.5	2.6
March 2009 Average Monthly Flowrate	127.8	125.9	3.0

Notes:

gpm: gallons per minute.

- ^a Extraction wells TW-3D and PE-1 were operated during the First Quarter 2009. Extraction well TW-2D ran for a short period on February 11, 2009. Extraction well TW-2S was not operated during the First Quarter 2009.
- ^b The difference between influent flow rate and the sum of the effluent and reverse osmosis concentrate flow rates during the First Quarter 2009 is approximately 0.5 percent.
- ^c Effluent was discharged into injection wells IW-02 and IW-03 during the First Quarter 2009.

BAO\091040001 TABLES-2

TABLE 3
Sample Collection Dates
First Quarter 2009 Monitoring Report for Interim Measure No. 3 Groundwater Treatment System

Parameter	Sample Collection Dates	Results
Influent ^a	January 9, 2009	See Table 4
	February 4, 2009	
	March 4, 2009	
Effluent ^b	January 9, 2009	See Table 5
	January 14, 2009	
	January 20, 2009	
	January 28, 2009	
	February 4, 2009	
	February 11, 2009	
	February 17, 2009	
	February 25, 2009	
	March 4, 2009	
	March 11, 2009	
	March 17, 2009	
	March 25, 2009	
Reverse Osmosis Concentrate ^c	March 4, 2009	See Table 6
Sludge ^d	January 13, 2009	See Table 7
	January 20, 2009	
	February 24, 2009	
	March 19, 2009	

Notes:

BAO\091040001 TABLES-3

^a Influent sampling is required monthly.

^b Effluent sampling is required weekly.

^c Reverse Osmosis Concentrate sampling is required quarterly.

^d Sludge sampling is required quarterly by composite.

TABLE 4 Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs) Influent Monitoring Results a First Quarter 2009 Monitoring Report for Interim Measure No.3 Groundwater Treatment System

Required Sampling Frequenc	y									Мо	nthly												
Analytes Units ^b	TDS mg/L	Turbidity NTU	Specific Conductance µmhos/cm	Field ^c pH pH units	Chromium µg/L	Hexavalent Chromium µg/L	Aluminium μg/L	Ammonia (as N) mg/L	Antimony µg/L	Arsenic µg/L	Barium µg/L	Boron mg/L	Copper µg/L	Fluoric mg/L	le Lead µg/L	Manganese μg/L	Molybdenum μg/L	Nickel μg/L	Nitrate (as N) mg/L		Sulfate mg/L	lron μg/L	Zinc µg/L
Sample ID Date	50.4	0.0070	0.0990		0.266	1.52	0.256	0.0090	0.112	0.0150	0.0162	0.0048	0.130	0.0050	0.0910	0.0161	0.0840	0.127	0.0350	0.0010	0.600	2.40	0.115
SC-100B-WDR-185 1/9/2009	4840	ND (0.100)	7850	7.1	1300	1370	ND (50.0)	ND (0.500)	ND (10.0)	1.76	16.5	1.18	ND (5.00)	2.79	ND (10.0)	ND (10.0)	18.5	ND (10.0)	3.76 N	ND (0.0050)	633	ND (20.0)	ND (10.0)
RL	250	0.100	2.00		1.00	21.0	50.0	0.500	10.0	0.200	10.0	0.200	5.00	0.500	10.0	10.0	10.0	10.0	1.00	0.0050	50.0	20.0	10.0
SC-100B-WDR-189 2/4/2009	5360	0.144	7800	7.3	1160	1250	ND (50.0)	ND (0.500)	ND (10.0)	6.12	31.4	1.15	ND (5.00)	2.53	ND (10.0)	ND (10.0)	25.4	ND (10.0)	3.26 N	ND (0.0050)	589	ND (20.0)	ND (10.0)
RL	250	0.100	2.00		1.00	10.5	50.0	0.500	10.0	1.00	10.0	0.200	5.00	0.500	10.0	10.0	10.0	10.0	1.00	0.0050	25.0	20.0	10.0
SC-100B-WDR-193 3/4/2009	4860	ND (0.100)	7670	7.3	1250	1220	ND (50.0)	ND (0.500)	ND (10.0)	2.27	28.3	1.11	ND (5.00)	2.70	ND (10.0)	ND (10.0)	26.6	ND (10.0)	3.29 N	ND (0.0050)	602	ND (20.0)	ND (10.0)
RL	250	0.100	2.00		2.00	21.0	50.0	0.500	10.0	2.00	10.0	0.200	5.00	0.500	10.0	10.0	10.0	10.0	1.00	0.0050	12.5	20.0	10.0

NOTES:

(---) = not required by the WDR Monitoring and Reporting Program J = concentration or reporting limits estimated by laboratory or validation

MDL = method detection limit mg/L = milligrams per liter

N = nitrogen

ND = parameter not detected at the listed value NTU = nephelometric turbidity units

RL = project reporting limit

μg/L = micrograms per liter

µmhos/cm = micromhos per centimeter

^a Sampling Location for all influent samples is tap on pipe from extraction wells into tank T-100 (see attached P&ID TP-PR-10-10-04).

b Units reported in this table are those units required in the WDRs.

c Starting 11/20/2007, analysis of pH was switched from California certified laboratory analysis to field method pursuant to the Water Board letter dated October 16, 2007 – Clarification of Monitoring and Reporting Program Requirements, stating that pH measurements may be conducted in the field.

TABLE 5
Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs)
Effluent Monitoring Results ^a
First Quarter 2009 Monitoring Report for Interim Measure No.3 Groundwater Treatment System

WDRs Effluent	Ave. Monthly	NA	NA	NA	6.5-8.4	25	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Limits ^b	Max Daily	NA	NA	NA	6.5-8.4	50	16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Required Sampli	ing Frequency			Weekly	1											Monthly								
	Analytes	TDS	Turbidity	Specific Conductance	Field ^e pH	Chromium	Hexavalent Chromium	Aluminium	Ammonia (as N)	Antimony	Arsenic	Barium	Boron	Copper	Fluoride	Lead	Manganese	Molybdenum	Nickel	Nitrate (as N)	Nitrite (as N)	Sulfate	Iron	Zinc
	Units ^C	mg/L	NTU	µmhos/cm	pH units	μg/L	μg/L	μg/L	mg/L	μg/L	μg/L	μg/L	mg/L	μg/L	mg/L	μg/L	μg/L	μg/L	μg/L	mg/L	mg/L	mg/L	μg/L	μg/L
	MDLd	50.4	0.0070	0.0990		0.0532	0.0304	0.512	0.0090	0.112	0.0150	0.0324	0.0048	0.130	0.0050	0.0910	0.0161	0.0840	0.127	0.0350	0.0010	0.600	2.40	0.115
Sample ID	Date																							
SC-700B-WDR-18	PE 1/0/2000	4200	0.119	6670	7.20	ND (1.00)	ND (0.200)	ND (50.0)	ND (0.500)	ND (10.0)	ND (0.200) 14.7	1.11	ND (5.00)	2.42	ND (10.0)	ND (10.0)	10.3	ND (10.0)	3.08	ND (0.0050)	521	ND (20.0) ND (10.0)
RL	33 1/9/2009	250	0.119	2.00		1.00	0.200)	50.0	0.500	10.0	0.200	10.0	0.200	` '	0.500	10.0	10.0	10.0	10.0	1.00	0.0050	12.5	20.0	10.0
SC-700B-WDR-18	36 1/1 <i>4/</i> 2009	4100	ND (0.100)	6560	7.30	ND (1.00)	ND (0.200)		0.500		0.200		0.200		0.500			10.0	10.0	1.00	0.0000		20.0	
RL	30 171 172000	250	0.100	2.00		1.00	0.200																	
SC-700B-WDR-18	37 1/20/2009	4720	ND (0.100)	6670	7.00	ND (1.00)	ND (0.200)																	
RL		250	0.100	2.00		1.00	0.200																	
SC-700B-WDR-18	38 1/28/2009	3840	ND (0.100)	6550	7.20	ND (1.00)	ND (0.200)																	
RL		250	0.100	2.00		1.00	0.200																	
SC-700B-WDR-18	39 2/4/2009	4110	0.114	6570	7.10	ND (1.00)	ND (0.200)	ND (50.0)	ND (0.500)	ND (10.0)	ND (1.00)	17.1	1.07	ND (5.00)	2.10	ND (10.0)	46.7	13.8	ND (10.0)	2.90	0.0054	477	ND (20.0) ND (10.0)
RL		250	0.100	2.00		1.00	0.200	50.0	0.500	10.0	1.00	10.0	0.200	5.00	0.500	10.0	10.0	10.0	10.0	1.00	0.0050	25.0	20.0	10.0
SC-700B-WDR-19	90 2/11/2009	3860	ND (0.100)	6590	7.00	ND (1.00)	ND (0.200)																	
RL		250	0.100	2.00		1.00	0.200																	
SC-700B-WDR-19	91 2/17/2009	4260	ND (0.100)	6560	7.00	ND (1.00)	ND (0.200)																	
RL		250	0.100	2.00		1.00	0.200																	
SC-700B-WDR-19	92 2/25/2009	4410	ND (0.100)	6570	7.40	ND (1.00)	ND (0.200)																	
RL		250	0.100	2.00		1.00	0.200																	
SC-700B-WDR-19	93 3/4/2009	4020	ND (0.100)	6600	7.30	ND (2.00)	ND (1.05)	ND (50.0)	ND (0.500)	ND (10.0)	ND (2.00)	57.1	1.04	27.0	1.98	ND (10.0)	ND (10.0)	14.0	ND (10.0)	2.69	ND (0.0050)	483	ND (20.0) ND (10.0)
RL		250	0.100	2.00		2.00	1.05	50.0	0.500	10.0	2.00	10.0	0.200	5.00	0.500	10.0	10.0	10.0	10.0	1.00	0.0050	50.0	20.0	10.0
SC-700B-WDR-19	94 3/11/2009	4190	ND (0.100)	6680	7.00	ND (1.00)	ND (0.200)																	
RL		250	0.100	2.00		1.00	0.200																	
SC-700B-WDR-19	95 3/17/2009	3960	ND (0.100)	6670	6.90	ND (1.00)	ND (0.200)																	
RL		250	0.100	2.00		1.00	0.200																	
SC-700B-WDR-19	96 3/25/2009	3830	ND (0.100)	6770	6.90	ND (1.00)	ND (0.200)																	
RL		250	0.100	2.00		1.00	0.200																	

TABLE 5

Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs)

Effluent Monitoring Results a

First Quarter 2009 Monitoring Report for Interim Measure No.3 Groundwater Treatment System

NOTES:

(---) = not required by the WDR Monitoring and Reporting Program J = concentration or reporting limits estimated by laboratory or validation MDL = method detection limit mg/L = milligrams per liter N = nitrogen NA = not applicable

ND = parameter not detected at the listed value NTU = nephelometric turbidity units

RL = project reporting limit

μg/L = micrograms per liter

µmhos/cm = micromhos per centimeter

- ^a Sampling location for all effluent samples is tap on pipe downstream from tank T-700 to injection wells (see attached P&ID TP-PR-10-10-04).
- b In addition to the listed effluent limits, the WDRs state that the effluent shall not contain heavy metals, chemicals, pesticides or other constituents in concentrations toxic to human health.
- ^c Units reported in this table are those units required in the WDRs.
- d MDL listed is the target MDL by analysis method; however, the MDL may change for each sample analysis due to the dilution required by the matrix to meet the method QC requirements. The target MDL for each method/analyte combination is calculated annually.
- Starting 11/20/2007, analysis of pH was switched from California certified laboratory analysis to field method pursuant to the Water Board letter dated October 16, 2007 Clarification of Monitoring and Reporting Program Requirements, stating that pH measurements may be conducted in the field.

TABLE 6

Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs)

Reverse Osmosis Concentrate Monitoring Results ^a

First Quarter 2009 Monitoring Report for Interim Measure No.3 Groundwater Treatment System

Required Sampling Frequency										(Quarterly											
Analytes Units ^b MDL	TDS mg/L 126	Specific Conductance µmhos/cm 0.153	Field ^c pH pH units	Chromium mg/L 0.00053	Hexavalent Chromium mg/L 0.00076	Antimony mg/L 0.00023	Arsenic mg/L 0.00015	Barium mg/L 0.00016	Beryllium mg/L 0.0019	Cadmium mg/L 0.00012	Cobalt mg/L 0.0013	Copper mg/L 0.0013	Fluoride mg/L 0.0250	Lead mg/L 0.00018	Molybdenum mg/L 0.00017	mg/L 0.000030	Nickel mg/L 0.0013	Selenium mg/L 0.00016	Silver mg/L 0.00021	Thallium mg/L 0.00018	Vanadium mg/L 0.00062	Zinc mg/L 0.0012
Sample ID Date																						
SC-701-WDR-193 3/4/2009	46700	59900	7.7	0.00455	ND (0.0052)	ND (0.0100)	ND (0.0020)	0.152	ND (0.0100)	ND (0.0030)	ND (0.0100) 0.171	28.4	ND (0.010	0) 0.0743 N	ND (0.00020)	0.0296	0.0281	ND (0.0100) ND (0.0100) ND (0.0100)	0.124
RL	625	2.00		0.0020	0.0052	0.0100	0.0020	0.0100	0.0100	0.0030	0.0100	0.0050	0.500	0.0100	0.0100	0.00020	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100

NOTES:

(---) = not required by the WDR Monitoring and Reporting Program

J = concentration or reporting limits estimated by laboratory or validation

MDL = method detection limit

mg/L = milligrams per liter

ND = parameter not detected at the listed value

RL = project reporting limit

μg/L = micrograms per liter

μmhos/cm = micromhos per centimeter

^a Sampling location for all reverse osmosis samples is tap on pipe T-701 (see attached P&ID TP-PR-10-10-08).

b Units reported in this table are those units required in the WDRs.

c Starting 11/20/2007, analysis of pH was switched from California certified laboratory analysis to field method pursuant to the Water Board letter dated October 16, 2007 – Clarification of Monitoring and Reporting Program Requirements, stating that pH measurements may be conducted in the field.

TABLE 7 Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs) Sludge Monitoring Results ^a

First Quarter 2009 Monitoring Report for Interim Measure No.3 Groundwater Treatment System

Required Sampling	Frequency	Quarterly																		
Sample ID	Analytes Units ^b MDL Date	Chromium mg/kg 0.0300	Hexavalent Chromium mg/kg 0.246	Antimony mg/kg 0.00092	Arsenic mg/kg 0.00063	Barium mg/kg 0.0035	Beryllium mg/kg 0.0029	Cadmium mg/kg 0.0022	Cobalt mg/kg 0.0035	Copper mg/kg 0.0117	Fluoride mg/kg 0.0208	Lead mg/kg 0.0146	Molybdenum mg/kg 0.0035	Mercury mg/kg 0.00013	Nickel mg/kg 0.0063	Selenium mg/kg 0.0033	Silver mg/kg 0.0020	Thallium mg/kg 0.0100	Vanadium mg/kg 0.0032	Zinc mg/kg 0.0079
SC-Sludge-WDR-193	3/4/2009	15100	12.0	ND (2.06)	38.9	114	211	38.1	7.96	57.6	67.9	ND (4.12)	23.4	0.507	ND (2.06)	ND (10.3)	ND (4.12)	10.7	311	128
RL		20.6	1.67	2.06	2.06	2.06	2.06	4.12	2.06	2.06	16.7	4.12	10.3	0.160	2.06	10.3	4.12	4.12	2.06	10.3

NOTES:

RL = project reporting limit

^{(---) =} not required by the WDR Monitoring and Reporting Program
J = concentration or reporting limits estimated by laboratory or validation
mg/kg = milligrams per killogram
mg/L = milligrams per liter
MDL = method detection limit
ND = parameter not detected at the listed reporting limit

^a Sampling location for all sludge samples is the sludge collection bin (see attached P&ID TP-PR-10-10-06).

b Units reported in this table are those units required in the WDRs.

TABLE 8 Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs) Monitoring Information
First Quarter 2009 Monitoring Report for Interim Measure No.3 Groundwater Treatment System

ocation	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician
SC-100B	SC-100B-WDR-185	J.Aide	1/9/2009	8:10:00 AM	TLI	EPA 120.1	SC	1/13/2009	Tina Acquiat
					TLI	EPA 200.7	В	1/13/2009	Daniel Kang
					TLI	EPA 200.7	FE	1/16/2009	Daniel Kang
					TLI	EPA 200.8	CR	1/20/2009	Romuel Chaves
					TLI	EPA 200.8	ZN	1/20/2009	Romuel Chaves
					TLI	EPA 200.8	SB	1/20/2009	Romuel Chaves
					TLI	EPA 200.8	PB	1/20/2009	Romuel Chaves
					TLI	EPA 200.8	NI	1/20/2009	Romuel Chaves
					TLI	EPA 200.8	MO	1/20/2009	Romuel Chaves
					TLI	EPA 200.8	CU	1/20/2009	Romuel Chaves
					TLI	EPA 200.8	BA	1/21/2009	Romuel Chaves
					TLI	EPA 200.8	AS	1/20/2009	Romuel Chaves
					TLI	EPA 200.8	AL	1/21/2009	Romuel Chaves
					TLI	EPA 200.8	MN	1/20/2009	Romuel Chaves
					TLI	EPA 218.6	CR6	1/12/2009	Michael Nonezyan
					TLI	EPA 300.0	SO4	1/13/2009	Giawad Ghenniwa
					TLI	EPA 300.0	NO3N	1/9/2009	Giawad Ghenniwa
					TLI	EPA 300.0	FL	1/13/2009	Giawad Ghenniwa
					FIELD	HACH	PH	1/7/2009	J. Aide
					TLI	SM2130B	TRB	1/9/2009	Gautam Savani
					TLI	SM2540C	TDS	1/13/2009	Tina Acquiat
					TLI	SM4500NH3D	NH3N	1/13/2009	Iordan Stavrev
					TLI	SM4500NO2B	NO2N	1/9/2009	Tina Acquiat
SC-100B	SC-100B-WDR-189	J. Aide	2/4/2009	8:30:00 AM	TLI	EPA 120.1	SC	2/5/2009	Tina Acquiat
					TLI	EPA 200.7	В	2/11/2009	Mark Kotani
					TLI	EPA 200.7	MN	2/11/2009	Mark Kotani
					TLI	EPA 200.7	FE	2/11/2009	Mark Kotani
					TLI	EPA 200.8	SB	2/28/2009	Romuel Chaves
					TLI	EPA 200.8	AL	2/25/2009	Romuel Chaves
					TLI	EPA 200.8	BA	2/28/2009	Romuel Chaves
					TLI	EPA 200.8	CR	2/18/2009	Romuel Chaves
					TLI	EPA 200.8	CU	2/25/2009	Romuel Chaves
					TLI	EPA 200.8	MO	2/25/2009	Romuel Chaves
					TLI	EPA 200.8	PB	2/28/2009	Romuel Chaves
					TLI	EPA 200.8	ZN	2/25/2009	Romuel Chaves
					TLI	EPA 200.8	NI	2/25/2009	Romuel Chaves

TABLE 8 Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs) Monitoring Information First Quarter 2009 Monitoring Report for Interim Measure No.3 Groundwater Treatment System

Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician
SC-100B	SC-100B-WDR-189	J. Aide	2/4/2009	8:30:00 AM	TLI	EPA 200.8	AS	2/25/2009	Romuel Chaves
					TLI	EPA 218.6	CR6	2/5/2009	Michael Nonezyan
					TLI	EPA 300.0	SO4	2/5/2009	Giawad Ghenniwa
					TLI	EPA 300.0	NO3N	2/5/2009	Giawad Ghenniwa
					TLI	EPA 300.0	FL	2/5/2009	Giawad Ghenniwa
					FIELD	HACH	PH	2/4/2009	J. Aide
					TLI	SM2130B	TRB	2/5/2009	Gautam Savani
					TLI	SM2540C	TDS	2/6/2009	Tina Acquiat
					TLI	SM4500NH3D	NH3N	2/10/2009	Iordan Stavrev
					TLI	SM4500NO2B	NO2N	2/5/2009	Tina Acquiat
SC-100B	SC-100B-WDR-193	C. Knight	3/4/2009	11:52:00 AM	TLI	EPA 120.1	SC	3/5/2009	Tina Acquiat
					TLI	EPA 200.7	В	3/16/2009	Daniel Kang
					TLI	EPA 200.7	FE	3/16/2009	Daniel Kang
					TLI	EPA 200.7	MN	3/16/2009	Daniel Kang
					TLI	EPA 200.8	SB	3/15/2009	Romuel Chaves\Mark Kotani
					TLI	EPA 200.8	BA	3/17/2009	Romuel Chaves\Mark Kotani
					TLI	EPA 200.8	ZN	3/15/2009	Romuel Chaves\Mark Kotani
					TLI	EPA 200.8	PB	3/17/2009	Romuel Chaves\Mark Kotani
					TLI	EPA 200.8	NI	3/17/2009	Romuel Chaves\Mark Kotani
					TLI	EPA 200.8	MO	3/15/2009	Romuel Chaves\Mark Kotani
					TLI	EPA 200.8	CR	3/17/2009	Romuel Chaves\Mark Kotani
					TLI	EPA 200.8	AS	3/17/2009	Romuel Chaves\Mark Kotani
					TLI	EPA 200.8	AL	3/17/2009	Romuel Chaves\Mark Kotani
					TLI	EPA 200.8	CU	3/17/2009	Romuel Chaves\Mark Kotani
					TLI	EPA 218.6	CR6	3/6/2009	Michael Nonezyan
					TLI	EPA 300.0	NO3N	3/5/2009	Giawad Ghenniwa
					TLI	EPA 300.0	SO4	3/9/2009	Giawad Ghenniwa
					TLI	EPA 300.0	FL	3/5/2009	Giawad Ghenniwa
					FIELD	HACH	PH	3/4/2009	C. Knight
					TLI	SM2130B	TRB	3/5/2009	Gautam Savani
					TLI	SM2540C	TDS	3/6/2009	Tina Acquiat
					TLI	SM4500NH3D	NH3N	3/10/2009	Iordan Stavrev
					TLI	SM4500NO2B	NO2N	3/5/2009	Tina Acquiat
SC-700B	SC-700B-WDR-185	J.Aide	1/9/2009	8:10:00 AM	TLI	EPA 120.1	SC	1/13/2009	Tina Acquiat
					TLI	EPA 200.7	FE	1/16/2009	Daniel Kang
					TLI	EPA 200.7	В	1/13/2009	Daniel Kang

TABLE 8
Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs)
Monitoring Information
First Quarter 2009 Monitoring Report for Interim Measure No.3 Groundwater Treatment System

Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician
SC-700B	SC-700B-WDR-185	J.Aide	1/9/2009	8:10:00 AM	TLI	EPA 200.8	MN	1/20/2009	Romuel Chaves
					TLI	EPA 200.8	CR	1/20/2009	Romuel Chaves
					TLI	EPA 200.8	BA	1/21/2009	Romuel Chaves
					TLI	EPA 200.8	AS	1/20/2009	Romuel Chaves
					TLI	EPA 200.8	AL	1/21/2009	Romuel Chaves
					TLI	EPA 200.8	РВ	1/20/2009	Romuel Chaves
					TLI	EPA 200.8	SB	1/20/2009	Romuel Chaves
					TLI	EPA 200.8	NI	1/20/2009	Romuel Chaves
					TLI	EPA 200.8	CU	1/20/2009	Romuel Chaves
					TLI	EPA 200.8	MO	1/20/2009	Romuel Chaves
					TLI	EPA 200.8	ZN	1/20/2009	Romuel Chaves
					TLI	EPA 218.6	CR6	1/12/2009	Michael Nonezyan
					TLI	EPA 300.0	NO3N	1/9/2009	Giawad Ghenniwa
					TLI	EPA 300.0	FL	1/13/2009	Giawad Ghenniwa
					TLI	EPA 300.0	SO4	1/13/2009	Giawad Ghenniwa
					FIELD	HACH	PH	1/7/2009	J. Aide
					TLI	SM2130B	TRB	1/9/2009	Gautam Savani
					TLI	SM2540C	TDS	1/13/2009	Tina Acquiat
					TLI	SM4500NH3D	NH3N	1/13/2009	Iordan Stavrev
					TLI	SM4500NO2B	NO2N	1/9/2009	Tina Acquiat
SC-700B	SC-700B-WDR-186	John Deetz	1/14/2009	8:10:00 AM	TLI	EPA 120.1	SC	1/15/2009	Tina Acquiat
					TLI	EPA 200.8	CR	1/15/2009	Romuel Chaves
					TLI	EPA 218.6	CR6	1/15/2009	Michael Nonezyan
					FIELD	HACH	PH	1/14/2009	John Deetz
					TLI	SM2130B	TRB	1/15/2009	Gautam Savani
					TLI	SM2540C	TDS	1/15/2009	Tina Acquiat
SC-700B	SC-700B-WDR-187	J. Aide	1/20/2009	7:35:00 AM	TLI	EPA 120.1	SC	1/21/2009	Tina Acquiat
					TLI	EPA 200.8	CR	1/21/2009	Romuel Chaves
					TLI	EPA 218.6	CR6	1/21/2009	Michael Nonezyan
					FIELD	HACH	PH	1/20/2009	J. Aide
					TLI	SM2130B	TRB	1/20/2009	Gautam Savani
					TLI	SM2540C	TDS	1/23/2009	Tina Acquiat
SC-700B	SC-700B-WDR-188	J.Aide	1/28/2009	8:00:00 AM	TLI	EPA 120.1	SC	1/29/2009	Tina Acquiat
					TLI	EPA 200.8	CR	1/30/2009	Romuel Chaves
					TLI	EPA 218.6	CR6	1/29/2009	Michael Nonezyan
					FIELD	HACH	PH	1/28/2009	J. Aide

TABLE 8
Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs)
Monitoring Information
First Quarter 2009 Monitoring Report for Interim Measure No.3 Groundwater Treatment System

Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician
SC-700B	SC-700B-WDR-188	J.Aide	1/28/2009	8:00:00 AM	TLI	SM2130B	TRB	1/29/2009	Gautam Savani
					TLI	SM2540C	TDS	1/29/2009	Tina Acquiat
SC-700B	SC-700B-WDR-189	J. Aide	2/4/2009	8:00:00 AM	TLI	EPA 120.1	SC	2/5/2009	Tina Acquiat
					TLI	EPA 200.7	MN	2/11/2009	Mark Kotani
					TLI	EPA 200.7	В	2/11/2009	Mark Kotani
					TLI	EPA 200.7	FE	2/11/2009	Mark Kotani
					TLI	EPA 200.8	ZN	2/25/2009	Romuel Chaves
					TLI	EPA 200.8	CR	2/18/2009	Romuel Chaves
					TLI	EPA 200.8	CU	2/25/2009	Romuel Chaves
					TLI	EPA 200.8	MO	2/25/2009	Romuel Chaves
					TLI	EPA 200.8	NI	2/25/2009	Romuel Chaves
					TLI	EPA 200.8	РВ	2/28/2009	Romuel Chaves
					TLI	EPA 200.8	SB	2/28/2009	Romuel Chaves
					TLI	EPA 200.8	BA	2/28/2009	Romuel Chaves
					TLI	EPA 200.8	AL	2/25/2009	Romuel Chaves
					TLI	EPA 200.8	AS	2/25/2009	Romuel Chaves
					TLI	EPA 218.6	CR6	2/5/2009	Michael Nonezyan
					TLI	EPA 300.0	FL	2/5/2009	Giawad Ghenniwa
					TLI	EPA 300.0	NO3N	2/5/2009	Giawad Ghenniwa
					TLI	EPA 300.0	SO4	2/5/2009	Giawad Ghenniwa
					FIELD	HACH	PH	2/4/2009	J. Aide
					TLI	SM2130B	TRB	2/5/2009	Gautam Savani
					TLI	SM2540C	TDS	2/6/2009	Tina Acquiat
					TLI	SM4500NH3D	NH3N	2/10/2009	Iordan Stavrev
					TLI	SM4500NO2B	NO2N	2/5/2009	Tina Acquiat
SC-700B	SC-700B-WDR-190	J. Aide	2/11/2009	8:00:00 AM	TLI	EPA 120.1	SC	2/12/2009	Tina Acquiat
					TLI	EPA 200.8	CR	2/19/2009	Romuel Chaves
					TLI	EPA 218.6	CR6	2/12/2009	Michael Nonezyan
					FIELD	HACH	PH	2/11/2009	J. Aide
					TLI	SM2130B	TRB	2/12/2009	Gautam Savani
					TLI	SM2540C	TDS	2/13/2009	Tina Acquiat
SC-700B	SC-700B-WDR-191	J. Aide	2/17/2009	8:00:00 AM	TLI	EPA 120.1	SC	2/19/2009	Tina Acquiat
					TLI	EPA 200.8	CR	2/19/2009	Romuel Chaves
					TLI	EPA 218.6	CR6	2/19/2009	Michael Nonezyan
					FIELD	HACH	PH	2/17/2009	J. Aide
					TLI	SM2130B	TRB	2/18/2009	Gautam Savani

TABLE 8
Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs)
Monitoring Information
First Quarter 2009 Monitoring Report for Interim Measure No.3 Groundwater Treatment System

Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician
SC-700B	SC-700B-WDR-191	J. Aide	2/17/2009	8:00:00 AM	TLI	SM2540C	TDS	2/20/2009	Tina Acquiat
SC-700B	SC-700B-WDR-192	J. Aide	2/25/2009	7:35:00 AM	TLI	EPA 120.1	SC	2/26/2009	Tina Acquiat
					TLI	EPA 200.8	CR	2/27/2009	Romuel Chaves
					TLI	EPA 218.6	CR6	2/26/2009	Michael Nonezyan
					FIELD	HACH	PH	2/25/2009	J. Aide
					TLI	SM2130B	TRB	2/26/2009	Gautam Savani
					TLI	SM2540C	TDS	2/26/2009	Tina Acquiat
SC-700B	SC-700B-WDR-193	C. Knight	3/4/2009	11:58:00 AM	TLI	EPA 120.1	SC	3/5/2009	Tina Acquiat
					TLI	EPA 200.7	FE	3/16/2009	Daniel Kang
					TLI	EPA 200.7	MN	3/16/2009	Daniel Kang
					TLI	EPA 200.7	В	3/16/2009	Daniel Kang
					TLI	EPA 200.8	ZN	3/15/2009	Romuel Chaves\Mark Kota
					TLI	EPA 200.8	AL	3/17/2009	Romuel Chaves\Mark Kota
					TLI	EPA 200.8	AS	3/17/2009	Romuel Chaves\Mark Kota
					TLI	EPA 200.8	BA	3/17/2009	Romuel Chaves\Mark Kota
					TLI	EPA 200.8	CR	3/17/2009	Romuel Chaves\Mark Kota
					TLI	EPA 200.8	CU	3/17/2009	Romuel Chaves\Mark Kota
					TLI	EPA 200.8	MO	3/15/2009	Romuel Chaves\Mark Kota
					TLI	EPA 200.8	NI	3/17/2009	Romuel Chaves\Mark Kota
					TLI	EPA 200.8	PB	3/17/2009	Romuel Chaves\Mark Kota
					TLI	EPA 200.8	SB	3/15/2009	Romuel Chaves\Mark Kota
					TLI	EPA 218.6	CR6	3/6/2009	Michael Nonezyan
					TLI	EPA 300.0	FL	3/5/2009	Giawad Ghenniwa
					TLI	EPA 300.0	NO3N	3/5/2009	Giawad Ghenniwa
					TLI	EPA 300.0	SO4	3/5/2009	Giawad Ghenniwa
					FIELD	HACH	PH	3/4/2009	C. Knight
					TLI	SM2130B	TRB	3/5/2009	Gautam Savani
					TLI	SM2540C	TDS	3/6/2009	Tina Acquiat
					TLI	SM4500NH3D	NH3N	3/10/2009	Iordan Stavrev
					TLI	SM4500NO2B	NO2N	3/5/2009	Tina Acquiat
SC-700B	SC-700B-WDR-194	J.Aide	3/11/2009	8:15:00 AM	TLI	EPA 120.1	SC	3/12/2009	Tina Acquiat
					TLI	EPA 200.7	CR	3/13/2009	Daniel Kang
					TLI	EPA 218.6	CR6	3/12/2009	Michael Nonezyan
					FIELD	HACH	PH	3/11/2009	J. Aide
					TLI	SM2130B	TRB	3/12/2009	Gautam Savani
					TLI	SM2540C	TDS	3/12/2009	Tina Acquiat

TABLE 8 Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs) Monitoring Information First Quarter 2009 Monitoring Report for Interim Measure No.3 Groundwater Treatment System

Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician
SC-700B	SC-700B-WDR-195	J. Aide	3/17/2009	8:25:00 AM	TLI	EPA 120.1	SC	3/18/2009	Tina Acquiat
					TLI	EPA 200.7	CR	3/19/2009	Daniel Kang
					TLI	EPA 218.6	CR6	3/18/2009	Michael Nonezyan
					FIELD	HACH	PH	3/17/2009	J. Aide
					TLI	SM2130B	TRB	3/18/2009	Gautam Savani
					TLI	SM2540C	TDS	3/18/2009	Tina Acquiat
SC-700B	SC-700B-WDR-196	J. Aide	3/25/2009	8:00:00 AM	TLI	EPA 120.1	SC	3/27/2009	Tina Acquiat
					TLI	EPA 200.8	CR	4/1/2009	Romuel Chavez
					TLI	EPA 218.6	CR6	3/31/2009	Michael Nonezyan
					FIELD	HACH	PH	3/25/2009	J. Aide
					TLI	SM2130B	TRB	3/26/2009	Gautam Savani
					TLI	SM2540C	TDS	3/27/2009	Tina Acquiat
SC-701	SC-701-WDR-193	C. Knight	3/4/2009	12:03:00 PM	TLI	EPA 120.1	SC	3/5/2009	Tina Acquiat
					TLI	EPA 200.8	NI	3/17/2009	Romuel Chaves\Mark Kotani
					TLI	EPA 200.8	PB	3/17/2009	Romuel Chaves\Mark Kotani
					TLI	EPA 200.8	AS	3/17/2009	Romuel Chaves\Mark Kotani
					TLI	EPA 200.8	SB	3/17/2009	Romuel Chaves\Mark Kotani
					TLI	EPA 200.8	ZN	3/17/2009	Romuel Chaves\Mark Kotani
					TLI	EPA 200.8	V	3/24/2009	Romuel Chaves\Mark Kotani
					TLI	EPA 200.8	BA	3/17/2009	Romuel Chaves\Mark Kotani
					TLI	EPA 200.8	SE	3/17/2009	Romuel Chaves\Mark Kotani
					TLI	EPA 200.8	AG	3/17/2009	Romuel Chaves\Mark Kotani
					TLI	EPA 200.8	MO	3/17/2009	Romuel Chaves\Mark Kotani
					TLI	EPA 200.8	CU	3/17/2009	Romuel Chaves\Mark Kotani
					TLI	EPA 200.8	CR	3/17/2009	Romuel Chaves\Mark Kotani
					TLI	EPA 200.8	CO	3/24/2009	Romuel Chaves\Mark Kotani
					TLI	EPA 200.8	CD	3/17/2009	Romuel Chaves\Mark Kotani
					TLI	EPA 200.8	BE	3/24/2009	Romuel Chaves\Mark Kotani
					TLI	EPA 200.8	TL	3/17/2009	Romuel Chaves\Mark Kotani
					TLI	EPA 218.6	CR6	3/6/2009	Michael Nonezyan
					TLI	EPA 245.1	HG	3/7/2009	Romuel Chaves\Mark Kotani
					TLI	EPA 300.0	FL	3/5/2009	Giawad Ghenniwa
					FIELD	HACH	PH	3/4/2009	C. Knight
					TLI	SM2540C	TDS	3/6/2009	Tina Acquiat
hase Seperator	SC-Sludge-WDR-193	C. Knight	3/4/2009	10:00:00 AM	TLI	EPA 300.0	FL	3/9/2009	Giawad Ghenniwa

TABLE 8 Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs) Monitoring Information

First Quarter 2009 Monitoring Report for Interim Measure No.3 Groundwater Treatment System

Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician
Phase Seperator	SC-Sludge-WDR-193	C. Knight	3/4/2009	10:00:00 AM	TLI	EPA 6010B	CU	3/24/2009	Hao Ton
					TLI	EPA 6010B	AG	3/24/2009	Hao Ton
					TLI	EPA 6010B	BA	3/24/2009	Hao Ton
					TLI	EPA 6010B	BE	3/24/2009	Hao Ton
					TLI	EPA 6010B	CD	3/24/2009	Hao Ton
					TLI	EPA 6010B	CR	4/1/2009	Hao Ton
					TLI	EPA 6010B	NI	3/24/2009	Hao Ton
					TLI	EPA 6010B	PB	3/24/2009	Hao Ton
					TLI	EPA 6010B	TL	3/24/2009	Hao Ton
					TLI	EPA 6010B	V	3/24/2009	Hao Ton
					TLI	EPA 6010B	ZN	3/24/2009	Hao Ton
					TLI	EPA 6010B	CO	3/24/2009	Hao Ton
					TLI	EPA 7471A	HG	3/16/2009	Romuel Chaves
					TLI	SW 6020A	SB	3/24/2009	Romuel Chaves
					TLI	SW 6020A	SE	4/2/2009	Romuel Chaves
					TLI	SW 6020A	MO	4/2/2009	Romuel Chaves
					TLI	SW 6020A	AS	3/24/2009	Romuel Chaves
					TLI	SW 7199	CR6	3/27/2009	David Blackburn

TABLE 8

Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs)

Monitoring Information

First Quarter 2009 Monitoring Report for Interim Measure No.3 Groundwater Treatment System

NOTES:

SC-700B = Sampling location for all effluent samples is tap on pipe downstream from tank T-700 to injection well IW-2 (see attached P&ID TP-PR-10-10-04).

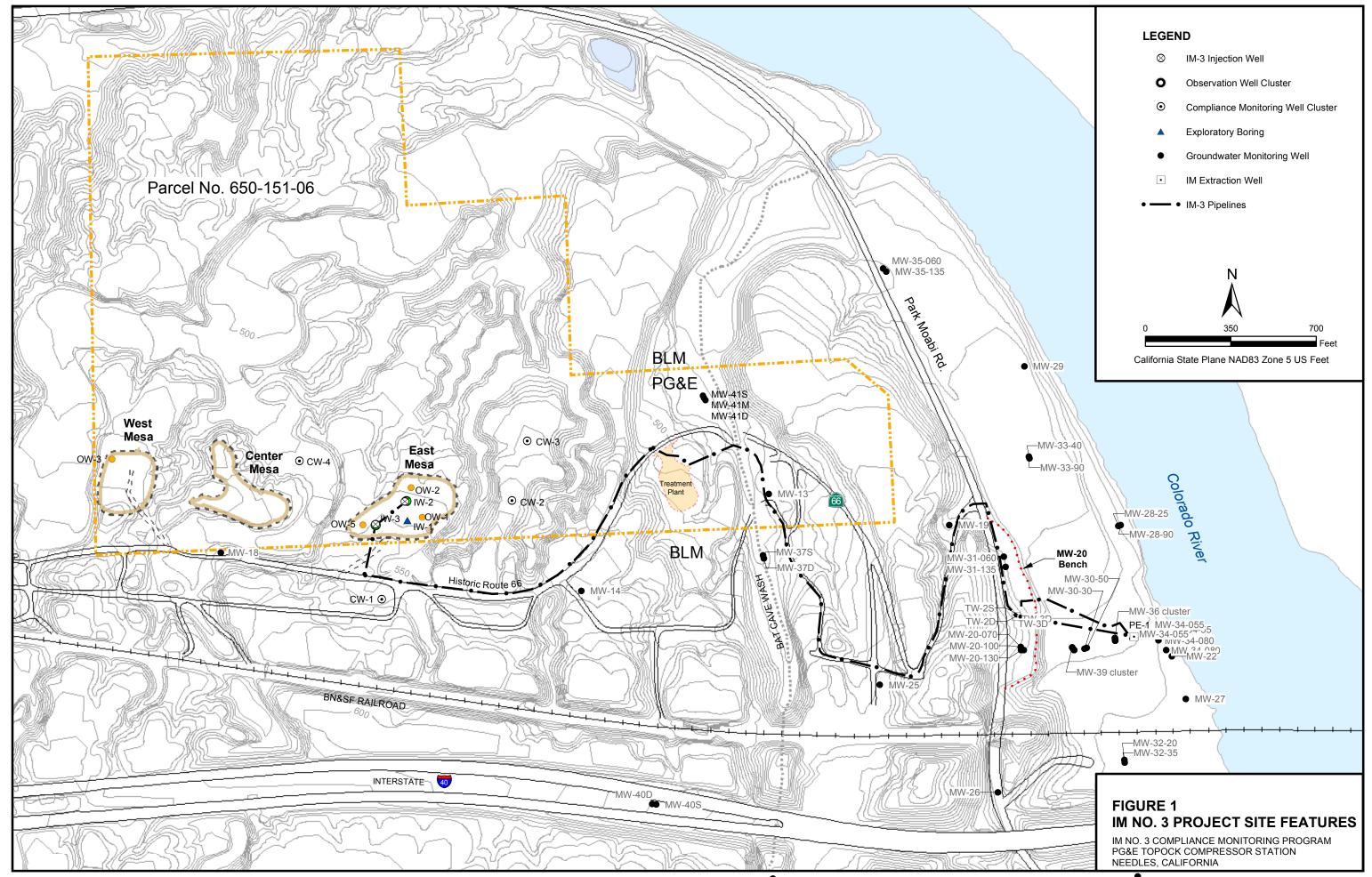
SC-100B = Sampling location for all influent samples is tap on pipe from extraction wells into tank T-100 (see attached P&ID TP-PR-10-10-04).

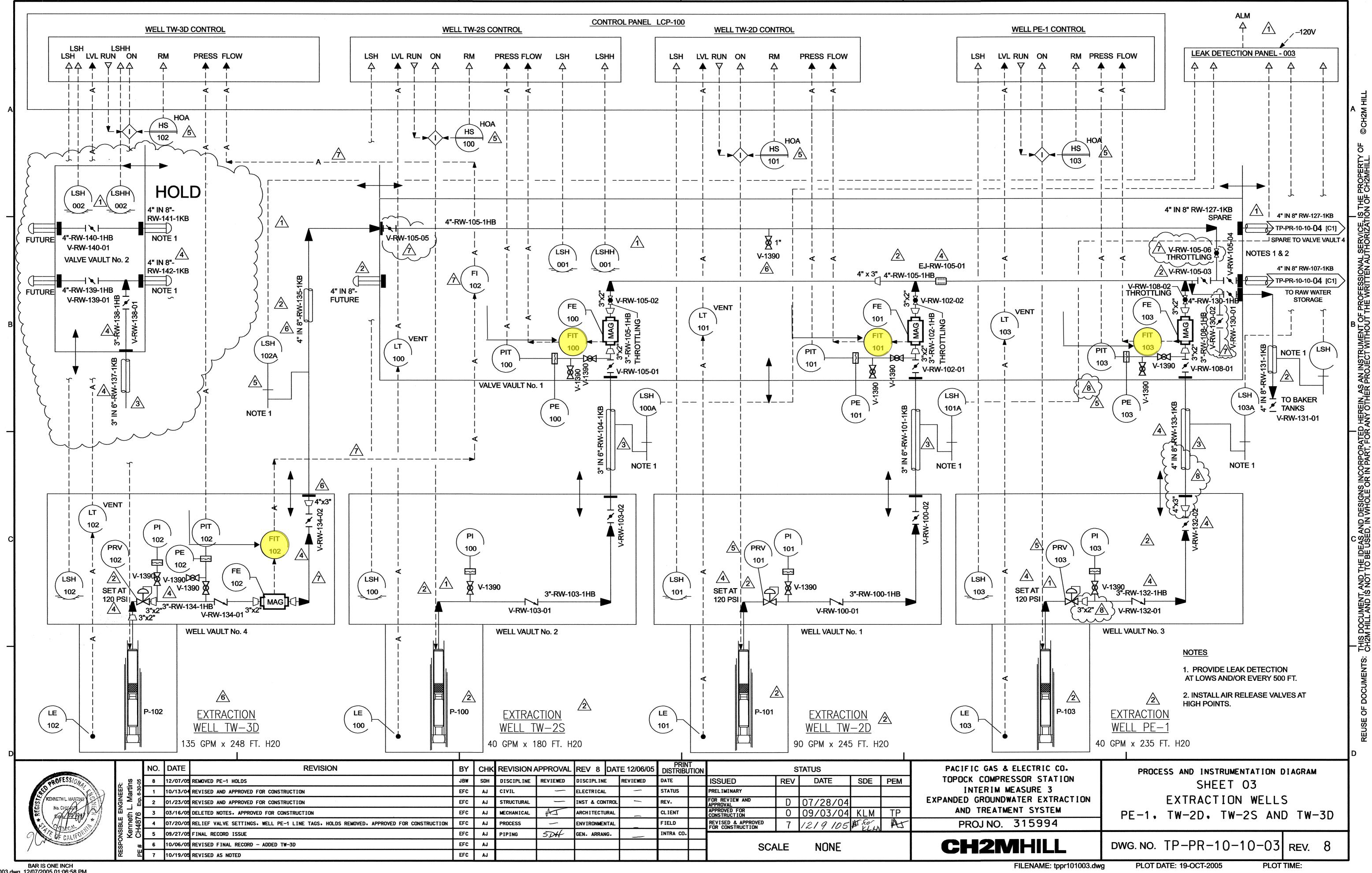
SC-701 = Sampling location for all reverse osmosis samples is tap on pipe T-701 (see attached P&ID TP-PR-10-10-08).

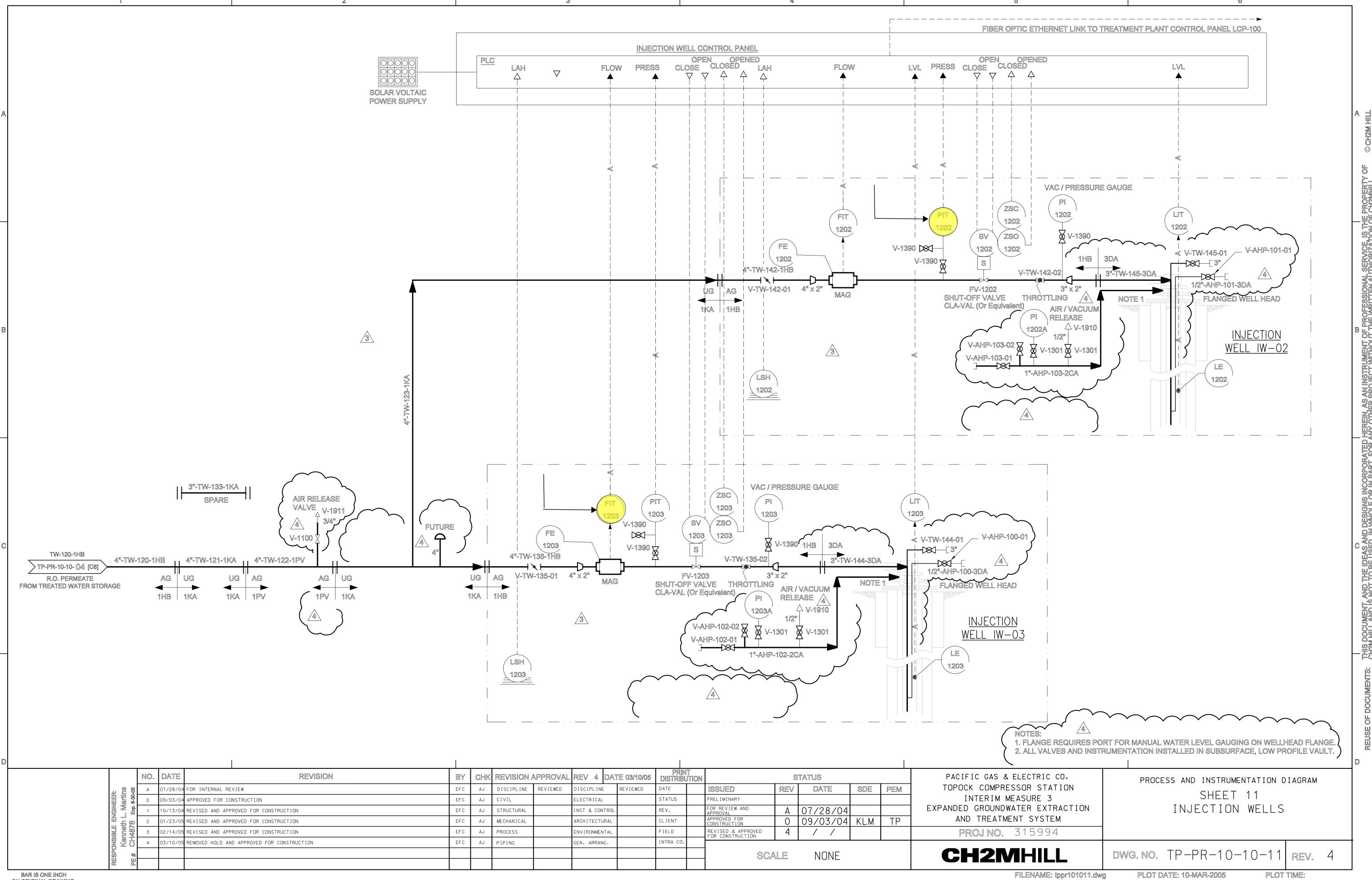
Prior to April 11, 2007 the analytical methods listed in the 40 CFR Part 136 for pH and TDS were E150.1 and E160.1, respectively. Per EPA and Department of Health Services guidelines, the analytical methods listed in the current 40 CFR Part 136 have changed to SM4500-H B and SM2540C as shown on the table.

AL = AG = AS = B = BA = BC = CO = CR = CR6 = CU = FE = FL = HG = MN =	aluminum silver arsenic boron barium beryllium cadmium cobalt chromium hexavalent chromium copper iron fluoride mercury manganese	NH3N = NI = NO2N = NO3N = PB = PH = SB = SC = SO4 = TDS = TL = TLI = TRB = V =	ammonia (as N) nickel nitrite (as N) nitrate (as N) lead pH antimony specific conductance selenium sulfate total dissolved solids thallium Truesdail Laboratories, Inc. turbidity vanadium
MO =	manganese molybdenum	v = ZN =	zinc





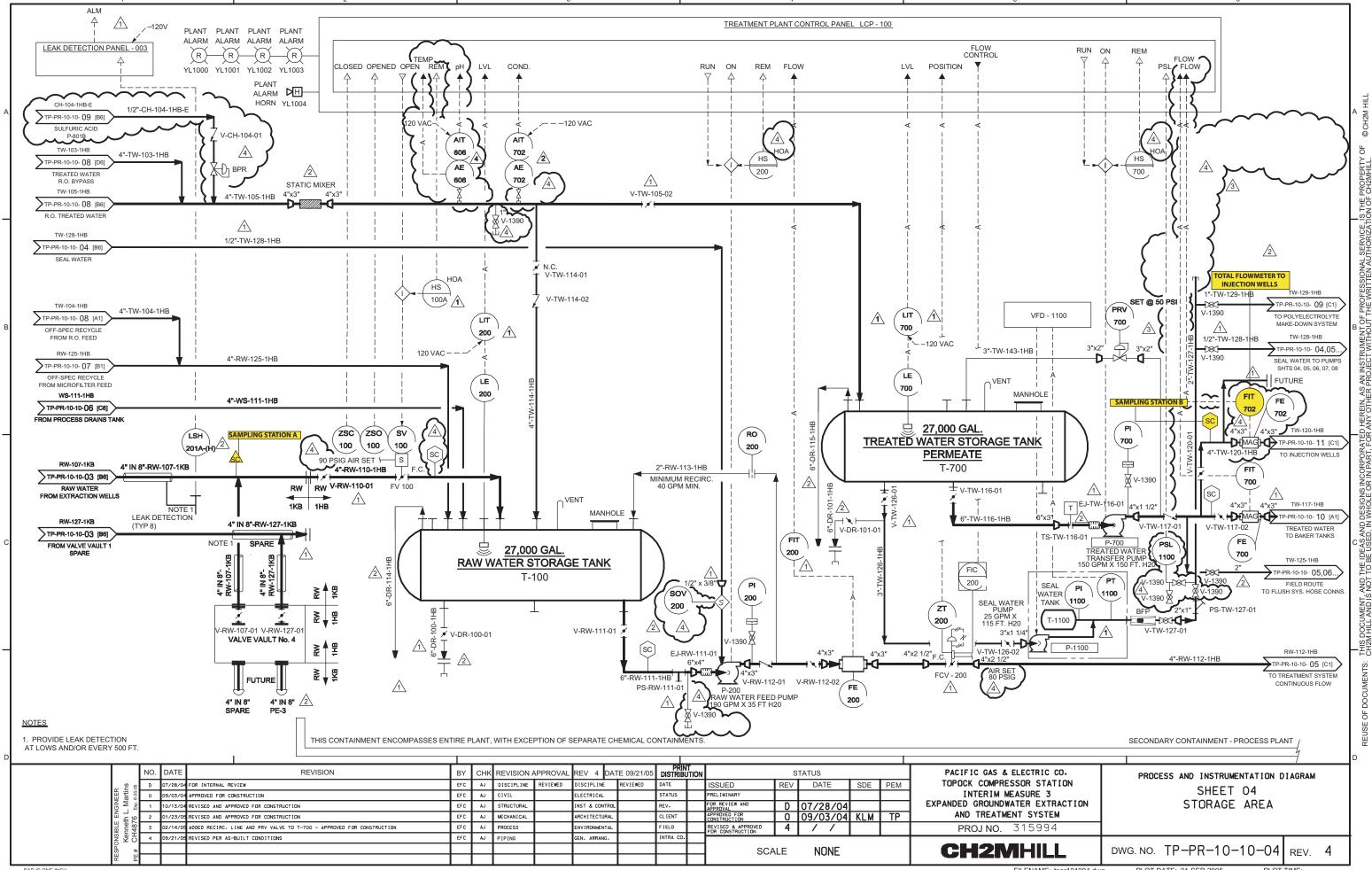


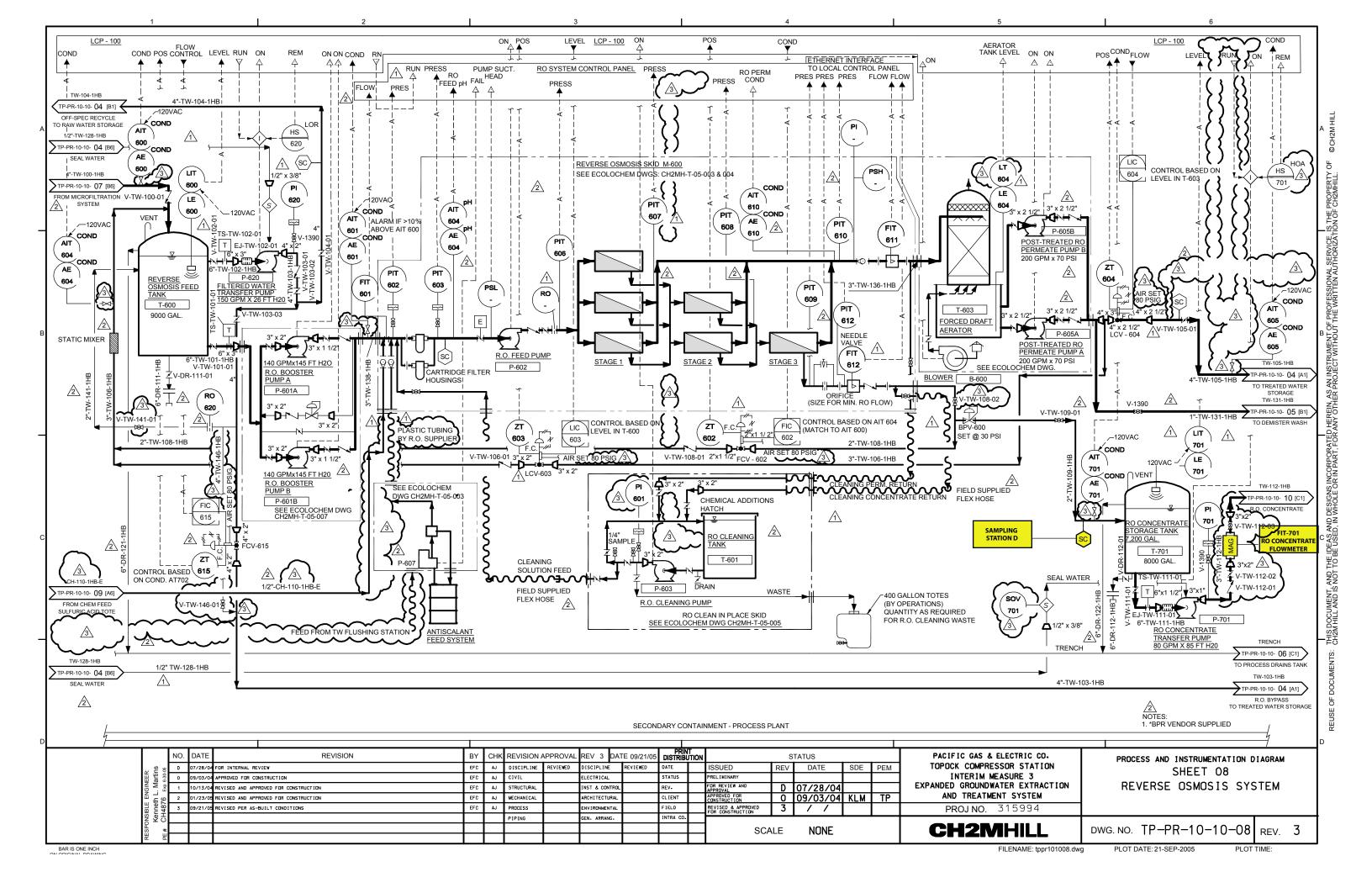


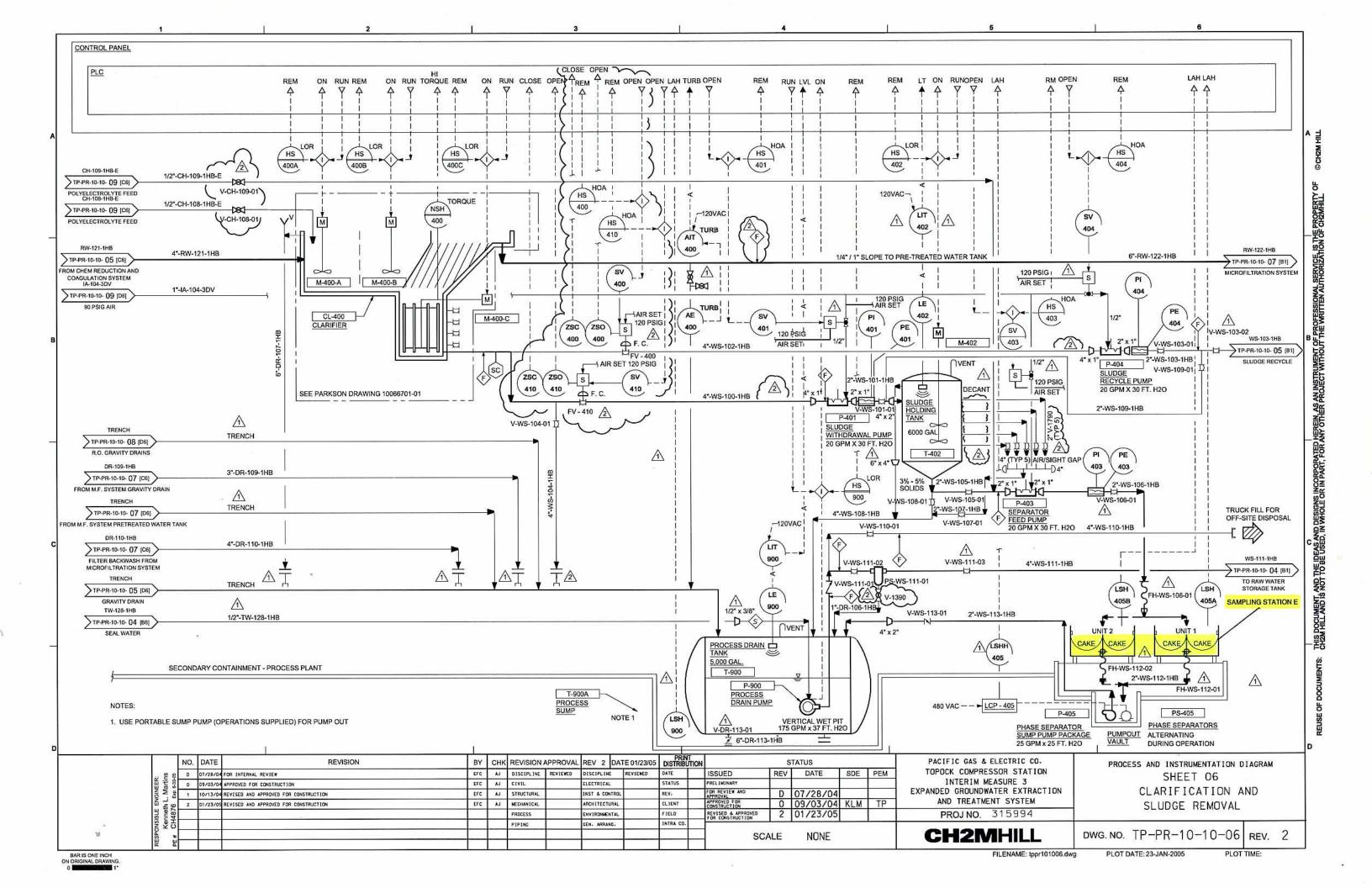
BAR IS ONE INCH ON ORIGINAL DRAWING.

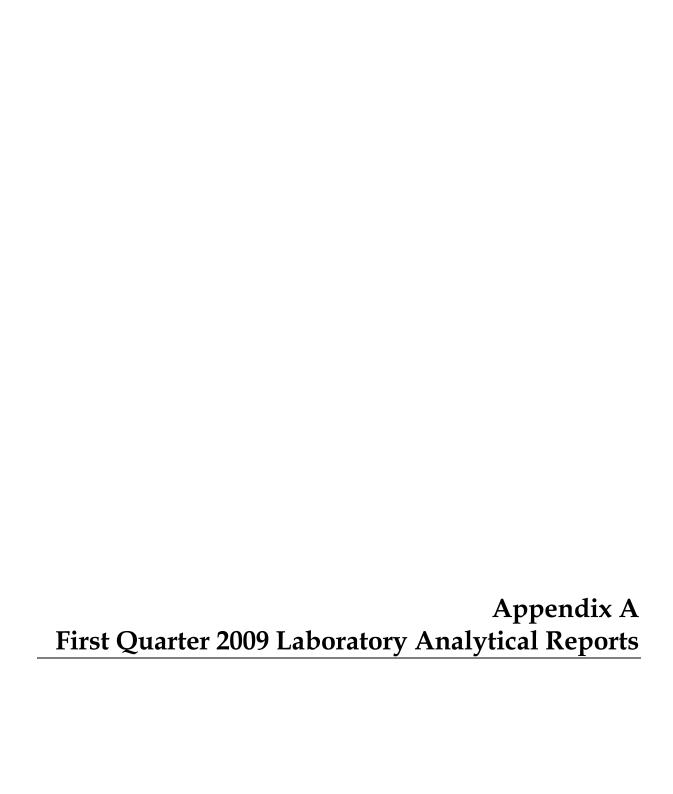
FILENAME: tppr101011.dwg

PLOT TIME:











14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

January 23, 2009

E2 Consulting Engineers, Inc. Mr. Shawn Duffy 155 Grand Ave., Suite 1000 Oakland, California 94612

Dear Mr. Duffy:

SUBJECT:

CASE NARRATIVE PG&F TOPOCK IM3PLANT-WDR-185 PROJECT, GROUNDWATER

MONITORING,

TLI NO.: 981060

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-185 project groundwater monitoring. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The samples were received and delivered with the chain of custody on January 9, 2009, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

The chain of custody indicated the samples were collected on January 7, 2009. The collection date on the sample containers was January 9, 2009. Mr. Shawn Duffy of CH2M Hill verified the samples were collected on January 9, 2009.

No other violations or nonconformance actions occurred for this data package.

If you have any questions or require additional information, please contact me at (714) 730-6239 ext. 200.

Respectfully Submitted,

TRUESDAIL LABORATORIES, INC.

🗸 – Mona Nassimi

Manager, Analytical Services

K.R.P. gy

K.R.P. Iver

Quality Assurance/Quality Control Officer

Established 1931

Client: E2 Consulting Engineers, Inc. 155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: Two (2) Groundwaters
Project Name: PG&E Topock Project
Project No.: 379209.01.03.01

Laboratory No.: 981060

TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462

www.truesdail.com

Date: January 23, 2009 Collected: January 9, 2009 Received: January 9, 2009

ANALYST LIST

METHOD	PARAMETER	ANALYST
EPA 120.1	Specific Conductivity	Tina Acquiat
SM 2540C	Total Dissolved Solids	Tina Acquiat
SM 2130B	Turbidity	Gautam Savani
EPA 300.0	Anions	Giawad Ghenniwa
SM 4500-NH3 B	Ammonia	lordan Stavrev
SM 4500-NO2 B	Nitrite as N	Tina Acquiat
EPA 200.7	Metals by ICP	Daniel Kang
EPA 200.8	Metals by ICP/MS	Romuel Chaves
EPA 218.6	Hexavalent Chromium	Michael Nonezyan

EXCELLENCE IN INDEPENDENT TESTING

Established 1931

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: Two (2) Groundwaters
Project Name: PG&E Topock Project
Project No.: 379209.01.03.01

P.O. No.: 379209.01.03.01



14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Laboratory No.: 981060

Date: January 23, 2009 Collected: January 9, 2009 Received: January 9, 2009 Prep/ Analyzed: January 13, 2009

Analytical Batch: 01EC09E

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

<u>TLI_I.D.</u>	<u>Field I.D.</u>	<u>Units</u>	<u>Method</u>	DF	<u>RL</u>	<u>Results</u>
981060-1	SC-700B-WDR-185	μmhos/cm	EPA 120.1	1.00	2.00	6670
981060-2	SC-100B-WDR-185	μmhos/cm	EPA 120.1	1,00	2.00	7850

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	981061-2	8450	8460	0.12%	<u><</u> 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<2.00		<2.00	Yes
CÇS	699	706	99.0%	90% - 110%	Yes
CVS#1	986	1000	98.6%	90% - 110%	Yes
LCS	700	706	99.2%	90% - 110%	Yes
LCSD	700	706	99.2%	90% - 110%	Vec

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from Truesdall Laboratories.

EXCELLENCE IN INDEPENDENT TESTING

Established 1931

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: Two (2) Groundwaters Project Name: PG&E Topock Project

Project No.: 379209.01.03.01 P.O. No.: 379209.01.03.01 REPORT

14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Laboratory No.: 981060

Date: January 23, 2009 Collected: January 9, 2009 Received: January 9, 2009

Prep/ Analyzed: January 13, 2009

Analytical Batch: 01TDS09F

Investigation:

Total Dissolved Solids by SM 2540C

Analytical Results Total Dissolved Solids

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Units</u>	<u>Method</u>	<u>RL</u>	<u>Results</u>
981060-1	SC-700B-WDR-185	mg/L	SM 2540C	250	4200
981060-2	SC-100B-WDR-185	mg/L	SM 2540C	250	4840

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	981061-2	5770	5700	0.61%	≤ 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<25.0		<25.0	Yes
LCS 1	500	500	100%	90% - 110%	Yes
LCS 2	504	500	101%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

RL: Reporting Limit.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

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EXCELLENCE IN INDEPENDENT TESTING

Established 1931

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: Two (2) Groundwaters Project Name: PG&E Topock Project

Project No.: 379209.01.03.01 P.O. No.: 379209.01.03.01 REPORT

14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Laboratory No.: 981060

Date: January 23, 2009

Collected: January 9, 2009

Received: January 9, 2009 Prep/ Analyzed: January 9, 2009

Analytical Batch: 01TUC09E

Investigation:

Turbidity by Method SM 2130B

Analytical Results Turbidity

TLI I.D.	<u>Field I.D.</u>	<u>Sample Time</u>	<u>Units</u>	<u>DF</u>	<u>RL</u>	Results
981060-1	SC-700B-WDR-185	08:10	NTU	1.00	0.100	0.119
981060-2	SC-100B-WDR-185	08:10	NTU	1.00	0.100	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC WithIn Control
Duplicate	981060-2	ND	NĎ	0.00%	≤ 20%	Yes

QC Std I.D.	Concentration		Percent Recovery	Acceptance Limits	QC Within Control
<u>Blank</u>	ND	<0.100		<0.100	Yes
LCS	7.50	8.00	93.8%	90% - 110%	Yes
LCS	7.56	8.00	94.5%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF- Dilution Factor

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

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Laboratory

Number

EXCELLENCE IN INDEPENDENT TESTING

Established 1931



14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

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Relative

Percent

Date: January 23, 2009
Collected: January 9, 2009
Received: January 9, 2009

QC Within

Control

Prep/ Analyzed: January 12, 2009

Analytical Batch: 01CrH09D

Acceptance

limits

155 Grand Ave. Suite 1000 Oakland, CA 94612

Client: E2 Consulting Engineers, Inc.

Attention: Shawn Duffy

Sample: Two (2) Groundwaters
Project Name: PG&E Topock Project
Project No.: 379209.01.03.01
P.O. No.: 379209.01.03.01

Prep. Batch: 01CrH09D

Investigation:

Hexavalent Chromium by IC Using Method EPA 218.6

Analytical Results Hexavalent Chromium

<u> TŁI I.D.</u>	Field I.D.	Sample Time	Run Time	<u>Units</u>	<u>D</u> F	<u>_RL</u>	Results
981060-1	SC-700B-WDR-185	08:10	16:24	μg/L	1.05	0.20	ND
981060-2	SC-100B-WDR-185	08:10	16:34	μg/L	105	21.0	1370

QA/QC Summary

Sample

Concentration

								Dilleteuce		1	
		Duplic	ate 98	11060-1 (5.25x)	ND		ND	0.00%	<u>< 20%</u>	Yes	
	QC Std I.D.	Lab Number	Conc.of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	M\$% Recovery	Acceptance limits	QC Within Control
1	MS	981060-1	0.00	1,06	1.00	1.06	1.11	1.06	105%	90-110%	Yes
ļ	MS	981060-2	1370	105	15.0	1575	3010	2945	104%	90-110%	Yes

Duplicate

Concentration

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	NĎ	<0.200	-+#	<0.200	Yes
MRCCS	5.00	5.00	100%	90% - 110%	Yes
MRCV\$#1	10.3	10.0	103%	95% - 105%	Yes
MRCVS#2	10.4	10.0	104%	95% - 105%	Yes
LCS	5.04	5.00	101%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

QC STD I.D.

DF: Dilution Factor

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

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Truesdail Laboratories, Inc.

EXCELLENCE IN INDEPENDENT TESTING

Established 1931

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: Two (2) Groundwaters Project Name: PG&E Topock Project Project No.: 379209.01.03.01

P.O. No.: 379209.01.03.01

REPORT

14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Laboratory No.: 981060

Date: January 23, 2009

Collected: January 9, 2009 Received: January 9, 2009

Prep/ Analyzed: January 13, 2009 Analytical Batch: 01NH3-E09C

Investigation:

Ammonia as N by Method SM 4500-NH3 D

Analytical Results Ammonia as N

TLI I.D.	<u>Field I.D.</u>	Sample Time	<u>Method</u>	<u>Units</u>	<u>DF</u>	<u>RL</u>	Results
981060-1	SC-700B-WDR-185	08:10	SM 4500-NH3 D	mg/L	1.00	0.500	ND
981060-2	SC-100B-WDR-185	08:10	SM 4500-NH3 D	mg/L	1.00	0.500	ND

QA/QC Summary

										_							
	QC STD I		Number		•	Concentr	ation	Du Conc	plica entr		F	Relative Percent Ifference		eptance QC Within Control			
	Duplic	ate		9 <u>81</u> 060	-1	ND			ND			0.00%	4	20%	十	Yes	
QC Std I.D.	Lab Number	uns	nc.of piked nple		ution ctor	Added Spike Conc.		MS nount	C	easured onc. of piked ample	1	Theoretical Conc. of spiked sample	I _	M\$% covery		Acceptance limits	QC Within Control
MS	981060-2	0	.00	1.	00	6.00		3.00		6.27	T	6.00	_	105%		75-125%	Yes
		L,	QC Std	I.D.		easured centration		eoretica Icentrați		Percer Recove		Acceptan Limits		QC Wit Contr			
			Blan	k		ND		<0.500			_	<0.500		Yes	_	1	
		\vdash	MRC	cs		5.59		6.00		93.2%	Ĭ	90% - 110		Yes		1	
			MRCV:	S#1		6.00	1	6.00		100%		90% - 110	۱%	Yes		1	

10.0

106%

10.6

ND: Below the reporting limit (Not Detected).

OF: Dilution Factor,

Respectfully submitted.

90% - 110%

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager

Analytical Services

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008

(714) 730-6239 · FAX (714) 730-6462

www.truesdail.com

REPORT

Client: E2 Consulting Engineers, Inc. 155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: Two (2) Groundwaters
Project Name: PG&E Topock Project
Project No.: 379209.01.03.01
P.O. No.: 379209.01.03.01

Laboratory No.: 981060

Date: January 23, 2009 Collected: January 9, 2009 Received: January 9, 2009

Prep/ Analyzed: January 13, 2009

Analytical Batch: 01AN09H

Investigation:

Fluoride by Ion Chromatography using EPA 300.0

Analytical Results Fluoride

<u>TLI I.D.</u>	<u>Field I.D.</u>	Sample Time	Run Time	<u>Units</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
981060-1	SC-700B-WDR-185	08:10	13:20	mg/L	1.00	0.500	2.42
981060-2	SC-100B-WDR-185	08:10	13:31	mg/L	1.00	0.500	2.79

QA/QC Summary

	QC ST		Nun		Concentra	tion		plicate entration	Percent Difference	Acceptance limits	QC Within Control	
	Dupli	cate	981	062	ND.		<u> </u>	ND	0.00%	≤ 20%	Yes	
QC St	d Lab Number	Conc.e unspike sampl	ed C	ilution Factor	Added Spike Conc.	_	MS nount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	981062	0.00		1.00	2.00		2.00	2.10	2.00	105%	85-115%	Yes
								- 1	- , -			1

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500		<0.500	Yes
MRCC\$	4.13	4.00	103%	90% - 110%	Yes
MRCVS#1	3,13	3.00	104%	90% - 110%	Yes
MRCVS#2	3.13	3.00	104%	90% - 110%	Yes
MRCVS#3	3.12	3,00	104%	90% - 110%	Yes
LCS	4.12	4.00	103%	90% - 110%	Voc

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager

Analytical Services

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REPORT

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·

Laboratory No.: 981060

Date: January 23, 2009 Collected: January 9, 2009

Received: January 9, 2009 Prep/ Analyzed: January 13, 2009

Analytical Batch: 01AN09H

Oakland, CA 94612 Attention: Shawn Duffy

Sample: Two (2) Groundwaters
Project Name: PG&E Topock Project
Project Name: 270202 04 02 04

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Project No.: 379209.01.03.01 P.O. No.: 379209.01.03.01

Investigation:

Sulfate by Method EPA 300.0

Analytical Results Sulfate

<u>TLI I.D.</u>	<u>Field I.D.</u>	Sample Time	Run Time	<u>Uni</u> ts	<u>D</u> F	RL	Results
981060-1	SC-700B-WDR-185	08:10	11:26	mg/Ł	25	12.5	521
981060-2	SC-100B-WDR-185	08:10	11:37	mg/L	100	50.0	633

QA/QC Summary

	QC STC			Numb	er	Concentra	ation		licate ntration	Percent Difference		eptance limits	QC Within Control	
	Duplic	ate	<u> </u>	8106	<u>)-2</u>	633		6	34	0.16%	-	≤ 20%	Yeş	
QC Std I.D.	Lab Number	Con- unsp sam			ution	Added Spike Conc.	l .	MS nount	Measured Conc. of spiked sample	Theoretica Conc. of spiked sample		M\$% covery	Acceptance limits	QC Within
M\$	981060-2	63	3		00	10.0	1	1000	1680	1633		105%	85-115%	Yes
		Q	C Std	I.D.		asured centration		eoretical centration	Percer Recove	1		QC Withi	n	
		- 1	Oloni	L.		NO							_	

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500		<0.500	Yes
MRCCS	20.5	20.0	103%	90% - 110%	Yes
MRCVS#1	1 <u>5.</u> 1	15.0	101%	90% - 110%	Yes
MRCVS#2	15.1	15,0	101%	90% - 110%	Yes
MRCVS#3	15.1	15.0	101%	90% - 110%	Yes
LCS	20.4	20.0	102%	90% - 110%	Yes

ND: Bolow the reporting limit (Not Detected).

DF: Dilution Factor,

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

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REPORT

14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000 Oakland, CA 94612

Attention: Shawn Duffy

Sample: Two (2) Groundwaters
Project Name: PG&E Topock Project
Project No.: 379209.01.03.01

P.O. No.: 379209.01.03.01

Laboratory No.: 981060

Date: January 23, 2009

Collected: January 9, 2009 Received: January 9, 2009

Prep/ Analyzed: January 9, 2009

Analytical Batch: 01AN09E

Investigation:

Nitrate as N by Ion Chromatography using EPA 300.0

Analytical Results Nitrate as N

TLI I.D.	<u>Field I.D.</u>	Sample Time	Run Time	<u>Units</u>	<u>DF</u>	<u>RL</u>	Results
981060-1	SC-700B-WDR-185	08:10	16:41	mg/L	5.00	1.00	3.08
981060-2	SC-100B-WDR-185	08:10	16:52	mg/L	5.00	1.00	3.76

QA/QC Summary

	QC STD Duplica	1.0.	Numb 981040	er	Concentra 3.8	ation	Conce	plicate entration 3.8	Percent Difference 0.26%		eptance limits ≤ 20%	QC Within Control Yes	
QC Std	Lab Number	Conc.of unspiked sample	برزق	rtion ctor	Added Spike Conc.		MS lount	Measured Conc. of spiked sample		<u>' </u>	MS%	Acceptance limits	QC Within Control
MS	981040-1	3.78	1	.00	4.00	4	.00	7.83	7.78	1	101%	85-115%	Yes
		QC St	d I.D,		easured centration	_	eoretical centratio				QC Withi Control		11

QC Std I.D.	Concentration	Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500		<0.500	Yes
MRCCS	4.01	4.00	100%	90% - 110%	Yes
MRCV\$#1	3.09	3.00	103%	90% - 110%	Yes
MRCV\$#2	3.14	3.00	105%	90% - 110%	Yes
MRCVS#3	3.14	3.00	105%	90% - 110%	Yes
LCS	4.05	4.00	101%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor,

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

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REPORT

14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Laboratory No.: 981060

Date: January 23, 2009 Collected: January 9, 2009 Received: January 9, 2009

Prep/ Analyzed: January 9, 2009 Analytical Batch: 01NO209D

Oakland, CA 94612 Attention: Shawn Duffy

Sample: Two (2) Groundwaters
Project Name: PG&E Topock Project
Project No.: 379209.01.03.01

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

P.O. No.: 379209.01.03.01

Investigation:

Nitrite as N by Method SM 4500-NO2-B

Analytical Results for Nitrite as N

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Sample Time</u>	<u>Run Tîme</u>	<u>Units</u>	<u>DF</u>	RI.	Results
981060-1	SC-700B-WDR-185	08:10	16:57	mg/L	1.00	0.0050	ND
981060-2	SC-100B-WDR-185	08:10	16:58	mg/L		0.0050	ND

QA/QC Summary

	QC ST	J 1,U.	Number	Concentra	ation	Conc		Relative Percent Difference	Acceptance limits	QC Within Control	
	Dubit	ate	981060-1	ND.			ND	0.00%	<u>< 20%</u>	Yes	
QC Std I.D.	Lab Number	Conc.of unspiked sample	Dilution Factor	Added Spike Conc.		MS rount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	981060-1	0.00	1.00	0.0200	0.0	0200	0.0192	0.0200	96.0%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.0050		<0.0050	Yes
MRCCS	0.0352	0.0370	95.1%	90% - 110%	Yes
MRCVS#1	0.0193	0.0200	96.5%	90% - 110%	Yes
LCS	0.0373	0.0370	101%	90% - 110%	Yes
LCSD	0.0372	0.0370	101%	00% 110%	V

ND: Below the reporting limit (Not Detected).

OF: Dilution Factor,

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

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Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Samples: Two (2) Groundwaters
Project Name: PG&E Topock Project
Project No.: 379209.01.03.01
P.O. No.: 379209.01.03.01

Investigation: Total Metal Analyses as Requested



14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Laboratory No.: 981060

Reported: January 23, 2009 Collected: January 9, 2009 Received: January 9, 2009 Analyzed: See Below

Analytical Results

REPORT

SAMPLE ID: S	C-700B-WD	R-185	Time Co	llected:	08:10		LAB ID:	981060-1	
Parameter		_Method	Reported Value	DF	Units	ŔĹ	Batch	Date Analyzed	Time Analyzed
Aluminum		EPA 200.8	ND	2.00	μg/L	50.0	012109A	01/21/09	14:47
Antimony		EPA 200.8	ND	5.00	μg/L	10.0	012009A	01/20/09	11:34
Arsenic		EPA 20 <u>0.8</u>	ND	1.00	<u>дд/L</u>	0.20	012009A	01/20/09	11:19
Barium		EPA 200.8	14.7	2.00	µg/L	10.0	012109A	01/21/09	14:47
Chromium		EPA 20 <u>0.8</u>	ND	1.00	,ıg/L	1.00	012009A	01/20/09	11:19
Copper		EPA 200.8	<u>N</u> D	1.00	μg/L	5.00	012009A	01/20/09	11:19
Lead		EPA 200.8	ND	5.00	<u>μg/L</u>	10.0	012009A	01/20/09	11:34
Manganese		EPA 200.8	ND	1.00	<u>μ</u> g/L	10.0	012009A	01/20/09	11:19
Molybdenum		EPA 200.8	_ 10.3	5.00	µg/∟	10.0	012009A	01/20/09	11:34
Nickel		EPA 200.8	ND	1.00	<u>μġ/L</u>	10.0	012009A	01/20/09	11:19
Zinc		EPA 200.8	ND	1.00	μg/L	10.0	012009A	01/20/09	11:19
Boron		EPA 200.7	1110	1.00	<u>µg/L</u>	200	011309A	01/13/09	15:16
Iron		EPA 200.7	ND	1.00	μg/L	20.0	011609A	01/16/09	11:27

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Report Continued

SAMPLE ID: SC-10	00B-WDR-185	Time Col	lected:	08:10	-	LAB IC	981060-2	
Parameter	Method	Reported Value	DF	Units	ŔĹ	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	ND	1.00	լւց/L	50.0	012109A	01/21/09	14;53
Antimony	EPA 200.8	ND	5.00	<u>μg/L</u>	10.0	012009A	01/20/09	11:41
Arsenic	<u>EP</u> A 200.8	1.76	1.00	μ g/ L	0.20	012009A	01/20/09	11:26
Barium	EPA 200.8	16.5	1,00	μg/L	10.0	012109A	01/21/09	14:53
Chromium	EPA 200.8	1300	5.00	μ g/L	1.00	012009A	01/20/09	11:41
Copper	EPA 200.8	ND	1.00	μ g /L	5.00	012009A	01/20/09	11:26
Lead	EPA 200.8	ND	5.00	μg/L_	10.0	012009A	01/20/09	11:41
Manganese	EPA 200.8	ND	1.00	μg/L	10.0	012009A	01/20/09	11;26
Molybdenum	EPA 200.8	18.5	5.00	μ ο /L	10.0	012009A	01/20/09	11:41
Nickel	EPA 200.8	ND	1.00		10.0	012009A	01/20/09	11:26
Zinc	EPA 200.8	ND	1.00	 µg/L	10.0	012009A	01/20/09	11:26
Boron	EPA 200.7	1180	1.00	μ g /L	200	011309A	01/13/09	15:33
Iron	EPA 200.7	ND	1.00	μ g/L	20.0	011609A	01/16/09	14:32

ND: Not detected,or below limit of detection,

DF: Dilution factor.

Respectfully submitted, TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

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CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-185]

090/86

COC Number

IM3Plant-WDR -185 10 Days PAGE TURNAROUND TIME OATE 01/07/09

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100B 8.89 COMMENTS D4 =2 812 756 NUMBER OF CONTAINERS L SCR Total Metals (200.7) Cr (300.0) F. NO3, NO2, SO4 (001EB) 201 ₈noinA A (0.00E) snolnA × × Total Metals (2.005) See Nielew Isto T × × Title 22 Motals List (200.7, 200.8, 245.1) 705 (2540 c) × × × CITVI) (218.6) Lab Fillened × ā × × DESCRIPTION FAX 530-339-3303 ¥ 01/8/4 60/20/10 01.200070110 155 Grand Ave Ste 1000 DATE Oakland, CA 94612 PG&E Topock IM3 530-229-3303 379209.01,49.01 CH2M HILL Æ2 SC-100B-WDR-185 SC-700B-WDR-185 SAMPLERS (SIGNATURE PROJECT NAME P.O. NUMBER SAMPLE 1D. COMPANY ACDRESS 문

SAMPLE CONDITIONS	RECEIVED COOL [] WARM [] "F	CUSTODY SEALED YES [] NO []	SPECIAL REQUIREMENTS:	The metals include: Cr, Al, Sb, As, Ba, B, Cu, Pb, Mn, Mo, Ni Fe, Zn			
	Date: 1-4-07	Date/ / 9 - 09 Time / 0:30	Time 2.07	Time //9/09 3.00	Date/ Time	Date/ Time	
SIGNATURE RECORD	Company Of The Agency	Companyl	(Agency (+ +	McRaency TLI	Company/ Agency	Company/ Agency	
, CHAIN OF CUSTODY SIGNATI	Printed At DE	Autle Name Rafael	Sole Name Kator	MW Wasame Stallell	Printed Name	Printed Name	
100	Signature (Relinquished)	Signature (Received)	(Relinquished)	Signature 2 Bull	Signature (Refinquished)	Signature (Received)	

007

BA

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TOTAL NUMBER OF CONTAINERS

Q

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462

January 23, 2009

E2 Consulting Engineers, Inc. Mr. Shawn Duffy 155 Grand Ave., Suite 1000 Oakland, California 94612

Dear Mr. Duffy:

SUBJECT:

CASE NARRATIVE PG&E TOPOCK IM3PLANT-WDR-186 PROJECT, GROUNDWATER

MONITORING, TLI No.: 981143

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-186 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, and Total Dissolved Solids. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The samples were received and delivered with the chain of custody on January 14, 2009, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

Due to the large number of samples in-house, the sample for Total Chromium analysis was analyzed by method EPA 200.8, rather than EPA 200.7 as requested on the chain of custody.

The straight run for the matrix spike for sample for Hexavalent Chromium analysis by EPA 218.6 was just outside the retention time window. Because the matrix spike recovery was within acceptable limits and the results from the 5x dilution agree with those from the straight run, the data from the straight run is reported.

No other violations or nonconformance actions occurred for this data package.

If you have any questions or require additional information, please contact me at (714) 730-6239 ext. 200.

Respectfully Submitted,

TRUESDAIL LABORATORIES, INC.

√_ Mona Nassimi

Manager, Analytical Services

K.R.P. gger

K.R.P. Iver

Quality Assurance/Quality Control Officer

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02

Laboratory No.: 981143

Date: January 23, 2009 Collected: January 14, 2009

Received: January 14, 2009

ANALYST LIST

METHOD	PARAMETER	ANALYST
EPA 120,1	Specific Conductivity	Tina Acquiat
SM 2540C	Total Dissolved Solids	Tina Acquiat
SM 2130B	Turbidity	Gautam Savani
EPA 200.8	Total Chromium	Romuel Chaves
EPA 218.6	Hexavalent Chromium	Michael Nonezyan

EXCELLENCE IN INDEPENDENT TESTING

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REPORT

Client: E2 Consulting Engineers, Inc. 155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Prep. Batch: 011509A

Laboratory No.: 981143

Date: January 23, 2009

14201 FRANKLIN AVENUE

TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 - FAX (714) 730-6462

www.truesdail.com

Collected: January 14, 2009 Received: January 14, 2009

Prep/ Analyzed: January 15, 2009

Analytical Batch: 011509A

Investigation:

Total Chromium by Inductively Coupled Argon Plasma Mass Spectrometer using EPA 200.8

Analytical Results Total Chromium

TLI I.D. Field I.D. <u>Units</u> Method Run Time <u>DF</u> RL <u>Results</u> SC-700B-WDR-186 981143 μ**g/**L **EPA 200.8** 14:51 1.00 1.00 ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	981017-1	24.3	24,4	0.41%	<u>≤</u> 20%	Yes

QC Std I.D.	Lab Number	Conc.of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
M\$	981017-1	24.3	1.00	50.0	50.0	71.8	74.3	95.0%	70-130%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<1.00		<1.00	Yes
MRCCS	50.5	50.0	101%	90% - 110%	Yes
MRCV\$#1	51.1	50.0	102%	90% - 110%	Yes
MRCVS#2	51,7	50.0	103%	90% - 110%	Yes
MRCVS#3	49.9	50.0	99.8%	90% - 110%	Yes
ICS	51.1	50.0	102%	80% - 120%	Yes
LCS	49.8	50.0	00.69/	000/ 1400/	103

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from Truesdail Laboratories.

Laboratory

EXCELLENCE IN INDEPENDENT TESTING

Established 1931

REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

QC STD I.D.

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Laboratory No.: 981143

Date: January 23, 2009

QC Within

14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008

(714) 730-6239 · FAX (714) 730-6462

www.truesdail.com

Collected: January 14, 2009 Received: January 14, 2009

Prep/ Analyzed: January 15, 2009

Analytical Batch: 01CrH09H

Acceptance

Investigation:

Hexavalent Chromium by EPA 218.6

Analytical Results Hexavalent Chromium

TLI I.D. Field I.D. Sample Time Run Time Units DF ŔĻ Results 981143 SC-700B-WDR-186 08:10 11:32 1.05 μg/L 0.20 ND

QA/QC Summary

Concentration

Duplicate

Relative

			. No	umber	***************************************	···	Conc	entration	Difference	limits	Control	
	Duplic	ate	98	1142-1	1030		·	1050	1.92%	<u><</u> 20%	Yes	
QC Std I.D.	Lab Number	unsp	ic.of piked nple	Dilution Factor	Added Spike Conc.		MS nount	Measured Conc. of spiked sample	Theoretical Conc. of spiked samp	MS%	Acceptance limits	QC Within Control
мş	981143	<u>o</u> .	00	1.06	1.00	,	1.06	1.15	1.06	108%	90 - 110%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.200	***	<0.200	Yes
MRCCS	5.03	5.00	101%	90% - 110%	Yes
MRCVS#1	10.00	10.0	100%	95% - 105%	Yes
MRCVS#2	9.95	10.0	99.5%	95% - 105%	Yes
MRCVS#3	9.8	10.0	98.3%	95% - 105%	Yes
LCS	5.05	5.00	101%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

f... Mona Nassimi, Manager

Analytical Services

EXCELLENCE IN INDEPENDENT TESTING

Established 1931

REPORT

Client: E2 Consulting Engineers, Inc. 155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Laboratory No.: 981143

Date: January 23, 2009

14201 FRANKLIN AVENUE

TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Collected: January 14, 2009

Received: January 14, 2009 Prep/ Analyzed: January 15, 2009

Analytical Batch: 01TUC09J

Investigation:

Turbidity by Method SM 2130B

Analytical Results Turbidity

 TLI I.D.
 Field I.D.
 Sample Time
 Units
 DF
 RL
 Results

 981143
 SC-700B-WDR-186
 08:10
 NTU
 1.00
 0.100
 ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	981137-24	ND	ND	0.00%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.100		<0.100	Yes
LCS	8.15	8.00	102%	90% - 110%	Yes
LCS	8.03	8.00	100%	90% - 110%	Yes
LCS	8.07	8.00	101%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

OF: Dilution Factor.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

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EXCELLENCE IN INDEPENDENT TESTING

Established 1931

REPORT

Client: E2 Consulting Engineers, Inc. 155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Laboratory No.: 981143

Date: January 23, 2009

14201 FRANKLIN AVENUE

TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 - FAX (714) 730-6462

www.truesdail.com

Collected: January 14, 2009 Received: January 14, 2009

Prep/ Analyzed: January 15, 2009

Analytical Batch: 01EC09F

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.

Field I.D.

<u>Units</u>

<u>Method</u>

<u>DF</u>

<u>RL</u>

Results

981143

SC-700B-WDR-186

μmhos/cm

EPA 120.1

1.00

2.00

6560

QA/QC Summary

QC STD	Laboratory Number	Concentration	Duplicat Concentrat		Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	981143	6560	606570		0.15%	≤ 10%	Yes
		Manaurad	Theoryelesi	-			

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC WithIn Control
Blank	ND	<2.00		<2.00	Yes
CC\$	700	706	99.2%	90% - 110%	Yes
CVS#1	979	1000	97.9%	90% - 110%	Yes
CVS#2	980	1000	98.0%	90% - 110%	Yes
LCS	700	706	99.2%	90% - 110%	Yes
LCSD	700	706	99.2%	90% - 110%	Yes

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

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EXCELLENCE IN INDEPENDENT TESTING

Established 1931

REPORT

Client: E2 Consulting Engineers, Inc. 155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 KEPURI

14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Laboratory No.: 981143

Date: January 23, 2009

Collected: January 14, 2009

Received: January 14, 2009 Prep/ Analyzed: January 15, 2009

Analytical Batch: 01TDS09H

Investigation:

Total Dissolved Solids by SM 2540C

Analytical Results Total Dissolved Solids

<u>TLI I.D.</u> 981143 <u>Fleid I.D.</u>

<u>Units</u>

mg/L

<u>Method</u>

<u>RL</u>

Results 4100

SC-700B-WDR-186

SM 2540C

250

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	981143	4100	4080	0.24%	<u>≤</u> 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<25.0		<25.0	Yes
LCS 1	499	500	99.8%	90% - 110%	Yes
LCS 2	498	500	99.6%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

RL: Reporting Limit.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

For Mona Nassimi, Manager Analytical Services

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14981143 Rec'd 01/14/09

> CHAIN OF CUSTODY RECORD TRUESDAL LABORATORIES, INC.
> 14201 Franklin Avenue, Tustin, CA 92789-7008
> [714]730-4239 FAX: (714) 730-4462
> www.truesdeil.com

[M3Plant-WDR-186]

COC Number

TURNAROUND TIME

OF. 10 Days PAGE 1 DATE 01/14/09

COMMENTS ,003 ŝ WUMBER OF CONTAINERS Turbidity (SM2130) Dos (SM2540C) Specific Corductance (1201) (7.005) Netali (200.7) DESCRIPTION Water FAX (530) 339-3303 TEAM ¥ F 90 01/14/09 155 Grand Ave Ste 1000 DATE Oakland, CA 94612 (530) 229-3303 PG&E Topock 379209.01.02 SAMPLERS (SIGNATURE E2 SC-7008-WDR-186 PROJECT NAME P.O. NUMBER SAMPLE 1D. COMPANY ADDRESS

PHOKE.

LERT!!	el III 0C
ALI	Level

The state of the s

TOTAL NUMBER OF CONTAINERS

(CHAIN OF CUSTODY SIGNATI	GNATURE RECORD		SAMPLE CONDITIONS
Signature (Relinquished)	Printed John Deet 2	Company/ 6241	Date/ (~14~09) Time 083.5	RECEIVED COOL WARM F
Signature Roll Da	14 16 Name Rofeel	Company! T. L. T.	Date /-/4-09	CUSTODY SEALED YES NO
Signature (Relinquished)	Dryname Karl	Agency / L I	Time 20:30	SPECIAL REGINIREMENTS:
Signature C. I. (Received)	Printed Rofe	Company! T.Y. T	Dates / - 14 - 09 Time 30:30	
Signature / // (Relinquished)	Printed Name	Company/ Agency	Date/ Time	
Signature (Received)	Printed Name	Company/ Agency	Oate/ Time	



14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

February 2, 2009

E2 Consulting Engineers, Inc. Mr. Shawn Duffy 155 Grand Ave., Suite 1000 Oakland, California 94612

Dear Mr. Duffy:

SUBJECT:

CASE NARRATTVE PG&E TOPOCK IM3PLANT-WDR-187 PROJECT, GROUNDWATER

MONITORING, TLI No.: 981233

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-187 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, and Total Dissolved Solids. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The samples were received and delivered with the chain of custody on January 20, 2009, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

Due to the large number of samples in-house, the sample for Total Chromium analysis was analyzed by method EPA 200.8, rather than EPA 200.7 as requested on the chain of custody.

The straight run for the matrix spike for sample for Hexavalent Chromium analysis by EPA 218.6 was just outside the retention time window. Because the matrix spike recovery was within acceptable limits and the results from the 5x dilution agree with those from the straight run, the data from the straight run is reported.

No other violations or nonconformance actions occurred for this data package.

If you have any questions or require additional information, please contact me at (714) 730-6239 ext. 200.

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.

√u – Mona Nassimi

Manager, Analytical Services

K. R. P. Syer

K.R.P. Iver

Quality Assurance/Quality Control Officer

EXCELLENCE IN INDEPENDENT TESTING



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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc. 155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02

Laboratory No.: 981233

Date: February 2, 2009 Collected: January 20, 2009

Received: January 20, 2009

ANALYST LIST

METHOD	PARAMETER	ANALYST
EPA 120.1	Specific Conductivity	Tina Acquiat
SM 2540C	Total Dissolved Solids	Tina Acquiat
SM 2130B	Turbidity	Gautam Savani
EPA 200.8	Total Chromium	Romuel Chaves
EPA 218.6	Hexavalent Chromium	Michael Nonezyan

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REPORT

14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Prep. Batch: 012109A Laboratory No.: 981233

Date: February 2, 2009

Collected: January 20, 2009

Received: January 20, 2009 Prep/ Analyzed: January 21, 2009

Analytical Batch: 012109A

Investigation:

Total Chromium by Inductively Coupled Argon Plasma Mass Spectrometer using EPA 200.8

Analytical Results Total Chromium

TLH.D. Field I.D. <u>Units</u> Method **Run Time** DF <u>RL</u> Results 981233 SC-700B-WDR-187 μg/L **EPA 200.8** 11:42 1.00 1.00 ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	980448-17	6.43	6.60	2.61%	≤20%	Yes

QC Std I.D.	Lab Number	Conc.of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	M\$% Recovery	Acceptance limits	QC Within Control
MS	980448-17	6.43	1.00	50.0	50.0	57.0	56.4	101%	70-130%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<1.00		<1.00	Yes
MRCCS	49.0	50.0	98.0%	90% - 110%	Yes
MRCVS#1	48.7	50.0	97.4%	90% - 110%	Yes
MRCVS#2	47.4	50.0	94.8%	90% - 110%	Yes
ICS	49.5	50.0	99.0%	80% - 120%	Yes
LCS	46.9	50.0	93.8%	90% - 110%	Vac

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted.

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

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EXCELLENCE IN INDEPENDENT TESTING



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REPORT

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155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Laboratory No.: 981233

Date: February 2, 2009

14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008

(714) 730-6239 FAX (714) 730-6462

www.truesdail.com

Collected: January 20, 2009

Received: January 20, 2009 Prep/ Analyzed: January 21, 2009

Analytical Batch: 01CrH09J

Investigation:

Hexavalent Chromium by EPA 218.6

Analytical Results Hexavalent Chromium

TLI I.D. Field I.D. Sample Time Run Time Units <u>D</u>F <u>RL</u> Results 981233 SC-700B-WDR-187 07:35 07:18 μg/L 1.05 0.20 ND

QA/QC Summary

	QC ST	O I.D.	l	orator umber	-	Concentrati	on	Du _l Conce	plica entra	ation	P	elative ercent ference		eptance limits		QC Within Control	
	Duplio	ate	9	81233		ND			ND			0.00%	-	20%	_	Yes	
QC Std I.D.	Lab Number	มกรุ	nc.of piked nple	Diluti Fact		Added Spike Conc.	_ '	MS nount	Co s	asured onc. of piked ample		Theoretical Conc. of iked sample	R	MS% ecovery	Ac	ceptance limits	QC Within Control
<u>M\$</u>	981233	<u> </u>	.00	1.0	6	1,00	•	1.06		1.04		1.06		98.1%		90 - 110%	Yes
		c	QC Std	I.D,	C	Measured oncentration	_	eoretica		Percer Recove		Acceptan Limits	ce	QC With Contro			
			Blani	k ·		ND		<0.200		 -		<0.200		Yes	\dashv		
			MRCC	s		5.03		5.00		101%		90% - 110	%	Yes			

10.0

10.0

5.00

101%

100%

101%

ND: Below the reporting limit (Not Detected).

MRCVS#1

MRCVS#2

LCS

10.1

10.0

5.04

DF: Dilution Factor.

Respectfully submitted.

95% - 105%

95% - 105%

90% - 110%

TRUESDAIL LABORATORIES, INC.

Yes

Yes

Yes

Mona Nassimi, Manager
 Analytical Services

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EXCELLENCE IN INDEPENDENT TESTING



Established 1931

REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Laboratory No.: 981233

Date: Fatarana 2 000

14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008

(714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Date: February 2, 2009 Collected: January 20, 2009

Received: January 20, 2009

Prep/ Analyzed: January 20, 2009 Analytical Batch: 01TUC09K

Investigation:

Turbidity by Method SM 2130B

Analytical Results Turbidity

TLI I.D. Field I.D. Sample Time Units

 TLI I.D.
 Field I.D.
 Sample Time
 Units
 DF
 RL
 Results

 981233
 SC-700B-WDR-187
 07:35
 NTU
 1.00
 0.100
 ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	981196-16	ND	ND	0.00%	<u><</u> 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.100	 .	<0.100	Yes
LCS	7.90	8.00	98.8%	90% - 110%	Yes
LCS	8.05	8.00	101%	90% - 110%	Yes
LCS	7.69	8.00	96.1%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

009

^ *---

Mona Nassimi, Manager

Analytical Services

EXCELLENCE IN INDEPENDENT TESTING

Established 1931

REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.; 379209.01.02 P.O. No.; 379209.01.02 Laboratory No.: 981233

Date: February 2, 2009

14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008

(714) 730-6239 · FAX (714) 730-6462

www.truesdall.com

Collected: January 20, 2009

Received: January 20, 2009 Prep/ Analyzed: January 21, 2009

Analytical Batch: 01EC09H

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.

Field I.D.

QC STD | Laboratory |

<u>Units</u>

<u>Method</u>

<u>DF</u>

<u>RL</u>

<u>Results</u>

981233

SC-700B-WDR-187

μmhos/cm

EPA 120.1

1.00

2.00

6670

QA/QC Summary

I.D.	I.D. Number		' Concent	ration	Concentration			liive Percent)ifference	limits		Contro	
Duplic	ate	981233	6670	0	6680			0.15%	:	≤ 10%	Yes	
	QC S	itd I.D.	Measured Concentration		heoretical incentration	Perce Recov		Acceptane Limits	ce	QC Within	n	
	В	ank	ND		<2.00			<2.00		Yes	7	
	С	CS	700		706	99.2	%	90% - 110	%	Yes		
	ÇV	/\$#1	976		1000	97.6	%	90% - 110	%	Yes	7	
ĺ	L	cs	700		706	99.2	%	90% - 110	%	Yes	7	
- 1	LC	CSD	700		706	99.2	%	90% - 110	%	Yes	7	

Respectfully submitted.

TRUESDAIL LABORATORIES, INC.

£,

Mona Nassimi, Manager Analytical Services

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EXCELLENCE IN INDEPENDENT TESTING



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REPORT

Client: E2 Consulting Engineers, Inc. 155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Laboratory No.: 981233

Date: February 2, 2009

14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008

(714) 730-6239 · FAX (714) 730-6462

www.truesdail.com

Collected: January 20, 2009

Received: January 20, 2009 Prep/ Analyzed: January 23, 2009

Analytical Batch: 01TDS09L

Investigation:

Total Dissolved Solids by SM 2540C

Analytical Results Total Dissolved Solids

TLI I.D. 981233 Field I.D.

SC-700B-WDR-187

Units mg/L

Method SM 2540C <u>RL</u> 250 Results 4720

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control	
Duplicate	981262-13	652	655	0.23%	≤ 5%	Yes	

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND ND	<25.0		<25.0	Yes
LCS 1	497	500	99.4%	90% - 110%	Yes
LCS 2	499	500	99.8%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

RL: Reporting Limit.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

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Rec'd 01/20/09 10 Days PAGE 1 TURNAROUND TIME DATE 01/20/09

II III	TRUESDAL LABORATORIES, INC.	ď	Ü	CHAIN OF CUSTODY RECORD	CUSTO	OY RE(CORD			Ö	COC Number	•	6 6 8	±6981233	
	14201 Franklin Avenua, Tuatin, CA 92780-7008 (714)730-6239 FAX: (714) 730-6462 Www.truesdail.com	15 O	8123	1	IIM3Plant-WDR-187]	R-187]				T 0	TURNAROL Date 01/	TURNAROUND TIME DATE 01/20/09	PAGE	10 Days	
COMPANY	£2						-			_		_			
PROJECT NAME	PG&E Topock				_		_	_	_	_	_	_		COMMENTS	·
PHONE	(530) 229-3303	FAX (530)	FAX (530) 339-3303		un		_	_							
ADDRESS	155 Grand Ave Ste 1000	8			Cyron		_			_		A3N/	23.45		
	Oakland, CA 94612			ρĐ	(150 M	_	<u></u>	_	-		-	KTV			
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SAMPLE 1D.	DATE	E 1146	DESCRIPTION	TOBING COB (21)	Specel Specel	_	Turbidity		_			BWIN			
SC-700B-WDR-187		SEFO BOUSEIN	Water	×	×							9	- H.	4	<u> </u>
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77	CHAIN OF CUSTODY SIGNATU	RE RECORD	10000	SAMPLE CONDITIONS
Signature (Relinquished)	Printed 100	Company! OME	Date COO	RECEMED COOL WARM *F
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(Relinquished)	Curle Name Xo 20	Agency / . T. I	Time 20:30	SPECIAL REQUIREMENTS:
Signature (August)	Printed A GAL	Company! T. L. T.	Date /- 20-09 Time 20-13 0	
Signature () (Refinquished)	V Printed Name	Company/ Agency	Oate/ Time	
Signature (Received)	Printed Name	Company/ Agency	Date/ Time	



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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdall.com

February 2, 2009

E2 Consulting Engineers, Inc. Mr. Shawn Duffy 155 Grand Ave., Suite 1000 Oakland, California 94612

Dear Mr. Duffy:

SUBJECT:

CASE NARRATIVE PG&E TOPOCK IM3PLANT-WDR-188 PROJECT, GROUNDWATER

MONITORING, TLI No.: 981395

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-188 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, and Total Dissolved Solids. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling petiod are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The samples were received and delivered with the chain of custody on January 28, 2009, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

Due to the large number of samples in-house, the sample for Total Chromium analysis was analyzed by method EPA 200.8, rather than EPA 200.7 as requested on the chain of custody.

The straight run for the matrix spike for sample for Hexavalent Chromium analysis by EPA 218.6 was just outside the retention time window. Because the matrix spike recovery was within acceptable limits and the results from the 5x dilution agree with those from the straight run, the data from the straight run is reported.

No other violations or nonconformance actions occurred for this data package.

If you have any questions or require additional information, please contact me at (714) 730-6239 ext. 200.

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.

🚣 - Mona Nassimi

Manager, Analytical Services

For K.R.P. Iyer

Quality Assurance/Quality Control Officer

Ala Khange

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc. 155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02

Laboratory No.: 981395

Date: February 2, 2009 Collected: January 28, 2009

Received: January 28, 2009

ANALYST LIST

METHOD	POR DATE OF THE PROPERTY OF TH	ANALYST
EPA 120.1	Specific Conductivity	Tina Acquiat
SM 2540C	Total Dissolved Solids	Tina Acquiat
SM 2130B	Turbidity	Gautam Savani
EPA 200.8	Total Chromium	Romuel Chaves
EPA 218.6	Hexavalent Chromium	Michael Nonezyan

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REPORT

14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Prep. Batch: 013009A Laboratory No.: 981395

Date: February 2, 2009

Collected: January 28, 2009

Received: January 28, 2009 Prep/ Analyzed: January 30, 2009

Analytical Batch: 013009A

Investigation:

Total Chromium by Inductively Coupled Argon Plasma Mass Spectrometer using EPA 200.8

Analytical Results Total Chromium

TLI I.D. Field I.D. <u>Units</u> Method <u>Run Time</u> <u>DF</u> RL Results: 981395 SC-700B-WDR-188 μg/L **EPA 200.8** 11:45 1.00 1.00 ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
 Duplicate	981395	ND	ND	0.00%	≤20%	Yes
			Measured			

QC Std I.D.	Lab Number	Conc.of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within
MS	981395	0.00	1.00	50.0	50.0	42,2	50.0	84,4%	70-130%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
<u>Bla</u> nk	ND	<1.00		<1.00	Yes
MRCCS	51.4	50.0	103%	90% - 110%	Yes
MRCV\$#1	52,0	50.0	104%	90% - 110%	Yes
ics	50.0	50.0	100%	80% - 120%	Yes
LCS	49.1	50.0	98.2%	90% - 110%	Yes

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

 Mona Nassimi, Manager Analytical Services

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Laboratory No.; 981395

Date: February 2, 2009

Collected: January 28, 2009 Received: January 28, 2009

Prep/ Analyzed: January 29, 2009

Analytical Batch: 01CrH09M

Investigation:

Hexavalent Chromium by EPA 218.6

Analytical Results Hexavalent Chromium

<u>TLI I.D.</u>	<u>Field I.D.</u>	Sample Time	Run Time	<u>Units</u>	<u>DF</u>	<u>RL</u>	Results
981395	SC-700B-WDR-188	08:00	12:26	μg/L	1.05	0.20	ND

QA/QC Summary

	QC STI		N	oratory umber	Concentrati	ion		plicate entration		ative cent rence		eptance imits	QC W Con	Vithin ntrol		
	Duplic	ate	9	81395	ND ND			ND :	0.0	0%	_ <	20%	Y	es		
QC Std I.D.	Lab Number	uns	nc.of piked nple	Dilution Factor			MS Jount	Measured Conc. of spiked sample	C	oretical onc. of od sample	ا ا	MS% covery	Accepta	nce limit	QC S Withi	n
MS	981395	0.	.00	1.06	1.00	1	.06	1.03		1.06	,	97.2%	90 -	110%	Yes	
		C	C Std	I.D.	Measured Concentration	I _	eoretica centratio	.		Acceptan Limits	ce	QC With Contro				_

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	NĎ	<0.200		<0.200	Yes
MRCCS	4.98	5.00	99.6%	90% - 110%	Yes
MRCVS#1	9.87	10.0	98.7%	95% - 105%	Yes
LCS	4.96	5.00	99.2%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from Truesdall Laboratories.

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REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Laboratory No.; 981395

Date: February 2, 2009

Collected: January 28, 2009 Received: January 28, 2009

Prep/ Analyzed: January 29, 2009

Analytical Batch: 01TUC09N

Investigation;

Turbidity by Method SM 2130B

Analytical Results Turbidity

 TLI I.D.
 Field I.D.
 Sample Time
 Units
 DF
 RL
 Results

 981395
 SC-700B-WDR-188
 08:00
 NTU
 1.00
 0.100
 ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
<u>Duplicate</u>	981385-3	0.183	0.185	1.09%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.100		<0.100	Yes
LCS	7.92	8.00	99.0%	90% - 110%	Yeş
LĊS	7.84	8.00	98.0%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

 Mona Nassimi, Manager Analytical Services

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Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Laboratory No.: 981395

Date: February 2, 2009

Collected: January 28, 2009 Received: January 28, 2009

Prep/ Analyzed: January 29, 2009

Analytical Batch: 01EC09N

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI_I.D,

Field I.D.

<u>Units</u>

<u>Method</u>

<u>DF</u>

<u>RL</u>

Results

981395

SC-700B-WDR-188

µmhos/cm

EPA 120.1

1.00

2.00

6550

QA/QC Summary

Duplicate 091395 esso 0570 0570 5 109/	QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
500 6570 0.30% 510% V	Duplicate	981395	6550	6570	0.30%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<2.00		<2.00	Yes
ccs	699	706	99.0%	90% - 110%	Yes
CVS#1	977	1000	97.7%	90% - 110%	Yes
CVS#2	977	1000	97.7%	90% - 110%	Yes
LCS	699	706	99.0%	90% - 110%	Yes
LCSD	699	706	99.0%	90% - 110%	Yes

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from Truesdail Laboratories.

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REPORT

14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Laboratory No.: 981395

Date: February 2, 2009

Collected: January 28, 2009

Received: January 28, 2009

Prep/ Analyzed: January 29, 2009

Analytical Batch: 01TDS090

Investigation:

Total Dissolved Solids by SM 2540C

Analytical Results Total Dissolved Solids

TLI I.D. 981395 <u>Field I.D.</u>

SC-700B-WDR-188

<u>Units</u> mg/L

Method SM 2540C <u>RL</u> 250

Results 3840

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	981395	3840	3780	0.79%	≤ 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<25.0		<25.0	Yes
LCS 1	501	500	100%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

RL: Reporting Limit.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

35e981395 01/28/09 Rec'd

DATE 01/26/09

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RUSHI PAGE TURNAROUND TIME COC Number

CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-188]

TOTAL NUMBER OF CONTAINERS COMMENTS NUMBER OF CONTAINERS n W Turbidity (SM2730) Specific Conductance (120.1) 16500 0805 TRUESDAIL LABORATORIES, INC.
14201 Franklin Avenue, Tuetin, CA 92780-7008
[714]730-8239 FAX: (714) 730-4462
[714]730-8239 FAX: (714) 730-4462
[714]730-8239 FAX: (714) 730-462 DESCRIPTION Water FAX (530) 339-3303 TE A 0005 8 TIME 01/28/09 155 Grand Ave Ste 1000 DATE 9 Oakland, CA 94612 (530) 229-3303 PG&E Topock 379209.01.02 Tomp. 75.7 SAMPLERS (SIGNATURE SC-700B-WDR-188 낊 PROJECT NAME P.O. NUMBER SAMPLE 1D. COMPANY ADDRESS 품

Level III QC ALERTII

08:24

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밝 WARM | ջ SAMPLE CONDITIONS YES C00L | SPECIAL REQUIREMENTS CUSTODY SEALED RECEIVED Data / - 28-09 000 Detei Time Date/ Time Oate/ Time Date/ Time CHAIN OF CUSTODY SIGNATURE RECORD Company/ Agency (Agency Company/ Agency Company/ Company! Agency Company/ Company/ Apency / Printed (Alame Printed (Printed /.Name Printed Printed Name (Refinquished) (Relinquished) (Relinquished Signature (Received) Signature / (Received) Signature (Received) Signalure Signature Signature



14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

March 4, 2009

E2 Consulting Engineers, Inc. Mr. Shawn Duffy 155 Grand Ave., Suite 1000 Oakland, California 94612

Dear Mr. Duffy;

SUBJECT:

CASE NARRATIVÉ PG&E TOPOCK IM3PLANT-WDR-189 PROJECT, GROUNDWATER

MONITORING,

TLI No.: 981541

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-189 project groundwater monitoring. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The samples were received and delivered with the chain of custody on February 4, 2009, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

No violations or nonconformance actions occurred for this data package.

If you have any questions or require additional information, please contact me at (714) 730-6239 ext. 200.

Respectfully Submitted, TRUESDAIL LABORATORIES, INC.

Mona Nassimi

Manager, Analytical Services

K. R. P. gyer

K.R.P. Iyet

Quality Assurance/Quality Control Officer

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc. 155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: Two (2) Groundwaters
Project Name: PG&E Topock Project
Project No.: 379209.01.03.01

Laboratory No.: 981541

Date: March 4, 2009 Collected: February 4, 2009 Received: February 4, 2009

ANALYST LIST

METHOD		ANALYST
EPA 120.1	Specific Conductivity	Tina Acquiat
SM 2540C	Total Dissolved Solids	Tina Acquiat
SM 2130B	Turbidity	Gautam Savani
EPA 300.0	Anions	Giawad Ghenniwa
SM 4500-NH3 B	Ammonia	lordan Stavrev
SM 4500-NO2 B	Nitrite as N	Tina Acquiat
EPA 200.7	Metals by ICP	Mark Kotani
EPA 200.8	Metals by ICP/MS	Romuel Chaves
EPA 218.6	Hexavalent Chromium	Michael Nonezyan

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: Two (2) Groundwaters
Project Name: PG&E Topock Project
Project No.: 379209.01.03.01

P.O. No.: 379209.01.03.01

REPORT

Laboratory No.: 981541

Date: March 4, 2009 Collected: February 4, 2009 Received: February 4, 2009

Prep/ Analyzed: February 5, 2009

Analytical Batch: 02EC09C

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Units</u>	<u>Method</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
981541-1	SC-700B-WDR-189	μ mhos/cm	EPA 120.1	1.00	2.00	6570
981541-2	SC-100B-WDR-189	μmhos/cm	EPA 120.1	1.00	2.00	7800

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	981541-2	7800	7810	0.13%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<2.00		<2.00	Yes
ccs	691	<u>7</u> 06	97.9%	90% - 110%	Yes
CVS#1	976	1000	97.6%	90% - 110%	Yes
LCS	692	706	98.0%	90% - 110%	Yes
LCSD	692	706	98.0%	90% - 110%	Yes

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

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Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: Two (2) Groundwaters Project Name: PG&E Topock Project Project No.: 379209.01.03.01

P.O. No.: 379209.01.03.01

Laboratory No.: 981541

Date: March 4, 2009

Collected: February 4, 2009

Received: February 4, 2009 Prep/ Analyzed: February 6, 2009

Analytical Batch: 02TDS09E

Investigation:

Total Dissolved Solids by SM 2540C

REPORT

Analytical Results Total Dissolved Solids

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Units</u>	<u>Method</u>	<u>RL</u>	<u>Results</u>
981541-1	SC-700B-WDR-189	mg/L	SM 2540C	250	4110
981541-2	SC-100B-WDR-189	mg/L	SM 2540C	250	5360

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	981576-2	497	506	0.90%	<u><</u> 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<25.0		<25.0	Yes
LCS 1	503	500	101%	90% - 110%	Yes
LCS 2	497	500	99.4%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

RL: Reporting Limit,

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: Two (2) Groundwaters
Project Name: PG&E Topock Project
Project No.: 379209.01.03.01

P.O. No.: 379209.01.03.01

REPORT

Laboratory No.: 981541

Date: March 4, 2009

Collected: February 4, 2009

Received: February 4, 2009 Prep/ Analyzed: February 5, 2009

Analytical Batch: 02TUC09E

Investigation:

Turbidity by Method SM 2130B

Analytical Results Turbidity

<u>TLI I.D.</u>	<u>Field I.D.</u>	Sample Time	<u>Units</u>	DF	<u>RL</u>	<u>Results</u>
981541-1	SC-700B-WDR-189	08:00	NTU	1.00	0.100	0.114
981541-2	SC-100B-WDR-189	08:30	NTU	1.00	0.100	0.144

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	981541-1	0.114	0.120	5.13%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.100		<0.100	Yes
LCS	7.85	8.00	98.1%	90% - 110%	Yes
LCS	8.02	8.00	100%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF- Dilution Eactor

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

Excellence in Independent Testing



Relative

Percent

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 FAX (714) 730-6462 www.truesdail.com

REPORT Client: E2 Consulting Engineers, Inc.

Laboratory

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: Two (2) Groundwaters Project Name: PG&E Topock Project Project No.: 379209.01.03.01

QC STD I.D.

P.O. No.: 379209.01.03.01 Prep. Batch: 02CrH09C

Laboratory No.: 981541

Date: March 4, 2009

QC Within

Collected: February 4, 2009 Received: February 4, 2009

Prep/ Analyzed: February 5, 2009

Analytical Batch: 02CrH09C

Acceptance

Investigation:

Hexavalent Chromium by IC Using Method EPA 218.6

Analytical Results Hexavalent Chromium

<u>TL1 I.D.</u>	<u>Field I.D.</u>	Sample Time	Run Time	<u>Units</u>	<u>D</u> F	<u>RL</u>	Results
981541-1	SC-700B-WDR-189	08:00	08:39	μg/L	1.05	0.20	ND
981541-2	SC-100B-WDR-189	08:30	09:31	μg/L	52.5	10.5	1250

QA/QC Summary

Duplicate

Sample

	QC SIL		Nun		Concentra	tion	Concent		Percent Difference		lmits	Control	
	Duplic	ate	9815	8-00	57.2		57.5	5	0.52%	3	20%	Yes	
QC Std I.D.	Lab Number	Conc.of unspiked sample	Dilut	ion Factor	Added Spike Conc.	M: Amo	S (leasured Conc. of spiked sample	Theoretical Conc. of spiked sample		MS% covery	Acceptance limits	QC Within Control
MS	981541-1	0.00	<u> </u>	1.06	1.00	1.0)6	1,01	1.06		5.3%	90-110%	Yes
MS	981541-2	1250		52.5	25.0	131	13	2500	2563	- 9	5.2%	90-110%	Yes
		QC Sto	1 I.D.		sured		oretical	Percer			QC With		

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within
Blank	ND	<0.200		<0.200	Yes
MRCCS	4.99	5.00	99.8%	90% - 110%	Yes
MRCVS#1	10.1	10.0	101%	95% - 105%	Yes
MRCVS#2	10.0	10.0	100%	95% - 105%	Yes
MRCVS#3	9.82	10.0	98,2%	95% - 105%	Yes
LCS	4.99	5.00	99.8%	90% - 110%	Yes

ND: Below the reporting firmt (Not Detected).

OF: Oilution Factor.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

Laboratory

EXCELLENCE IN INDEPENDENT TESTING

Established 1931



REPORT

14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: Two (2) Groundwaters
Project Name: PG&E Topock Project
Project No.: 379209.01.03.01

P.O. No.: 379209.01.03.01

Laboratory No.: 981541

Date: March 4, 2009

Collected: February 4, 2009 Received: February 4, 2009

Prep/ Analyzed: February 10, 2009 Analytical Batch: 02NH3-E09B

Acceptance | QC Within

Investigation:

Ammonia as N by Method SM 4500-NH3 D

Analytical Results Ammonia as N

TLI I.D.	<u>Field I.D.</u>	<u>Sample Time</u>	<u>Method</u>	<u>Units</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
981541-1	SC-700B-WDR-189	08:00	SM 4500-NH3 D	mg/L	1.00	0.500	ND
981541-2	SC-100B-WDR-189	08:30	SM 4500-NH3 D	mg/L	1.00	0.500	ND

QA/QC Summary

Duplicate

	Quplic		Number 981541-1	ND	Conc	entration ND	Difference 0.00%	timits ≤ 20%	Control	
QC Std I.D.	Lab Number	Conc.of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	981060-2	0.00	1.00	6.00	6.00	6.00	6.00	100%	75-125%	Yes
		QC Std	11.D. I _	leasured	Theoretica		1			

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500		<0.500	Yes
MRCCS	6.11	6.00	102%	90% - 110%	Yes
MRCVS#1	5,93	6.00	98.8%	90% - 110%	Yes
LCS	10.4	10.0	104%	90% - 110%	Vet

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted, TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

EXCELLENCE IN INDEPENDENT TESTING

Established 1931



REPORT

14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: Two (2) Groundwaters

Project Name: PG&E Topock Project

Project No.: 379209.01.03.01 P.O. No.: 379209.01.03.01 Laboratory No.: 981541

Date: March 4, 2009

Collected: February 4, 2009

Received: February 4, 2009

Prep/ Analyzed: February 5, 2009

Analytical Batch: 02AN09D

Investigation:

Fluoride by Ion Chromatography using EPA 300.0

Analytical Results Fluoride

TLI I.D.	<u>Field I.D.</u>	Sample Time	Run Time	<u>Units</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
981541-1	SC-700B-WDR-189	08:00	10:10	mg/L	5.00	0.500	2.10
981541-2	SC-100B-WDR-189	08:30	10:22	mg/L	5.00	0.500	2.53

QA/QC Summary

	QC STE	_ -	N	borat	er	Concentra	ation	Conc	plicate entration	l Q	Relative Percent ifference	١	eptance imits	QC Within Control	
	<u> </u>	ate	98	81541	<u> </u>	2.10			2.10		0.00%	-	20%	Yes	
QC Std I.D.	Lab Number	Conc. unspik samp	bex		ution ctor	Added Spike Conc.		MS nount	Measure Conc. o spiked sample	F	Theoretical Conc. of spiked sample		MS% covery	Acceptance limits	QC Within Control
м\$	981541-1	2.10		5	.00	4.00		20.0	22.6	T	22.1		103%		Yes
		QC	Std I	l.D.		easured centration		neoretica ncentrati	1		Acceptar Limits		QC Withir Control	7	

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500	_	<0.500	Yes
MRCCS	4.06	4.00	102%	90% - 110%	Yes
MRCVS#1	3.10	3.00	103%	90% - 110%	Yes
MRCV\$#2	3.12	3.00	104%	90% - 110%	Yes
LCS	4.06	4.00	102%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor,

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

Laboratory

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Established 1931

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Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: Two (2) Groundwaters Project Name: PG&E Topock Project

QC STD I.D.

Project No.: 379209.01.03.01 P.O. No.: 379209.01.03.01 REPORT

Laboratory No.: 981541

Date: March 4, 2009

QC Within

Collected: February 4, 2009 Received: February 4, 2009

Prep/ Analyzed: February 5, 2009

Analytical Batch: 02AN09D

Acceptance

investigation:

Sulfate by Method EPA 300.0

Analytical Results Sulfate

<u>TLI I.D.</u>	<u>Field I.D.</u>	Sample Time	Run Time	<u>Units</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
981541-1	SC-700B-WDR-189	08:00	17:33	mg/L	50.0	25.0	477
981541-2	SC-100B-WDR-189	08:30	17:44	mg/L	50.0	25.0	589

Concentration

QA/QC Summary

Duplicate

Relative

	QC ST	J I.U.	Number 981517	Concentr	Conc	entration	Percent Difference 0.00%	Acceptance limits ≤ 20%	QC Within Control	
QC Std I.D.	Lab Number	Conc.of unspiked sample	Dilutio Facto	Snike	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS.	981517	1.88	1.00	2.00	2.00	4.00	3.88	106%	85-115%	Yes
		QC Sto	11.D.	Measured	Theoretica		nt Accepta	nce QC Wit	hin	

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500		<0.500	Yes
MRCCS	20.2	20.0	101%	90% - 110%	Yes
MRCVS#1	15.1	15.0	101%	90% - 110%	Yes
MRCVS#2	15.1	15.0	101%	90% - 110%	Yes
MRCVS#3	15.1	15.0	101%	90% - 110%	Yes
MRCVS#4	15.1	15.0	101%	90% - 110%	Yes
LCS	20.2	20.0	101%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor

Respectfully submitted, ...

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

Laboratory

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Relative

Established 1931

14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: Two (2) Groundwaters Project Name: PG&E Topock Project

OC STD LD.

Project No.: 379209.01.03.01 P.O. No.: 379209.01.03.01 Laboratory No.: 981541

Date: March 4, 2009

QC Within

Collected: February 4, 2009 Received: February 4, 2009

Prep/ Analyzed: February 5, 2009

Analytical Batch: 02AN09D

Acceptance

Investigation:

Nitrate as N by Ion Chromatography using EPA 300.0

REPORT

Analytical Results Nitrate as N

TLI I.D.	<u>Field I.D.</u>	Sample Time	Run Time	<u>Units</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
981541-1	SC-700B-WDR-189	08:00	10:10	mg/L	5.00	1.00	2.90
981541-2	SC-100B-WDR-189	08:30	10:22	mg/L	5.00	1.00	3.26

Concentration

QA/QC Summarv

		QC STD I	0 1	Number	Concentra	ition		entration	Percent Difference	limits	Control	
		Duplicat	te 9	81541-1	2.90			2.89	0.35%	<u>≤</u> 20%	Yes	
QC S		Lab umber	Conc.of unspiked sample	Dilution Factor	Added Spike Conc.	_ `	MS nount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	98	1541-1	2.90	5.00	4.00	- 7	20.0	23.1	22.9	101%	85-115%	Yes

Duplicate

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500		<0.500	Yes
MRCCS	3.94	4.00	98.5%	90% - 110%	Yes
MRCVS#1	2.97	3.00	99.0%	90% - 110%	Yes
MRCVS#2	2.98	3.00	99.3%	90% - 110%	Yes
MRCVS#3	3,02	3.00	101%	9 0% - 110%	Yes
LCS	3.95	4.00	98.8%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

≁-- Mona Nassimi, Manager Analytical Services

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Established 1931

14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

REPORT Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: Two (2) Groundwaters Project Name: PG&E Topock Project Project No.: 379209.01.03.01

P.O. No.: 379209.01.03.01

Laboratory No.: 981541

Date: March 4, 2009

Collected: February 4, 2009 Received: February 4, 2009

Prep/ Analyzed: February 5, 2009

Analytical Batch: 02NO209C

Investigation:

Nitrite as N by Method SM 4500-NO2-B

Analytical Results for Nitrite as N

<u>TLI I.D.</u>	Field I.D.	Sample Time	Run Time	<u>Units</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
981541-1	SC-700B-WDR-189	08:00	13:16	mg/L	1.00	0.0050	0.0054
981541-2	SC-100B-WDR-189	08:30	13:17	mg/L	1.00	0.0050	ND

QA/QC Summarv

		QC STE	מ.ו כ	Laboratory Number	Concentra	ND Concentration Co ND MS Added MS Spike Amount		plicate entration	Relative Percent Difference	Acceptance limits	QC Within Control	
		Duplic	ate	981541-2	ND			ND	0.00%	< 20%	Yes	
a	C Std I.D.	Lab Number	Conc.o unspike sample	d Dilution Factor	Spike			Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	M\$% Recovery	Acceptance limits	QC Within Control
M	3	981541-2	0.00	1.00	0.0200	0.	.0200	0.0195	0.0200	97.5%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	NĎ	<0.0050		<0.0050	Yes
MRCCS	0.0192	0.0200	96.0%	90% - 110%	Yes
MRCVS#1	0.0199	0.0200	99.5%	90% - 110%	Yes
LCS	0.0398	0.0400	99.5%	90% - 110%	Yes
LCSD	0.0399	0.0400	99.8%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

EXCELLENCE IN INDEPENDENT TESTING



Established 1931

14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Samples: Two (2) Groundwaters
Project Name: PG&E Topock Project
Project No.: 379209.01.03.01
P.O. No.: 379209.01.03.01

Investigation: Total Metal Analyses as Requested

Laboratory No.: 981541 Reported: March 4, 2009 Collected: February 4, 2009 Received: February 4, 2009

Analyzed: See Below

Analytical Results

REPORT

SAMPLE ID: SC-70	00B-WDR-189	Time Col	lected:	08:00		LAB II): 981541-1	
		Reported					Date	Time
Parameter	Method	Value	DF	Units	RL	Batch	Analyzed	Analyzęd
Aluminum	EPA 200.8	ND	5.00	μg/L	50.0	022509A	02/25/09	15:48
Antimony	EPA 200.8	ND	5.00	μ g/L	10.0	022809A	02/28/09	17:13
Arsenic	EPA 200.8	ND	5.00	μg/L	1,00	022509A	02/25/09	15:48
Barium	EPA 200.8	17,1	5.00	μ g/ L	10.0	022809A	02/28/09	17:13
Chromium	EPA 200.8	ND	5.00	μ g/L	1.00	0218098	02/18/09	17:49
Copper	EPA 200.8	ND	5.00	μg/L	5.00	022509A	02/25/09	15:48
Lead	EPA 200.8	ND	5.00	μg/L	10.0	022809A	02/28/09	17:13
Manganese	EPA 200.7	46.7	1.00	μ g/L	10.0	021109A	02/11/09	10:40
Molybdenum	EPA 200.8	13.8	5.00	μg/L	10.0	022509A	02/25/09	15:48
Nickel	EPA 200.8	ND	5.00	μ g/L	10.0	022509A	02/25/09	15:48
Zinc	EPA 200.8	ND	5.00	μ g/L	10.0	022509A	02/25/09	15:48
Boron	EPA 200.7	1070	1.00	μ g/L	200	021109A	02/11/09	10:40
Iron	EPA 200.7	ND	1.00	μ g/ L_	20.0	021109A	02/11/09	10:40



Report Continued

SAMPLE ID: SC-10	00B-WDR-189	Time Coll	ected:	08:30	****	LAB IC): 981541-2	
		Reported				1	Date	Time
Parameter	Method	Value	DF	Units	RL	Batch	Analyzed	Analyzed
Aluminum	EPA 200.8	ND	5.00	μg/L	50.0	022509A	02/25/09	16:13
Antimony	EPA 200.8	ND	5.00	μ g/ L	10.0	022809A	02/28/09	17:20
Arsenic	EPA 200.8	6.12	5.00	μ д /L	1.00	022509A	02/25/09	16:13
Barium	EPA 200.8	31.4	5.00	μg/L	10.0	022809A	02/28/09	17:20
Chromlum	EPA 200.8	1160	5.00	μg/L	1.00	021809B	02/18/09	18:14
Copper	EPA 200.8	ND	5.00	μg/L	5.00	022509A	02/25/09	16:13
Lead	EPA 200.8	ND	5.00	ր ք/ Լ	10.0	022809A	02/28/09	17:20
Manganese	EPA 200.7	ND	1.00	μ g /L	10,0	021109A	02/11/09	11:37
Molybdenum	EPA 200.8	25.4	5.00	μg/L	10.0	022509A	02/25/09	16:13
Nickel	EPA 200.8	ND	5.00	μg/L	10.0	022509A	02/25/09	16:13
Zinç	EPA 200.8	ND	5.00	μg/L	10.0	022509A	02/25/09	16:13
Boron	EPA 200.7	1150	1.00	μ g/L	200	021109A	02/11/09	11:37
Iron	EPA 200.7	NĎ	1.00	μg/L	20.0	021109A	02/11/09	11:37

ND: Not detected, or below limit of detection.

DF: Dilution factor.

Respectfully submitted, TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

14201 Franklin Avenue, Tustin, CA 92780-7008 (714)730-6239 FAX: (714) 730-6462 RUESDAM LABORATORIES, INC. www.truesdall.com

CHAIN OF CUSTODY RECORD [IM3Plant-WDR-189]

78186

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M3Plant-WDR-189

10 Days PAGE

TURNAROUND TIME

COC Number

DATE 02/04/09

加加 COMMENTS Rec'd NUMBER OF CO. 4 a, Total Metals (200.7) Cr \$00 CON (EON & (0.00E) 100 (5310 C) A (0.00E) snoinA × × Total Metals (2007) Sea List Below (EHN-0034) BINOMINA × Turb (2130) × × Title 22 Metals List (200.7, 200.8, 245.1) 10S (2840 c) × × × × Or(VI) (218.6) Lab Fillered × × × DESCRIPTION 530-339-3303 ¥ 02/04/09 02/04/09 155 Grand Ave Ste 1000 OATE Oakland, CA 94612 PG&E Topock IM3 530-229-3303 379209.01.03.01 CH2M HILL Æ2 SC-700B-WDR-189 SC-100B-WDR-189 SAMPLERS (SIGNATURE PROJECT NAME P.O. NUMBER SAMPLE I.D. COMPANY ADORESS PHOME

۳ The metals include: Cr, Al, Sb, As, Ba, B, Cu, Pb, Mn, SAMPLE CONDITIONS 오 WARM Test-0835 YES 8 SPECIAL REQUIREMENTS: CUSTODY SEALED Mo, Ni, Fe, Zn RECEIVED 36.6 50-75 めのしない 8 20:4 7000 ローカープ 3000 Date/ P SAYO/1-082 Dale' Time Date/ Time Date/ Time Date/ Time BOOM CHAIN OF CUSTODY SIGNATURE RECORD I 100. Company/ Agency Company/ Company/ Company Company/ Company/ Apency Agency Agency Agency 1001 270 Printed Name Printed Printed (Name Printed Name 0/80. Printed Name Printed avi Mame X が表 925 Signature (Relinquished) Signature (Relinquished) (Relinquished) 5Ample Signature (Received) Signature (Received) Signature Signature

TOTAL NUMBER OF CONTAINERS

769

1.50

<u>A</u>

47

B

12/1/21

760

H H

HOB.

<u></u>

Tomas (

0/80

8

070

Name

(Received)





February 24, 2009

E2 Consulting Engineers, Inc. Mr. Shawn Duffy 155 Grand Ave., Suite 1000 Oakland, California 94612

Dear Mr. Duffy:

SUBJECT:

CASE NARRATIVE PG&E TOPOCK IM3PLANT-WDR-190 PROJECT, GROUNDWATER MONITORING, TLI NO.: 981757

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-190 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, and Total Dissolved Solids. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The samples were received and delivered with the chain of custody on February 11, 2009, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

Due to the large number of samples in-house, the sample for Total Chromium analysis was analyzed by method EPA 200.8, rather than EPA 200.7 as requested on the chain of custody.

No other violations or nonconformance actions occurred for this data package.

If you have any questions or require additional information, please contact me at (714) 730-6239 ext. 200.

Respectfully Submitted, TRUESDAIL LABORATORIES, INC.

Fe- Mona Nassimi

Manager, Analytical Services

K. R. P. J.ze

K.R.P. Iyer

Quality Assurance/Quality Control Officer

EXCELLENCE IN INDEPENDENT TESTING

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000 Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02

Laboratory No.: 981757

Date: February 24, 2009 Collected: February 11, 2009 Received: February 11, 2009

ANALYST LIST

ser nove		
EPA 120.1	Specific Conductivity	Tina Acquiat
SM 2540C	Total Dissolved Solids	Tina Acquiat
SM 2130B	Turbidity	Gautam Savani
EPA 200.8	Total Chromium	Romuel Chaves
EPA 218.6	Hexavalent Chromium	Michael Nonezyan

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

REPORT

Client: E2 Consulting Engineers, Inc. 155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Prep. Batch: 021909A Laboratory No.: 981757

Date: February 24, 2009

Collected: February 11, 2009

Received: February 11, 2009 Prep/ Analyzed: February 19, 2009

Analytical Batch: 021909A

Investigation:

Total Chromium by Inductively Coupled Argon Plasma Mass Spectrometer

using EPA 200.8

Analytical Results Total Chromium

TLI I.D. Field I.D. <u>Units</u> <u>Me</u>thod Run Time <u>DF</u> RL Results 4 1 981757 SC-700B-WDR-190 μg/L **EPA 200.8** 13:45 5.00 1.00 ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	981616-2	1.76	1,61	8.90%	<u>≤</u> 20%	Yes

QC Std I.D.	Lab Number	Conc.of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control	
MS	981616-2	1.76	5.00	50.0	250	232	252	92,1%	70-130%	Yes	l

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<1.00		<1.00	Yes
MRCCS	51.7	50.0	103%	90% - 110%	Yes
MRCVS#1	50.1	50.0	100%	90% - 110%	Yes
MRCVS#2	48.5	50.0	97.0%	90% - 110%	Yes
MRCVS#3	48.9	50.0	97.8%	90% - 110%	Yes
ICŞ	48.4	50.0	96.8%	80% - 120%	Yes
LCS	50,7	50.0	101%	90% - 110%	Ves

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted.

TRUESDAIL LABORATORIES, INC.

fur Mona Nassimi, Manager Analytical Services

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Laboratory No.: 981757

Date: February 24, 2009

Collected: February 11, 2009 Received: February 11, 2009

Prep/ Analyzed: February 12, 2009

Analytical Batch: 02CrH09M

Investigation:

Hexavalent Chromium by EPA 218.6

Analytical Results Hexavalent Chromium

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Sample Time</u>	Run Time	<u>Units</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
981757	SC-700B-WDR-190	08:00	10:42	μg/L	1.05	0.20	ND

QA/QC Summary

	QC ST) I.D.		oratory umber	Concentrat	ion		olicate entration	Percent Difference	ceptance limits	QC Within Control	
	Duplic	ate	98	1720-22	730		7	724	0.83%	<u>≺</u> 20%	Yes	
QC Std I.D.	Lab Number	uns	nc.of piked nple	Dilution Factor	Added Spike Conc.		MS nount	Measured Conc. of spiked sample	Theoretica Conc. of spiked samp	MS% ecovery	Acceptance limit	QC s Within Control
M\$	981757	0.	.00	1.06	1.00		1.06	1.11	1.06	105%	90 - 110%	Yes
		G	C Std	I.D.	Measured Concentration	· - '	neoretical ncentratio	1		 QC With Contro	1	

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	NĎ	<0.200		<0.200	Yes
MRCCS	4.98	5.00	99.6%	90% - 110%	Yes
MRCVS#1	10.0	10.0	100%	95% - 105%	Yes
MRCVS#2	9.86	10.0	98.6%	95% - 105%	Yes
MRCVS#3	9.94	10.0	99.4%	95% - 105%	Yes
LÇŞ	4.98	5.00	99.6%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

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REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Laboratory No.: 981757

Date: February 24, 2009

Collected: February 11, 2009

Received: February 11, 2009 Prep/ Analyzed: February 12, 2009

Analytical Batch: 02TUC09K

Investigation:

Turbidity by Method SM 2130B

Analytical Results Turbidity

 TLI I.D.
 Field I.D.
 Sample Time
 Units
 DF
 RL
 Results

 981757
 SC-700B-WDR-190
 08:00
 NTU
 1.00
 0.100
 ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	981736-2	ND	ND	0.00%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	D	<0.100		<0.100	Yes
LCS	7.78	8.00	97.3%	90% - 110%	Yes
LCS	7.73	8.00	96.6%	90% - 110%	Yes
LCS	7.34	8.00	91.8%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted.

TRUESDAIL LABORATORIES, INC.

Koma Nassimi, Manager Analytical Services

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REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Laboratory No.: 981757

Date: February 24, 2009

Collected: February 11, 2009

Received: February 11, 2009 Prep/ Analyzed: February 12, 2009

Analytical Batch: 02EC09F

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D. Field I.D. Units Method DF RL Results 981757 SC-700B-WDR-190 μmhos/cm EPA 120.1 1.00 2.00 6590

QA/QC Summary

QC STD I.D.		Laborato Number	" Concentrat	Concentration		Duplicate Concentration		Relative Percent Difference		ceptance limits	QC Within Control
Dupli	cate	981757	6590	6590		6600		0.15%		≤ 10%	Yes
	Q	C Std I.D.	Measured Concentration	1 '	fheoretical encentration	Perc Reco		Acceptan Limits	ce	QC Within	1
		Blank	ND		<2.00			<2.00		Yes	1
	$ldsymbol{ld}}}}}}$	ccs	693		706	98.2	2%	90% - 110	%	Yes	7
		CVS#1	976	<u> </u>	1000	97.€	3%	90% - 110	%	Yes	1
	\perp	LCS	693		706	98.2	2%	90% - 110	%	Yes	1
		LCSD	693		706	98.2	2%	90% - 110	%	Yes	7

Respectfully submitted.

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

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REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Laboratory No.; 981757

Date: February 24, 2009

Collected: February 11, 2009

Received: February 11, 2009 Prep/ Analyzed: February 13, 2009

Analytical Batch: 02TDS09M

Investigation:

Total Dissolved Solids by SM 2540C

Analytical Results Total Dissolved Solids

TLI I.D. 981757 Field I.D. SC-700B-WDR-190 Units mg/L

Method SM 2540C <u>RL</u> 250 Results 3860

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	981759	328	336	1.20%	≤ 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<25.0		<25.0	Yes
LCS 1	496	500	99.2%	90% - 110%	Yes
LCS 2	500	500	100%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

RL: Reporting Limit.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

TRUESDAL LABORATORIES, INC. 14201 Franklin Avenue, Tustin, CA 92780-7008 (714)730-6239 FAX: (714) 730-6462 www.truesdeil.com

CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-190]

98/ 757 TURNAROUND TIME

10 Days

COC Number

PAGE

TOTAL NUMBER OF CONTAINERS COMMENTS 4 NUMBER OF CONTAINERS Ø Ŋ 02/11/09 817 Ō Rec'd (DELEMIS) (SUPPLIED) (DOBEZME) SQL Spacific Conductance (1201) Time Tusted DESCRIPTION Water FAX (530) 339-3303 1 1. Pake D 155 Grand Ave Ste 1000 Oakland, CA 94612 (530) 229-3303 PG&E Topock 379209.01.92 SAMPLERS (SIGNATURE SC-700B-MDR-190 껇 PROJECT NAME P.O. NUMBER SAUMPLE 1.D. COMPANY **A**DDRESS 뿚

ALERTI Fevel Π (

C807

8080

24 3.0 6 FC 3.43 FC 3.43 Co. 35.3

200,

0800

ş WARM | SAMPLE CONDITIONS YES 000 000 SPECIAL REQUIREMENTS CUSTODY SEALED RECEIVED Date/FEB Time Date/ Date/ Time Date/ Time 2 Date/ Time 2 Oate/ Time CHAIN OF CUSTODY SIGNATURE RECORD Company/ Agency Company/ Agency Company/ Agency Companyl Agency Company/ Agency Company! (MCAgency Name of Printed Name Printed Printed Name Name Printed Name Printed' Name Printed Signature (Relinquished) (Relinquished) (Relinquished) (Received) (Received) (Received) Signature Signature Signature Signature Signature



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March 2, 2009

E2 Consulting Engineers, Inc. Mr. Shawn Duffy 155 Grand Ave., Suite 1000 Oakland, California 94612

Dear Mr. Duffy:

SUBJECT:

CASE NARRATIVE PG&E TOPOCK IM3PLANT-WDR-191 PROJECT, GROUNDWATER

MONITORING, TLI No.: 981855

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-191 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, and Total Dissolved Solids. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The samples were received and delivered with the chain of custody on February 18, 2009, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

Due to the large number of samples in-house, the sample for Total Chromium analysis was analyzed by method EPA 200.8, rather than EPA 200.7 as requested on the chain of custody.

No other violations or nonconformance actions occurred for this data package.

If you have any questions or require additional information, please contact me at (714) 730-6239 ext. 200.

Respectfully Submitted,

TRUESDAIL LABORATORIES, INC.

For Mona Nassimi

Manager, Analytical Services

K. R. P. 9-90

K.R.P. Iver

Quality Assurance/Quality Control Officer

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc. 155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02

Laboratory No.: 981855

Date: March 2, 2009

Collected: February 18, 2009 Received: February 18, 2009

ANALYST LIST

MACHINE DE	azetya:	ANALYST
EPA 120.1	Specific Conductivity	Tina Acquiat
SM 2540C	Total Dissolved Solids	Tina Acquiat
SM 2130B	Turbidity	Gautam Savani
EPA 200.8	Total Chromium	Romuel Chaves
EPA 218.6	Hexavalent Chromium	Michael Nonezyan

EXCELLENCE IN INDEPENDENT TESTING

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REPORT

Client: E2 Consulting Engineers, Inc. 155 Grand Ave. Suite 1000

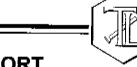
Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Prep. Batch: 021909A



14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Laboratory No.: 981855

Date: March 2, 2009 Collected: February 18, 2009

Received: February 18, 2009 Prep/ Analyzed: February 19, 2009

Analytical Batch: 021909A

Investigation:

Total Chromium by Inductively Coupled Argon Plasma Mass Spectrometer using EPA 200.8

Analytical Results Total Chromium

TLI I.D. Field I.D. <u>Units</u> Method Run Time DF RL Results 4 1 981855 SC-700B-WDR-191 μg/L EPA 200.8 13:52 5.00 1.00 ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	981616-2	1.76	1.61	8.90%	<u><</u> 20%	Yes

	QC Std I.D.	Lab Number	Conc.of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
Į	MS	981616-2	1.76	5.00	50.0	250	232	252	92.1%	70-130%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<1.00		<1.00	Yes
MRCCS	51.7	50.0	103%	90% - 110%	Yes
MRCVS#1	50.1	50.0	100%	90% - 110%	Yes
MRCV\$#2	48.5	50.0	97.0%	90% - 110%	Yes
MRCVS#3	48.9	50.0	97.8%	90% - 110%	Yes
ics	48.4	50.0	96.8%	80% - 120%	Yes
LCS	50.7	50.0	101%	90% - 110%	Voc

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

 Mona Nassimi, Manager Analytical Services

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Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Laboratory No.: 981855

Date: March 2, 2009

Collected: February 18, 2009 Received: February 18, 2009

Prep/ Analyzed: February 19, 2009

Analytical Batch: 02CrH09Q

Investigation:

Hexavalent Chromium by EPA 218.6

Analytical Results Hexavalent Chromium

TLI I.D. Field I.D. Sample Time Run Time Units DF <u>R</u>L Results 981855 SC-700B-WDR-191 08:00 05:29 μg/L 1.05 0.20 ND

QA/QC Summary

	QC STI	J.D.		oratory umber	Conc	Concentration		Ouplicate Concentration		Relative A Percent Difference		Acceptance limits		QC Within Control	
	Duplic	ate	9	81855	<u></u> _	ND		ND		0.00%		<u><</u> 20%		Yes	
QC Std I.D.	Lab Number	unsp	ic.of piked nple	Dilutio Factor			MS Amount	C,	easured conc. of spiked sample	Theoretics Conc. of spiked sam		MS% Recovery	Acc	ceptance limits	QC Within Control
мѕ	981855	0.	00	1.06	1.0	0	1.06		1.10	1.06		104%		90 - 110%	Yes
		a	C Std	I.D.	Measure Concentra		Theoretic Concentrat		Percen Recove			QC Will Conti	1		•
			Blani	, "	ND		<0.200			<0.2	00	Yes	,		

100%

102%

99.1%

100%

5.00

10.0

10.0

5.00

ND: Below the reporting limit (Not Detected).

MRCCS

MRCVS#1

MRCV\$#2

5.00

10.2

9.91

5.01

DF: Dilution Factor.

Respectfully submitted,

90% - 110%

95% - 105%

95% - 105%

90% - 110%

TRUESDAIL LABORATORIES, INC.

Yes

Yes

Yes

Yes

Mona Nassimi, Manager Analytical Services

EXCELLENCE IN INDEPENDENT TESTING

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REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02

Laboratory No.: 981855

Date: March 2, 2009

Collected: February 18, 2009

14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008

(714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Received: February 18, 2009 Prep/ Analyzed: February 18, 2009

Analytical Batch: 02TUC09P

Investigation:

Turbidity by Method SM 2130B

Analytical Results Turbidity

TLI I.D. Field I.D. Sample Time Units DF RL Results SC-700B-WDR-191 981855 08:00 NTU 1.00 0.100 ND

QA/QC Summarv

QC STD I,D,	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	981824-2	175	176	0.57%	<u>≺</u> 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control	
Blank	ND	<0.100		<0.100	Yes	
LCS	7,77	8.00	97.1%	90% - 110%	Yeş	
LCS	7.80	8.00	97.5%	90% - 110%	Yes	
LCS	7.53	8.00	94.1%	90% - 110%	Yes	

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

トーン~ Mona Nassimi, Manager

Analytical Services

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Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

QC STD

Laboratory

LCSD

Concentration

695

Project No.: 379209.01.02 P.O. No.: 379209.01.02

Laboratory No.: 981855

Date: March 2, 2009

Collected: February 18, 2009

Received: February 18, 2009 Prep/ Analyzed: February 19, 2009

Analytical Batch: 02EC09J

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D. Field I.D. <u>Units</u> Method DF RL Results 981855 SC-700B-WDR-191 μmhos/cm EPA 120.1 1.00 2.00 6560

> QA/QC Summary **Duplicate**

I.D.	<u> </u>	Number	r l			Concentra	tion	Ċ)ifferenc	e	limits	
Duplic	ate	981855		6560		6570			0.15%		≤ 10%	Yes
	QC:	Std I.D.		easured centration		heoretical ncentration	Perce Recov			ptance imits	QC Within Control	
1	₽	Blank		ND		<2.00			٧	2.00	Yes	1
		ccs		695		706	98.4	%	90%	- 110%	Yes	1
	<u> </u>	V\$#1		976		1000	97.6	%	90%	- 110%	Yes	1
	C	VS#2		977		1000	97.7	%	90%	- 110%	Yes	1
	L	.cs		695		706	98.4	%	90%	- 110%	Yes	1

98.4%

706

Respectfully submitted.

90% - 110%

Relative Percent | Acceptance | QC Within

TRUESDAIL LABORATORIES, INC.

Yes

Mona Nassimi, Manager **Analytical Services**

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from Truesdail Laboratories.

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EXCELLENCE IN INDEPENDENT TESTING

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REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02

14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008

(714) 730-6239 · FAX (714) 730-6462

www.truesdail.com

Laboratory No.: 981855

Date: March 2, 2009

Collected: February 18, 2009

Received: February 18, 2009

Prep/ Analyzed: February 20, 2009

Analytical Batch: 02TDS09N

Investigation:

Total Dissolved Solids by SM 2540C

Analytical Results Total Dissolved Solids

TLI I.D. 981855

<u>Field I.D.</u>

SC-700B-WDR-191

<u>Units</u> mg/L

Method SM 2540C <u>RL</u> 250 Results 4260

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	981855	4260	4240	0.24%	<u>≤</u> 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<25.0		<25.0	Yes
LCS 1	504	500	101%	90% - 110%	Yes
LCS 2	499	500	99.8%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

RL: Reporting Limit.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

10 Days PAGE 1

> TURNAROUND TIME DATE 2/17/09

CHAIN OF CUSTODY RECORD

TRUESDAK LABÓRÁTÓRIES, INC. 14201 Franklin Aventin, Tustin, CA 92780-7008 (714)730-6239 FAX: (714) 730-6462

www.truesdail.com

[IM3Plant-WDR-191]

TOTAL NUMBER OF CONTAINERS COMMENTS NUMBER OF CONTAINERS Ņ Turbidity (SM2730) Specific Consuciance (120.1) 2 (7.005) Tolal Chromium 76572P 0807 DESCRIPTION Water FAX (530) 339-3303 TEAM 0800 2/17/09 155 Grand Ave Ste 1000 SHMP/ED DATE 0800 Oakland, CA 94612 (530) 229-3303 PG&E Topock 379209.01.02 SAMPLERS (SIGNATURE 띫 SC-700B-WDR-191 HOR PROJECT NAME P.O. NUMBER SAMPLE 10. COMPANY ADDRESS PHONE

	SAMPLE CONDITIONS	RECEIVED COOL WARM "F	CUSTODY SEALED YES 🔲 NO 🔲	SPECIAL REQUIREMENTS:			
·	6000 316		bo.	Date 2 18 of SPECI	Date/ /or 7 h Time	Date/ Time	Date/ Time
	ODY SIGNATURE RECORD	TOL Agency OMY	Cost Company! TLF	1 Company 7 61	Company/ Agency	Company! Agency	Company/ Agency
	CHAIN OF CUSTODY SIGNA	Printed Name	Printed 75/	Printed // ⟨ > // Name	Printed Name	Printed Name	Printed Name
	10	Signature (Relinquished)	Signature (Received)	Signature (Relinquished)	Signature (Received)	Signature (Relinquished)	Signature (Received)

Level III QC

ALERT!!

1080

0834

5.45 0.45 100.

6442



14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

March 4, 2009

E2 Consulting Engineers, Inc. Mr. Shawn Duffy 155 Grand Ave., Suite 1000 Oakland, California 94612

Dear Mr. Duffy:

SUBJECT:

CASE NARRATIVE PG&E TOPOCK IM3PLANT-WDR-192 PROJECT, GROUNDWATER MONITORING, TLI No.: 981968

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-192 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, and Total Dissolved Solids. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The samples were received and delivered with the chain of custody on February 25, 2009, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

Due to the large number of samples in-house, the sample for Total Chromium analysis was analyzed by method EPA 200.8, rather than EPA 200.7 as requested on the chain of custody.

No other violations or nonconformance actions occurred for this data package.

If you have any questions or require additional information, please contact me at (714) 730-6239 ext. 200.

Respectfully Submitted,

TRUESDAIL LABORATORIES, INC.

For Mona Nassimi

Manager, Analytical Services

K. R. P. 970

K.R.P. Iver

Quality Assurance/Quality Control Officet

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc. 155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample Project Name: PG&E Topock Project

Project No.: 379209.01.02

Laboratory No.: 981968

Date: March 4, 2009 Collected: February 25, 2009 Received: February 25, 2009

ANALYST LIST

METHOD		ANALY81
EPA 120.1	Specific Conductivity	Tina Acquiat
SM 2540C	Total Dissolved Solids	Tina Acquiat
SM 2130B	Turbidity	Gautam Savani
EPA 200.8	Total Chromium	Romuel Chaves
EPA 218.6	Hexavalent Chromium	Michael Nonezyan

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Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Laboratory

Number

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

QC STD I.D.

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Prep. Batch: 022709A Laboratory No.: 981968

Date: March 4, 2009

Collected: February 25, 2009 Received: February 25, 2009

Prep/ Analyzed: February 27, 2009

QC Within

Analytical Batch: 022709A

Acceptance

Investigation:

Total Chromium by Inductively Coupled Argon Plasma Mass Spectrometer using EPA 200.8

REPORT

Analytical Results Total Chromium

TLI I.D. Field I.D. <u>Units</u> <u>Method</u> Run Time <u>DF</u> RL <u>Results</u> 981968 SC-700B-WDR-192 μg/L, **EPA 200.8** 12:05 5.00 1.00 ND

Concentration

QA/QC Summary

Duplicate

Concentration

Relative

Percent

	ļ						entration.	Difference	ıımıçş	Control	
	Duplica	ate	981664	-6	1.95		1.97	1.02%	<u>≺</u> 20%	Yes	
QC Std I.D.	Lab Number	Conc.of unspiked sample	d Dilli Fa	ution	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretica Conc. of spiked samp	MS%	Acceptance limits	QC Within Control
MS	981664-6	1.95	1	. <u>0</u> 0	50.0	50.0	51.9	52.0	99.9%	70-130%	Yes
		QC S	td I.D.	_	Measured ncentration	Theoretica Concentrati			··· -•	thin	

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<1.00		<1.00	Yes
MRCCS	48.3	50.0	96.6%	90% - 110%	Yes
MRCV\$#1	48.8	50.0	97.6%	90% - 110%	Yes
MRCVS#2	46.3	50.0	92.6%	90% - 110%	Yes
MRCVS#3	45.6	50.0	91.2%	90% - 110%	Yes
MRCVS#4	45.4	50.0	90.8%	90% - 110%	Yes
ICS	49.3	50.0	98.6%	80% - 120%	Yes
LCS	47.5	50.0	95.0%	000/ 1100/	- V

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

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REPORT

14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Laboratory No.: 981968

Date: March 4, 2009

Collected: February 25, 2009

Received: February 25, 2009 Prep/ Analyzed: February 26, 2009

Analytical Batch: 02CrH09U

Investigation:

Hexavalent Chromium by EPA 218.6

Analytical Results Hexavalent Chromium

TLLI.D. Field I.D. Sample Time Run Time Units DF ŖL Results 981968 SC-700B-WDR-192 07:35 08:32 μg/L 1.05 0.20 ND

QA/QC Summarv

							********	J								
	QC ST			oorato: umber	•	Concentrati	lon	,	licate ntration	P	elative ercent ference		ceptance limits		QC Within Control	
	Duplic	ate	98	1888-1		33			3		0.35%		≤ 20%	+	Yes	
QC Std I.D.	Lab Number	unsp	c.of liked ple	Dilut Fact		Added Spike Conc.	I -	MS nount	Measured Conc. of spiked sample		heoretical Conc. of iked sample	R	MS% ecovery	Ac	ceptance limits	QC Within Control
MS	981968	0.0	00	1.0	6	1.00	Ī	.06	1.06	T	1,06	╁	100%		90 - 110%	Yes
		Q	C Std	I.D.		Measured oncentration		eoretical centration	Percer Recove	- 1	Acceptan Limits	Ce	QC With Contro			1 05
			Blani	ζ .		ND		<0.200		\neg	<0.200		Yes	\dashv		

MRCCS 4.99 5.00 99.8% 90% - 110% Yes MRCVS#1 9.77 10.0 97.7% 95% - 105% Yes MRCV\$#2 9.78 10.0 97.8% 95% - 105% Yes LCS 5.00 5.00 100% 90% - 110% Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Fur Mona Nassimi, Manager Analytical Services

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Laboratory No.: 981968

Date: March 4, 2009

Collected: February 25, 2009

Received: February 25, 2009 Prep/ Analyzed: February 26, 2009

Analytical Batch: 02TUC09T

Investigation:

Turbidity by Method SM 2130B

Analytical Results Turbidity

TLI I.D. Field I.D.

Sample Time

<u>Units</u>

<u>DF</u>

<u>RL</u>

<u>Results</u>

981968

SC-700B-WDR-192

07:35

NTU

1.00

0.100

ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	981968	ND	ND	0.00%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.100		<0.100	Yes
LCS	7.90	8.00	98.8%	90% - 110%	Yes
LCS	8.10	8.00	101%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

OF: Dilution Factor.

Respectfully submitted.

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager

Analytical Services

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REPORT

14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Laboratory No.: 981968

Date: March 4, 2009

Collected: February 25, 2009

Received: February 25, 2009 Prep/ Analyzed: February 26, 2009

Analytical Batch: 02EC09P

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLL I.D.

<u>Field I.D.</u>

Units

<u>Method</u>

DF

RL.

Results

981968

SC-700B-WDR-192

µmhos/cm

EPA 120.1

1.00

2.00

6570

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentrat	ion Duplica Concentra		lative Percent Difference	Acceptance limits	QC Within Control
Duplicate	981968	6570	6580		0.15%	≤ 10%	Yes
ه ا	C Std I.D.	Measured	Theoretical	Percent	Acceptan	ce QC With	'

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<2.00		<2.00	Yes
ccs	695	706	98.4%	90% - 110%	Yes
CVS#1	977	1000	97.7%	90% - 110%	Yes
LCS	695	706	98.4%	90% - 110%	Yes
LCSD	695	706	98.4%	90% - 110%	Ves

Respectfully submitted.

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

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REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000 Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Laboratory No.: 981968

Date: March 4, 2009

Collected: February 25, 2009

Received: February 25, 2009 Prep/ Analyzed: February 26, 2009

Analytical Batch: 02TDS09Q

Investigation:

Total Dissolved Solids by SM 2540C

Analytical Results Total Dissolved Solids

TLI I.D. 981968

Field I.D. SC-700B-WDR-192 Units mg/L

Method SM 2540C <u>RL</u> 250 Results 4410

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	981968	4410	4490	0.90%	<u>≺</u> 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<25.0		<25.0	Yes
LCS 1	500	500	100%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

RL: Reporting Limit.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

- Mona Nassimi, Manager Analytical Services

COC Number

TRUE	TRUESDAIL LABORATORIES, INC.	, INC.	さ	HAIN OF CU!	CHAIN OF CUSTODY RECORD	202	COC Number		
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COMPANY	E2					////	1///	COMMENTS	92
PROJECT NAME	PG&E Topock			_					ļ
PHOME	(530) 229-3303	FAX (530) 339-3303	9-3303		\$		5		
ADDRESS	155 Grand Ave Ste 1000	1000		Chron		/ /	IVER		
	Oakland, CA 94612			Pelol	031)6		KTW		-
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March 30, 2009

14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

E2 Consulting Engineers, Inc. Mr. Shawn Duffy 155 Grand Ave., Suite 1000 Oakland, California 94612

Dear Mr. Duffy:

SUBJECT:

CASE NARRATIVE PG&E TOPOCK IM3PLANT-WDR-193PROJECT, GROUNDWATER MONITORING, TLI No.: 982073

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-193 project groundwater monitoring. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The samples were received and delivered with the chain of custody on March 4, 2009, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

No violations or nonconformance actions occurred for this data package.

If you have any questions or require additional information, please contact me at (714) 730-6239 ext. 200.

Respectfully Submitted,

TRUESDAIL LABORATORIES, INC.

Lo - Mona Nassimi Manager, Analytical Services

K. R. P. Ryan

K.R.P. Ivcr

Quality Assurance/Quality Control Officer

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: Three (3) Groundwaters
Project Name: PG&E Topock Project
Project No.: 379209.01.03.01

Laboratory No.: 982073

Date: March 30, 2009 Collected: Martch 4, 2009 Received: Martch 4, 2009

ANALYST LIST

EPA 120.1	Specific Conductivity	Tina Acquiat
SM 2540C	Total Dissolved Solids	Tina Acquiat
SM 2130B	Turbidity	Gautam Savani
EPA 300.0	Anions	Giawad Ghenniwa
SM 4500-NH3 B	Ammonia	lordan Stavrev
SM 4500-NO2 B	Nitrite as N	Tina Acquiat
EPA 200.7	Metals by ICP	Daniel Kang
EPA 200.8 / EPA 245.1	Metals by ICP/MS	Romuel Chaves / Mark Kotani
EPA 218.6	Hexavalent Chromium	Michael Nonezyan

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462

REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Samples: Three (3) Groundwaters
Project Name: PG&E Topock Project
Project No.: 379209.01.03.01
P.O. No.: 379209.01.03.01

Investigation: Total Metal Analyses as Requested

www.truesdail.com Laboratory No.: 982073

Reported: March 30, 2009 Collected: Martch 4, 2009 Received: Martch 4, 2009 Analyzed: See Below

Analytical Results

SAMPLE ID:	SC-700B-WDR-193	Time Col	lected:	11:58		LAB ID:	982073-1	
		Reported					Date	Time
Parameter	Method	Value	DF	Units	RL	Batch	Analyzed	Analyzed
Aluminum	EPA 200.8	ND	10.0	µg/L	50.0	032409A	03/24/09	14:01
Antimony	EPA 200.8	ND	5.00	μg/L	10.0	031509A	03/15/09	16:19
Arsenic	EPA 200.8	ND	10.0	μg/L	2.00	031709A	03/17/09	14:26
Barium	EPA 200.8	57.1	10.0	μg/L	10.0	031709A	03/17/09	14:26
Chromium	EPA 200.8	ND	10.0	μg/L	2.00	031709A	03/17/09	14:26
Copper	EPA 200.8	27.0	10.0	μg/L	5.00	031709A	03/17/09	14:26
Lead	EPA 200.8	ND	10.0	μ g/L	10.0	031709A	03/17/09	14:26
Manganese	EPA 200.7	ND	1.00	μg/L	10.0	031609A	03/16/09	17:14
Molybdenum	EPA 200.8	14.0	5.00	<u> </u>	10.0	031509A	03/15/09	16:19
Nickel	EPA 200.8	ND	10.0	μ g/L	10.0	031709A	03/17/09	14:26
Zinc	EPA 200.8	ND	5.00	μg/L	10.0	031509A	03/15/09	16:19
Boron	EPA 200.7	1040	1.00	μ g/L	200	031609A	03/16/09	17:14
Iron	EPA 200.7	ND	1.00	μ g/ L	20.0	031609A	03/16/09	17:14



Report Continued

SAMPLE ID:	SC-100B-WDR-193	Time Col	lected:	11:52		LAB ID:	982073-2	
		Reported					Date	Time
Parameter	Method	Value	DF	Units	RL	Batch	Analyzed	Analyzed
Aluminum	EPA 200.8	ND	10.0	μg/L	50.0	032409A	03/24/09	14:07
Antimony	EPA 200.8	ND	5.00	μg/L	10.0	031509A	03/15/09	17:24
Arsenic	EPA 200.8	2.27	10.0	μ g/ <u>L</u>	2.00	031709A	03/17/09	14:33
8arium -	EPA 200.8	28.3	10.0	μ g/L	10.0	031709A	03/17/09	14:33
Chromium	EPA 200.8	1250	10.0	μg/Լ	2.00	031709A	03/17/09	14:33
Copper	EPA 200.8	ND .	10.0	μg/L	5.00	031709A	03/17/09	14:33
Lead	EPA 200.8	ND	10.0	μ g/ L	10.0	031709A	03/17/09	14:33
Manganese	EPA 200.7	ND	5.00	μg/L	10.0	031609A	03/16/09	17:30
Molybdenum	EPA 200.8	26.6	5.00	μ g/L	10.0	031509A	03/15/09	17:24
Nickel	EPA 200.8	ND	10.0	<u> րց/L</u>	10.0	031709A	03/17/09	14:33
Zinc	EPA 200.8	ND	5.00	μg/L	10.0	031509A	03/15/09	17:24
Boron	EPA 200.7	1110	1.00	μg/L	200	031609A	03/16/09	17:30
Irọn	EPA 200.7	ND	1.00	μg/L	20.0	031609A	03/16/09	17:30

SAMPLE ID: SC-70	1-WDR-193	Time Co	lected: 12	:03		LAB IO	982073-3	
	•	Reported					Date	Time
Parameter	Method	Value	DF	Units	RL .	Batch	Analyzed	Analyzed
Antimony	EPA 200.8	ND	10.0	μg/L	10.0	031709A	03/17/09	14:39
Arsenic	EPA 200.8	ND	10.0	μg/L	2.00	031709A	03/17/09	14:39
Barium	EPA 200.8	152	10.0	μg/L	10.0	031709A	03/17/09	14:39
Beryllium	EPA 200.8	ND	50.0	μ 9/L	10,0	032409A	03/24/09	16:30
Cadmium	EPA 200.8	ND	10.0	μ g/ L	3.00	031709A	03/17/09	14:39
Chromium	EPA 200.8	4.55	10.0	μg/L	2.00	031709A	03/17/09	14:39
Cobalt	EPA 200.8	ND	50.0	μց/∟	10.0	032409A	03/24/09	16:30
Copper	EPA 200.8	171	10.0	μ g/ L	5.00	031709A	03/17/09	14:39
Lead	EPA 200.8	ND	10.0	μg/L	10.0	031709A	03/17/09	14:39
Mercury	EPA 245.1	ND	1.00	μg/L	0.20	03Hg09B	03/07/09	N/A
Molybdenum	EPA 200.8	74.3	10.0	μ g/L	10.0	031709A	03/17/09	14:39
Nickel	EPA 200.8	29.6	10.0	μg/L	10.0	031709A	03/17/09	14:39
Selenium	EPA 200.8	28.1	10.0	μ g/L	10.0	031709A	03/17/09	14:39
Silver	EPA 200.8	ND	10.0	با/وبر	10.0	031709A	03/17/09	14:39
Thallium	EPA 200.8	ND	10.0	μg/L	2.00	031709A	03/17/09	14:39
Vanadium	EPA 200.8	ND	50.0	μg/L	10.0	032409A	09/23/88	16:30
Zinc	EPA 200.8	124	10.0	μ g/L	10.0	031709A	03/17/09	14:39

ND: Not detected, or below limit of detection.

DF: Dilution factor.

Respectfully submitted, TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

EXCELLENCE IN INDEPENDENT TESTING



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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462

www.truesdail.com

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: Three (3) Groundwaters
Project Name: PG&E Topock Project

Project No.: 379209.01.03.01 P.O. No.: 379209.01.03.01 Laboratory No.: 982073

Date: March 30, 2009

Collected: Martch 4, 2009 Received: Martch 4, 2009

Prep/ Analyzed: March 6, 2009 Analytical Batch: 03TDS09D

Investigation:

Total Dissolved Solids by SM 2540C

REPORT

Analytical Results Total Dissolved Solids

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Units</u>	<u>Method</u>	RL.	<u>Results</u>
982073-1	SC-700B-WDR-193	mg/L	SM 2540C	250	4020
982073-2	SC-100B-WDR-193	mg/L	SM 2540C	250	4860
982073-3	SC-701-WDR-193	mg/L	SM 2540C	625	46700

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	982073-2	4860	4910	0.51%	<u>≤</u> 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<25.0		<25.0	Yes
LCS 1	501	500	100%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

RL: Reporting Limit.

Respectfully submitted, TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

EXCELLENCE IN INDEPENDENT TESTING



Established 1931

14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462

www.truesdail.com

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: Three (3) Groundwaters

Project Name: PG&E Topock Project Project No.: 379209.01.03.01

P.O. No.: 379209.01.03.01

Laboratory No.: 982073

Date: March 30, 2009

Collected: Martch 4, 2009

Received: Martch 4, 2009 Prep/ Analyzed: March 5, 2009

Analytical Batch: 03TUC09E

Investigation:

Turbidity by Method SM 2130B

REPORT

Analytical Results Turbidity

<u>TLI I.D.</u>	<u>Field I.D.</u>	Sample Time	<u>Units</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
982073-1	SC-700B-WDR-193	11:58	NTU	1.00	0.100	ND
982073-2	SC-100B-WDR-193	11:52	NTU	1.00	0.100	ND

QA/QC Summary

QC ST	D I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Oupli	cate	982073-2	ŅD	ND	0.00%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.100		<0.100	Yes
LCS	7.76	8.00	97.0%	90% - 110%	Yes
LCS	7.80	8.00	97.5%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

EXCELLENCE IN INDEPENDENT TESTING



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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: Three (3) Groundwaters
Project Name: PG&E Topock Project
Project No.: 379209.01.03.01
P.O. No.: 379209.01.03.01

Prep. Batch: 03CrH09B

Laboratory No.: 982073

Date: March 30, 2009 Collected: Martch 4, 2009 Received: Martch 4, 2009

Prep/ Analyzed: March 6, 2009 Analytical Batch: 03CrH09B

Investigation:

Hexavalent Chromium by IC Using Method EPA 218.6

REPORT

Analytical Results Hexavalent Chromium

<u>TLI I,D,</u>	Field I.D.	<u>Sample Time</u>	Run Time	<u>Units</u>	<u>DF</u>	RL	<u>Results</u>
982073-1	SC-700B-WDR-193	11:58	08:02	μ g/ L	5.25	1.05	ND
982073-2	SC-100B-WDR-193	11:52	07:42	μ g/L	105	21.0	1220
982073-3	SC-701-WDR-193	12:03	11:01	μg/L	26.2	5.24	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Sample Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	982073-2	1220	1210	0.82%	<u>< 20%</u>	Yes

QC Std I.D.	Lab Number	Conc.of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of apiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	982073-1	0.00	5.25	1.00	5.25	5.34	5.25	102%	90-110%	Yes
M\$	982073-2	1220	105	15.0	1575	2890	2795	106%	90-110%	Yes
MS	982073-3	0.00	26.2	1.00	26.2	26.7	26.2	102%	90-110%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.200		<0.200	Yes
MRCCS	4.99	5.00	99.8%	90% - 110%	Yes
MRCVS#1	10.0	10.0	100%	95% - 105%	Yes
MRCV\$#2	10.0	10.0	100%	95% - 105%	Yeş
MRCVS#3	9.97	10.0	99.7%	95% - 105%	Yes
MRCVS#4	9.78	10.0	97.8%	95% - 105%	Yes
MRCVS#5	9.74	10.0	97.4%	95% - 105%	Yes
LCS	4.99	5.00	99.8%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

fr.

Mona Nassimi, Manager Analytical Services

EXCELLENCE IN INDEPENDENT TESTING



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14201 FRANKLIN AVÉNUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: Three (3) Groundwaters
Project Name: PG&E Topock Project
Project No.: 379209.01.03.01

P.O. No.: 379209.01.03.01

REPORT

Laboratory No.: 982073

Date: March 30, 2009 Collected: Martch 4, 2009

Received: Martch 4, 2009

Prep/ Analyzed: March 10, 2009 Analytical Batch: 03NH3-E09C

Investigation:

Ammonia as N by Method SM 4500-NH3 D

Analytical Results Ammonia as N

<u>TLI I.D.</u>	<u>Field I.D.</u>	Sample Time	<u>Method</u>	<u>Units</u>	<u>DF</u>	<u>RL</u>	Results
982073-1	SC-700B-WDR-193	11:58	SM 4500-NH3 D	mg/L	1.00	0.500	ND
982073-2	SC-100B-WDR-193	11:52	SM 4500-NH3 D	mg/L	1.00	0.500	ND

QA/QC Summary

	QC ST) I.D.		borate Numbe	•	Concentra	tion		olicate		Relative Percent Ofference		eptance imits	QC Within Control		
	Duplic	ate	9	82073	-1	ND.			ND		0.00%		20%	Yes		
QC Std i.D.	Lab Number	иларі	Inenikad (Added Spike Conc.			MS nount	Measure Conc. o spiked sample	f	Theoretical Conc. of spiked sample		MS% covery	Acceptance limits	QC Within Control	
MS	982073-1	2073-1 0,00	73-1 0,00	0.00	0.00		00	6.00	6	3.00	5.95		9	9.2%	75-125%	Yes
	,	Q	C 8td	I.D.		easured centration		eoretica centratio			Acceptan Limits	Ce	QC Within	1		
			Blani	κ		ND		<0.500			<0.500) Yes		1		

6.00

6.00

10.0

102%

99.5%

102%

90% - 110%

90% - 110%

90% - 110%

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

MRCCS

MRCVS#1

LCS

6.13

5.97

10.2

Respectfully submitted, TRUESDAIL LABORATORIES, INC.

Yes

Yes

Yes

Mona Nassimi, Manager Analytical Services

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: Three (3) Groundwaters
Project Name: PG&E Topock Project
Project No.: 379209.01.03.01

P.O. No.: 379209.01.03.01

Laboratory No.: 982073

Date: March 30, 2009 Collected: Martch 4, 2009

Received: Martch 4, 2009

Prep/ Analyzed: March 5, 2009 Analytical Batch: 03AN09D

Investigation:

Fluoride by Ion Chromatography using EPA 300.0

Analytical Results Fluoride

<u>TLI I.D.</u>	Field I.D.	Sample Time	Run Time	<u>Units</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
982073-1	SC-700B-WDR-193	11:58	10:29	mg/L	5.00	0.500	1.98
982073-2	SC-100B-WDR-193	11:52	10:41	mg/L	5.00	0.500	2.70
982073-3	SC-701-WDR-193	12:03	10:52	mg/L	5.00	0.500	28.4

QA/QC Summarv

	QC ST		N	borat lumb	er	Concentra		Conce	licate ntration	Percent Difference	ı	eptance limits	QC Within Control	
QC Std I.D.	Lab Number	Conc.of unspiked sample		piked Dilution		Added Spike Conc.			98 Measured Conc. of spiked sample	0.00% Theoretical Conc. of spiked sample		4 20%	Acceptance limits	QC Within Control
MS	982073-1	1.9	8	5	.00	4.00	2	20.0	23.0	22.0	Î	105%	85-115%	Yes
		1	Std	.D.		asured entration		eoretical centration	Percen Recove			QC With Contro	1	

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500		<0.500	Yes
MRCCS	4.16	4.00	104%	90% - 110%	Yes
MRCVS#1	3.11	3.00	104%	90% - 110%	Yes
MRCVS#2	3.10	3.00	103%	90% - 110%	Yes
LCS	4.15	4,00	104%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted, TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

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Laboratory No.: 982073

Collected: Martch 4, 2009

Received: Martch 4, 2009

Prep/ Analyzed: March 5, 2009 Analytical Batch: 03AN09D

Date: March 30, 2009

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: Three (3) Groundwaters
Project Name: PG&E Topock Project
Project No.: 379209.01.03.01
P.O. No.: 379209.01.03.01

REPORT

Investigation:

Sulfate by Method EPA 300.0

Analytical Results Sulfate

TLI I.D. Field I.D. Sample Time Run Time Units DF RL. Results 982073-1 SC-700B-WDR-193 11:58 16:57 mg/L 100 50.0 483

QA/QC Summary

	QC STD	I.D.		borat lumb		Concentration		Duplicate Concentration		P	telative Percent fference		ceptance limits	QC Within Control		
	Duplic	ate	9	82073	<u>-1</u>	483		4	181		0.41%		≤ 20%		Yes	
QC Std I.D.	Lab Number	นกร	nc.of piked npie		ution	Added Spike Conc.		MS nount	C	leasured Conc. of spiked sample	1	heoretical Conc. of spiked sample		MS% ecovery	Acceptance limits	QC Within Control
M\$ 98	982073-1	4	83	,	100	10.0	·	1000		1520		1483		104%	85-115%	Yes
			C Std	I.D.	_	easured centration		neoretical ncentratio		Percent Recover	- I	Acceptant Limits	ce	QC Withi		
			Blank	(ND		<0.500				<0.500		Yes		
			MRCC	s		20.4		20.0		102%		90% - 110	%	Yes		
			MRCVS	#1		15.0		15.0		100%	\Box	90% - 110	%	Yes		
			MRCVS	# 2		15.0		15.0		100%		90% - 110	%	Yes		
			MRCV5	3 #3		15.0		15.0		100%		90% - 110	%	Yes		
			MRCVS	#4		15.1		15.0		101%	Ι	90% - 110	%	Yes		
			LCS			20.3	1	20.0		102%	Т	90% - 110	%	Yes		

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: Three (3) Groundwaters
Project Name: PG&E Topock Project
Project No.: 379209.01.03.01
P.O. No.: 379209.01.03.01

REPORT

Laboratory No.: 982073

Date: March 30, 2009 Collected: Martch 4, 2009 Received: Martch 4, 2009

Prep/ Analyzed: March 9, 2009 Analytical Batch: 03AN09F

Investigation:

Suifate by Method EPA 300.0

Analytical Results Sulfate

TLI I.D. Field I.D. Sample Time Run Time **Units** DF RL Results 982073-2 SC-100B-WDR-193 11:52 15:16 mg/L 25.0 12.5 602

QA/QC Summary

	QC STD		N	oratory umber 2124-3		Concenti 40.1		Conce	plicate entration	Percent Difference	Acceptance limits < 20%	QC Within Control	
r			90.	2124-0		40.1			10.2	0.25%	<u> </u>	Yes	
QC Std I.D.	I.D. Number un		c.of iked iple	Dilution Factor		Added Spike Conc.	_	MS Jount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	982124-3	40	,1	5.00	0	10.0	5	0.0	92.7	90.1	105%	85-115%	Yes
					14		-						

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500		<0.500	Yes
MRCCS	20.4	20.0	102%	90% - 110%	Yes
MRCVS#1	15.2	15.0	101%	90% - 110%	Yes
MRCVS#2	15,4	15.0	103%	90% - 110%	Yes
MRCVS#3	15.3	15.0	102%	90% - 110%	Yes
LCS	20.6	20.0	103%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
 Analytical Services

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Relative

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: Three (3) Groundwaters
Project Name: PG&E Topock Project
Project No.: 379209.01.03.01

P.O. No.: 379209.01.03.01 **P.O. No.:** 379209.01.03.01 REPORT

Laboratory No.: 982073

Date: March 30, 2009 Collected: Martch 4, 2009 Received: Martch 4, 2009

Prep/ Analyzed: March 5, 2009 Analytical Batch: 03AN09D

Investigation:

Nitrate as N by Ion Chromatography using EPA 300.0

Analytical Results Nitrate as N

TLI I.D.	Fleid I.D.	<u>Sample Time</u>	Run Time	<u>Units</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
982073-1	SC-700B-WDR-193	11:58	10:29	mg/L	5.00	1.00	2.69
982073-2	SC-100B-WDR-193	11:52	10:41	mg/L	5.00	1.00	3.29

QA/QC Summary

	QC STD	1.0.	Number 982065-7	Concentr 8.62	ation Co	ncentrati 8.64	on	Percent Difference 0.23%	· li	mits 20%	Control	
QC Std I,D,	Lab Number	Conc.of unspiked sample	Dilution	Added Spike Conc.	MS Amount	Mea: Cor spi	sured nc. of iked nple	Theoretical Conc. of spiked sample		AS% covery	Acceptance limits	QC Within Control
MS	982065-7	8.62	5.00	4.00	20.0	. 2	8.9	28.6	1	01%	85-115%	Yes
		QC Std	1.D. I _	leasured icentration	Theoret Concentr	1 .	Percent ecovery	Acceptan Limits		QC With Contro		_ .

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500		<0.500	Yes
MRCCS	3.99	4.00	99.8%	90% - 110%	Yes
MRCVS#1	2.97	3.00	99.0%	90% - 110%	Yes
MRCVS#2	2.96	3.00	98.7%	90% - 110%	Yes
MRCVS#3	2.97	3.00	99.0%	90% - 110%	Yes
MRCVS#4	2.98	3.00	99.3%	90% - 110%	Yes
LCS	3.96	4.00	99.0%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: Three (3) Groundwaters
Project Name: PG&E Topock Project
Project No.: 379209.01.03.01
P.O. No.: 379209.01.03.01

REPORT

Laboratory No.: 982073

Date: March 30, 2009 Collected: Martch 4, 2009

Received: Martch 4, 2009

Prep/ Analyzed: March 5, 2009 Analytical Batch: 03NO209D

Investigation:

Nitrite as N by Method SM 4500-NO2-B

Analytical Results for Nitrite as N

<u>TL1 I.D.</u>	Field I.D.	Sample Time	Run Time	<u>Units</u>	DF	<u>RL</u>	<u>Results</u>
982073-1	SC-700B-WDR-193	11:58	11:02	mg/L	1.00	0.0050	ЙN
982073-2	SC-100B-WDR-193	11:52	11:03	mg/L	1.00	0.0050	ND

QA/QC Summary

	QC STC	I.D.	aboratory Number	Concentra	ation		plicate entration	Relative Percent Difference	Acceptance limits	QC Within Control	
	Duplic	ate	982073-1	ND			ND	0.00%	<u><</u> 20%	Yes	
QC Std I.D.	Lab Number	Conc.of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount		Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance ilmits	QC Within Control
MS	982073-1	0.00	1.00	0.0200	0.0	200	0.0169	0,0200	94.5%	75-125%	Yes
					_						

QC Std I,D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.0050		<0.0050	Yes
MRCCS	0.0199	0.0200	99.5%	90% - 110%	Yes
MRCV\$#1	0.0201	0.0200	101%	90% - 110%	Yes
LCS	0.0408	0.0400	102%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Oilution Factor.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

Rec'd

98207 1

14201 Franklin Avenue, Tustin, CA 92780-7008 (714)730-6239 FAX: (714) 730-6462 www.fruesdall.com RUESDAIL LABORATORIES, INC.

CHAIN OF CUSTODY RECORD [IM3Plant-WDR-193]

IM3Plant-WDR -193 10 Days PAGE SOC Number COC Number GALO COC

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4 DK -2 たりな TOTAL NUMBER OF CONTAINERS COMMENTS Pi ,ZI 8 多多 $\widehat{\mathscr{Q}}$ 0,10 NUMBER OF CONTAINERS 2 4 4 4 Total Metals (200.7) Ct 5.42 12.40 (300.0) F, NO3, NO2, SO4 OF (-) -TIME (3₀₁₈₈₎ 1.24š A (0.00E) anoinA × × 10tal Metals (2.00.7) See List Below × × 12.3 12:34 · TIME × Tible 22 Metals List (200.7, 200.8, 245.1) × ţ 8 (2) × × CUVI) (218.6) Lab Fillered × × 7.14 × 7.3- 12:11 ロミニ・ま × × × DESCRIPTION FAX 530-339-3303 12:05 - 12:13 EC-TIME 12:03 1158 11.52 27.5 だって 03/04/09 03/04/09 03/04/09 155 Grand Ave Ste 1000 DATE 75.25 12:13 Oakland, CA 94612 PG&E Topock IM3 530-229-3303 TEMP-TIME 379209.01.03.01 CH2M HILL Æ2 -1124 4 08 SC-700B-WDR-193 SC-100B-WDR-193 SC-701-WDR-193 SAMPLERS (SIGNATURE PROJECT NAME P.O. NUMBER 50-700 56-100 SAMPLEID COMPANY ADDRESS PHONE

۴ The metals include: Cr, Al, Sb, As, Ba, B, Cu, Pb, Mn, ş SAMPLE CONDITIONS WARH ΥES 8 SPECIAL REQUIREMENTS: CUSTODY SEALED Mo, Ni, Fe, Zn RECEIVED 3/4/00 67Me 60/4 3-4-09 Date/ Time Date Time Date/ Time Oate/ Time Date. Time Date/ Time CHAIN ÓF CUSTODY SIGNATURE RECORD SAT S Agency Company/ Company/ Agency Companyi 64 Wile Agency Company Company Company/ Agency Agency Agency Printed O.K.JIGHT Printed ~ Printed Printed Name Printed Name Printed Printed Name Name Name Class II (Relinquished) (Relinquished) **A**(Relinquished) Signature -(Received) (Received) Signature Signature Signature Signature Signature (Received)

7



14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

April 2, 2009

E2 Consulting Engineers, Inc. Mr. Shawn Duffy 155 Grand Ave., Suite 1000 Oakland, California 94612

Dear Mr. Duffy:

SUBJECT:

CASE NARRATIVE PG&E TOPOCK IM3PLANT-WDR-193 PROJECT, SLUDGE

MONITORING,

TLI No.: 982074

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-193 project sludge monitoring. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The samples were received and delivered with the chain of custody on March 4, 2009, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

All final results and associated dilution factors are reported on a dry weight basis.

No other violations or nonconformance actions occurred for this data package.

If you have any questions or require additional information, please contact me at (714) 730-6239 ext. 200.

Respectfully Submitted, TRUESDAIL LABORATORIES, INC.

- Mona Nassimi

Manager, Analytical Services

K. R. P. Byla

K.R.P. Iver

Quality Assurance/Quality Control Officer

EXCELLENCE IN INDEPENDENT TESTING



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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Soil Sample
Project Name: PG&E Topock Project
Project No.: 379209.01.03.01

Laboratory No.: 982074

Date: April 2, 2009 Collected: March 4, 2009 Received: March 4, 2009

ANALYST LIST

WE WOD		ANALYST
EPA 300.0	Fluoride	Giawad Ghenniwa
SM 2540 B	% Moisture	Gautam Savani
SW 6010B	Metals by ICP	Hao Ton
SW 6020	Metals by ICP/MS	Romuel Chaves
SW 7471A	Mercury	Romuel Chaves
SW 7199	Hexavalent Chromium	David Blackburn

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Soil Sample
Project Name: PG&E Topock Project
Project No.: 379209.01.03.01

P.O. No.: 379209.01.03.01 Prep. Batch: 03CrH09A REPORT

Laboratory No.: 982074

Date: April 2, 2009

Collected: March 4, 2009 Received: March 4, 2009

Prep/ Analyzed: March 27, 2009 Analytical Batch: 03CrH09A

Investigation:

Hexavalent Chromium by IC Using Method SW 7199

Analytical Results Hexavalent Chromium

<u>TLI I.</u>D. Fleid I.D. Sample Time Run Time Units DF RL <u>Results</u> 982074 SC-Słudge-WDR-193 10:00 12:02 mg/kg 1.00 1.67 12.0

QA/QC Summary

			_													
	QC ST	QC STD I.O.			ratory nber	Sample Concentration		Duplicate n Concentration		Relative Percent Difference		Acceptance limits		QC Within Control		
	Duplio	ate		982	074	12.0			12.1		0.81%		< 20%	1	Yes	
QC Std I.D.	Lab Number	nuat	ic.of piked nple	Dilui	tion Factor	Added Spike Conc.		MS nount	C :	easured onc. of spiked sample	Theoretical Conc. of spiked sample		MS% acovery	4	Acceptance limits	QC Within Control
MS	982074	12	2.0		10,0	33,3	333		Ť	322	345	† ,	93.0%		75-125%	Yes
IMS	982074	12	2.0		200	18.9	- 3	3784		3690	3796		97.2%		75-125%	Yes
PDMS	982074	12	2.0		25.0	26.7		668		760	680		112%	_	75-125%	Yes
		Q	QC Std I.D.			sured ntration	_	eoretica Icentrați		Percen Recove		nce	nce QC Wit		74 140 70	103
			Blan	k	N	10		<0.400			<0.40	0	Yes			
			MRCC	s	2.	.04		2.00		102%			Yes	\dashv		
		MRCVS		S#1_	2.	.02		2.00		101%			Yes			
			LÇS		1,	.99		2.00		99.7%			Yes	_		

ND: Below the reporting limit (Not Detected).

DF: Dilution Fector.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

800

Mona Nassimi, Manager Analytical Services

EXCELLENCE IN INDEPENDENT TESTING



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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Soil Sample
Project Name: PG&E Topock Project
Project No.: 379209.01,03.01

P.O. No.: 379209.01.03.01

Laboratory No.: 982074

Date: April 2, 2009 Collected: March 4, 2009

Received: March 4, 2009

Prep/ Analyzed: March 9, 2009 Analytical Batch: 03SOLID09A

Investigation:

Total Solids by SM 2540 B

REPORT

Analytical Results % Moisture

 TLI I.D.
 Field I.D.
 Sample Time
 Units
 Results

 982074
 SC-Sludge-WDR-193
 10:00
 %
 76.0

QA/QC Summary

QC STD I.D.	Laboratory Number Concentration		Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	982074	76.0	75.8	0.26%	≤ 20%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

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REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000 Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Soil Sample Project Name: PG&E Topock Project

Project No.: 379209.01.03.01 P.O. No.: 379209.01.03.01 Laboratory No.: 982074

Date: April 2, 2009

Collected: March 4, 2009 Received: March 4, 2009

Prep/ Analyzed: March 9, 2009 Analytical Batch: 03AN09F

Investigation:

Fluoride by Ion Chromatography using EPA 300.0

Analytical Results Fluoride

TLI I.D.	<u> Field I.D.</u>	Sample Time	<u>Run Time</u>	<u>Unitş</u>	<u>DF</u>	<u>RL</u>	Results
982074	SC-Sludge-WDR-193	10:00	11:19	mg/kg	1.00	16.7	67.9

QA/QC Summary

																	
	QC STI) I.D.		abora Numb	-	Concentratio		Concentration		Relative Percent Difference		Acceptance limits					
	Duplicate 982121 ND				0.00%		≤ 20%			Yes							
QC Std I.D.	Lab Number	unsp	c.of olked tple		ution	Added Spike Conc.		MS nount	C t	easured onc. of spiked sample		Theoretical Conc. of spiked sample	_ `	MS% covery	,	Acceptance	QC Within Control
MS	982121	0.0	00	1	.00	2.00	2	2.00		2.12	1	2.00	ľ	06%	_	85-115%	Yes
		Q	C Std	I.D.		easured centration		neoretica ncentratio		Percer Recove	- 1	Acceptan Limits		QC Wit			
			Blan	k		ND		<0.500			T	<0.500		Yes			
		<u> </u>	MRCC	S_		4.13		4.00		103%		90% - 110)%	Yes			
		M	IRCV:	S#1		3.17		3.00		106%		90% - 110)%				
		MRCVS#2				3.17		3.00		106%		90% - 110		Yes			
			LCS		<u> </u>	4.16		4.00		104%		90% - 110)%	Yes	\neg		

NO: Below the reporting limit (Not Detected).

DF: Oilution Factor.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Laboratory No.: 982074
Reported: April 2, 2009
Collected: March 4, 2009
Received: March 4, 2009
Analyzed: See Below

REPORT

Attention: Shawn Duffy

Samples: One (1) Soil Sample
Project Name: PG&E Topock Project
Project No.: 379209.01.03.01
P.O. No.: 379209.01.03.01

Investigation: Total Metal Analyses as Requested

Client: E2 Consulting Engineers, Inc.

Oakland, CA 94612

155 Grand Ave. Suite 1000

Analytical Results

SAMPLE ID: SC-S	ludge-WDR-193	Time Coll	ected:	10:00		LAB ID;	982074	
Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Antimony	SW 6020	ND	10.0	mg/kg	2.06	032409C	03/24/09	
<u>Arsen</u> ic	SW 6020	38.9	10.0	mg/kg	2.06	032409C	03/24/09	14:21
Barium	SW 6010B	114	1.00	mg/kg	2.06	032409A	03/24/09	14;21
Beryllium	SW 6010B	211	1.00	mg/kg	2.06	032409A	03/24/09	18:06
Cadmium	SW 6010B	38.1	1.00	mg/kg	4.12	032409A	03/24/09	18:06
Chromium	SW 6010B	15100	10.0	mg/kg	20.6	040109A	04/01/09	18.06
Cobalt	SW 6010B	7.96	1.00	mg/kg	2.06	032409A	03/24/09	<u>14:1</u> 1
Copper	SW 6010B	57.6	1.00	mg/kg	2.06	032409A		18:06
<u>_ea</u> d	SW 6010B	ND	1.00	mg/kg	4.12	032409A	03/24/09	. 18:06
Mercury	SW 7471A	0.507	1.00	mg/kg	0.160		03/24/09	. 18:06
Molybdenum	SW 6020	23.4	50.0	mg/kg	10.3	<u>03HG09D</u>	03/16/09	N/A
Nickel	SW 6010B	ND	1.00		2.06	040209A	04/02/09	14:40
Selenium	SW 6020	ND	50.0	mg/kg		032409A	03/24/09	18:06_
Silver	SW 6010B	ND -	1.00	<u>mg/kg</u>	10.3	040209A	04/02/09	14:40
- ·	SW 6010B	10.7		mg/kg	4.12	032409A	03/24/09	18:06
/anadium	SW 6010B		<u> </u>	mg/kg	<u>4.12</u>	032409A	03/24/09	18:06
Zinc		311	1.00	mg/kg	2.06	032409A	03/24/09	18:06
	SW 6010B	128	1.00	mg/kg	10.3	032409A	03/24/09	18:06

NOTES:

Sample results and reporting limits reported on a dry weight basis.

ND: Not detected, or below limit of detection.

DF: Dilution factor.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

TRUESDAIL LABORATORIES, INC. 14201 Franklin Avenue, Tustin, CA 92780-7008 (7*4)730-6239 FAX: (714) 730-6462 www.truesdail.com

ORIES, INC.
CHAIN OF
Lustin, CA 92780-7008

CHAIN OF CUSTODY RECORD

[IM3plant-WDR-193] 982027

COC Number

TURNAROUND TIME 10 Days

DATE 03/04/09 PAGE 1

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COMPANY CH2M HILL	ILL		:					Una	_	_			_	_	_	-		_
PROJECT NAME PG&E TO	PG&E Topock IM3						-W 8	164	•			_	_	~		_		COMMENTS
PHONE 530	530-229-3303	FAX 530	FAX 530-339-3303		-		Θρηγο				B	ec'd	03	104/1	_		7	
ADDRESS 155 Gran	155 Grand Ave Ste 1000 Oakland, CA 94612					10 22. (In	19 55' (II)			_	- S	60 _	7 0	@8207 4 /////		_	BABNIAT	
P.O. NUMBER 379209.01.03.01	1.03.01			3(0)	J (0)	(80								_		3	Non	
SAMPLERS (SIGNATURE	C Vunt	\		(30)	000	109)	(661			•	•					O dia		
	Ò			SUOK		S/e/6	V.	•	•	•	-					BW		
SAMPLE 1D.	DATE	TIME	DESCRIPTION	/ ∻ /	~	() }			\neg	\neg		_		/ /		7 /		
SC-Sludge-WDR-193	03/04/09	10:00	Sludge	x	×	X			<u> </u>					-	,,,	3		:
				-														
										\vdash								
				,	ii.	Ř H		El const			1					-		
				et Bi Juniali Line		2		2	4		، نز «			_		_		
					# 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ξ,		3	4.77	1								
						:												·
															Ŋ		TOTAL NUM	TOTAL NUMBER OF CONTAINERS

SAMPLE CONDITIONS	RECEIVED COOL WARM *F	CUSTODY SEALED YES NO	SPECIAL REQUIREMENTS:	AI ERTII	ALLIN STATES	
	Date 3-4-09 Time 14-50	Date 3	Time of Co	Date 3/1/09	Date: 02.6	Date/ Time
CHAIN OF CUSTODY SIGNATURE RECORD	SWIGHT Company OUT	Company TAE	LAR Agency TLE	Company TLD	Company/ Agency	Company/ Agency
CHAIN OF CU	Printed 0.KN/6tm Name	Printed Name	Name 7	Printed 7	Printed Name	Printed Name
)	Signature (Relinquished) Claudith	Signature (Received)	(Relinquished)	(Received) Chabumus	Signature (Relinquished)	Signature (Received)



March 23, 2009

E2 Consulting Engineers, Inc. Mr. Shawn Duffy 155 Grand Ave., Suite 1000 Oakland, California 94612

Dear Mr. Duffy;

SUBJECT:

CASE NARRATIVE PG&E TOPOCK IM3PLAN'I-WDR-194 PROJECT, GROUNDWATER MONITORING, TLI NO.: 982269

Trucsdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-194 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, and Total Dissolved Solids. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The samples were received and delivered with the chain of custody on March 11, 2009, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

No violations or nonconformance actions occurred for this data package.

If you have any questions or require additional information, please contact me at (714) 730-6239 ext. 200.

Respectfully Submitted,

Soon Canda

TRUESDAIL LABORATORIES, INC.

Mona Nassimi

Manager, Analytical Services

K.R.P. Byc

K.R.P. Iver

Quality Assurance/Quality Control Officer

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc. 155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02

Laboratory No.: 982269

Date: March 23, 2009 Collected: March 11, 2009

Received: March 11, 2009

ANALYST LIST

		ANA_YST
EPA 120.1	Specific Conductivity	Tina Acquiat
SM 2540C	Total Dissolved Solids	Tina Acquiat
SM 2130B	Turbidity	Gautam Savani
EPA 200.7	Total Chromium	Daniel Kang
EPA 218.6	Hexavalent Chromium	Michael Nonezyan

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REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Prep. Batch: 031309A Laboratory No.: 982269

Date: March 23, 2009

Collected: March 11, 2009 Received: March 11, 2009

Prep/ Analyzed: March 13, 2009

Analytical Batch: 031309A

Investigation:

Total Chromium by Inductively Coupled Argon Plasma
Using Method EPA 200.7

Analytical Results Total Chromium

<u>TLI I.D.</u> Field I.D. Units Method **Run Time** DF RL Results 982269 SC-700B-WDR-194 μq/L EPA 200.7 13:51 1.00 1.00 ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	982265-3	21.3	21.7	1,86%	<u><</u> 20%	Yes

QC Sto	l Lab Number	Conc.of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
мѕ	982265-3	21.3	1.00	50.0	50.0	63.0	71.3	83.4%	70-130%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<1.00		<1.00	Yes
MRCCS	50.6	50.0	101%	95% - 105%	Yes
MRCVS#1	49.2	50.0	98.4%	90% - 110%	Yes
MRCVS#2	47.1	50.0	94.2%	90% - 110%	Yes
ICS	46.1	50.0	92.2%	80% - 120%	Yes
LCS	54.1	50.0	108%	90% - 110%	Yes

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from Truesdail Laboratories.

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Relative

Percent

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REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Laboratory

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

QC STD I.D.

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Laboratory No.: 982269

Date: March 23, 2009

QC Within

Collected: March 11, 2009

Received: March 11, 2009

Prep/ Analyzed: March 12, 2009

Analytical Batch: 03CrH09G

Acceptance

Investigation:

Hexavalent Chromium by EPA 218.6

Analytical Results Hexavalent Chromium

TLI I.D. Field I.D. Sample Time Run Time Units DF <u>RL</u> Results 982269 SC-700B-WDR-194 08:15 12:45 μg/L 1.05 0.20 ND

QA/QC Summary

Concentration

Duplicate

			N	nwoer			Conc	entration	Difference	limits	Control		
	Duplic	ate.	98	2267-3	17,8			17.8	0.00%	<u>≺</u> 20%	Yes		
QC Std I.D.	Lab Number	uns	nc.of piked nple	Dilution Factor	Added Spike Conc.	_ `	MS nount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control	
MS	982269	0.	00	1.06	1.00	1	1.06	1.02	1.06	96.2%	90 - 110%	Yes	1

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC WithIn Control
Blank	ND	<0.200		<0.200	Yes
MRCCS	4,80	5.00	96.0%	90% - 110%	Yes
MRCVS#1	9.68	10.0	96.8%	95% - 105%	Yes
MRCVS#2	9.61	10.0	96.1%	95% - 105%	Yes
MRCVS#3	9.75	10.0	97.5%	95% - 105%	Yes
MRCVS#4	9.78	10.0	97.8%	95% - 105%	Yes
LCS	4.80	5,00	96.0%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from Truesdail Laboratories.

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REPORT

14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Laboratory No.: 982269

Date: March 23, 2009

Collected: March 11, 2009

Received: March 11, 2009

Prep/ Analyzed: March 12, 2009

Analytical Batch: 03TUC09K

Investigation:

Turbidity by Method SM 2130B

Analytical Results Turbidity

TLI 1.D.

Field I.D.

Sample Time

Units

DF

RL

Results

982269

SC-700B-WDR-194

08:15

NTU

1.00

0.100

ND

009

QA/QC Summarv

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	982190-6	ND	ND	0.00%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	Z D	<0.100		<0,100	Yes
LCS	8.10	8.00	101%	90% - 110%	Yes
LCS	8.12	8.00	102%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

🚣 💄 Mona Nassimi, Manager

Analytical Services

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REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

QC STD

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Laboratory No.: 982269

Date: March 23, 2009

Collected: March 11, 2009

Received: March 11, 2009 Prep/ Analyzed: March 12, 2009

Analytical Batch: 03EC09E

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.

Field I.D.

LCS

LCSD

<u>Units</u>

<u>Method</u>

<u>DF</u>

<u>RL</u>

Results

010

982269

SC-700B-WDR-194

Laboratory

μmhos/cm

Concentration

694

694

EPA 120.1

98.3%

98.3%

1.00

90% - 110%

90% - 110%

Relative Percent | Acceptance | QC Within

2.00

6680

QA/QC Summary

I.D.	<u>. </u>	Number	r concentrati	 Concentra	ition		Difference		limits	Control
Duplic	ate	982269	6680	 6690			0.15%		≤ 10%	Yes
	QC	Std I.D.	Measured Concentration	Theoretical oncentration	Perce Recov		Acceptan Limits	ce	QC Withi Control	· · •
		Blank	ND	<2.00			<2.00		Yes	
		ccs	694	706	98.3	%	90% - 110	%	Yes	
	Ĭ	CV\$#1	982	1000	98.2	%	90% - 110	1%	Yes	7
i		CVS#2	982	1000	98.2	%	90% - 110	%	Yes	7

706

706

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Yes

Yes

fr.

Mona Nassimi, Manager Analytical Services

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REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Laboratory No.: 982269

Date: March 23, 2009

Collected: March 11, 2009

Received: March 11, 2009

Prep/ Analyzed: March 12, 2009

Analytical Batch: 03TDS09H

Investigation:

Total Dissolved Sollds by SM 2540C

Analytical Results Total Dissolved Solids

TLI I.D. 982269 <u>Field I.D.</u>

SC-700B-WDR-194

Units mg/L Method SM 2540C <u>RL</u> 250 Results 4190

QA/QC Summary

QC STD I.D.	Laboratory Number	' Concentration		Percent Difference	Acceptance limits	QC Within Control
Duplicate	982269	4190	4140	0.60%	<u>≤</u> 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<25.0		<25.0	Yes
LCS 1	498	500	99.6%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

RL: Reporting Limit.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager

Analytical Services

692286

CHAIN OF CUSTODY RECORD

[M3Plant-WDR-194]

뜽 10 Days PAGE TURNAROUND TIME DATE 03/11/09

COC Number

TOTAL NUMBER OF CONTAINERS COMMENTS NUMBER OF CONTAINERS ٧٦ Turbidity (SM2130) TOS (SARZSAOC) Specific Conductance (120.1) DESCRIPTION Water FAX (530) 339-3303 TEAM TRUESDAL LABORATORIES, INC. 14201 Franklin Avenue, Tustin, CA 92780-7008 (714)730-6239 FAX: {714} 730-6462 www.truesdail.com TIME 03/11/09 155 Grand Ave Ste 1000 DATE Oakland, CA 94612 (530) 229-3303 PG&E Topock 379209.01.02 SAMPLERS (SIGNATURE SC-7008-WDR-194 ជ PROJECT NAME P.O. NUMBER SAMPLE ID. COMPANY **A**DDRESS PHONE

Teval III

0819

182

Sesult

Sample

Sc-300 B

	ቷ.					
SAMPLE CONDITIONS	RECEIVED COOL [] WARM []	CUSTODY SEALED YES NO	SPECIAL REQUIREMENTS:			
0 11-09	Date / 000	Date 3-//-0 9 Time 75/30	Time 23:00	Date' 3-11-04	Date/13:00 Time	Date/ Time
CHAIN OF CUSTODY SIGNATURE RECORD	Printed A / Off Company! Off	Printed Rafe / Company T.L. I	Philad D for Company T. L. T.	Printed Company! / C. Name / C. L. Agency	Printed Company/	
CHAI	Signature Pri (Relinquished)	Reby Dove	Signature Signature Manager Control of the Control	1 A	Signature / (Relinquished)	



14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

March 30, 2009

E2 Consulting Engineers, Inc. Mr. Shawn Duffy 155 Grand Ave., Suite 1000 Oakland, California 94612

Dear Mr. Duffy:

SUBJECT:

CASE NARRATIVE PG&E TOPOCK IM3PLANT-WDR-194 PROJECT, GROUNDWATER MONITORING, TLI NO.: 982373

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-195 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, and Total Dissolved Solids. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The samples were received and delivered with the chain of custody on March 17, 2009, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

No violations or nonconformance actions occurred for this data package.

If you have any questions or require additional information, please contact me at (714) 730-6239 ext. 200.

Respectfully Submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi

Manager, Analytical Services

K. R. P. Syev

K.R.P. lyer

Quality Assurance/Quality Control Officer

EXCELLENCE IN INDEPENDENT TESTING



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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc. 155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02

Laboratory No.: 982373

Date: March 30, 2009

Collected: March 17, 2009 Received: March 17, 2009

ANALYST LIST

MERROD		ANALYST
EPA 120.1	Specific Conductivity	Tina Acquiat
SM 2540C	Total Dissolved Solids	Tina Acquiat
SM 2130B	Turbidity	Gautam Savani
EPA 200.7	Total Chromium	Daniel Kang
EPA 218.6	Hexavalent Chromium	Michael Nonezyan

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QC Within

Control

Yes

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REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

sample

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Prep. Batch: 031909B

Laboratory No.: 982373

Date: March 30, 2009

Collected: March 17, 2009

Received: March 17, 2009 Prep/ Analyzed: March 19, 2009

Analytical Batch: 031909B

Investigation:

Total Chromium by Inductively Coupled Argon Plasma Using Method EPA 200.7

Analytical Results Total Chromium

TLI I.D. Field I.D. <u>Units</u> Method Run Time Ð۴ _RL **Results** 982373 SC-700B-WDR-195 μg/L EPA 200.7 17:19 1.00 1.00 ND

QA/QC Summary

					~ ~,			,		
	QC STD	STD I.D. Laboratory Number		Concentra	Concentration		plicate entration	Relative Percent Difference	Acceptance limits	QC Within Control
	Duplic	ate	982373	ND			ND	0.00%	≤20%	Yes
QC Std I.D.	Lab Number	Conc.of unspiked	Dilution Factor	Added Spike		MS nount	Measured Conc. of spiked	Theoretical Conc. of	MS% Recovery	Acceptance limits

Conc.

_	0.0	1.	00	50.0	50.0	_	41.3	L	50.0	- 8	<u>82.6%</u>	70-130%
	QC Std	I.D.		leasured scentration	Theoretica Concentration		Percent Recover	_	Acceptanc Limits	6	QC Wit Contr	
	Blank	(ND	<1.00				<1.00		Yes	
	MRCC	s		51.3	50.0		103%		95% - 105%	6	Yes	
	MRCVS	i#1		50.4	50.0		101%		90% - 1109	6	Yes	
	ICS			53.1	50.0		106%		_80% - 1209	6	Yes	
	LCS			48.3	50.0		96.6%		90% - 1109	6	Yes	

sample

ND: Not detected at reporting limit

982373

DF: Dilution Factor

MŞ

Respectfully submitted.

spiked sample

TRUESDAIL LABORATORIES, INC.

Yes

🚣 Mona Nassimi, Manager Analytical Services

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REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02

Laboratory No.: 982373

Date: March 30, 2009

Collected: March 17, 2009

Received: March 17, 2009 Prep/ Analyzed: March 18, 2009

Analytical Batch: 03CrH09K

Investigation:

Hexavalent Chromium by EPA 218.6

Analytical Results Hexavalent Chromium

TLI I.D. Field I.D. Sample Time Run Time <u>Units</u> <u>DF</u> <u>RL</u> Results 982373 SC-700B-WDR-195 08:25 08:25 μg/L 1.05 0.20 ND

QA/QC Summary

	QC ST) I.D.	ı	ooratory umber	Concentrat	lon	1 _ •	licate ntration	Relative Percent Difference	A	cceptance limits	QC Within Control	
	Duplio	ate	98	2318-1	24.5		2.	4.4	0.41%		≤ 20%	Yes	
QC Std I.D.	Lab Number	uns	nc.of piked nple	Dilutio Factor		t.	MS nount	Measured Conc. of spiked sample	Theoretica Conc. of spiked samp		MS% Recovery	Acceptance limit	QC Within Control
мѕ	982373	0.	.00	1.06	1.00		1.06	1.05	1.06		99.1%	90 - 110%	Yes
		G	C Std	I.D.	Measured Concentration	I -	eoretical centratio	Percei n Recove			QC With		
			Blani		ND		<0.200		<0.20	00	Yes		
		- 1	MRCC	is i	4.83	I	5.00	06.60/	000/ 4	4007	V		

QC Std I.D.	Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.200		<0.200	Yes
MRCCS	4.83	5.00	96.6%	90% - 110%	Yes
MRCVS#1	10.0	10.0	100%	95% - 105%	Yes
MRCVS#2	9.68	10.0	96.8%	95% - 105%	Yes
MRCVS#3	10.1	10.0	101%	95% - 105%	Yes
MRCV\$#4	9.77	10.0	97.7%	95% - 105%	Yes
MRCVS#5	9.85	10.0	98.5%	95% - 105%	Yes
LCS	4.84	5.00	96.8%	90% - 110%	Ves

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

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REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02

Laboratory No.: 982373

Date: March 30, 2009

Collected: March 17, 2009

Received: March 17, 2009 Prep/ Analyzed: March 18, 2009

Analytical Batch: 03TUC09N

Investigation:

Turbidity by Method SM 2130B

Analytical Results Turbidity

TLI I.D.

<u>Field I</u>.D.

Sample Time

Units

DF

<u>R</u>L

Results 8 8 1

982373

SC-700B-WDR-195

08:25

NTU

1.00

0.100

ND

QA/QC Summarv

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	982367-17	0.143	0.144	0.70%	<u>< 2</u> 0%	Yes

QC Std 1.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.100		<0.100	Yeş
LCS	8.10	8.00	101%	90% - 110%	Yes
LCS	7.79	8.00	97.4%	90% - 110%	Yes

ND: Selow the reporting limit (Not Detected).

DF: Dilution Factor,

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

for Mona Nassimi, Manager

Analytical Services

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REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02

Laboratory No.: 982373

Date: March 30, 2009

Collected: March 17, 2009

Received: March 17, 2009 Prep/ Analyzed: March 18, 2009

Analytical Batch: 03EC09G

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.

Field I.D.

QC STD

<u>Units</u>

<u>Method</u>

<u>DF</u>

<u>RL</u>

Results

982373

SC-700B-WDR-195

umhos/cm

EPA 120.1

1.00

2.00

6670

QA/QC Summary Duplicate

	STD D.	Laboratory Number		" (CARABEPATIA)		Duplicate Concentration			ative Percent Difference	Acceptance limits		QC Within Control
Dup	licate	982373	l	6670		6680			0.15%	-	≤ 10%	Yes
	G	C Std I.D.	_	Measured Incentration		heoretical ncentration	Perc Reco		Acceptane Limits	Ce	QC With	1
		Blank		ND		<2.00			<2.00		Yes	_
	\vdash	ccs		692		706	98.0	%	90% - 110	- -	Yes	
	\vdash	CVS#1		976		1000	97.6	%	90% - 110		Yes	
		LCS		692		706	98.0	%	90% - 110		Yes	
	L_	LCSD		692		706	98,0	%	90% - 110		Yes	┪

Respectfully submitted.

TRUESDAIL LABORATORIES, INC.

لمر Mona Nassimi, Manager **Analytical Services**

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from Truesdail Laboratories.

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REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Laboratory No.: 982373

Date: March 30, 2009

Collected: March 17, 2009

Received: March 17, 2009 Prep/ Analyzed: March 18, 2009

Analytical Batch: 03TDS09J

Investigation:

Total Dissolved Solids by SM 2540C

Analytical Results Total Dissolved Solids

TLI I.D. 982373 <u>Field I.D.</u>

SC-700B-WDR-195

<u>Units</u> mg/L Method SM 2540C

<u>RL</u> 250 Results 3960

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control	
Duplicate	982373	3960	3890	0.89%	≤ 5%	Yes	

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<25.0		<25.0	Yes
LCS 1	497	500	99.4%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

RL: Reporting Limit,

Respectfully submitted.

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from Truesdail Laboratories.

E2

COMPANY

PROJECT NAME

TRUESDAIL LABORATORIES, INC. 14201 Franklin Avenue, Tustin, CA 92780-7008 (714)730-6239 FAX: (714) 730-6462 www.truesdail.com

CHAIN OF CUSTODY RECORD (IM3Plant-WDR-195)

922373 TURNAROUND TIME.

COC Number

10 Days

COMMENTS PAGE NUMBER OF CONTAINERS 98237 03/17/09 Rec'd Turbidity (SM2) (DE 15/0) Space Conductance (120.1) DESCRIPTION FAX (530) 339-3303 TEAM **#** 155 Grand Ave Ste 1000 DATE Oakland, CA 94612 (530) 229-3303 PG&E Topock 379209.01.02

Level III QC **ALERT!!**

28.0 2.34 6.9 -00/

603

0845

C, POTA!

0835 0831

TOTAL NUMBER OF CONTAINERS

 ∞

Water

15280

03/17/09

SC-700B-WDR-195

SAMPLE 1D.

SAMPLERS (SIGNATURE

P.O. NUMBER

ADDRESS

품

Results

TOTED

100

SC-700B

0828

0825

Temp

0825 8825

0830

9770

	å					
SAMPLE CONDITIONS	WARIN	<u></u>				
SAMPLE	000	ED YES	ENTS:			
	RECEIVED	CUSTODY SEALED	SPECIAL REQUIREMENTS:	0		
2-17-09	090	Date: 3-17-09 Time 15:29	Date 3-17-09	Date 3/14/09 2/19		
	Date/ -		Date: Time	Date: Time	Date/ Time	Date/ Time
GNATURE RECORD	Company 900	Company! 7. 1. 7	Agency T. K. T	Company! 72.2	Company/ Agency	Company! Agency
CHAIN OF CUSTODY SIGNAT	HOE	Robert	Rate	L. Shakun		
CHAIN O	Printed 7 Name,	Printed Printed	Printed	WE 11 My MA Name	Printed Name	Printed Name
11	Signature (Relinquished)	Signature (Received)	Signature (Relinquished)	Signature Signature (Received)	Signature (Relinquished)	Signature (Received)



14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

April 2, 2009

E2 Consulting Engineers, Inc. Mr. Shawn Duffy 155 Grand Ave., Suite 1000 Oakland, California 94612

Dear Mr. Duffy:

SUBJECT:

CASE NARRATIVE PG&E TOPOCK IM3PLANT-WDR-196 PROJECT, GROUNDWATER

MONITORING, TLI NO.: 982488

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-196 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, and Total Dissolved Solids. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The samples were received and delivered with the chain of custody on March 25, 2009, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

Due to the large number of samples in-house, the sample for Total Chromium analysis was analyzed by method EPA 200.8, rather than EPA 200.7 as requested on the chain of custody.

No other violations or nonconformance actions occurred for this data package.

If you have any questions or require additional information, please contact me at (714) 730-6239 ext. 200.

Respectfully Submitted, TRUESDAIL LABORATORIES, INC.

L Mona Nassimi

Manager, Analytical Services

K. R. P. Goe

K.R.P. Iver

Quality Assurance/Quality Control Officer

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

Client: E2 Consulting Engineers, Inc. 155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02

Laboratory No.: 982488

Date: April 2, 2009 Collected: March 25, 2009 Received: March 25, 2009

ANALYST LIST

	distribution of the state of th	ANNI VST
EPA 120.1	Specific Conductivity	Tina Acquiat
SM 2540C	Total Dissolved Solids	Tina Acquiat
SM 2130B	Turbidity	Gautam Savani
EPA 200.8	Total Chromium	Romuel Chavez
EPA 218.6	Hexavalent Chromium	Michael Nonezyan

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Prep. Batch: 040109B Laboratory No.: 982488

Date: April 2, 2009

Collected: March 25, 2009 Received: March 25, 2009

Prep/ Analyzed: April 1, 2009 Analytical Batch: 040109B

Investigation:

Total Chromium by Inductively Coupled Argon Plasma Mass Spectrometer using EPA 200.8

Analytical Results Total Chromium

TLI I.D. Field I.D. <u>Units</u> Method Run Time DF RLResults SC-700B-WDR-196 982488 μg/L **EPA 200.8** 20:32 5.00 1.00 ND

QA/QC Summary

QC STD I,D,	Laboratory Number	Number Concentration		Relative Percent Difference	Acceptance Ilmits	QC Within Control	
Duplicate	982268-10	126	124	1.60%	<u>≤</u> 20%	Yes	

QC Std I.D.	Lab Number	Conc.of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	982268-10	126	5.00	50.0	250	388	376	105%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<1.00		<1.00	Yes
MRCCS	51.6	50.0	103%	90% - 110%	Yes
MRCVS#1	51.6	50.0	103%	90% - 110%	Yes
MRCVS#2	51.5	50.0	103%	90% - 110%	Yes
ICS	50.6	50.0	101%	80% - 120%	Yes
LÇŞ	48.6	50.0	97.2%	90% - 110%	Yes

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

For Mona Nassimi, Manager Analytical Services

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Laboratory No.: 982488

Date: April 2, 2009

Collected: March 25, 2009 Received: March 25, 2009

Prep/ Analyzed: March 31, 2009

Analytical Batch: 03CrH09N

Investigation:

Hexavalent Chromium by EPA 218.6

Analytical Results Hexavalent Chromium

TLI I.D. Field I.D. Sample Time Run Time **Units** <u>DF</u> RL. **Results** 982488 SC-700B-WDR-196 08:00 08:00 μg/L 1.05 0.20 ND

QA/QC Summarv

						Q/A	VQ	<u> </u>	un	ımar	У						
	QC ST	STD I.D. Laboratory Number Concentration		on	1	plica entr	ate ation	ı	Relative Percent ifference	Acceptance limits			QC Within Control				
	Duplio	ate	98	2530-3		4.16			4,17			0.24%		<u><</u> 20%	╗	Yes	
QC Std I.D.	Lab Number	uns	nc.of piked npie	Diluti Fact		Added Spike Conc.		MS nount	C,	easured onc. of spiked sample	s	Theoretical Conc. of piked sample	R	MS% ecovery	Ac	cceptance limits	QC Within Control
MS	982488	0.	.00	1.0	6	1.00		1.06		1.14		1.06		108%		90 - 110%	Yes
		6	IC Std	I.D.	C	Measured oncentration		neoretic: ncentrat		Percer Recove		Acceptano Limits	ce	QC With			
			Blani	k		ND		<0.200		***		<0.200		Yes			
			MRCC	S		5.08		5.00		102%	<u>.</u> .	90% - 110	%	Yes]	
			MRCV	S#1		9.96		10.0		99.6%		95% - 105	%	Yes]	
			MRČVS	3#2		9.75		10.0		97.5%	,	95% - 105	%	Yes		1	

10.0

5.00

96.2%

101%

ND: Below the reporting limit (Not Detected).

MRCVS#3

LCS

9.62

5.07

DF: Dilution Factor.

Respectfully submitted.

95% - 105%

90% - 110%

TRUESDAIL LABORATORIES, INC.

800

Yes

Yes

Mona Nassimi, Manager
 Analytical Services

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Laboratory No.: 982488

Date: April 2, 2009

Collected: March 25, 2009

Received: March 25, 2009 Prep/ Analyzed: March 26, 2009

Analytical Batch: 03TUC09R

Investigation:

Turbidity by Method SM 2130B

Analytical Results Turbidity

TLI I.D. 982488 Field I.D.

SC-700B-WDR-196

Sample Time

08:00

Units NTU

DF 1.00

RL 0.100 Results

ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	982488	D	ND	0.00%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.100	-	<0.100	Yes
LCS	7.93	8.00	99.1%	90% - 110%	Yes
LCS	7.80	8.00	97.5%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

 $f_{
m e}$ – Mona Nassimi, Manager **Analytical Services**

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000 Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209.01.02 Laboratory No.: 982488

Date: April 2, 2009

Collected: March 25, 2009

Received: March 25, 2009

Prep/ Analyzed: March 27, 2009

Analytical Batch: 03EC09I

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

 TLI I.D.
 Field I.D.
 Units
 Method
 DF
 RL
 Results

 982488
 SC-700B-WDR-196
 μmhos/cm
 EPA 120.1
 1.00
 2.00
 6770

QA/QC Summary

QC S1		- Lancontrat	ion	Duplica Concentra			itive Percent Ofference		eptance limits	QC Within Control
Duplica	ate 982488	6770		6780			0.15%	_ :	<u>< 10%</u>	Yes
	QC Std I,D,	Measured Concentration		heoretical incentration	Perc		Acceptant Limits	ce	QC Withi	
	Blank	ND		<2.00		.	<2.00		Yes	┪
	ccs	694		706	98.3	%	90% - 110	%	Yes	_
	CVS#1	977		1000	97.7	′%	90% - 110	%	Yes	
	LCS	694		<u>7</u> 06	98.3	%	90% - 110	%	Yes	7
	LCSD	694		706	98.3	19%	90% - 110	%	Voc	7

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager Analytical Services

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14201 FRANKLIN AVENUE TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 www.truesdail.com

REPORT

Client: E2 Consulting Engineers, Inc.

155 Grand Ave. Suite 1000

Oakland, CA 94612

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 379209.01.02 P.O. No.: 379209,01,02

Laboratory No.; 982488

Date: April 2, 2009

Collected: March 25, 2009 Received: March 25, 2009

Prep/ Analyzed: March 27, 2009

Analytical Batch: 03TDS09L

Investigation:

Total Dissolved Solids by SM 2540C

Analytical Results Total Dissolved Solids

TLI I.D.

Field I.D.

Units

Method

RL

Results

982488

SC-700B-WDR-196

mg/L

SM 2540C

250

3830

QA/QC Summary

QC STD I,D,	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance Ilmits	QC Within Control
Duplicate	982488	3830	3900	0.91%	≤ 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<25.0		<25.0	Yes
LCS 1	503	500	101%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

RL: Reporting Limit,

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

- Mona Nassimi, Manager Analytical Services

TRUESDAL LABORATORIES, INC. 14201 Franklin Avenue, Tustin, CA 92780-7008 {714}730-6239 FAX: (714) 730-6462 www.tnsesdail.com

CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-196]

922488 TURNAROUND TIME DATE 03/25/09 COC Number

ㅎ

PAGE 40

Days

COMMENTS マング NUMBER OF CONTAINERS W) S#98248 03/25/09 Rec'd (OEISME) (SMETED) Spacific Conductance (120,1) DESCRIPTION Water Fax (530) 339-3303 TEAM ᄪ 55 Grand Ave Ste 1000 DATE Oakland, CA 94612 (530) 229-3303 PG&E Topock 379209.01.02 SAMPLERS (SKONATURE SC-700B-WDR-196 23 PROJECT NAME P.O. NUMBER SAMPLE LD. COMPANY ADDRESS PHONE

9080 Trail Testery 5080

Crown , 000 X

Temp 78.

File SAMPLED

8C-700B

0800

TOTAL NUMBER OF CONTAINERS

3 /	CHAIN OF CUSTODY SIGNATURE RECORD		2.25-09	SAMPLE CONDITIONS
Signature (Relinquished)	Printed ALDL	Companyl MM I	Dated 2 900	RECEIVED COOL WARM F
Signature Rah (p.v.	Winted Robert	Company 7- X- X	Dated 3-25-09 Time /5:30	CUSTODY SEALED YES \(\Box\) NO \(\Box\)
Signature (Relinquished)	Printed Karfor	Company! 7.4.7	Untel 3-25-09 SPECIAL REQUIREMENTS:	SPECIAL REQUIREMENTS:
Signature & The Russian	Printed Compared Name Agency	Company! TLD	Date/ MAR 2 5 2009	
Signature (Relinquished)	Printed Name	Company/ Agency	Date/ 20:40 Time	
Signature (Received)	Printed Name	Company/ Agency	Date/ Time	