Pacific Gas and Electric Company

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October 15, 2008

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: Board Order R7-2006-0060
PG&E Topock Compressor Station, Needles, California
Interim Measure No. 3 Groundwater Treatment System
Discharge to Injection Wells
Third Quarter 2008 Monitoring Report

Dear Mr. Perdue:

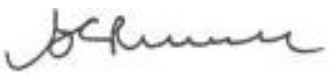
Enclosed is the Third Quarter 2008 Monitoring Report for the Pacific Gas and Electric Company (PG&E) Topock Compressor Station, Interim Measure (IM) No. 3 Groundwater Treatment System.

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 Onsite Project Manager

Enclosures:

Third Quarter 2008 Monitoring Report for the IM No. 3 Groundwater Treatment System

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

BAO\082890001

Third Quarter 2008 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

October 15, 2008

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155 Grand Avenue, Suite 1000
Oakland, CA 94612

Third Quarter 2008 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

October 15, 2008

This report was prepared under the supervision of a California Certified Professional Engineer

Dennis Fink

Dennis Fink, P.E. No. 68986
Project Engineer

Contents

Acronyms and Abbreviations

IM	Interim Measure
MRP	Monitoring and Reporting Program
PG&E	Pacific Gas and Electric Company
Truesdail	Truesdail Laboratories, Inc.
Water Board	California Regional Water Quality Control Board, Colorado River Basin Region
WDR	Waste Discharge Requirements

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 Third Quarter 2008. 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 Third Quarter 2008, 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 September 9, 2008 during Arcadis sampling, otherwise it was not operated during the Third Quarter 2008. Extraction well TW-2S was not operated during Third Quarter 2008. The operational run time for the IM groundwater extraction system (combined or individual pumping), by month, was approximately:

- 97.0 percent during July 2008.
- 97.5 percent during August 2008.
- 91.8 percent during September 2008.

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.

Two release events were reported by telephone to Cliff Raley of the Water Board on October 1, 2008. Mr. Raley indicated by telephone that PG&E should include a description of the two events with the next scheduled Self-Monitoring Report, and that no further actions would be required. The following constitutes a description of the two events:

- The first release was approximately 100 - 200 gallons of combined sewage/potable water from the sewage holding tank. The release occurred September 30, 2008, and overflowed

from the holding tank vent to the onsite gravel area adjacent to and west of the office trailer. The release was due to a failure of the toilet in the IM No. 3 office trailer to stop flow after flushing. To mitigate odor and to disinfect the area affected by the release, PG&E applied a mix of 17 gallons sodium hypochlorite and 17 gallons water to the affected area with sprayers. The septic system is not a part of the IM-3 groundwater treatment system and Mr. Raley confirmed that this release event is not a violation of the WDRs.

- The second release also occurred September 30, 2008 when approximately 1 - 5 gallons of treatment water sprayed out from failed microfilter tubing onto the surface of the adjacent gravel roadway within the station fence line. The treatment plant was immediately shut down and all the wetted gravel was collected and disposed off-site at a permitted disposal facility. The water released was downstream of the hexavalent chromium reduction and the sludge removal steps in the IM-3 process, and just upstream of the final microfiltration step. A sample of treatment water flowing through the microfilter tubing was collected on September 30, 2008 immediately after the release. On-site laboratory analysis indicated that the sampled water was non-detect for hexavalent chromium and total chromium (with a detection limit of 5 ppb and 10 ppb respectively), 9150 *u*mhos/cm specific conductivity, pH 8.2, and 63.3 NTU turbidity. After evaluating the information that PG&E provided to him concerning this event, Mr. Raley provided written confirmation to PG&E that "your prompt and immediate action to repair the pinhole leak (before a substantial problem occurred) prevented the facility from being in violation of Discharge Prohibition A.4. which states, '…bypass overflow, discharge or spill of untreated or partially treated wastewater is prohibited.'"

4.0 Groundwater Treatment System Flow Rates

The Third Quarter 2008 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 17,115,857 gallons of extracted groundwater during Third Quarter 2008. The IM No. 3 facility also treated approximately 2,720 gallons of water generated from the groundwater monitoring program and 74,800 gallons of injection well development water.

There were five containers of solids transported offsite from the IM No. 3 facility during Third Quarter 2008.

Periods of planned and unplanned extraction system downtime (that together resulted in approximately 4.6 percent of downtime during Third Quarter 2008) 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 July 2008

- **July 10-11, 2008 (unplanned):** The extraction well system was offline from July 10 at 4:46 p.m. until 4:54 p.m. and from 11:55 p.m. to July 11 at 12:01 a.m. when a City of Needles power supply imbalance alarmed and shut down the extraction wells. Extraction system downtime was 14 minutes.
- **July 16, 2008 (planned):** The extraction well system was offline from 2:08 a.m. to 7:20 p.m. to perform scheduled monthly maintenance. Extraction system downtime was 17 hours and 12 minutes.
- **July 20, 2008 (unplanned):** The extraction well system was offline from 7:35 a.m. to 12:41 p.m. when lightening struck the plant causing the extraction well system to shutdown. Extraction system downtime was 5 hours and 6 minutes.

4.2 August 2008

- **August 5, 2008 (unplanned):** The extraction well system was offline from 6:14 p.m. to 6:16 p.m. and from 6:34 p.m. to 6:40 p.m. when a City of Needles power supply imbalance alarmed and shut down the extraction wells. Extraction system downtime was 8 minutes.

- **August 8, 2008 (unplanned):** The extraction well system was offline from 6:40 p.m. to 6:41 p.m., from 7:03 p.m. to 7:13 p.m., from 7:14 p.m. to 7:15 p.m., and from 7:21 p.m. to 10:43 p.m. when a City of Needles power supply imbalance alarmed and shut down the extraction wells. Extraction system downtime was 3 hours and 34 minutes.
- **August 20-21, 2008 (planned):** The extraction well system was offline from August 20 at 7:33 a.m. to 4:09 p.m. to perform scheduled monthly maintenance. It was also offline from 5:15 p.m. to 8:33 p.m. when the level in the reverse osmosis feed tank was too high, and it was offline from 9:38 p.m. to 10:03 p.m. and from 10:16 to August 21 at 12:04 a.m. when the level in the raw water feed tank was too high. Extraction system downtime was 14 hours and 7 minutes.
- **August 25, 2008 (unplanned):** The extraction well system was offline from 5:01 p.m. to 5:26 p.m. when a City of Needles power supply imbalance alarmed and shut down the extraction wells. Extraction system downtime was 25 minutes.
- **August 26, 2008 (unplanned):** The extraction well system was offline from 7:41 a.m. to 7:44 a.m. when plant power was switched from generator power to City of Needles power. Extraction system downtime was 3 minutes.

4.3 September 2008

- **September 3, 2008 (planned):** The extraction well system was offline from 12:41 p.m. to 12:57 p.m. for maintenance. Extraction system downtime was 16 minutes.
- **September 6, 2008 (unplanned):** The extraction well system was offline from 1:11 a.m. to 6:33 a.m. when a low-flow alarm in the chemical loop triggered, shutting down the extraction system. Extraction system downtime was 5 hours and 22 minutes.
- **September 15 -17, 2008 (planned):** The extraction well system was offline from 8:13 a.m. on September 15 to 9:09 a.m. on September 17 to perform scheduled monthly maintenance. Extraction system downtime was 2 days and 56 minutes.
- **September 17, 2008 (unplanned):** The extraction well system was offline from 1:49 p.m. to 3:12 p.m. when a City of Needles power supply imbalance alarmed and shut down the extraction wells. Extraction system downtime was 1 hour and 23 minutes.
- **September 18, 2008 (planned):** The extraction well system was offline from 6:38 a.m. to 6:47 a.m. when the plant was switched from generator power back to City of Needles power supply. Extraction system downtime was 9 minutes.
- **September 23, 2008 (unplanned):** The extraction well system was offline from 8:33 a.m. to 8:34 a.m., from 8:44 a.m. to 9:11 a.m., from 11:32 a.m. to 11:33 a.m., and from 11:35 a.m. to 11:59 a.m. when a City of Needles power supply imbalance alarmed and shut down the extraction wells. Extraction system downtime was 53 minutes.
- **September 30, 2008 (unplanned):** The extraction well system was offline from 8:56 a.m. to 11:02 a.m. when a leak was detected in the microfilter tubing. The tubing was repaired and the plant was brought back online. Extraction system downtime was 2 hours and 6 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 Third Quarter 2008, analysis of pH was conducted at Truesdail for each sample. Analysis of pH was also 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 and 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. 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 Third Quarter 2008 were prepared by certified analytical laboratories, and are presented in Appendix A.

The Third Quarter 2008 analytical results from groundwater treatment system influent, effluent, reverse osmosis concentrate, and sludge samples are presented in Tables 4, 5, 6, and 7, respectively.

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.

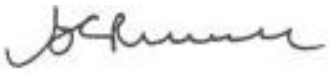
In addition, no incidents of non-compliance were identified during the reporting period. No events that caused an immediate or potential threat to human health or the environment, or new releases of hazardous waste or hazardous waste constituents, or new solid waste management units were identified during 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 R7-2006-0600 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: 

Name: Curt Russell

Company: Pacific Gas and Electric Company

Title: Topock Onsite Project Manager

Date: October 15, 2008

Tables

TABLE 1
Sampling Station Descriptions
Third Quarter 2008 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.

[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
Third Quarter 2008 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)
July 2008 Average Monthly Flowrate	130.1	127.4	5.3
August 2008 Average Monthly Flowrate	132.6	127.7	6.3
September 2008 Average Monthly Flowrate	124.8	120.2	5.7

Notes:

gpm: gallons per minute.

[a] Extraction wells TW-3D and PE-1 were operated during the Third Quarter 2008. Extraction well TW-2D ran for a short period on September 9, 2008 during a groundwater sampling event.

[b] The difference between influent flow rate and the sum of the effluent and reverse osmosis concentrate flow rates during the Third Quarter 2008 is approximately 1.3 percent.

[c] Effluent was discharged into injection wells IW-02 and IW-03 during the Third Quarter 2008.

TABLE 3
Sample Collection Dates
Third Quarter 2008 Monitoring Report for Interim Measure No. 3 Groundwater Treatment System

Parameter	Sample Collection Dates	Results
Influent[a]	July 2, 2008	See Table 4
	August 6, 2008	
	September 4, 2008	
Effluent[b]	July 2, 2008	See Table 5
	July 10, 2008	
	July 17, 2008	
	July 23, 2008	
	July 30, 2008	
	August 6, 2008	
	August 13, 2008	
	August 19, 2008	
	August 26, 2008	
	September 4, 2008	
	September 10, 2008	
	September 22, 2008	
	September 24, 2008	
Reverse Osmosis Concentrate[c]	July 2, 2008	See Table 6
	August 6, 2008	
	September 4, 2008	
Sludge[d]	July 10, 2008	See Table 7
	August 6, 2008	
	September 4, 2008	

Notes:

[a] Influent sampling is required monthly.

[b] Effluent sampling is required weekly.

[c] Reverse Osmosis Concentrate sampling is required quarterly; was required monthly prior to August 28, 2008.

[d] Sludge sampling is required quarterly; was required monthly prior to August 28, 2008.

TABLE 4
Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs)
Influent Monitoring Results [a]
Third Quarter 2008 Report for Interim Measures No.3 Groundwater Treatment System

Required Sampling Frequency		Monthly																						
Analytes		TDS	Turbidity	Specific Conductance	Lab [c] pH	Field [d] 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 [b]		mg/L	NTU	µmhos/cm	pHunits	pHunits	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
MDL		50.4	0.0070	0.153	0.0700	---	0.266	3.04	0.256	0.0090	0.0225	0.0150	0.0162	0.0048	0.130	0.0250	0.0182	0.0161	0.0168	0.127	0.0350	0.0010	1.20	2.40	0.115
Sample ID	**Date**																							
SC-100B-WDR-158	**7/2/2008**	**5040**	**ND (0.100)**	**7790**	**7.44 J**	**7.1**	**1290**	**1300**	**ND (50.0)**	**ND (0.500)**	**ND (3.00)**	**ND (5.00)**	**ND (300)**	**1.33**	**ND (10.0)**	**2.74**	**ND (2.00)**	**ND (20.0)**	**23.1**	**ND (20.0)**	**2.88**	**ND (0.0050)**	**581**	**ND (20.0)**	**ND (20.0)**
RL		250	0.100	2.00	2.00	---	1.00	21.0	50.0	0.500	3.00	5.00	300	0.200	10.0	0.500	2.00	20.0	5.00	20.0	1.00	0.0050	25.0	20.0	20.0
SC-100B-WDR-163	**8/6/2008**	**5180**	**0.104**	**7760**	**7.39 J**	**7.4**	**1200**	**1180**	**ND (50.0)**	**ND (0.500)**	**ND (10.0)**	**3.21**	**26.0**	**1.05**	**ND (5.00)**	**2.61**	**ND (10.0)**	**ND (10.0)**	**11.3**	**ND (10.0)**	**2.99**	**ND (0.0050)**	**574**	**ND (20.0)**	**ND (10.0)**
RL		250	0.100	2.00	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	25.0	20.0	10.0
SC-100B-WDR-167	**9/4/2008**	**4830**	**0.115**	**7920**	**7.12 J**	**7.8**	**1260**	**1260**	**ND (50.0)**	**ND (0.500)**	**ND (10.0)**	**3.46**	**23.5**	**0.916**	**ND (5.00)**	**3.02**	**ND (10.0)**	**ND (10.0)**	**26.2**	**ND (10.0)**	**3.10**	**ND (0.0050)**	**573**	**ND (20.0)**	**ND (10.0)**
RL		250	0.100	2.00	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	12.5	20.0	10.0

NOTES:

(---) = not required by the WDR Monitoring and Reporting Program
µg/L = micrograms per liter
mg/L = milligrams per liter
NTU = nephelometric turbidity units
µmhos/cm = micromhos per centimeter
ND = parameter not detected at the listed value
J = concentration or reporting limits estimated by laboratory or validation
MDL = method detection limit
RL = project reporting limit
N = nitrogen

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 pH results are J flagged because recent EPA requirements for pH analysis have 15-minute holding time.

d 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]
Third Quarter 2008 Report for Interim Measures No.3 Groundwater Treatment System

WDRs Effluent Limits[b]	Ave. Monthly	NA	NA	NA	6.5-8.4	6.5-8.4	25	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Max Daily	NA	NA	NA	6.5-8.4	6.5-8.4	50	16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Required Sampling Frequency		**Weekly**							**Monthly**																	
Analytes		TDS	Turbidity	Specific Conductance	Lab [e] pH	Field [f] 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	pHunits	pHunits	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
MDL[d]		50.4	0.0070	0.153	0.0700	---	0.0532	0.152	0.256	0.0090	0.0225	0.0150	0.0162	0.0048	0.130	0.0250	0.0182	0.0161	0.0168	0.127	0.0350	0.0010	2.40	2.40	0.115
Sample ID	**Date**																									
SC-700B-WDR-158	**7/2/2008**	**4510**	**ND (0.100)**	**7010**	**8.03 J**	**8.0**	**ND (1.00)**	**ND (0.200)**	**ND (50.0)**	**ND (0.500)**	**ND (3.00)**	**ND (5.00)**	**ND (300)**	**1.26**	**ND (10.0)**	**2.74**	**ND (2.00)**	**ND (20.0)**	**18.6**	**ND (20.0)**	**2.65**	**ND (0.0050)**	**526**	**53.7 J**	**ND (20.0)**
RL		250	0.100	2.00	2.00	---	1.00	0.200	50.0	0.500	3.00	5.00	300	0.200	10.0	0.500	2.00	20.0	5.00	20.0	1.00	0.0050	50.0	20.0	20.0
SC-700B-WDR-159	**7/10/2008**	**4450**	**ND (0.100)**	**6910**	**7.90 J**	**8.0**	**ND (1.00)**	**ND (0.200)**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
RL		250	0.100	2.00	2.00	---	1.00	0.200	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SC-700B-WDR-160	**7/17/2008**	**4030**	**ND (0.100)**	**6610**	**7.85 J**	**7.9**	**ND (1.00)**	**ND (0.200)**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
RL		250	0.100	2.00	2.00	---	1.00	0.200	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SC-700B-WDR-161	**7/23/2008**	**4200**	**ND (0.100)**	**6270**	**8.01 J**	**8.0**	**ND (1.00)**	**ND (0.200)**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
RL		250	0.100	2.00	2.00	---	1.00	0.200	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SC-700B-WDR-162	**7/30/2008**	**4140**	**ND (0.100)**	**6590**	**7.98 J**	**8.1**	**ND (1.00)**	**ND (0.200)**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
RL		250	0.100	2.00	2.00	---	1.00	0.200	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SC-700B-WDR-163	**8/6/2008**	**4360**	**ND (0.100)**	**6690**	**7.86 J**	**8.0**	**ND (1.00)**	**ND (1.05)J**	**ND (50.0)**	**ND (0.500)**	**ND (10.0)**	**0.330**	**14.5**	**1.01**	**ND (5.00)**	**2.20**	**ND (10.0)**	**ND (10.0)**	**ND (10.0)**	**ND (10.0)**	**2.63**	**ND (0.0050)**	**483**	**ND (20.0)**	**ND (10.0)**
RL		250	0.100	2.00	2.00	---	1.00	1.05	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	25.0	20.0	10.0
SC-700B-WDR-164	**8/13/2008**	**4160**	**ND (0.100)**	**6750**	**7.90 J**	**8.0**	**ND (1.00)**	**ND (0.200)**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
RL		250	0.100	2.00	2.00	---	1.00	0.200	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SC-700B-WDR-165	**8/19/2008**	**4420**	**ND (0.100)**	**6690**	**7.86 J**	**8.1**	**ND (1.00)**	**ND (0.200)**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
RL		250	0.100	2.00	2.00	---	1.00	0.200	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SC-700B-WDR-166	**8/26/2008**	**4210**	**ND (0.100)**	**6740**	**7.89 J**	**7.9**	**ND (1.00)**	**0.650**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
RL		250	0.100	2.00	2.00	---	1.00	0.200	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SC-700B-WDR-167	**9/4/2008**	**4220**	**ND (0.100)**	**6750**	**7.39 J**	**7.9**	**ND (1.00)**	**ND (0.200)**	**ND (50.0)**	**ND (0.500)**	**ND (10.0)**	**ND (0.200)**	**12.8**	**1.02**	**ND (5.00)**	**2.30**	**ND (10.0)**	**41.1**	**19.7**	**ND (10.0)**	**2.71**	**ND (0.0050)**	**480**	**ND (20.0)**	**ND (10.0)**
RL		250	0.100	2.00	2.00	---	1.00	0.200	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	12.5	20.0	10.0
SC-700B-WDR-168	**9/10/2008**	**4170**	**0.116**	**6700**	**7.82 J**	**8.0**	**ND (1.00)**	**ND (1.05)**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
RL		250	0.100	2.00	2.00	---	1.00	1.05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SC-700B-WDR-169	**9/22/2008**	**4170**	**ND (0.100)**	**6610**	**7.60 J**	**8.0**	**ND (1.00)**	**ND (0.200)**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
RL		250	0.100	2.00	2.00	---	1.00	0.200	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SC-700B-WDR-170	**9/24/2008**	**4060**	**ND (0.100)**	**6670**	**7.70 J**	**8.0**	**ND (1.00)**	**ND (0.200)**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
RL		250	0.100	2.00	2.00	---	1.00	0.200	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 5
Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs)
Effluent Monitoring Results[a]
Third Quarter 2008 Report for Interim Measures No.3 Groundwater Treatment System

NOTES:

(---) = not required by the WDR Monitoring and Reporting Program
NA = not applicable
µg/L = micrograms per liter
mg/L = milligrams per liter
NTU = nephelometric turbidity units
µmhos/cm = micromhos per centimeter
ND = parameter not detected at the listed value
J = concentration or reporting limits estimated by laboratory or validation
RL = project reporting limit
MDL = method detection limit
N = nitrogen

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.

e pH results are J flagged because recent EPA requirements for pH analysis have 15-minute holding time.

f 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 Results [a]
Third Quarter 2008 Report for Interim Measures No.3 Groundwater Treatment System

Required Sampling Frequency		Quarterly																					
Analytes		TDS	Specific Conductance	Lab pH [c]	Field pH [d]	Chromium	Hexavalent Chromium	Antimony	Arsenic	Barium	Beryllium	Cadmium	Cobalt	Copper	Fluoride	Lead	Molybdenum	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Units [b]		mg/L	µmhos/cm	pHunits	pHunits	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MDL		126	0.153	0.0700	---	0.00027	0.00030	0.00011	0.00015	0.00016	0.00038	0.000058	0.00013	0.0013	0.0250	0.00018	0.00017	0.000060	0.00064	0.00016	0.00011	0.000090	0.000062	0.0012
Sample ID	**Date**																							
SC-701-WDR-158	**7/2/2008**	**21000**	**28700**	**7.84 J**	**7.9**	**ND (0.0010)**	**ND (0.0010)**	**ND (0.0030)**	**ND (0.0050)**	**ND (0.300)**	**ND (0.0010)**	**ND (0.0020)**	**0.00685**	**0.0168**	**12.7**	**ND (0.0020)**	**0.101**	**ND (0.00020)**	**ND (0.0200)**	**0.00576**	**0.0638**	**ND (0.0010)**	**0.00580**	**ND (0.0200)**
RL		625	2.00	2.00	---	0.0010	0.0010	0.0030	0.0050	0.300	0.0010	0.0020	0.0050	0.0100	0.500	0.0020	0.0050	0.00020	0.0200	0.0050	0.0050	0.0010	0.0050	0.0200
SC-701-WDR-163	**8/6/2008**	**20900**	**29900**	**7.83 J**	**8.0**	**0.00222**	**ND (0.0021)**	**ND (0.0100)**	**0.00238**	**0.0730**	**ND (0.0010)**	**ND (0.0030)**	**0.00857**	**0.0123**	**11.9**	**ND (0.0100)**	**0.0880**	**ND (0.00040)**	**0.0132**	**0.0158**	**ND (0.0050)**	**ND (0.0010)**	**0.00562**	**0.0524**
RL		625	2.00	2.00	---	0.0010	0.0021	0.0100	0.0010	0.0100	0.0010	0.0030	0.0050	0.0050	0.500	0.0100	0.0100	0.00040	0.0100	0.0100	0.0050	0.0010	0.0050	0.0100
SC-701-WDR-167	**9/4/2008**	**20400**	**28700**	**7.56 J**	**8.2**	**ND (0.0010)**	**ND (0.0010)**	**ND (0.0100)**	**ND (0.0020)**	**0.0663**	**ND (0.0020)**	**ND (0.0030)**	**ND (0.0050)**	**ND (0.0050)**	**10.3**	**ND (0.0100)**	**0.0734**	**0.000540**	**0.0140**	**0.0106**	**ND (0.0050)**	**ND (0.0010)**	**ND (0.0050)**	**ND (0.0100)**
RL		625	2.00	2.00	---	0.0010	0.0010	0.0100	0.0020	0.0100	0.0020	0.0030	0.0050	0.0050	0.500	0.0100	0.0100	0.00020	0.0100	0.0100	0.0050	0.0010	0.0050	0.0100

NOTES:

(---) = not required by the WDR Monitoring and Reporting Program
µg/L = micrograms per liter
mg/L = milligrams per liter
µmhos/cm = micromhos per centimeter
ND = parameter not detected at the listed value
J = concentration or reporting limits estimated by laboratory or validation
MDL = method detection limit
RL = project reporting limit

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 pH results are J flagged because recent EPA requirements for pH analysis have 15-minute holding time.

d 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]
Third Quarter 2008 Report for Interim Measures No.3 Groundwater Treatment System

Required Sampling Frequency		Quarterly																		Annually
Analytes		Chromium	Hexavalent Chromium	Antimony	Arsenic	Barium	Beryllium	Cadmium	Cobalt	Copper	Fluoride	Lead	Molybdenum	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Bioassay [c]
Units [b]		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	% Survival at 750 mg/L
MDL		0.0680	2.36	0.0414	0.0360	0.0104	0.0120	0.0204	0.0080	0.0173	0.0309	0.0224	0.0492	0.0333	0.0136	0.0228	0.0130	0.0292	0.0136	0.0124	5%
Sample ID	**Date**																				
SC-Sludge-WDR-159	**7/10/2008**	**16400**	**204**	**211**	**79.5**	**96.9**	**299**	**43.5**	**ND (2.50)**	**86.6**	**102**	**ND (3.79)**	**31.3**	**0.564**	**ND (2.50)**	**ND (19.0)**	**17.4**	**ND (3.79)**	**163**	**110**	**100**
RL		19.0	16.0	3.79	2.50	2.50	2.50	3.79	2.50	2.50	16.0	3.79	19.0	0.137	2.50	19.0	3.79	3.79	2.50	9.48	100
SC-Sludge-WDR-163	**8/6/2008**	**5650**	**83.1**	**83.5**	**29.5**	**39.2**	**133**	**15.5**	**ND (1.00)**	**38.6**	**28.1**	**ND (1.90)**	**ND (9.51)**	**0.116 J**	**ND (1.00)**	**101**	**4.24**	**ND (2.00)**	**62.7**	**62.2**	**---**
RL		9.51	8.44	2.00	0.951	1.00	0.951	1.90	1.00	1.00	8.44	1.90	9.51	0.100	1.00	4.75	1.90	2.00	1.00	4.75	---
SC-Sludge-WDR-167	**9/4/2008**	**22000**	**312 J**	**301**	**65.4**	**133**	**497**	**56.9**	**ND (2.82)**	**257**	**98.8**	**ND (5.64)**	**39.0 J**	**0.667**	**ND (2.82)**	**ND (28.2)**	**ND (28.2)**	**ND (5.64)**	**233**	**300**	**100**
RL		28.2	24.7	5.64	28.2	2.82	2.82	5.64	2.82	2.82	24.7	5.64	28.2	0.222	2.82	28.2	28.2	5.64	2.82	14.1	100

NOTES:

(---) = not required by the WDR Monitoring and Reporting Program
ND = parameter not detected at the listed reporting limit
J = concentration or reporting limits estimated by laboratory or validation
mg/kg = milligrams per killogram
mg/L = milligrams per liter
MDL = method detection limit
RL = project 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 WDR
c Concentration of sludge per 1 liter of water.

TABLE 8
Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs)
Monitoring Information
Third Quarter 2008 Report for Interim Measures 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-158	John Deetz	7/2/2008	3:50:00 PM	TLI	EPA 120.1	SC	7/3/2008	Tina Acquiat
					TLI	EPA 200.7	B	7/14/2008	Hao Ton
					TLI	EPA 200.7	FE	7/14/2008	Hao Ton
					TLI	EPA 200.8	AS	7/10/2008	Linda Saetern
					TLI	EPA 200.8	ZN	7/10/2008	Linda Saetern
					TLI	EPA 200.8	SB	7/10/2008	Linda Saetern
					TLI	EPA 200.8	PB	7/10/2008	Linda Saetern
					TLI	EPA 200.8	NI	7/10/2008	Linda Saetern
					TLI	EPA 200.8	MO	7/10/2008	Linda Saetern
					TLI	EPA 200.8	MN	7/10/2008	Linda Saetern
					TLI	EPA 200.8	CU	7/10/2008	Linda Saetern
					TLI	EPA 200.8	CR	7/10/2008	Linda Saetern
					TLI	EPA 200.8	AL	7/10/2008	Linda Saetern
					TLI	EPA 200.8	BA	7/10/2008	Linda Saetern
					TLI	EPA 218.6	CR6	7/3/2008	Jean-Paul Gleeson
					TLI	EPA 300.0	FL	7/3/2008	Giawad Ghenniwa
					TLI	EPA 300.0	SO4	7/3/2008	Giawad Ghenniwa
					TLI	EPA 300.0	NO3N	7/3/2008	Giawad Ghenniwa
					FIELD	HACH	PH	7/2/2008	John Deetz
					TLI	SM2130B	TRB	7/3/2008	Gautam Savani
					TLI	SM2540C	TDS	7/3/2008	Tina Acquiat
					TLI	SM4500-HB	PH	7/3/2008	Tina Acquiat/Iordan Stavrev
					TLI	SM4500NH3D	NH3N	7/8/2008	Iordan Stavrev
					TLI	SM4500NO2B	NO2N	7/3/2008	Tina Acquiat
SC-100B	SC-100B-WDR-163	Joe Aide	8/6/2008	9:45:00 AM	TLI	EPA 120.1	SC	8/7/2008	Tina Acquiat
					TLI	EPA 200.7	B	9/5/2008	Hao Ton
					TLI	EPA 200.7	FE	9/9/2008	Hao Ton
					TLI	EPA 200.8	MO	8/20/2008	Romuel Chaves
					TLI	EPA 200.8	AS	8/20/2008	Romuel Chaves
					TLI	EPA 200.8	MN	8/20/2008	Romuel Chaves
					TLI	EPA 200.8	SB	8/22/2008	Romuel Chaves
					TLI	EPA 200.8	NI	8/20/2008	Romuel Chaves
					TLI	EPA 200.8	ZN	8/20/2008	Romuel Chaves
					TLI	EPA 200.8	CR	8/20/2008	Romuel Chaves
					TLI	EPA 200.8	AL	8/22/2008	Romuel Chaves
					TLI	EPA 200.8	BA	8/20/2008	Romuel Chaves

TABLE 8
Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs)
Monitoring Information
Third Quarter 2008 Report for Interim Measures 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-163	Joe Aide	8/6/2008	9:45:00 AM	TLI	EPA 200.8	CU	8/20/2008	Romuel Chaves
					TLI	EPA 200.8	PB	8/20/2008	Romuel Chaves
					TLI	EPA 218.6	CR6	8/7/2008	Jean-Paul Gleeson
					TLI	EPA 300.0	SO4	8/7/2008	Giawad Ghenniwa
					TLI	EPA 300.0	NO3N	8/7/2008	Giawad Ghenniwa
					TLI	EPA 300.0	FL	8/7/2008	Giawad Ghenniwa
					FIELD	HACH	PH	8/6/2008	Joe Aide
					TLI	SM2130B	TRB	8/7/2008	Gautam Savani
					TLI	SM2540C	TDS	8/8/2008	Tina Acquiat
					TLI	SM4500-HB	PH	8/7/2008	Tina Acquiat
					TLI	SM4500NH3D	NH3N	8/8/2008	Iordan Stavrev
					TLI	SM4500NO2B	NO2N	8/7/2008	Tina Acquiat
SC-100B	SC-100B-WDR-167	Chris Knight	9/4/2008	8:28:00 AM	TLI	EPA 120.1	SC	9/5/2008	Tina Acquiat
					TLI	EPA 200.7	B	9/18/2008	Hao Ton
					TLI	EPA 200.7	FE	9/18/2008	Hao Ton
					TLI	EPA 200.8	CU	9/17/2008	Romuel Chaves
					TLI	EPA 200.8	AL	9/17/2008	Romuel Chaves
					TLI	EPA 200.8	AS	9/17/2008	Romuel Chaves
					TLI	EPA 200.8	CR	9/22/2008	Romuel Chaves
					TLI	EPA 200.8	MN	9/17/2008	Romuel Chaves
					TLI	EPA 200.8	MO	9/17/2008	Romuel Chaves
					TLI	EPA 200.8	NI	9/16/2008	Romuel Chaves
					TLI	EPA 200.8	PB	9/17/2008	Romuel Chaves
					TLI	EPA 200.8	SB	9/16/2008	Romuel Chaves
					TLI	EPA 200.8	ZN	9/17/2008	Romuel Chaves
					TLI	EPA 200.8	BA	9/17/2008	Romuel Chaves
					TLI	EPA 218.6	CR6	9/5/2008	Jean-Paul Gleeson
					TLI	EPA 300.0	SO4	9/5/2008	Giawad Ghenniwa
					TLI	EPA 300.0	NO3N	9/5/2008	Giawad Ghenniwa
					TLI	EPA 300.0	FL	9/5/2008	Giawad Ghenniwa
					FIELD	HACH	PH	9/4/2008	Chris Knight
					TLI	SM2130B	TRB	9/5/2008	Gautam Savani
					TLI	SM2540C	TDS	9/5/2008	Tina Acquiat
					TLI	SM4500-HB	PH	9/5/2008	Tina Acquiat
					TLI	SM4500NH3D	NH3N	9/8/2008	Iordan Stavrev
					TLI	SM4500NO2B	NO2N	9/5/2008	Tina Acquiat

TABLE 8
Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs)
Monitoring Information
Third Quarter 2008 Report for Interim Measures 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-158	John Deetz	7/2/2008	3:50:00 PM	TLI	EPA 120.1	SC	7/3/2008	Tina Acquiat
					TLI	EPA 200.7	FE	7/14/2008	Hao Ton
					TLI	EPA 200.7	B	7/14/2008	Hao Ton
					TLI	EPA 200.8	ZN	7/10/2008	Linda Saetern
					TLI	EPA 200.8	SB	7/10/2008	Linda Saetern
					TLI	EPA 200.8	NI	7/10/2008	Linda Saetern
					TLI	EPA 200.8	MO	7/10/2008	Linda Saetern
					TLI	EPA 200.8	MN	7/10/2008	Linda Saetern
					TLI	EPA 200.8	CU	7/10/2008	Linda Saetern
					TLI	EPA 200.8	CR	7/10/2008	Linda Saetern
					TLI	EPA 200.8	BA	7/10/2008	Linda Saetern
					TLI	EPA 200.8	AS	7/10/2008	Linda Saetern
					TLI	EPA 200.8	AL	7/10/2008	Linda Saetern
					TLI	EPA 200.8	PB	7/10/2008	Linda Saetern
					TLI	EPA 218.6	CR6	7/3/2008	Jean-Paul Gleeson
					TLI	EPA 300.0	SO4	7/3/2008	Giawad Ghenniwa
					TLI	EPA 300.0	NO3N	7/3/2008	Giawad Ghenniwa
					TLI	EPA 300.0	FL	7/3/2008	Giawad Ghenniwa
					FIELD	HACH	PH	7/2/2008	John Deetz
					TLI	SM2130B	TRB	7/3/2008	Gautam Savani
					TLI	SM2540C	TDS	7/3/2008	Tina Acquiat
					TLI	SM4500-HB	PH	7/3/2008	Tina Acquiat/Iordan Stavrev
					TLI	SM4500NH3D	NH3N	7/8/2008	Iordan Stavrev
					TLI	SM4500NO2B	NO2N	7/3/2008	Tina Acquiat
SC-700B	SC-700B-WDR-159	J.Aide	7/10/2008	8:45:00 AM	TLI	EPA 120.1	SC	7/14/2008	Tina Acquiat
					TLI	EPA 200.8	CR	7/24/2008	Romuel Chaves
					TLI	EPA 218.6	CR6	7/11/2008	Jean-Paul Gleeson
					FIELD	HACH	PH	7/10/2008	J. Aide
					TLI	SM2130B	TRB	7/11/2008	Gautam Savani
					TLI	SM2540C	TDS	7/14/2008	Tina Acquiat
					TLI	SM4500-HB	PH	7/11/2008	Ethel Suico
SC-700B	SC-700B-WDR-160	J.Aide	7/17/2008	8:30:00 AM	TLI	EPA 120.1	SC	7/18/2008	Tina Acquiat
					TLI	EPA 200.8	CR	7/18/2008	Linda Saetern
					TLI	EPA 218.6	CR6	7/18/2008	Jean-Paul Gleeson
					FIELD	HACH	PH	7/17/2008	J. Aide
					TLI	SM2130B	TRB	7/18/2008	Gautam Savani

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Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician
SC-700B	SC-700B-WDR-160	J.Aide	7/17/2008	8:30:00 AM	TLI	SM2540C	TDS	7/18/2008	Tina Acquiat
					TLI	SM4500-HB	PH	7/18/2008	Gautam Savani
SC-700B	SC-700B-WDR-161	Ron Phelps	7/23/2008	11:00:00 AM	TLI	EPA 120.1	SC	7/24/2008	Tina Acquiat
					TLI	EPA 200.8	CR	7/24/2008	Romuel Chaves
					TLI	EPA 218.6	CR6	7/24/2008	Jean-Paul Gleeson
					FIELD	HACH	PH	7/23/2008	Ron Phelps
					TLI	SM2130B	TRB	7/24/2008	Gautam Savani
					TLI	SM2540C	TDS	7/24/2008	Tina Acquiat
					TLI	SM4500-HB	PH	7/24/2008	Tina Acquiat
SC-700B	SC-700B-WDR-162	J. Aide	7/30/2008	11:40:00 AM	TLI	EPA 120.1	SC	7/31/2008	Tina Acquiat
					TLI	EPA 200.8	CR	7/31/2008	Romuel Chaves
					TLI	EPA 218.6	CR6	7/31/2008	Jean-Paul Gleeson
					FIELD	HACH	PH	7/30/2008	J. Aide
					TLI	SM2130B	TRB	7/31/2008	Gautam Savani
					TLI	SM2540C	TDS	7/31/2008	Tina Acquiat
					TLI	SM4500-HB	PH	7/31/2008	Tina Acquiat
SC-700B	SC-700B-WDR-163	Joe Aide	8/6/2008	10:05:00 AM	TLI	EPA 120.1	SC	8/7/2008	Tina Acquiat
					TLI	EPA 200.7	FE	9/9/2008	Hao Ton
					TLI	EPA 200.7	B	9/5/2008	Hao Ton
					TLI	EPA 200.8	PB	8/20/2008	Romuel Chaves
					TLI	EPA 200.8	AS	8/20/2008	Romuel Chaves
					TLI	EPA 200.8	ZN	8/20/2008	Romuel Chaves
					TLI	EPA 200.8	SB	8/22/2008	Romuel Chaves
					TLI	EPA 200.8	CR	8/20/2008	Romuel Chaves
					TLI	EPA 200.8	NI	8/20/2008	Romuel Chaves
					TLI	EPA 200.8	AL	8/22/2008	Romuel Chaves
					TLI	EPA 200.8	MO	8/20/2008	Romuel Chaves
					TLI	EPA 200.8	MN	8/20/2008	Romuel Chaves
					TLI	EPA 200.8	CU	8/20/2008	Romuel Chaves
					TLI	EPA 200.8	BA	8/20/2008	Romuel Chaves
					TLI	EPA 218.6	CR6	8/7/2008	Jean-Paul Gleeson
					TLI	EPA 300.0	NO3N	8/7/2008	Giawad Ghenniwa
					TLI	EPA 300.0	SO4	8/7/2008	Giawad Ghenniwa
					TLI	EPA 300.0	FL	8/7/2008	Giawad Ghenniwa
					FIELD	HACH	PH	8/6/2008	Joe Aide
					TLI	SM2130B	TRB	8/7/2008	Gautam Savani

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Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician
SC-700B	SC-700B-WDR-163	Joe Aide	8/6/2008	10:05:00 AM	TLI	SM2540C	TDS	8/8/2008	Tina Acquiat
					TLI	SM4500-HB	PH	8/7/2008	Tina Acquiat
					TLI	SM4500NH3D	NH3N	8/8/2008	Iordan Stavrev
					TLI	SM4500NO2B	NO2N	8/7/2008	Tina Acquiat
SC-700B	SC-700B-WDR-164	Joe Aide	8/13/2008	1:30:00 PM	TLI	EPA 120.1	SC	8/14/2008	Tina Acquiat
					TLI	EPA 200.8	CR	8/19/2008	Romuel Chaves
					TLI	EPA 218.6	CR6	8/14/2008	Jean-Paul Gleeson
					FIELD	HACH	PH	8/13/2008	Joe Aide
					TLI	SM2130B	TRB	8/14/2008	Gautam Savani
					TLI	SM2540C	TDS	8/14/2008	Tina Acquiat
					TLI	SM4500-HB	PH	8/14/2008	Tina Acquiat
SC-700B	SC-700B-WDR-165	John Deetz	8/19/2008	8:50:00 AM	TLI	EPA 120.1	SC	8/20/2008	Tina Acquiat
					TLI	EPA 200.8	CR	8/26/2008	Romuel Chaves
					TLI	EPA 218.6	CR6	8/20/2008	Jean-Paul Gleeson
					FIELD	HACH	PH	8/19/2008	John Deetz
					TLI	SM2130B	TRB	8/20/2008	Gautam Savani
					TLI	SM2540C	TDS	8/21/2008	Tina Acquiat
					TLI	SM4500-HB	PH	8/20/2008	Tina Acquiat
SC-700B	SC-700B-WDR-166	Chris Knight	8/26/2008	10:35:00 AM	TLI	EPA 120.1	SC	8/27/2008	Tina Acquiat
					TLI	EPA 200.8	CR	9/4/2008	Romuel Chaves
					TLI	EPA 218.6	CR6	8/29/2008	Jean-Paul Gleeson
					FIELD	HACH	PH	8/26/2008	Chris Knight
					TLI	SM2130B	TRB	8/27/2008	Gautam Savani
					TLI	SM2540C	TDS	8/28/2008	Tina Acquiat
					TLI	SM4500-HB	PH	8/27/2008	Tina Acquiat
SC-700B	SC-700B-WDR-167	Chris Knight	9/4/2008	8:10:00 AM	TLI	EPA 120.1	SC	9/5/2008	Tina Acquiat
					TLI	EPA 200.7	FE	9/18/2008	Hao Ton
					TLI	EPA 200.7	B	9/18/2008	Hao Ton
					TLI	EPA 200.8	AL	9/17/2008	Romuel Chaves
					TLI	EPA 200.8	CR	9/16/2008	Romuel Chaves
					TLI	EPA 200.8	CU	9/17/2008	Romuel Chaves
					TLI	EPA 200.8	MN	9/17/2008	Romuel Chaves
					TLI	EPA 200.8	MO	9/17/2008	Romuel Chaves
					TLI	EPA 200.8	NI	9/16/2008	Romuel Chaves
					TLI	EPA 200.8	PB	9/17/2008	Romuel Chaves

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Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician
SC-700B	SC-700B-WDR-167	Chris Knight	9/4/2008	8:10:00 AM	TLI	EPA 200.8	SB	9/16/2008	Romuel Chaves
					TLI	EPA 200.8	ZN	9/17/2008	Romuel Chaves
					TLI	EPA 200.8	AS	9/17/2008	Romuel Chaves
					TLI	EPA 200.8	BA	9/17/2008	Romuel Chaves
					TLI	EPA 218.6	CR6	9/5/2008	Jean-Paul Gleeson
					TLI	EPA 300.0	SO4	9/5/2008	Giawad Ghenniwa
					TLI	EPA 300.0	FL	9/5/2008	Giawad Ghenniwa
					TLI	EPA 300.0	NO3N	9/5/2008	Giawad Ghenniwa
					FIELD	HACH	PH	9/4/2008	Chris Knight
					TLI	SM2130B	TRB	9/5/2008	Gautam Savani
					TLI	SM2540C	TDS	9/5/2008	Tina Acquiat
					TLI	SM4500-HB	PH	9/5/2008	Tina Acquiat
					TLI	SM4500NH3D	NH3N	9/8/2008	Iordan Stavrev
					TLI	SM4500NO2B	NO2N	9/5/2008	Tina Acquiat
SC-700B	SC-700B-WDR-168	Joe Aide	9/10/2008	7:50:00 AM	TLI	EPA 120.1	SC	9/11/2008	Tina Acquiat
					TLI	EPA 200.8	CR	9/23/2008	Romuel Chaves
					TLI	EPA 218.6	CR6	9/11/2008	Jean-Paul Gleeson
					FIELD	HACH	PH	9/10/2008	Joe Aide
					TLI	SM2130B	TRB	9/11/2008	Gautam Savani
					TLI	SM2540C	TDS	9/11/2008	Tina Acquiat
					TLI	SM4500-HB	PH	9/11/2008	Tina Acquiat
SC-700B	SC-700B-WDR-169	John Deetz	9/22/2008	11:50:00 AM	TLI	EPA 120.1	SC	9/23/2008	Tina Acquiat
					TLI	EPA 200.8	CR	9/23/2008	Romuel Chaves
					TLI	EPA 218.6	CR6	9/23/2008	Michael Nonezyan
					FIELD	HACH	PH	9/22/2008	John Deetz
					TLI	SM2130B	TRB	9/23/2008	Gautam Savani
					TLI	SM2540C	TDS	9/23/2008	Tina Acquiat
					TLI	SM4500-HB	PH	9/23/2008	Tina Acquiat
SC-700B	SC-700B-WDR-170	Chris Knight	9/24/2008	9:40:00 AM	TLI	EPA 120.1	SC	9/25/2008	Tina Acquiat
					TLI	EPA 200.8	CR	9/30/2008	Romuel Chaves
					TLI	EPA 218.6	CR6	9/25/2008	Michael Nonezyan
					FIELD	HACH	PH	9/24/2008	Chris Knight
					TLI	SM2130B	TRB	9/25/2008	Gautam Savani
					TLI	SM2540C	TDS	9/25/2008	Tina Acquiat
					TLI	SM4500-HB	PH	9/25/2008	Tina Acquiat

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Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician
SC-701	SC-701-WDR-158	John Deetz	7/2/2008	3:50:00 PM	TLI	EPA 120.1	SC	7/3/2008	Tina Acquiat
					TLI	EPA 200.8	SE	7/10/2008	Linda Saetern
					TLI	EPA 200.8	BA	7/10/2008	Linda Saetern
					TLI	EPA 200.8	BE	7/14/2008	Linda Saetern
					TLI	EPA 200.8	CD	7/10/2008	Linda Saetern
					TLI	EPA 200.8	CO	7/10/2008	Linda Saetern
					TLI	EPA 200.8	CR	7/10/2008	Linda Saetern
					TLI	EPA 200.8	CU	7/10/2008	Linda Saetern
					TLI	EPA 200.8	MO	7/10/2008	Linda Saetern
					TLI	EPA 200.8	NI	7/10/2008	Linda Saetern
					TLI	EPA 200.8	PB	7/10/2008	Linda Saetern
					TLI	EPA 200.8	SB	7/10/2008	Linda Saetern
					TLI	EPA 200.8	TL	7/10/2008	Linda Saetern
					TLI	EPA 200.8	V	7/10/2008	Linda Saetern
					TLI	EPA 200.8	ZN	7/10/2008	Linda Saetern
					TLI	EPA 200.8	AG	7/14/2008	Linda Saetern
					TLI	EPA 200.8	AS	7/10/2008	Linda Saetern
					TLI	EPA 218.6	CR6	7/3/2008	Jean-Paul Gleeson
					TLI	EPA 245.1	HG	7/19/2008	Michel Mendoza
					TLI	EPA 300.0	FL	7/3/2008	Giawad Ghenniwa
					FIELD	HACH	PH	7/2/2008	John Deetz
					TLI	SM2540C	TDS	7/3/2008	Tina Acquiat
					TLI	SM4500-HB	PH	7/3/2008	Tina Acquiat/Iordan Stavrev
SC-701	SC-701-WDR-163	Joe Aide	8/6/2008	11:25:00 AM	TLI	EPA 120.1	SC	8/7/2008	Tina Acquiat
					TLI	EPA 200.8	BE	8/31/2008	Romuel Chaves
					TLI	EPA 200.8	TL	8/20/2008	Romuel Chaves
					TLI	EPA 200.8	AS	8/20/2008	Romuel Chaves
					TLI	EPA 200.8	V	8/20/2008	Romuel Chaves
					TLI	EPA 200.8	SE	8/20/2008	Romuel Chaves
					TLI	EPA 200.8	SB	8/22/2008	Romuel Chaves
					TLI	EPA 200.8	PB	8/20/2008	Romuel Chaves
					TLI	EPA 200.8	NI	8/20/2008	Romuel Chaves
					TLI	EPA 200.8	MO	9/9/2008	Romuel Chaves
					TLI	EPA 200.8	CU	8/20/2008	Romuel Chaves
					TLI	EPA 200.8	CR	8/20/2008	Romuel Chaves
					TLI	EPA 200.8	AG	9/4/2008	Romuel Chaves

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Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician
SC-701	SC-701-WDR-163	Joe Aide	8/6/2008	11:25:00 AM	TLI	EPA 200.8	ZN	8/20/2008	Romuel Chaves
					TLI	EPA 200.8	BA	8/20/2008	Romuel Chaves
					TLI	EPA 200.8	CD	9/4/2008	Romuel Chaves
					TLI	EPA 200.8	CO	8/20/2008	Romuel Chaves
					TLI	EPA 218.6	CR6	8/7/2008	Jean-Paul Gleeson
					TLI	EPA 245.1	HG	8/25/2008	Romuel Chaves
					TLI	EPA 300.0	FL	8/7/2008	Giawad Ghenniwa
					FIELD	HACH	PH	8/6/2008	Joe Aide
					TLI	SM2540C	TDS	8/8/2008	Tina Acquiat
					TLI	SM4500-HB	PH	8/7/2008	Tina Acquiat
SC-701	SC-701-WDR-167	Chris Knight	9/4/2008	8:48:00 AM	TLI	EPA 120.1	SC	9/5/2008	Tina Acquiat
					TLI	EPA 200.8	MO	9/17/2008	Romuel Chaves
					TLI	EPA 200.8	ZN	9/17/2008	Romuel Chaves
					TLI	EPA 200.8	V	9/16/2008	Romuel Chaves
					TLI	EPA 200.8	TL	9/16/2008	Romuel Chaves
					TLI	EPA 200.8	SE	9/17/2008	Romuel Chaves
					TLI	EPA 200.8	BE	9/23/2008	Romuel Chaves
					TLI	EPA 200.8	SB	9/16/2008	Romuel Chaves
					TLI	EPA 200.8	NI	9/16/2008	Romuel Chaves
					TLI	EPA 200.8	CU	9/17/2008	Romuel Chaves
					TLI	EPA 200.8	CR	9/16/2008	Romuel Chaves
					TLI	EPA 200.8	CO	9/16/2008	Romuel Chaves
					TLI	EPA 200.8	CD	9/16/2008	Romuel Chaves
					TLI	EPA 200.8	AG	9/16/2008	Romuel Chaves
					TLI	EPA 200.8	AS	9/17/2008	Romuel Chaves
					TLI	EPA 200.8	BA	9/17/2008	Romuel Chaves
					TLI	EPA 200.8	PB	9/17/2008	Romuel Chaves
					TLI	EPA 218.6	CR6	9/5/2008	Jean-Paul Gleeson
					TLI	EPA 245.1	HG	9/15/2008	Romuel Chaves
					TLI	EPA 300.0	FL	9/5/2008	Giawad Ghenniwa
					FIELD	HACH	PH	9/4/2008	Chris Knight
					TLI	SM2540C	TDS	9/5/2008	Tina Acquiat
					TLI	SM4500-HB	PH	9/5/2008	Tina Acquiat
Phase Seperator	SC-Sludge-WDR-159	Chris Knight	7/10/2008	8:40:00 AM	TLI	EPA 300.0	FL	7/11/2008	Giawad Ghenniwa
					TLI	EPA 6010B	TL	7/14/2008	Hao Ton
					TLI	EPA 6010B	AS	7/14/2008	Hao Ton

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Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician
Phase Seperator	SC-Sludge-WDR-159	Chris Knight	7/10/2008	8:40:00 AM	TLI	EPA 6010B	AG	7/14/2008	Hao Ton
					TLI	EPA 6010B	ZN	7/14/2008	Hao Ton
					TLI	EPA 6010B	CD	7/21/2008	Hao Ton
					TLI	EPA 6010B	BA	7/14/2008	Hao Ton
					TLI	EPA 6010B	SB	7/14/2008	Hao Ton
					TLI	EPA 6010B	CO	7/14/2008	Hao Ton
					TLI	EPA 6010B	CR	7/14/2008	Hao Ton
					TLI	EPA 6010B	CU	7/14/2008	Hao Ton
					TLI	EPA 6010B	V	7/14/2008	Hao Ton
					TLI	EPA 6010B	NI	7/14/2008	Hao Ton
					TLI	EPA 6010B	PB	7/14/2008	Hao Ton
					TLI	EPA 6010B	BE	7/14/2008	Hao Ton
					TLI	EPA 7471A	HG	7/29/2008	Romuel Chaves
					TLI	SW 6020A	SE	7/14/2008	Linda Saetern
					TLI	SW 6020A	MO	7/14/2008	Linda Saetern
					TLI	SW 7199	CR6	7/23/2008	David Blackbum
Phase Seperator	SC-Sludge-WDR-163	Joe Aide	8/6/2008	11:30:00 AM	TLI	EPA 300.0	FL	8/8/2008	Giawad Ghenniwa
					TLI	EPA 6010B	PB	8/12/2008	Hao Ton
					TLI	EPA 6010B	CO	8/12/2008	Hao Ton
					TLI	EPA 6010B	SE	8/12/2008	Hao Ton
					TLI	EPA 6010B	AG	8/18/2008	Hao Ton
					TLI	EPA 6010B	AS	8/12/2008	Hao Ton
					TLI	EPA 6010B	BA	8/12/2008	Hao Ton
					TLI	EPA 6010B	CD	8/12/2008	Hao Ton
					TLI	EPA 6010B	CR	8/12/2008	Hao Ton
					TLI	EPA 6010B	CU	8/12/2008	Hao Ton
					TLI	EPA 6010B	ZN	8/12/2008	Hao Ton
					TLI	EPA 6010B	NI	8/12/2008	Hao Ton
					TLI	EPA 6010B	SB	8/12/2008	Hao Ton
					TLI	EPA 6010B	BE	8/12/2008	Hao Ton
					TLI	EPA 6010B	TL	8/12/2008	Hao Ton
					TLI	EPA 6010B	V	8/12/2008	Hao Ton
					TLI	EPA 6010B	MO	8/12/2008	Hao Ton
					TLI	EPA 7471A	HG	9/10/2008	Romuel Chaves
					TLI	SM2540B	MOIST	8/11/2008	Gautam Savani
					TLI	SW 7199	CR6	8/15/2008	David Blackburn

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Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician
Phase Seperator	SC-Sludge-WDR-167	Chris Knight	9/4/2008	1:20:00 PM	TLI	EPA 300.0	FL	9/5/2008	Giawad Ghenniwa
					TLI	EPA 6010B	PB	9/26/2008	Hao Ton
					TLI	EPA 6010B	ZN	9/26/2008	Hao Ton
					TLI	EPA 6010B	V	9/26/2008	Hao Ton
					TLI	EPA 6010B	TL	9/26/2008	Hao Ton
					TLI	EPA 6010B	SB	9/26/2008	Hao Ton
					TLI	EPA 6010B	NI	9/26/2008	Hao Ton
					TLI	EPA 6010B	CU	9/26/2008	Hao Ton
					TLI	EPA 6010B	CR	9/26/2008	Hao Ton
					TLI	EPA 6010B	CO	9/26/2008	Hao Ton
					TLI	EPA 6010B	CD	9/26/2008	Hao Ton
					TLI	EPA 6010B	BA	9/26/2008	Hao Ton
					TLI	EPA 6010B	BE	9/26/2008	Hao Ton
					TLI	EPA 7471A	HG	9/10/2008	Romuel Chaves
					TLI	SW 6020A	AG	10/1/2008	Romuel Chaves
					TLI	SW 6020A	AS	9/29/2008	Romuel Chaves
					TLI	SW 6020A	MO	9/30/2008	Romuel Chaves
					TLI	SW 6020A	SE	9/30/2008	Romuel Chaves
					TLI	SW 7199	CR6	10/3/2008	David Blackburn

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Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician
Phase Seperator	SC-Sludge-WDR-159	Chris Knight	07/10/2008	8:40:00 AM	ATL	96-Hour Acute Aquatic Toxicity Screening Test	BIO	7/16//2008 - 07/20/2008	Laurie Montoya / Jacob LeMay
Phase Seperator	SC-Sludge-WDR-167	Chris Knight	09/4/2008	1:20:00 PM	ATL	96-Hour Acute Aquatic Toxicity Screening Test	BIO	9/10//2008 - 09/14/2008	Laurie Montoya / Jacob LeMay

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.

TLI = Truesdail Laboratories, Inc.
ATL = Aquatic Testing Laboratories

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

Figures

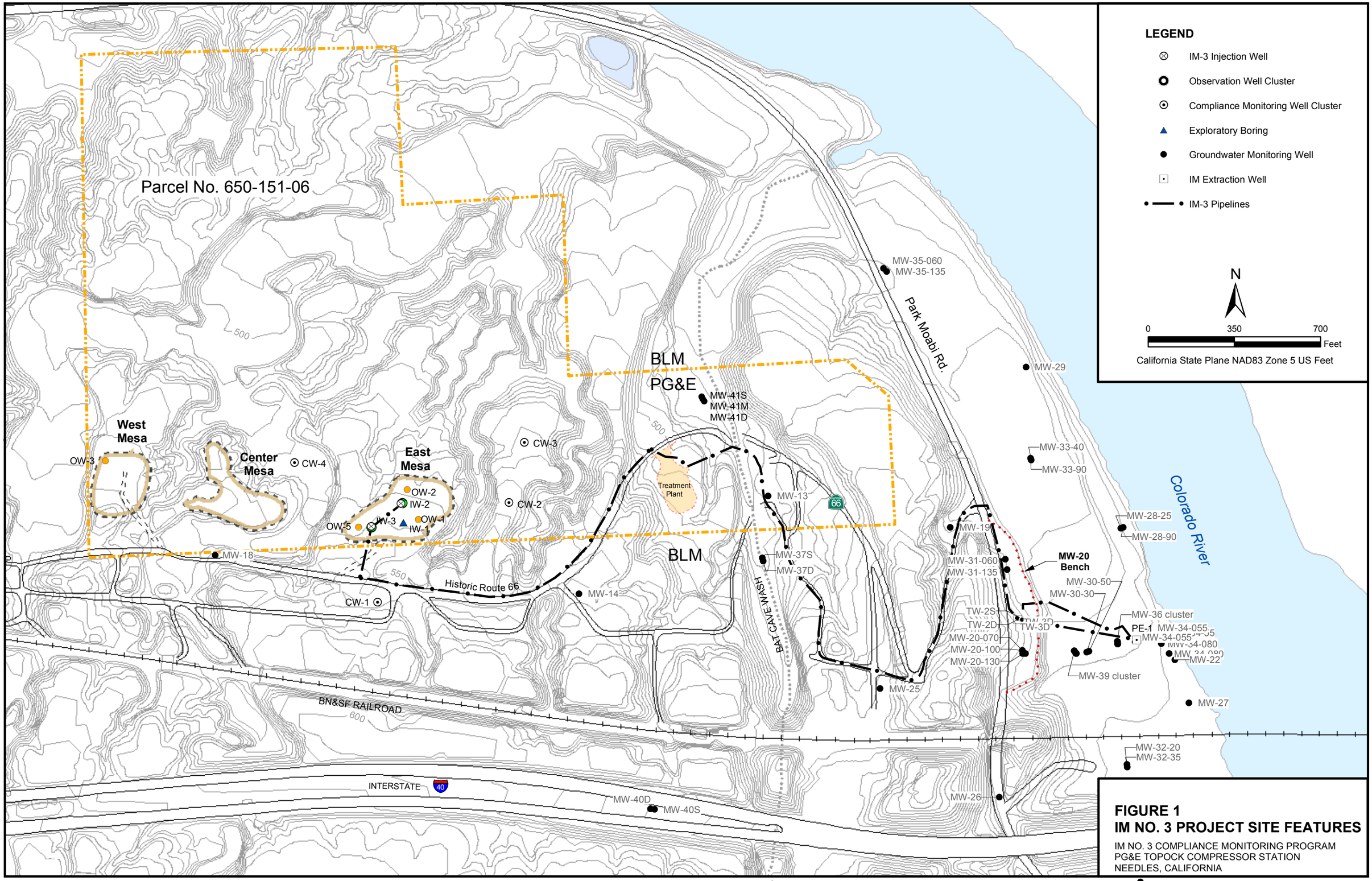


FIGURE 1
IM NO. 3 PROJECT SITE FEATURES

IM NO. 3 COMPLIANCE MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

\\ZINFANDEL\PROJ\PACIFICGASELECTRICCO\TOPOCKPROGRAM\GIS\MAPFILES\2006\IM3_PROJECT_AREA_MAY06.MXD IM3_PROJECT_AREA_MAY06.PDF 1/14/2008 14:59:14

CONTROL PANEL LCP-100

WELL TW-3D CONTROL

WELL TW-2S CONTROL

WELL TW-2D CONTROL

WELL PE-1 CONTROL

LEAK DETECTION PANEL - 003

ALM

120V

LSH LVL RUN ON RM PRESS FLOW

LSHH

HOA

HS 102

HS 100

HS 101

HS 103

HOLD

LSH 002

LSHH 002

FUTURE

4"-RW-140-1HB

V-RW-140-01

VALVE VAULT No. 2

4"-RW-139-1HB

V-RW-139-01

4" IN 8"-RW-141-1KB

4" IN 8"-RW-142-1KB

NOTE 1

3"-RW-138-1HB

V-RW-138-01

3" IN 6"-RW-137-1KB

4"-RW-105-1HB

V-RW-105-05

4" IN 8"-FUTURE

4" IN 8"-RW-135-1KB

LSH 102A

NOTE 1

FI 102

LSH 001

LSHH 001

1" V-1390

4" x 3"

EJ-RW-105-01

4"-RW-105-1HB

Well TW-2S Flowmeter

Well TW-2D Flowmeter

Well PE-1 Flowmeter

FE 100

FIT 100

PIT 100

PE 100

LT 100

VENT

3"x2"

V-RW-105-02

MAG

3"-RW-105-1HB THROTTLING

V-RW-105-01

V-1390

VALVE VAULT No. 1

LT 101

FE 101

FIT 101

PIT 101

PE 101

V-RW-102-02

3"-RW-102-1HB THROTTLING

V-RW-102-01

LT 103

FE 103

FIT 103

PIT 103

PE 103

V-RW-108-02 THROTTLING

V-RW-108-1HB

V-RW-108-01

V-RW-130-02

V-RW-130-01

4"-RW-130-1HB

V-RW-105-06 THROTTLING

V-RW-105-03

V-RW-105-04

4" IN 8" RW-127-1KB SPARE

4" IN 8" RW-127-1KB

TP-PR-10-10-04 [C1]

SPARE TO VALVE VAULT 4

NOTES 1 & 2

4" IN 8" RW-107-1KB

TP-PR-10-10-04 [C1]

TO RAW WATER STORAGE

4" IN 8"-RW-131-1KB

TO BAKER TANKS V-RW-131-01

V-RW-131-01

LSH 100A

LSH 101A

LSH 103A

3" IN 6"-RW-104-1KB

3" IN 6"-RW-101-1KB

4" IN 8"-RW-133-1KB

NOTE 1

Well TW-3D Flowmeter

VENT

LT 102

PI 102

PIT 102

PRV 102

PE 102

FE 102

FIT 102

LSH 102

SET AT 120 PSI

V-1390

3"x2"

3"-RW-134-1HB

V-RW-134-01

MAG

4"x3"

V-RW-134-02

WELL VAULT No. 4

PI 100

LSH 100

3"-RW-103-1HB

V-RW-103-01

V-RW-103-02

WELL VAULT No. 2

PI 101

PRV 101

LSH 101

3"-RW-100-1HB

V-RW-100-01

V-RW-100-02

WELL VAULT No. 1

PI 103

PRV 103

LSH 103

4"x3"

3"-RW-132-1HB

V-RW-132-01

V-RW-132-02

WELL VAULT No. 3

LE 102

P-102

EXTRACTION WELL TW-3D

135 GPM x 248 FT. H20

LE 100

P-100

EXTRACTION WELL TW-2S

40 GPM x 180 FT. H20

LE 101

P-101

EXTRACTION WELL TW-2D

90 GPM x 245 FT. H20

LE 103

P-103

EXTRACTION WELL PE-1

40 GPM x 235 FT. H20

NOTES

1. PROVIDE LEAK DETECTION AT LOWS AND/OR EVERY 500 FT.
2. INSTALL AIR RELEASE VALVES AT HIGH POINTS.

NO.	DATE	REVISION	BY	CHK
8	12/07/05	REMOVED PE-1 HOLDS	JBW	SDH
1	10/13/04	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ
2	01/23/05	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ
3	03/16/05	DELETED NOTES. APPROVED FOR CONSTRUCTION	EFC	AJ
4	07/20/05	RELIEF VALVE SETTINGS. WELL PE-1 LINE TAGS. HOLDS REMOVED. APPROVED FOR CONSTRUCTION	EFC	AJ
5	09/27/05	FINAL RECORD ISSUE	EFC	AJ
6	10/06/05	REVISED FINAL RECORD – ADDED TW-3D	EFC	AJ
7	10/19/05	REVISED AS NOTED	EFC	AJ

REVISION APPROVAL		REV 8 DATE 12/06/05	
DISCIPLINE	REVIEWED	DISCIPLINE	REVIEWED
CIVIL	—	ELECTRICAL	—
STRUCTURAL	—	INST & CONTROL	—
MECHANICAL	AJ	ARCHITECTURAL	—
PROCESS	—	ENVIRONMENTAL	—
PIPING	SDH	GEN. ARRANG.	—

PRINT DISTRIBUTION

DATE	
STATUS	
REV.	
CLIENT	
FIELD	
INTRA CO.	

STATUS	REV	DATE	SDE	PEM
ISSUED				
PRELIMINARY				
FOR REVIEW AND APPROVAL	D	07/28/04		
APPROVED FOR CONSTRUCTION	0	09/03/04	KLM	TP
REVISED & APPROVED FOR CONSTRUCTION	7	12/9/05	for KLM	AJ

SCALE NONE

RESPONSIBLE ENGINEER: Kenneth L. Martins CH4876 Exp. 6-30-06

REGISTERED PROFESSIONAL ENGINEER KENNETH L. MARTINS No. CH4876 Exp. 6-30-06 CIVIL STATE OF CALIFORNIA

PACIFIC GAS & ELECTRIC CO.
TOPOCK COMPRESSOR STATION
INTERIM MEASURE 3
EXPANDED GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

PROJ NO. 315994

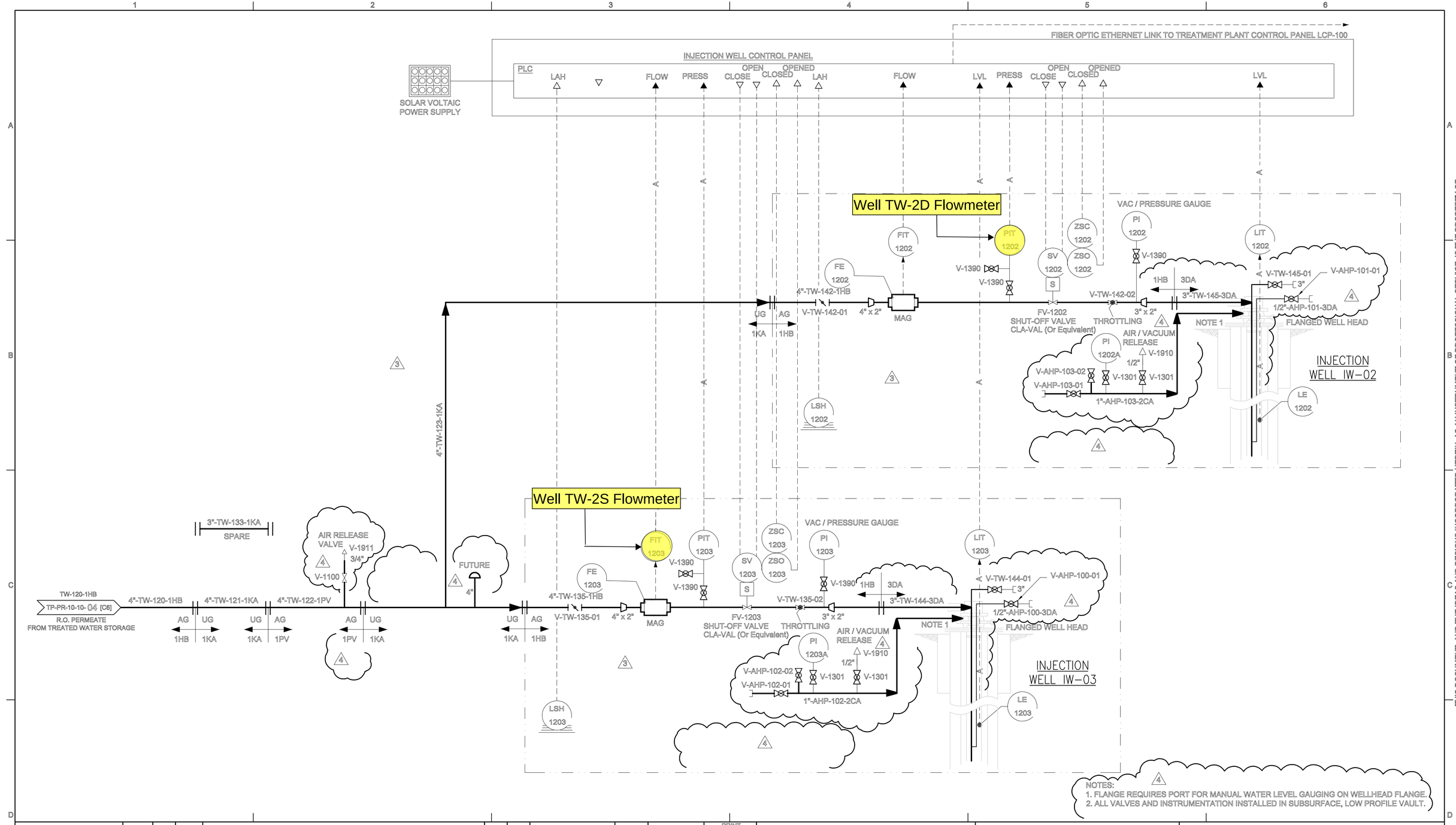
CH2MHILL

PROCESS AND INSTRUMENTATION DIAGRAM
SHEET 03
EXTRACTION WELLS
PE-1, TW-2D, TW-2S AND TW-3D

DWG. NO. TP-PR-10-10-03 REV. 8

BAR IS ONE INCH
tppr101003.dwg 12/07/2005 01:06:58 PM

FILENAME: tppr101003.dwg PLOT DATE: 19-OCT-2005 PLOT TIME:



NO.	DATE	REVISION	BY	CHK
A	07/28/04	FOR INTERNAL REVIEW	EFC	AJ
0	09/03/04	APPROVED FOR CONSTRUCTION	EFC	AJ
1	10/13/04	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ
2	01/23/05	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ
3	02/14/05	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ
4	03/10/05	REMOVED HOLD AND APPROVED FOR CONSTRUCTION	EFC	AJ

REVISION APPROVAL	REVIEWED	REV 4	DATE 03/10/05	REVIEWED
DISCIPLINE		DISCIPLINE		
CIVIL		ELECTRICAL		
STRUCTURAL		INST & CONTROL		
MECHANICAL		ARCHITECTURAL		
PROCESS		ENVIRONMENTAL		
PIPING		GEN. ARRANG.		

PRINT DISTRIBUTION	
DATE	
STATUS	
REV.	
CLIENT	
FIELD	
INTRA CO.	

RESPONSIBLE ENGINEER: Kenneth L. Martine CH4876 Exp. 6-30-05 PE #

STATUS	REV	DATE	SDE	PEM
PRELIMINARY				
FOR REVIEW AND APPROVAL	A	07/28/04		
APPROVED FOR CONSTRUCTION	0	09/03/04	KLM	TP
REVISED & APPROVED FOR CONSTRUCTION	4	/ /		

SCALE NONE

PACIFIC GAS & ELECTRIC CO.
TOPOCK COMPRESSOR STATION
INTERIM MEASURE 3
EXPANDED GROUNDWATER EXTRACTION
AND TREATMENT SYSTEM
PROJ NO. 315994

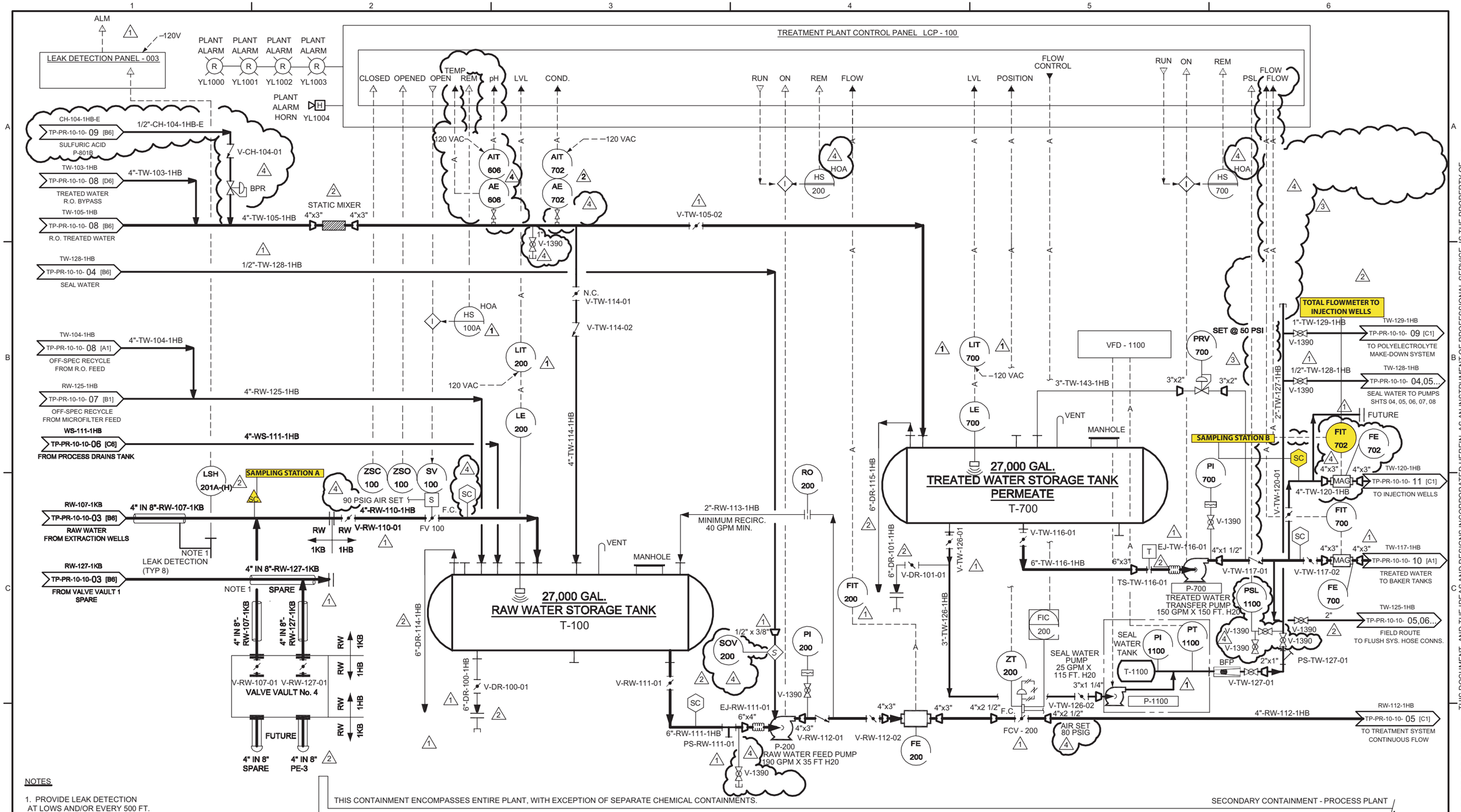
CH2MHILL

PROCESS AND INSTRUMENTATION DIAGRAM
SHEET 11
INJECTION WELLS

DWG. NO. TP-PR-10-10-11 REV. 4

BAR IS ONE INCH ON ORIGINAL DRAWING. 0 1"

FILENAME: tppr101011.dwg PLOT DATE: 10-MAR-2005 PLOT TIME:



NO.	DATE	REVISION	BY	CHK	REVISION APPROVAL		REV 4	DATE 09/21/05	PRINT DISTRIBUTION
0	07/28/04	FOR INTERNAL REVIEW	EFC	AJ	DISCIPLINE	REVIEWED	DISCIPLINE	REVIEWED	DATE
0	09/03/04	APPROVED FOR CONSTRUCTION	EFC	AJ	CIVIL		ELECTRICAL		STATUS
1	10/13/04	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ	STRUCTURAL		INST & CONTROL		REV.
2	01/23/05	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ	MECHANICAL		ARCHITECTURAL		CLIENT
3	02/14/05	ADDED RECIRC. LINE AND PRV VALVE TO T-700 - APPROVED FOR CONSTRUCTION	EFC	AJ	PROCESS		ENVIRONMENTAL		FIELD
4	09/21/05	REVISED PER AS-BUILT CONDITIONS	EFC	AJ	PIPING		GEN. ARRANG.		INTRA CO.

RESPONSIBLE ENGINEER: Kenneth L. Martins Exp. 6-30-05 CH4876 PE #

STATUS	REV	DATE	SDE	PEM
PRELIMINARY				
FOR REVIEW AND APPROVAL	D	07/28/04		
APPROVED FOR CONSTRUCTION	0	09/03/04	KLM	TP
REVISED & APPROVED FOR CONSTRUCTION	4	/ /		

SCALE NONE

PACIFIC GAS & ELECTRIC CO.
TOPOCK COMPRESSOR STATION
INTERIM MEASURE 3
EXPANDED GROUNDWATER EXTRACTION AND TREATMENT SYSTEM
PROJ NO. 315994

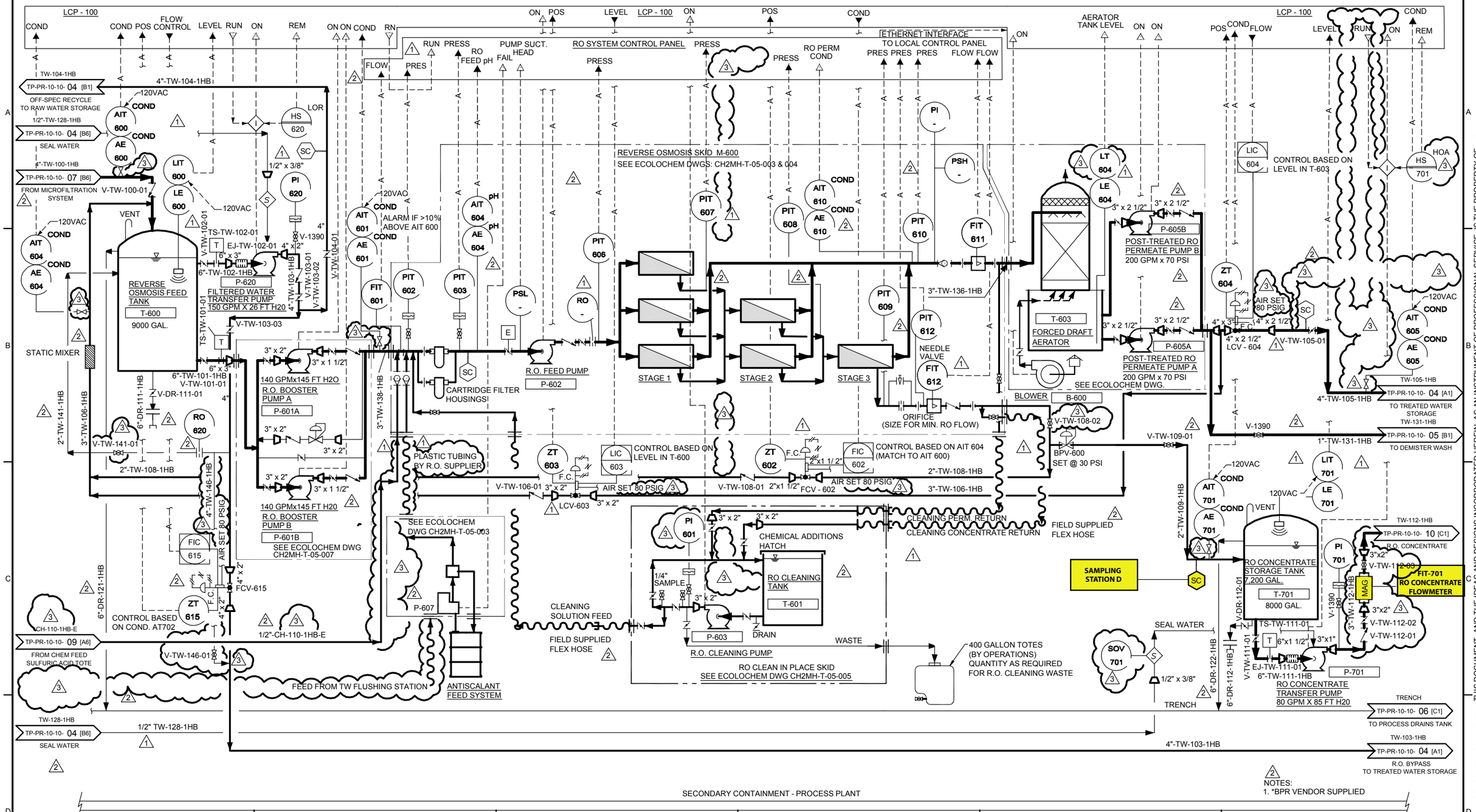
CH2MHILL

PROCESS AND INSTRUMENTATION DIAGRAM
SHEET 04
STORAGE AREA

DWG. NO. TP-PR-10-10-04 REV. 4

BAR IS ONE INCH ON ORIGINAL DRAWING

FILENAME: tppr101004.dwg PLOT DATE: 21-SEP-2005 PLOT TIME:



NO.	DATE	REVISION	BY	CHK
D	07/28/04	FOR INTERNAL REVIEW	EFC	AJ
0	09/03/04	APPROVED FOR CONSTRUCTION	EFC	AJ
1	10/13/04	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ
2	01/23/05	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ
3	09/21/05	REVISED PER AS-BUILT CONDITIONS	EFC	AJ

REVISION APPROVAL — REV 3 — DATE 09/21/05

DISCIPLINE	REVIEWED	DISCIPLINE	REVIEWED
CIVIL		ELECTRICAL	
STRUCTURAL		INST & CONTROL	
MECHANICAL		ARCHITECTURAL	
PROCESS		ENVIRONMENTAL	
PIPING		GEN. ARRANG.	

PRINT DISTRIBUTION: DATE, STATUS, REV, FIELD, INTRA CO.

ISSUED	REV	DATE	SDE	PEM
PRELIMINARY				
FOR REVIEW AND APPROVAL	D	07/28/04		
APPROVED FOR CONSTRUCTION	0	09/03/04	KLM	TP
REVISED & APPROVED FOR CONSTRUCTION	3	/ /		

RESPONSIBLE ENGINEER: Kenneth L. Martins PE# CH4876 Exp. 6-30-05

SCALE NONE

PACIFIC GAS & ELECTRIC CO.
TOPOCK COMPRESSOR STATION
INTERIM MEASURE 3
EXPANDED GROUNDWATER EXTRACTION AND TREATMENT SYSTEM
PROJ NO. 315994

CH2MHILL

PROCESS AND INSTRUMENTATION DIAGRAM
SHEET 08
REVERSE OSMOSIS SYSTEM

DWG. NO. TP-PR-10-10-08 REV. 3

BAR IS ONE INCH ON ORIGINAL DRAWING

FILENAME: tppr101008.dwg PLOT DATE: 21-SEP-2005 PLOT TIME:

CONTROL PANEL

PLC

REM ON RUN REM ON RUN HI TORQUE REM ON RUN CLOSE OPEN CLOSE OPEN REM REM OPEN OPEN LAH TURB OPEN REM RUN LVL ON REM REM LT ON RUNOPEN LAH RM OPEN REM LAH LAH

HS 400A LOR · HS 400B LOR · HS 400C LOR · HS 401 HOA · HS 402 LOR · HS 404 HOA

HS 400 HOA · HS 410 HOA · HS 900 LOR

CH-109-1HB-E
TP-PR-10-10- 09 [C6]
POLYELECTROLYTE FEED
1/2"-CH-109-1HB-E
V-CH-109-01

CH-108-1HB-E
TP-PR-10-10- 09 [C6]
POLYELECTROLYTE FEED
1/2"-CH-108-1HB-E
V-CH-108-01

TORQUE NSH 400

RW-121-1HB
TP-PR-10-10- 05 [C6]
FROM CHEM REDUCTION AND COAGULATION SYSTEM IA-104-3DV
4"-RW-121-1HB

TP-PR-10-10- 09 [D6]
90 PSIG AIR
1"-IA-104-3DV

M-400-A · M-400-B · M-400-C

CL-400 CLARIFIER

6"-DR-107-1HB

SEE PARKSON DRAWING 10066701-01

120VAC AIT 400 TURB

1/4" / 1" SLOPE TO PRE-TREATED WATER TANK

6"-RW-122-1HB
RW-122-1HB
TP-PR-10-10- 07 [B1]
MICROFILTRATION SYSTEM

120VAC LIT 402

SV 400 · SV 401 · SV 403 · SV 404 · SV 410

ZSC 400 · ZSO 400 · AE 400 TURB · ZSC 410 · ZSO 410

AIR SET 120 PSIG · F. C.

FV - 400 · FV - 410

4"-WS-102-1HB · 4"-WS-100-1HB

120 PSIG AIR SET · 1/2"

PI 401 · PE 401 · LE 402 · M-402

HS 403 HOA · PI 404 · PE 404

4" x 1" · 2" x 1"

V-WS-103-01 · V-WS-103-02

WS-103-1HB
TP-PR-10-10- 05 [B1]
SLUDGE RECYCLE

P-404
SLUDGE RECYCLE PUMP
20 GPM X 30 FT. H2O

2"-WS-109-1HB

V-WS-109-01

V-WS-104-01

2"-WS-101-1HB · V-WS-101-01 · 4" x 2"

P-401
SLUDGE WITHDRAWAL PUMP
20 GPM X 30 FT. H2O

SLUDGE HOLDING TANK
6000 GAL
T-402

VENT · DECANT

2" V-1790 (TYP 5)

4" (TYP 5) AIR/SIGHT GAP · 4"

PI 403 · PE 403

3% - 5% SOLIDS

2"-WS-105-1HB · V-WS-105-01 · V-WS-108-01 · 4"-WS-108-1HB

2"-WS-107-1HB · V-WS-107-01

P-403
SEPARATOR FEED PUMP
20 GPM X 30 FT. H2O

2"-WS-106-1HB · V-WS-106-01 · 4"-WS-110-1HB

TRUCK FILL FOR OFF-SITE DISPOSAL

TRENCH
TP-PR-10-10- 08 [D6]
R.O. GRAVITY DRAINS

DR-109-1HB
TP-PR-10-10- 07 [C6]
FROM M.F. SYSTEM GRAVITY DRAIN
3"-DR-109-1HB

TRENCH
TP-PR-10-10- 07 [D6]
FROM M.F. SYSTEM PRETREATED WATER TANK

4"-WS-104-1HB

DR-110-1HB
TP-PR-10-10- 07 [C6]
FILTER BACKWASH FROM MICROFILTRATION SYSTEM
4"-DR-110-1HB

TRENCH
TP-PR-10-10- 05 [D6]
GRAVITY DRAIN

TW-128-1HB
TP-PR-10-10- 04 [B6]
SEAL WATER
1/2"-TW-128-1HB

120VAC LIT 900 · LE 900 · 1/2" x 3/8" · VENT

V-WS-110-01 · V-WS-111-02 · V-WS-111-03 · 4"-WS-111-1HB

V-WS-111-01 · PS-WS-111-01 · V-1390 · 1"-DR-106-1HB

V-WS-113-01 · 2"-WS-113-1HB · 4" x 2"

WS-111-1HB
TP-PR-10-10- 04 [B1]
TO RAW WATER STORAGE TANK

LSH 405B · FH-WS-106-01 · LSH 405A

SAMPLING STATION E

UNIT 2 CAKE CAKE · UNIT 1 CAKE CAKE

FH-WS-112-02 · 2"-WS-112-1HB · FH-WS-112-01

LSHH 405

480 VAC · LCP - 405

P-405
PHASE SEPARATOR SUMP PUMP PACKAGE
25 GPM x 25 FT. H2O

PUMPOUT VAULT

PS-405
PHASE SEPARATORS ALTERNATING DURING OPERATION

PROCESS DRAIN TANK
5,000 GAL.
T-900

P-900
PROCESS DRAIN PUMP

V-DR-113-01 · 6"-DR-113-1HB

VERTICAL WET PIT
175 GPM x 37 FT. H2O

LSH 900

T-900A
PROCESS SUMP

NOTE 1

SECONDARY CONTAINMENT - PROCESS PLANT

NOTES:

1. USE PORTABLE SUMP PUMP (OPERATIONS SUPPLIED) FOR PUMP OUT

NO.	DATE	REVISION	BY	CHK
0	07/28/04	FOR INTERNAL REVIEW	EFC	AJ
0	09/03/04	APPROVED FOR CONSTRUCTION	EFC	AJ
1	10/13/04	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ
2	01/23/05	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ

REVISION APPROVAL		REV 2	DATE 01/23/05
DISCIPLINE	REVIEWED	DISCIPLINE	REVIEWED
CIVIL		ELECTRICAL	
STRUCTURAL		INST & CONTROL	
MECHANICAL		ARCHITECTURAL	
PROCESS		ENVIRONMENTAL	
PIPING		GEN. ARRANG.	

PRINT DISTRIBUTION: DATE · STATUS · FIELD · CLIENT · INTRA CO.

RESPONSIBLE ENGINEER: Kenneth L. Martins PE # CH4876 Exp. 6-30-05

STATUS	REV	DATE	SDE	PEM
PRELIMINARY				
FOR REVIEW AND APPROVAL	D	07/28/04		
APPROVED FOR CONSTRUCTION	0	09/03/04	KLM	TP
REVISED & APPROVED FOR CONSTRUCTION	2	01/23/05		

SCALE NONE

PACIFIC GAS & ELECTRIC CO.
TOPOCK COMPRESSOR STATION
INTERIM MEASURE 3
EXPANDED GROUNDWATER EXTRACTION AND TREATMENT SYSTEM
PROJ NO. 315994

CH2MHILL

PROCESS AND INSTRUMENTATION DIAGRAM
SHEET 06
CLARIFICATION AND SLUDGE REMOVAL

DWG. NO. TP-PR-10-10-06 REV. 2

FILENAME: tppr101006.dwg PLOT DATE: 23-JAN-2005 PLOT TIME:

BAR IS ONE INCH ON ORIGINAL DRAWING. 0 1"

Appendix A
Third Quarter 2008 Laboratory Analytical Reports

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

July 23, 2008

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-158 PROJECT, GROUNDWATER MONITORING,

TLI NO.: 976856

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-158 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 July 2, 2008, 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 sample collection times differed between the chain of custody and the sample containers. The sample times from the sample containers are reported at the request of Mr. Shawn Duffy's of CH2M Hill.

The straight run for the matrix spike for sample SC-700B-WDR-158 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.

The matrix spike run at a dilution of 5x for sample SC-701-WDR-154 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 10x dilution agree with those from the 5x run, the data from the 5x run is reported.

A result for Total Manganese by EPA 200.8 is reported in the matrix spike calculation although it is below the reporting limit due to the small amount of Manganese detected in the sample.

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.

Sean Candau

for Mona Nassimi
Manager, Analytical Services

K. R. P. Iyer

K.R.P. Iyer
Quality Assurance/Quality Control Officer

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
Sample: Three (3) Groundwaters
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00

Laboratory No.: 976856
Date: July 23, 2008
Collected: July 2, 2008
Received: July 2, 2008

ANALYST LIST

[redacted]	[redacted]	ANALYST
EPA 120.1	Specific Conductivity	Tina Acquiat
SM 4500-H B	pH	Tina Acquiat / Iordan Stavrev
SM 2540C	Total Dissolved Solids	Tina Acquiat
SM 2130B	Turbidity	Gautam Savani
EPA 300.0	Anions	Giawad Ghenniwa
SM 4500-NH3 B	Ammonia	Iordan Stavrev
SM 4500-NO2 B	Nitrite as N	Tina Acquiat
EPA 200.7	Metals by ICP	Hao Ton
EPA 200.8	Metals by ICP/MS	Linda Saetern
EPA 245.1	Mercury	Michel Mendoza
EPA 218.6	Hexavalent Chromium	Jean-Paul Gleeson

TRUESDAIL LABORATORIES, INC.

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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.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 976856
Date: July 23, 2008
Collected: July 2, 2008
Received: July 2, 2008
Prep/ Analyzed: July 3, 2008
Analytical Batch: 07PH08D

Investigation: **pH by SM 4500-H B**

Analytical Results pH

TLI I.D.	Field I.D.	Run Time	Units	MDL	RL	Results
976856-1	SC-700B-WDR-158	08:30	pH	0.0700	2.00	8.03
976856-2	SC-100B-WDR-158	08:32	pH	0.0700	2.00	7.44
976856-3	SC-701-WDR-158	08:35	pH	0.0700	2.00	7.84

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	976857-2	7.30	7.30	0.00	± 0.100 Units	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Difference (Units)	Acceptance Limits	QC Within Control
MRCVS	7.00	7.00	0.00	± 0.100 Units	Yes
LCS	7.02	7.00	0.02	± 0.100 Units	Yes
LCSD	7.03	7.00	0.03	± 0.100 Units	Yes

ND: Below the reporting limit (Not Detected).
RL: Reporting Limit.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Carlin

for Mona Nassimi, Manager
Analytical Services

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Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Date: July 23, 2008
Collected: July 2, 2008
Received: July 2, 2008
Prep/ Analyzed: July 3, 2008
Analytical Batch: 07EC08A

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
976856-1	SC-700B-WDR-158	µmhos/cm	EPA 120.1	1.00	2.00	7010
976856-2	SC-100B-WDR-158	µmhos/cm	EPA 120.1	1.00	2.00	7790
976856-3	SC-701-WDR-158	µmhos/cm	EPA 120.1	1.00	2.00	28700

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	976856-3	28700	28800	0.35%	≤ 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	704	706	99.7%	90% - 110%	Yes
CVS#1	977	996	98.1%	90% - 110%	Yes
LCS	704	706	99.7%	90% - 110%	Yes
LCSD	704	706	99.7%	90% - 110%	Yes

Respectfully submitted,
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Sean Conlon
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Sample: Three (3) Groundwaters
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 976856
Date: July 23, 2008
Collected: July 2, 2008
Received: July 2, 2008
Prep/ Analyzed: July 3, 2008
Analytical Batch: 07TDS08B

Investigation: **Total Dissolved Solids by SM 2540C**

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
976856-1	SC-700B-WDR-158	mg/L	SM 2540C	250	4510
976856-2	SC-100B-WDR-158	mg/L	SM 2540C	250	5040
976856-3	SC-701-WDR-158	mg/L	SM 2540C	625	21000

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	976857-2	5660	5610	0.44%	≤ 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
LCS 2	499	500	99.8%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
RL: Reporting Limit.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sean Carla
Mona Nassimi, Manager
Analytical Services

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Attention: Shawn Duffy
Sample: Three (3) Groundwaters
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 976856
Date: July 23, 2008
Collected: July 2, 2008
Received: July 2, 2008
Prep/ Analyzed: July 3, 2008
Analytical Batch: 07TUC08D

Investigation: **Turbidity by Method SM 2130B**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
976856-1	SC-700B-WDR-158	10:50	NTU	1.00	0.100	ND
976856-2	SC-100B-WDR-158	10:50	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	976879-1	3.35	3.25	3.03%	≤ 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	8.38	8.00	105%	90% - 110%	Yes
LCS	8.30	8.00	104%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor

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Sean Carlin
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Oakland, CA 94612
Attention: Shawn Duffy
Sample: Three (3) Groundwaters
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00
Prep. Batch: 07CrH08B

Laboratory No.: 976856
Date: July 23, 2008
Collected: July 2, 2008
Received: July 2, 2008
Prep/ Analyzed: July 3, 2008
Analytical Batch: 07CrH08B

Investigation: **Hexavalent Chromium by IC Using Method EPA 218.6**

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
976856-1	SC-700B-WDR-158	10:50	09:47	µg/L	1.05	0.20	ND
976856-2	SC-100B-WDR-158	10:50	10:25	µg/L	105	21.0	1300
976856-3	SC-701-WDR-158	11:06	10:54	µg/L	5.25	1.05	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Sample Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	976856-2	1300	1290	0.77%	< 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	976856-1	0.00	1.06	1.00	1.06	1.10	1.06	104%	90-110%	Yes
MS	976856-2	1300	105	15.0	1575	2820	2875	96.5%	90-110%	Yes
MS	976856-3	0.00	5.25	1.00	5.25	5.72	5.25	109%	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	5.16	5.00	103%	90% - 110%	Yes
MRCVS#1	9.62	10.0	96.2%	95% - 105%	Yes
MRCVS#2	9.53	10.0	95.3%	95% - 105%	Yes
MRCVS#3	9.64	10.0	96.4%	95% - 105%	Yes
LCS	5.17	5.00	103%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

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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.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 976856
Date: July 23, 2008
Collected: July 2, 2008
Received: July 2, 2008
Prep/ Analyzed: July 8, 2008
Analytical Batch: 07NH3-E08A

Investigation: **Ammonia as N by Method SM 4500-NH3 D**

Analytical Results Ammonia as N

TLI I.D.	Field I.D.	Sample Time	Method	Units	DF	RL	Results
976856-1	SC-700B-WDR-158	10:50	SM 4500-NH3 D	mg/L	1.00	0.500	ND
976856-2	SC-100B-WDR-158	10:50	SM 4500-NH3 D	mg/L	1.00	0.500	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	976856-1	ND	ND	0.00%	≤ 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	976856-2	0.00	1.00	6.00	6.00	5.67	6.00	94.5%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500	---	<0.500	Yes
MRCCS	5.85	6.00	97.5%	90% - 110%	Yes
MRCVS#1	5.78	6.00	96.3%	90% - 110%	Yes
LCS	10.2	10.0	102%	90% - 110%	Yes

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DF: Dilution Factor.

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Attention: Shawn Duffy
Sample: Three (3) Groundwaters
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 976856
Date: July 23, 2008
Collected: July 2, 2008
Received: July 2, 2008
Prep/ Analyzed: July 3, 2008
Analytical Batch: 07AN08D

Investigation: **Fluoride by Ion Chromatography using EPA 300.0**

Analytical Results Fluoride

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
976856-1	SC-700B-WDR-158	10:50	11:22	mg/L	5.00	0.500	2.74
976856-2	SC-100B-WDR-158	10:50	11:34	mg/L	5.00	0.500	2.74
976856-3	SC-701-WDR-158	11:06	11:45	mg/L	5.00	0.500	12.7

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	976814	2.34	2.35	0.43%	≤ 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	976814	2.34	1.00	4.00	4.00	6.20	6.34	96.5%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.200	---	<0.200	Yes
MRCCS	4.13	4.00	103%	90% - 110%	Yes
MRCVS#1	3.12	3.00	104%	90% - 110%	Yes
LCS	4.15	4.00	104%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
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Sample: Three (3) Groundwaters
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 976856
Date: July 23, 2008
Collected: July 2, 2008
Received: July 2, 2008
Prep/ Analyzed: July 3, 2008
Analytical Batch: 07AN08D

Investigation: **Sulfate by Method EPA 300.0**

Analytical Results Sulfate

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
976856-1	SC-700B-WDR-158	10:50	13:16	mg/L	100	50.0	526
976856-2	SC-100B-WDR-158	10:50	13:51	mg/L	50.0	25.0	581

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	976856-1	526	532	1.13%	≤ 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	976856-1	526	100	10.00	1000	1540	1526	101%	85-115%	Yes

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	14.9	15.0	99.3%	90% - 110%	Yes
MRCVS#2	15.0	15.0	100%	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.

Sam Cowle

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 976856
Date: July 23, 2008
Collected: July 2, 2008
Received: July 2, 2008
Prep/ Analyzed: July 3, 2008
Analytical Batch: 07AN08D

Investigation: **Nitrate as N by Ion Chromatography using EPA 300.0**

Analytical Results Nitrate as N

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
976856-1	SC-700B-WDR-158	10:50	11:22	mg/L	5.00	1.00	2.65
976856-2	SC-100B-WDR-158	10:50	11:34	mg/L	5.00	1.00	2.88

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	976856-2	2.88	3.04	5.41%	≤ 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	976856-2	2.88	5.00	4.00	20.0	22.9	22.9	100%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.200	---	<0.200	Yes
MRCCS	3.93	4.00	98.3%	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
LCS	3.99	4.00	99.8%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sam Cash

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Sample: Three (3) Groundwaters
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 976856
Date: July 23, 2008
Collected: July 2, 2008
Received: July 2, 2008
Prep/ Analyzed: July 3, 2008
Analytical Batch: 07NO208C

Investigation: **Nitrite as N by Method SM 4500-NO2-B**

Analytical Results for Nitrite as N

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
976856-1	SC-700B-WDR-158	10:50	13:22	mg/L	1.00	0.0050	ND
976856-2	SC-100B-WDR-158	10:50	13:23	mg/L	1.00	0.0050	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	976856-2	ND	ND	0.00%	≤ 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	976856-2	0.00	1.00	0.0200	0.0200	0.0198	0.0200	99.0%	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	0.0198	0.0200	99.0%	90% - 110%	Yes
MRCVS#1	0.0200	0.0200	100%	90% - 110%	Yes
LCS	0.0400	0.0400	100%	90% - 110%	Yes
LCSD	0.0404	0.0400	101%	90% - 110%	Yes

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Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sam Cantu

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: Three (3) Groundwaters
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00
Investigation: Total Metal Analyses as Requested

Laboratory No.: 976856
Reported: July 23, 2008
Collected: July 2, 2008
Received: July 2, 2008
Analyzed: July 10 - 19, 2008

Analytical Results

SAMPLE ID: SC-700B-WDR-158 **Time Collected:** 10:50 **LAB ID:** 976856-1

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	ND	1.00	µg/L	50.0	071008A	07/10/08	08:38
Antimony	EPA 200.8	ND	1.00	µg/L	3.00	071008A	07/10/08	08:38
Arsenic	EPA 200.8	ND	1.00	µg/L	5.00	071008A	07/10/08	08:38
Barium	EPA 200.8	ND	1.00	µg/L	300	071008A	07/10/08	08:38
Chromium	EPA 200.8	ND	1.00	µg/L	1.00	071008A	07/10/08	08:38
Copper	EPA 200.8	ND	1.00	µg/L	10.0	071008A	07/10/08	08:38
Lead	EPA 200.8	ND	1.00	µg/L	2.00	071008A	07/10/08	08:38
Manganese	EPA 200.8	ND	1.00	µg/L	20.0	071008A	07/10/08	08:38
Molybdenum	EPA 200.8	18.6	1.00	µg/L	5.00	071008A	07/10/08	08:38
Nickel	EPA 200.8	ND	1.00	µg/L	20.0	071008A	07/10/08	08:38
Zinc	EPA 200.8	ND	1.00	µg/L	20.0	071008A	07/10/08	08:38
Boron	EPA 200.7	1260	1.00	µg/L	200	071408A	07/14/08	10:47
Iron	EPA 200.7	53.7	1.00	µg/L	20.0	071408A	07/14/08	10:47

SAMPLE ID: SC-100B-WDR-158 **Time Collected:** 10:50 **LAB ID:** 976856-2

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	ND	1.00	µg/L	50.0	071008A	07/10/08	09:40
Antimony	EPA 200.8	ND	1.00	µg/L	3.00	071008A	07/10/08	09:40
Arsenic	EPA 200.8	ND	1.00	µg/L	5.00	071008A	07/10/08	09:40
Barium	EPA 200.8	ND	1.00	µg/L	300	071008A	07/10/08	09:40
Chromium	EPA 200.8	1290	5.00	µg/L	1.00	071008A	07/10/08	09:48
Copper	EPA 200.8	ND	1.00	µg/L	10.0	071008A	07/10/08	09:40
Lead	EPA 200.8	ND	1.00	µg/L	2.00	071008A	07/10/08	09:40
Manganese	EPA 200.8	ND	1.00	µg/L	20.0	071008A	07/10/08	09:40
Molybdenum	EPA 200.8	23.1	1.00	µg/L	5.00	071008A	07/10/08	09:40
Nickel	EPA 200.8	ND	1.00	µg/L	20.0	071008A	07/10/08	09:40
Zinc	EPA 200.8	ND	1.00	µg/L	20.0	071008A	07/10/08	09:40
Boron	EPA 200.7	1330	1.00	µg/L	200	071408A	07/14/08	10:52
Iron	EPA 200.7	ND	1.00	µg/L	20.0	071408A	07/14/08	10:52

SAMPLE ID: SC-701-WDR-158 **Time Collected:** 11:06 **LAB ID:** 976856-3

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Antimony	EPA 200.8	ND	5.00	µg/L	3.00	071008A	07/10/08	10:00
Arsenic	EPA 200.8	ND	5.00	µg/L	5.00	071008A	07/10/08	10:00
Barium	EPA 200.8	ND	5.00	µg/L	300	071008A	07/10/08	10:00
Beryllium	EPA 200.8	ND	5.00	µg/L	1.00	071408A	07/14/08	11:17
Cadmium	EPA 200.8	ND	5.00	µg/L	2.00	071008A	07/10/08	10:00
Chromium	EPA 200.8	ND	5.00	µg/L	1.00	071008A	07/10/08	10:00
Cobalt	EPA 200.8	6.85	5.00	µg/L	5.00	071008A	07/10/08	10:00
Copper	EPA 200.8	16.8	5.00	µg/L	10.0	071008A	07/10/08	10:00
Lead	EPA 200.8	ND	5.00	µg/L	2.00	071008A	07/10/08	10:00
Mercury	EPA 245.1	ND	1.00	µg/L	0.20	0719HG08A	07/19/08	N/A
Molybdenum	EPA 200.8	101	5.00	µg/L	5.00	071008A	07/10/08	10:00
Nickel	EPA 200.8	ND	5.00	µg/L	20.0	071008A	07/10/08	10:00
Selenium	EPA 200.8	5.76	5.00	µg/L	5.00	071008A	07/10/08	10:00
Silver	EPA 200.8	63.8	5.00	µg/L	5.00	071408A	07/14/08	11:17
Thallium	EPA 200.8	ND	5.00	µg/L	1.00	071008A	07/10/08	10:00
Vanadium	EPA 200.8	5.80	5.00	µg/L	5.00	071008A	07/10/08	10:00
Zinc	EPA 200.8	ND	5.00	µg/L	20.0	071008A	07/10/08	10:00

ND: Not detected,or below limit of detection.
DF: Dilution factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi, Manager
Analytical Services

Rec'd 07/02/08

976856

TRUESDAIL LABORATORIES, INC.
14201 Franklin Avenue, Tustin, CA 92780-7008
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CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-158]

976856

COC Number IM3Plant-WDR-158
TURNAROUND TIME 10 Days
DATE 07/02/08 PAGE 1 OF 1

COMPANY CH2M HILL /E2
PROJECT NAME PG&E Topock IM3
PHONE 530-229-3303 FAX 530-339-3303
ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612
P.O. NUMBER E-2
SAMPLERS (SIGNATURE

	SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr(VI) (218.6) Lab Filtered	Title 22 Metals List (200.7, 200.8, 245.1)	EC (120.1), pH (4500H+ B)	TDS (2540 c)	Turb (2130)	Total Metals (200.7) See List Below	Ammonia (4500-NH3)	Anions (300.0) F	Anions (300.0) F, NO3, NO2, SO4	TOC (5310 C)	Total Metals (200.7) Cr	NUMBER OF CONTAINERS	
-1	SC-700B-WDR-158	7/2/08	15:50		X		X	X	X	X	X		X			5	4 PH-2
-2	SC-100B-WDR-158	7/2/08	15:50		X		X	X	X	X	X		X			5	4 PH-2
-3	SC-701-WDR-158	7/2/08	15:50		X	X	X	X		X	X					5	4 PH-2

ALERT!! Level III QC
No Sample Corrections
See Form Attached

COMMENTS

700B-100B-701
ph - 8.0 | 7.1 | 7.9
EC - 7.90 | 8.67 | 33.6
Temp - 84.7° | 79.3° | 87.4°

5 | 4 TOTAL NUMBER OF CONTAINERS

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished) John Deetz	Printed Name John Deetz	Company/ Agency OMI	Date/ Time 7-2-08 15:50	
Signature (Received) Rafael Davila	Printed Name Rafael	Company/ Agency T.L.I	Date/ Time 7-2-08 4:20	
Signature (Relinquished) Rafael Davila	Printed Name Rafael	Company/ Agency T.L.I	Date/ Time 7-2-08 21:30	
Signature (Received) Rafael Davila	Printed Name Rafael	Company/ Agency T.L.I	Date/ Time 7-2-08 21:30	
Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time	
Signature (Received)	Printed Name	Company/ Agency	Date/ Time	

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

087

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July 25, 2008

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-159 PROJECT, GROUNDWATER MONITORING, TLI NO.: 977066

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-159 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, pH, 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 July 10, 2008, 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 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.

Sean Conklin

for Mona Nassimi
Manager, Analytical Services

Ali Kharaj

For K.R.P. Iyer
Quality Assurance/Quality Control Officer

TRUESDAIL LABORATORIES, INC.

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Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00

Laboratory No.: 977066
Date: July 25, 2008
Collected: July 10, 2008
Received: July 10, 2008

ANALYST LIST

EPA 120.1	Specific Conductivity	Tina Acquiat
SM 4500-H B	pH	Ethel Suico
SM 2540C	Total Dissolved Solids	Tina Acquiat
SM 2130B	Turbidity	Gautam Savani
EPA 200.8	Total Chromium	Romuel Chaves
EPA 218.6	Hexavalent Chromium	Jean-Paul Gleeson

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00
Prep. Batch: 072408A

Laboratory No.: 977066
Date: July 25, 2008
Collected: July 10, 2008
Received: July 10, 2008
Prep/ Analyzed: July 24, 2008
Analytical Batch: 072408A

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

Analytical Results Total Chromium

TLI I.D.	Field I.D.	Units	Method	Run Time	DF	RL	Results
977066	SC-700B-WDR-159	µg/L	EPA 200.8	14:31	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	977344	ND	ND	0.00%	≤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	977344	0.00	1.00	50.0	50.0	54.3	50.0	109%	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	48.8	50.0	97.6%	90% - 110%	Yes
MRCVS#1	49.7	50.0	99.4%	90% - 110%	Yes
ICS	48.9	50.0	97.8%	80% - 120%	Yes
LCS	20.4	20.0	102%	90% - 110%	Yes

ND: Not detected at reporting limit
DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conlon

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977066

Date: July 25, 2008
Collected: July 10, 2008
Received: July 10, 2008
Prep/ Analyzed: July 11, 2008
Analytical Batch: 07CrH08C

Investigation: **Hexavalent Chromium by EPA 218.6**

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
977066	SC-700B-WDR-159	08:45	11:10	µg/L	1.05	0.20	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	977069-2	250	258	3.15%	< 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	977066	0.00	1.06	1.00	1.06	1.06	1.06	100%	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	5.10	5.00	102%	90% - 110%	Yes
MRCVS#1	9.76	10.0	97.6%	95% - 105%	Yes
MRCVS#2	9.65	10.0	96.5%	95% - 105%	Yes
MRCVS#3	9.62	10.0	96.2%	95% - 105%	Yes
LCS	5.08	5.00	102%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sam Conla
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977066
Date: July 25, 2008
Collected: July 10, 2008
Received: July 10, 2008
Prep/ Analyzed: July 11, 2008
Analytical Batch: 07TUC08K

Investigation: **Turbidity by Method SM 2130B**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
977066	SC-700B-WDR-159	08:45	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	977100-1	4.18	4.09	2.18%	≤ 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	7.78	8.00	97.3%	90% - 110%	Yes
LCS	7.68	8.00	96.0%	90% - 110%	Yes

ND: Below 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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977066
Date: July 25, 2008
Collected: July 10, 2008
Received: July 10, 2008
Prep/ Analyzed: July 11, 2008
Analytical Batch: 07PH08J

Investigation:

pH by SM 4500-H B

Analytical Results pH

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	MDL	RL	Results
977066	SC-700B-WDR-159	08:45	08:41	pH	0.0700	2.00	7.90

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	977066	7.90	7.91	0.01	± 0.100 Units	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Difference (Units)	Acceptance Limits	QC Within Control
MRCVS	7.04	7.00	0.04	± 0.100 Units	Yes
LCS	7.02	7.00	0.02	± 0.100 Units	Yes
LCSD	7.03	7.00	0.03	± 0.100 Units	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977066
Date: July 25, 2008
Collected: July 10, 2008
Received: July 10, 2008
Prep/ Analyzed: July 14, 2008
Analytical Batch: 07EC08C

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
977066	SC-700B-WDR-159	µmhos/cm	EPA 120.1	1.00	2.00	6910

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	977066	6910	6910	0.00%	≤ 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	702	706	99.4%	90% - 110%	Yes
CVS#1	977	996	98.1%	90% - 110%	Yes
LCS	702	706	99.4%	90% - 110%	Yes
LCSD	702	706	99.4%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977066
Date: July 25, 2008
Collected: July 10, 2008
Received: July 10, 2008
Prep/ Analyzed: July 14, 2008
Analytical Batch: 07TDS08D

Investigation: **Total Dissolved Solids by SM 2540C**

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
977066	SC-700B-WDR-159	mg/L	SM 2540C	250	4450

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	977066	4450	4400	0.56%	≤ 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	497	500	99.4%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
RL: Reporting Limit.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Candler
for Mona Nassimi, Manager
Analytical Services

Rec'd 07/10/08

RUSH! Tp

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CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-159]

~~97~~ 97066 Number

TURNAROUND TIME 5 Days

DATE _____ PAGE 1 OF 1

97066

COMPANY E2

PROJECT NAME PG&E Topock

PHONE (530) 229-3303 FAX (530) 339-3303

ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612

P.O. NUMBER 358342.TM.02.00 TEAM 1

SAMPLERS (SIGNATURE _____

SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Total Metals (200.7) Total Chromium	Specific Conductance (120.1)	TDS (SM2540C)	PH (SM4500HB)	Turbidity (SM2130)	NUMBER OF CONTAINERS	COMMENTS
SC-700B-WDR-159	7-10-08	0845	Water	X	X	X	X	X	X	3	PH-7
										3	TOTAL NUMBER OF CONTAINERS

EC - 795
pH - ~~7.95~~ JA 8.0
TEMP - 84°

ALERT!!
Level III QC

For Sample Conditions See Form Attached

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	JAIDE	QNT	7-10-08 0850
Signature (Received)	Hipolito	TLI	7-10-08 1550
Signature (Relinquished)	Hipolito	TLI	7-10-08 21:10
Signature (Received)	Rafael	T.L.I	7-10-08 21:10
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ _____ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

036

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July 28, 2008

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-160 PROJECT, GROUNDWATER MONITORING, TLI NO.: 977227

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-160 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, pH, 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 July 17, 2008, 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 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.

Sean Conde

for Mona Nassimi
Manager, Analytical Services

Ali Khorasgi

for K.R.P. Iyer
Quality Assurance/Quality Control Officer

TRUESDAIL LABORATORIES, INC.

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Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00

Laboratory No.: 977227
Date: July 28, 2008
Collected: July 17, 2008
Received: July 17, 2008

ANALYST LIST

EPA 120.1	Specific Conductivity	Tina Acquiat
SM 4500-H B	pH	Gautam Savani
SM 2540C	Total Dissolved Solids	Tina Acquiat
SM 2130B	Turbidity	Gautam Savani
EPA 200.8	Total Chromium	Linda Saetern
EPA 218.6	Hexavalent Chromium	Jean-Paul Gleeson

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(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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00
Prep. Batch: 071808A

Laboratory No.: 977227

Date: July 28, 2008
Collected: July 17, 2008
Received: July 17, 2008
Prep/ Analyzed: July 18, 2008
Analytical Batch: 071808A

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

Analytical Results Total Chromium

TLI I.D.	Field I.D.	Units	Method	Run Time	DF	RL	Results
977227	SC-700B-WDR-160	µg/L	EPA 200.8	11:40	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	977069-1	ND	ND	0.00%	≤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	977069-1	0.00	1.00	50.0	50.0	50.0	50.0	100%	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	48.1	50.0	96.2%	90% - 110%	Yes
MRCVS#1	48.6	50.0	97.2%	90% - 110%	Yes
MRCVS#2	47.3	50.0	94.6%	90% - 110%	Yes
ICS	48.6	50.0	97.2%	80% - 120%	Yes
LCS	20.4	20.0	102%	90% - 110%	Yes

ND: Not detected at reporting limit
DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conlon
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977227

Date: July 28, 2008
Collected: July 17, 2008
Received: July 17, 2008
Prep/ Analyzed: July 18, 2008
Analytical Batch: 07CrH08D

Investigation: **Hexavalent Chromium by EPA 218.6**

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
977227	SC-700B-WDR-160	08:30	13:30	µg/L	1.05	0.20	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	977227	ND	ND	0.00%	< 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	977227	0.00	1.06	1.00	1.06	1.06	1.06	100%	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	5.04	5.00	101%	90% - 110%	Yes
MRCVS#1	9.84	10.0	98.4%	95% - 105%	Yes
LCS	5.02	5.00	100%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sam Candia
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977227
Date: July 28, 2008
Collected: July 17, 2008
Received: July 17, 2008
Prep/ Analyzed: July 18, 2008
Analytical Batch: 07TUC08M

Investigation: **Turbidity by Method SM 2130B**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
977227	SC-700B-WDR-160	08:30	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	977212-2	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	8.04	8.00	101%	90% - 110%	Yes
LCS	7.90	8.00	98.8%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sean Conklin
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977227
Date: July 28, 2008
Collected: July 17, 2008
Received: July 17, 2008
Prep/ Analyzed: July 18, 2008
Analytical Batch: 07PH08Q

Investigation:

pH by SM 4500-H B

Analytical Results pH

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	MDL	RL	Results
977227	SC-700B-WDR-160	08:30	08:20	pH	0.0700	2.00	7.85

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	977227	7.85	7.86	0.01	± 0.100 Units	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Difference (Units)	Acceptance Limits	QC Within Control
MRCVS	7.02	7.00	0.02	± 0.100 Units	Yes
LCS	7.00	7.00	0.00	± 0.100 Units	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977227
Date: July 28, 2008
Collected: July 17, 2008
Received: July 17, 2008
Prep/ Analyzed: July 18, 2008
Analytical Batch: 07EC08E

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
977227	SC-700B-WDR-160	µmhos/cm	EPA 120.1	1.00	2.00	6610

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	977227	6610	6620	0.15%	≤ 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	701	706	99.3%	90% - 110%	Yes
CVS#1	978	996	98.2%	90% - 110%	Yes
LCS	701	706	99.3%	90% - 110%	Yes
LCSD	701	706	99.3%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sean Candler
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977227
Date: July 28, 2008
Collected: July 17, 2008
Received: July 17, 2008
Prep/ Analyzed: July 18, 2008
Analytical Batch: 07TDS08G

Investigation: **Total Dissolved Solids by SM 2540C**

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
977227	SC-700B-WDR-160	mg/L	SM 2540C	250	4030

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	977227	4030	4070	0.49%	≤ 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.

for Sam Conde
Mona Nassimi, Manager
Analytical Services

Rec'd 07/17/08

977227

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CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-160]

977227

COC Number 977227

TURNAROUND TIME 5 Days

DATE 7/17/08 PAGE 1 OF 1

COMPANY	E2
PROJECT NAME	PG&E Topock
PHONE	(530) 229-3303 FAX (530) 339-3303
ADDRESS	155 Grand Ave Ste 1000 Oakland, CA 94612
P.O. NUMBER	358342.TM.02.00 TEAM 1
SAMPLERS (SIGNATURE	

SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Total Metals (200.7) Total Chromium	Specific Conductance (120.1)	TDS (SM2540C)	PH (SM4500HB)	Turbidity (SM2130)	NUMBER OF CONTAINERS	COMMENTS
SC-700B-WDR-160	7/17/08	0830	Water	x	x	x	x	x	x	3	PH-7
										3	TOTAL NUMBER OF CONTAINERS

Temp- 84.9
EC- 7.58
pH- 7.9

RUSH

ALERT!!
Level III QC

See Sample Conditions
See Form Attached

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	J Hide	OMI	7-17-08 0830
Signature (Received)	Rafael Davila	T.L.I	7-17-08 2:00
Signature (Relinquished)	Rafael Davila	T.L.I	7-17-08 20:00
Signature (Received)	Rafael Davila	T.L.I	7-17-08 20:00
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

033

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July 31, 2008

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-161 PROJECT, GROUNDWATER MONITORING, TLI NO.: 977344

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-161 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, pH, 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 July 23, 2008, 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 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.

Sean Conkle

for Mona Nassimi
Manager, Analytical Services

K.R.P. Iyer

K.R.P. Iyer
Quality Assurance/Quality Control Officer

TRUESDAIL LABORATORIES, INC.

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Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00

Laboratory No.: 977344
Date: July 31, 2008
Collected: July 23, 2008
Received: July 23, 2008

ANALYST LIST

EPA 120.1	Specific Conductivity	Tina Acquiat
SM 4500-H B	pH	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	Jean-Paul Gleeson

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00
Prep. Batch: 072408A

Laboratory No.: 977344

Date: August 4, 2008
Collected: July 23, 2008
Received: July 23, 2008
Prep/ Analyzed: July 24, 2008
Analytical Batch: 072408A
Revision 1

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

Analytical Results Total Chromium

TLI I.D.	Field I.D.	Units	Method	Run Time	DF	RL	Results
977344-1	SC-700B-WDR-161	µg/L	EPA 200.8	14:07	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	977344	ND	ND	0.00%	≤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	977344	0.00	1.00	50.0	50.0	54.3	50.0	109%	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	48.8	50.0	97.6%	90% - 110%	Yes
MRCVS#1	49.7	50.0	99.4%	90% - 110%	Yes
ICS	48.9	50.0	97.8%	80% - 120%	Yes
LCS	20.4	20.0	102%	90% - 110%	Yes

ND: Not detected at reporting limit
DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Laboratory No.: 977344

Sample: One (1) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Date: July 31, 2008
Collected: July 23, 2008
Received: July 23, 2008
Prep/ Analyzed: July 24, 2008
Analytical Batch: 07CrH08G

Investigation: **Hexavalent Chromium by EPA 218.6**

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
977344-1	SC-700B-WDR-161	11:00	10:54	µg/L	1.05	0.20	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	977345-1	182	182	0.00%	< 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	977344-1	0.00	1.06	1.00	1.06	1.08	1.06	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	5.03	5.00	101%	90% - 110%	Yes
MRCVS#1	10.1	10.0	101%	95% - 105%	Yes
MRCVS#2	9.93	10.0	99.3%	95% - 105%	Yes
LCS	5.03	5.00	101%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi, Manager
Analytical Services

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Attention: Shawn Duffy
Sample: One (1) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977344
Date: July 31, 2008
Collected: July 23, 2008
Received: July 23, 2008
Prep/ Analyzed: July 24, 2008
Analytical Batch: 07TUC08Q

Investigation: **Turbidity by Method SM 2130B**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
977344-1	SC-700B-WDR-161	11:00	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	977353-4	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	8.05	8.00	101%	90% - 110%	Yes
LCS	8.00	8.00	100%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sam Cunha
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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Attention: Shawn Duffy

Sample: One (1) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977344
Date: August 4, 2008
Collected: July 23, 2008
Received: July 23, 2008
Prep/ Analyzed: July 24, 2008
Analytical Batch: 07PH08V
Revision 1

Investigation:

pH by SM 4500-H B

Analytical Results pH

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	MDL	RL	Results
977344-1	SC-700B-WDR-161	11:00	08:55	pH	0.0700	2.00	8.01

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	977344-1	8.01	8.01	0.00	± 0.100 Units	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Difference (Units)	Acceptance Limits	QC Within Control
MRCVS	7.00	7.00	0.00	± 0.100 Units	Yes
LCS	7.05	7.00	0.05	± 0.100 Units	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sean Conlon
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977344
Date: August 4, 2008
Collected: July 23, 2008
Received: July 23, 2008
Prep/ Analyzed: July 24, 2008
Analytical Batch: 07EC08G
Revision 1

Investigation: **Specific Conductivity by EPA 120.1**

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
977344-1	SC-700B-WDR-161	µmhos/cm	EPA 120.1	1.00	2.00	6270

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	977344-1	6270	6270	0.00%	≤ 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	696	706	98.6%	90% - 110%	Yes
CVS#1	978	996	98.2%	90% - 110%	Yes
LCS	696	706	98.6%	90% - 110%	Yes
LCSD	696	706	98.6%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977344
Date: July 31, 2008
Collected: July 23, 2008
Received: July 23, 2008
Prep/ Analyzed: July 24, 2008
Analytical Batch: 07TDS08J

Investigation: **Total Dissolved Solids by SM 2540C**

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
977344-1	SC-700B-WDR-161	mg/L	SM 2540C	250	4200

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	977344-1	4200	4160	0.48%	≤ 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.

Sam Cantu

for Mona Nassimi, Manager
Analytical Services

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CHAIN OF CUSTODY RECORD

[3Plant-WDR-161]

977344

Rec'd 07/23/08

977344

COC Number

TURNAROUND TIME RUSH 5 Days

DATE 7-23-08 PAGE 1 OF 1

COMPANY E2

PROJECT NAME PG&E Topock

PHONE (530) 229-3303 FAX (530) 339-3303

ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612

P.O. NUMBER 358342.TM.02.00 TEAM 1

SAMPLERS (SIGNATURE)

SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Total Metals (200.7) Total Chromium	Specific Conductance (120.1)	TDS (SM2540C)	PH (SM4500HB)	Turbidity (SM2130)	NUMBER OF CONTAINERS
SC-700B-WDR-161	7-23-08	11:00	Water	x	x	x	x	x	x	3
										3 TOTAL NUMBER OF CONTAINERS

COMMENTS
7-23-08
PH - 8.0
EC - 6.97
TEMP: 84.3
Time 11:06
PH 7

-1

For Sample Condition See Back Page

ALERT!!
Level III QC

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Ron Pielos	ONI	7-23-08 11:00
Signature (Received) Bonifacio Dayag	BONIFACIO DAYAG	TL	7-23-08 1530
Signature (Relinquished) Bonifacio Dayag	BONIFACIO DAYAG	TL	7-23-08 2030
Signature (Received) Hipolito	Hipolito	TL	2035 7-23-08
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

035

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August 5, 2008

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-162 PROJECT, GROUNDWATER MONITORING, TLI NO.: 977541

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-162 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, pH, 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 July 30, 2008, 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 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.

Sam Condon

for Mona Nassimi
Manager, Analytical Services

K. R. P. Iyer

K.R.P. Iyer
Quality Assurance/Quality Control Officer

TRUESDAIL LABORATORIES, INC.

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Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00

Laboratory No.: 977541
Date: August 5, 2008
Collected: July 30, 2008
Received: July 30, 2008

ANALYST LIST

EPA 120.1	Specific Conductivity	Tina Acquiat
SM 4500-H B	pH	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	Jean-Paul Gleeson

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00
Prep. Batch: 073108A

Laboratory No.: 977541
Date: August 5, 2008
Collected: July 30, 2008
Received: July 30, 2008
Prep/ Analyzed: July 31, 2008
Analytical Batch: 073108A

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

Analytical Results Total Chromium

TLI I.D.	Field I.D.	Units	Method	Run Time	DF	RL	Results
977541	SC-700B-WDR-162	µg/L	EPA 200.8	16:54	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	976778	ND	ND	0.00%	≤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	976778	0.00	1.00	50.0	50.0	52.7	50.0	105%	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	51.1	50.0	102%	90% - 110%	Yes
MRCVS#1	50.4	50.0	101%	90% - 110%	Yes
MRCVS#2	49.8	50.0	99.6%	90% - 110%	Yes
ICS	48.7	50.0	97.4%	80% - 120%	Yes
LCS	19.9	20.0	99.5%	90% - 110%	Yes

ND: Not detected at reporting limit
DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Carle
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Laboratory No.: 977541

Sample: One (1) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Date: August 5, 2008
Collected: July 30, 2008
Received: July 30, 2008
Prep/ Analyzed: July 31, 2008
Analytical Batch: 07CrH08I

Investigation: **Hexavalent Chromium by EPA 218.6**

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
977541	SC-700B-WDR-162	11:40	10:58	µg/L	1.05	0.20	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	977541 5.25X	ND	ND	0.00%	< 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	977541	0.00	1.06	1.00	1.06	1.05	1.06	99.1%	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	9.95	10.0	99.5%	95% - 105%	Yes
LCS	4.98	5.00	99.6%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Carlin
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977541
Date: August 5, 2008
Collected: July 30, 2008
Received: July 30, 2008
Prep/ Analyzed: July 31, 2008
Analytical Batch: 07TUC08U

Investigation: **Turbidity by Method SM 2130B**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
977541	SC-700B-WDR-162	11:40	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	977566-1	6.20	6.22	0.32%	≤ 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	8.05	8.00	101%	90% - 110%	Yes
LCS	8.10	8.00	101%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sean Carla
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977541
Date: August 5, 2008
Collected: July 30, 2008
Received: July 30, 2008
Prep/ Analyzed: July 31, 2008
Analytical Batch: 07PH08AA

Investigation:

pH by SM 4500-H B

Analytical Results pH

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	MDL	RL	Results
977541	SC-700B-WDR-162	11:40	09:05	pH	0.0700	2.00	7.98

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	977541	7.98	7.98	0.00	± 0.100 Units	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Difference (Units)	Acceptance Limits	QC Within Control
MRCVS	7.01	7.00	0.01	± 0.100 Units	Yes
LCS	7.01	7.00	0.01	± 0.100 Units	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conklin
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977541
Date: August 5, 2008
Collected: July 30, 2008
Received: July 30, 2008
Prep/ Analyzed: July 31, 2008
Analytical Batch: 07EC08K

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
977541	SC-700B-WDR-162	µmhos/cm	EPA 120.1	1.00	2.00	6590

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	977541	6590	6590	0.00%	≤ 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	697	706	98.7%	90% - 110%	Yes
CVS#1	984	996	98.8%	90% - 110%	Yes
LCS	697	706	98.7%	90% - 110%	Yes
LCSD	697	706	98.7%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Cunha
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977541
Date: August 5, 2008
Collected: July 30, 2008
Received: July 30, 2008
Prep/ Analyzed: July 31, 2008
Analytical Batch: 07TDS08N

Investigation: **Total Dissolved Solids by SM 2540C**

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
977541	SC-700B-WDR-162	mg/L	SM 2540C	250	4140

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	977541	4140	4160	0.24%	≤ 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.

Sean Carla

for Mona Nassimi, Manager
Analytical Services

977541

Rec'd 07/31/08
S3B977541

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CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-162]

COC Number

TURNAROUND TIME 5 Days

DATE 7-30-08 PAGE 1 OF 1

COMPANY: E2

PROJECT NAME: PG&E Topock

PHONE: (530) 229-3303 FAX: (530) 339-3303

ADDRESS: 155 Grand Ave Ste 1000, Oakland, CA 94612

P.O. NUMBER: 358342.TM.02.00 TEAM: 1

SAMPLERS (SIGNATURE):

SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Total Metals (200.7) Total Chromium	Specific Conductance (120.1)	TDS (SM2540C)	PH (SM4500HB)	Turbidity (SM2130)	NUMBER OF CONTAINERS	COMMENTS
SC-700B-WDR-162	7-30-08	1140	Water	x	x	x	x	x	x	3	pH = 7
										3	TOTAL NUMBER OF CONTAINERS

COMMENTS: 11:45 Samples Read EC - 7.60 Temp - 83.4 pH - 8.1

ALERT!!
Level III QC

RUSH

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Aide	OMI	7-30-08 1140
Signature (Received)	Rafael	T.L.I	7-30-08 1540
Signature (Relinquished)	Hushen	T.L.I	7-30-08 2030
Signature (Received)	Wayne	T.L.I	7-31-08 0845
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

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September 10, 2008

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-163 PROJECT, GROUNDWATER MONITORING,

TLI NO.: 977683

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-163 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 August 6, 2008, 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.

Sample 977683-3 for Mercury by EPA 245.1 was analyzed at a dilution of 2x due to possible matrix interference.

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.

Sean Candler

for Mona Nassimi
Manager, Analytical Services

K. R. P. Iyer

K.R.P. Iyer
Quality Assurance/Quality Control Officer

TRUESDAIL LABORATORIES, INC.

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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.: 977683
Date: September 10, 2008
Collected: August 6, 2008
Received: August 6, 2008

ANALYST LIST

EPA 120.1	Specific Conductivity	Tina Acquiat
SM 4500-H B	pH	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	Iordan Stavrev
SM 4500-NO2 B	Nitrite as N	Tina Acquiat
EPA 200.7	Metals by ICP	Hao Ton
EPA 200.8	Metals by ICP/MS	Romuel Chaves
EPA 245.1	Mercury	Romuel Chaves
EPA 218.6	Hexavalent Chromium	Jean-Paul Gleeson

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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.: 977683
Date: September 10, 2008
Collected: August 6, 2008
Received: August 6, 2008
Prep/ Analyzed: August 7, 2008
Analytical Batch: 08PH08G

Investigation: **pH by SM 4500-H B**

Analytical Results pH

TLI I.D.	Field I.D.	Run Time	Units	MDL	RL	Results
977683-1	SC-100B-WDR-163	08:39	pH	0.0700	2.00	7.39
977683-2	SC-700B-WDR-163	09:00	pH	0.0700	2.00	7.86
977683-3	SC-701-WDR-163	09:02	pH	0.0700	2.00	7.83

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	977683-2	7.86	7.86	0.00	± 0.100 Units	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Difference (Units)	Acceptance Limits	QC Within Control
MRCVS	7.01	7.00	0.01	± 0.100 Units	Yes
LCS	7.03	7.00	0.03	± 0.100 Units	Yes

ND: Below the reporting limit (Not Detected).
RL: Reporting Limit.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conlon

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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

Laboratory No.: 977683

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

Date: September 10, 2008
Collected: August 6, 2008
Received: August 6, 2008
Prep/ Analyzed: August 7, 2008
Analytical Batch: 08EC08C

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
977683-1	SC-100B-WDR-163	µmhos/cm	EPA 120.1	1.00	2.00	7760
977683-2	SC-700B-WDR-163	µmhos/cm	EPA 120.1	1.00	2.00	6690
977683-3	SC-701-WDR-163	µmhos/cm	EPA 120.1	1.00	2.00	29900

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	977683-1	7760	7760	0.00%	≤ 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	986	996	99.0%	90% - 110%	Yes
CVS#2	986	996	99.0%	90% - 110%	Yes
LCS	699	706	99.0%	90% - 110%	Yes
LCSD	699	706	99.0%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conlon

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

Laboratory No.: 977683
Date: September 10, 2008
Collected: August 6, 2008
Received: August 6, 2008
Prep/ Analyzed: August 8, 2008
Analytical Batch: 08TDS08C

Investigation: **Total Dissolved Solids by SM 2540C**

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
977683-1	SC-100B-WDR-163	mg/L	SM 2540C	250	5180
977683-2	SC-700B-WDR-163	mg/L	SM 2540C	250	4360
977683-3	SC-701-WDR-163	mg/L	SM 2540C	625	20900

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	977682-11	1010	1040	1.46%	≤ 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
LCS 2	501	500	100%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
RL: Reporting Limit.

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REPORT

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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.: 977683
Date: September 10, 2008
Collected: August 6, 2008
Received: August 6, 2008
Prep/ Analyzed: August 7, 2008
Analytical Batch: 08TUC08F

Investigation: **Turbidity by Method SM 2130B**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
977683-1	SC-100B-WDR-163	09:45	NTU	1.00	0.100	0.104
977683-2	SC-700B-WDR-163	10:05	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	977674-1	2.72	2.73	0.37%	≤ 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	8.10	8.00	101%	90% - 110%	Yes
LCS	8.05	8.00	101%	90% - 110%	Yes
LCS	7.90	8.00	98.8%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor

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REPORT

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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: 08CrH08C

Laboratory No.: 977683
Date: September 10, 2008
Collected: August 6, 2008
Received: August 6, 2008
Prep/ Analyzed: August 7, 2008
Analytical Batch: 08CrH08C

Investigation: **Hexavalent Chromium by IC Using Method EPA 218.6**

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
977683-1	SC-100B-WDR-163	09:45	13:39	µg/L	105	21.0	1180
977683-2	SC-700B-WDR-163	10:05	14:36	µg/L	5.25	1.05	ND
977683-3	SC-701-WDR-163	11:25	15:49	µg/L	10.5	2.10	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Sample Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	977683-1	1180	1200	1.68%	≤ 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	977683-1	1180	105	15.0	1575	2820	2755	104%	90-110%	Yes
MS	977683-2	0.00	5.25	1.00	5.25	5.17	5.25	98.5%	90-110%	Yes
MS	977683-3	0.00	10.5	1.00	10.5	10.6	10.5	101%	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	4.79	5.00	95.8%	90% - 110%	Yes
MRCVS#1	9.69	10.0	96.9%	95% - 105%	Yes
MRCVS#2	9.56	10.0	95.6%	95% - 105%	Yes
MRCVS#3	9.50	10.0	95.0%	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,
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Sean Conde
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Analytical Services

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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.: 977683
Date: September 10, 2008
Collected: August 6, 2008
Received: August 6, 2008
Prep/ Analyzed: August 8, 2008
Analytical Batch: 08NH3-E08C

Investigation: **Ammonia as N by Method SM 4500-NH3 D**

Analytical Results Ammonia as N

TLI I.D.	Field I.D.	Sample Time	Method	Units	DF	RL	Results
977683-1	SC-100B-WDR-163	09:45	SM 4500-NH3 D	mg/L	1.00	0.500	ND
977683-2	SC-700B-WDR-163	10:05	SM 4500-NH3 D	mg/L	1.00	0.500	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	977683-2	ND	ND	0.00%	≤ 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	977683-2	0.00	1.00	6.00	6.00	6.66	6.00	111%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500	—	<0.500	Yes
MRCCS	6.49	6.00	108%	90% - 110%	Yes
MRCVS#1	6.26	6.00	104%	90% - 110%	Yes
LCS	10.4	10.0	104%	90% - 110%	Yes

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DF: Dilution Factor.

Respectfully submitted,
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Sean Carla
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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.: 977683
Date: September 10, 2008
Collected: August 6, 2008
Received: August 6, 2008
Prep/ Analyzed: August 7, 2008
Analytical Batch: 08AN08F

Investigation: **Fluoride by Ion Chromatography using EPA 300.0**

Analytical Results Fluoride

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
977683-1	SC-100B-WDR-163	09:45	13:17	mg/L	5.00	0.500	2.61
977683-2	SC-700B-WDR-163	10:05	13:29	mg/L	5.00	0.500	2.20
977683-3	SC-701-WDR-163	11:25	13:40	mg/L	5.00	0.500	11.9

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	977682-3	2.47	2.28	8.00%	≤ 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	977682-3	2.47	5.00	4.00	20.0	22.9	22.5	102%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500	---	<0.500	Yes
MRCCS	4.11	4.00	103%	90% - 110%	Yes
MRCVS#1	3.09	3.00	103%	90% - 110%	Yes
MRCVS#2	3.08	3.00	103%	90% - 110%	Yes
MRCVS#3	3.08	3.00	103%	90% - 110%	Yes
MRCVS#4	3.08	3.00	103%	90% - 110%	Yes
LCS	4.12	4.00	103%	90% - 110%	Yes

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Sean Conda

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REPORT

Client: E2 Consulting Engineers, Inc.
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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.: 977683
Date: September 10, 2008
Collected: August 6, 2008
Received: August 6, 2008
Prep/ Analyzed: August 7, 2008
Analytical Batch: 08AN08F

Investigation: **Sulfate by Method EPA 300.0**

Analytical Results Sulfate

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
977683-1	SC-100B-WDR-163	09:45	21:39	mg/L	50.0	25.0	574
977683-2	SC-700B-WDR-163	10:05	21:51	mg/L	50.0	25.0	483

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	977672-1	515	514	0.19%	≤ 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	977672-1	515	50.0	10.0	500	1000	1015	97.0%	85-115%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500	---	<0.500	Yes
MRCCS	20.0	20.0	100%	90% - 110%	Yes
MRCVS#1	15.0	15.0	100%	90% - 110%	Yes
MRCVS#2	15.1	15.0	101%	90% - 110%	Yes
MRCVS#3	15.0	15.0	100%	90% - 110%	Yes
MRCVS#4	15.0	15.0	100%	90% - 110%	Yes
MRCVS#5	15.0	15.0	100%	90% - 110%	Yes
MRCVS#6	15.1	15.0	101%	90% - 110%	Yes
LCS	20.4	20.0	102%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

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for Sean Carla
Mona Nassimi, Manager
Analytical Services

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REPORT

Client: E2 Consulting Engineers, Inc.
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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.: 977683
Date: September 10, 2008
Collected: August 6, 2008
Received: August 6, 2008
Prep/ Analyzed: August 7, 2008
Analytical Batch: 08AN08F

Investigation: **Nitrate as N by Ion Chromatography using EPA 300.0**

Analytical Results Nitrate as N

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
977683-1	SC-100B-WDR-163	09:45	13:17	mg/L	5.00	1.00	2.99
977683-2	SC-700B-WDR-163	10:05	13:29	mg/L	5.00	1.00	2.63

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	977672-1	3.37	3.38	0.30%	≤ 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	977672-1	3.37	1.00	4.00	4.00	7.34	7.37	99.3%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500	---	<0.500	Yes
MRCCS	3.95	4.00	98.8%	90% - 110%	Yes
MRCVS#1	2.96	3.00	98.7%	90% - 110%	Yes
MRCVS#2	2.95	3.00	98.3%	90% - 110%	Yes
MRCVS#3	2.97	3.00	99.0%	90% - 110%	Yes
LCS	3.98	4.00	99.5%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conklin

for Mona Nassimi, Manager
Analytical Services

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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.: 977683
Date: September 10, 2008
Collected: August 6, 2008
Received: August 6, 2008
Prep/ Analyzed: August 7, 2008
Analytical Batch: 08NO208D

Investigation: **Nitrite as N by Method SM 4500-NO2-B**

Analytical Results for Nitrite as N

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
977683-1	SC-100B-WDR-163	09:45	14:43	mg/L	1.00	0.0050	ND
977683-2	SC-700B-WDR-163	10:05	14:44	mg/L	1.00	0.0050	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	977683-1	ND	ND	0.00%	≤ 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	977683-1	0.00	1.00	0.0200	0.0200	0.0197	0.0200	98.5%	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	0.0195	0.0200	97.5%	90% - 110%	Yes
MRCVS#1	0.0203	0.0200	102%	90% - 110%	Yes
LCS	0.0398	0.0400	99.5%	90% - 110%	Yes
LCSD	0.0397	0.0400	99.3%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sam Cunha

for Mona Nassimi, Manager
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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612

Attention: Shawn Duffy

Laboratory No.: 977683

Reported: September 10, 2008
Collected: August 6, 2008
Received: August 6, 2008
Analyzed: See Below

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

Analytical Results

SAMPLE ID: SC-100B-WDR-163 **Time Collected:** 09:45 **LAB ID:** 977683-1

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	ND	1.00	µg/L	50.0	082208A	08/22/08	09:59
Antimony	EPA 200.8	ND	1.00	µg/L	10.0	082208A	08/22/08	09:59
Arsenic	EPA 200.8	3.21	1.00	µg/L	0.20	082008A	08/20/08	11:54
Barium	EPA 200.8	26.0	1.00	µg/L	10.0	082008A	08/20/08	11:54
Chromium	EPA 200.8	1200	5.00	µg/L	1.00	082008A	08/20/08	12:12
Copper	EPA 200.8	ND	1.00	µg/L	5.00	082008A	08/20/08	11:54
Lead	EPA 200.8	ND	1.00	µg/L	10.0	082008A	08/20/08	11:54
Manganese	EPA 200.8	ND	1.00	µg/L	10.0	082008A	08/20/08	11:54
Molybdenum	EPA 200.8	11.3	1.00	µg/L	10.0	082008A	08/20/08	11:54
Nickel	EPA 200.8	ND	1.00	µg/L	10.0	082008A	08/20/08	11:54
Zinc	EPA 200.8	ND	1.00	µg/L	10.0	082008A	08/20/08	11:54
Boron	EPA 200.7	1050	1.00	µg/L	200	090508A	09/05/08	10:58
Iron	EPA 200.7	ND	1.00	µg/L	20.0	082008A	08/20/08	16:49

SAMPLE ID: SC-700B-WDR-163 **Time Collected:** 10:05 **LAB ID:** 977683-2

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	ND	1.00	µg/L	50.0	082208A	08/22/08	10:23
Antimony	EPA 200.8	ND	1.00	µg/L	10.0	082208A	08/22/08	10:23
Arsenic	EPA 200.8	0.33	1.00	µg/L	0.20	082008A	08/20/08	11:30
Barium	EPA 200.8	14.5	1.00	µg/L	10.0	082008A	08/20/08	11:30
Chromium	EPA 200.8	ND	1.00	µg/L	1.00	082008A	08/20/08	11:30
Copper	EPA 200.8	ND	1.00	µg/L	5.00	082008A	08/20/08	11:30
Lead	EPA 200.8	ND	1.00	µg/L	10.0	082008A	08/20/08	11:30
Manganese	EPA 200.8	ND	1.00	µg/L	10.0	082008A	08/20/08	11:30
Molybdenum	EPA 200.8	ND	1.00	µg/L	10.0	082008A	08/20/08	11:30
Nickel	EPA 200.8	ND	1.00	µg/L	10.0	082008A	08/20/08	11:30
Zinc	EPA 200.8	ND	1.00	µg/L	10.0	082008A	08/20/08	11:30
Boron	EPA 200.7	1010	1.00	µg/L	200	090508A	09/05/08	11:11
Iron	EPA 200.7	ND	1.00	µg/L	20.0	082008A	08/20/08	16:53

SAMPLE ID: SC-701-WDR-163 **Time Collected:** 11:25 **LAB ID:** 977683-3

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Antimony	EPA 200.8	ND	1.00	µg/L	10.0	082208A	08/22/08	10:29
Arsenic	EPA 200.8	2.38	5.00	µg/L	1.00	082008A	08/20/08	12:37
Barium	EPA 200.8	73.0	5.00	µg/L	10.0	082008A	08/20/08	12:37
Beryllium	EPA 200.8	ND	5.00	µg/L	1.00	083108A	08/31/08	17:57
Cadmium	EPA 200.8	ND	5.00	µg/L	3.00	090408B	09/04/08	17:20
Chromium	EPA 200.8	2.22	5.00	µg/L	1.00	082008A	08/20/08	12:37
Cobalt	EPA 200.8	8.57	5.00	µg/L	5.00	082008A	08/20/08	12:24
Copper	EPA 200.8	12.3	5.00	µg/L	5.00	082008A	08/20/08	12:37
Lead	EPA 200.8	ND	5.00	µg/L	10.0	082008A	08/20/08	12:24
Mercury	EPA 245.1	ND	2.00	µg/L	0.40	08HG08G	08/25/08	N/A
Molybdenum	EPA 200.8	88.0	1.00	µg/L	10.0	090908A	09/09/08	12:24
Nickel	EPA 200.8	13.2	5.00	µg/L	10.0	082008A	08/20/08	12:37
Selenium	EPA 200.8	15.8	1.00	µg/L	10.0	082008A	08/20/08	12:18
Silver	EPA 200.8	ND	5.00	µg/L	5.00	090408B	09/04/08	17:20
Thallium	EPA 200.8	ND	5.00	µg/L	1.00	082008A	08/20/08	12:24
Vanadium	EPA 200.8	5.62	5.00	µg/L	5.00	082008A	08/20/08	12:37
Zinc	EPA 200.8	52.4	5.00	µg/L	10.0	082008A	08/20/08	12:24

ND: Not detected,or below limit of detection.

DF: Dilution factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sean Conlan
Mona Nassimi, Manager
Analytical Services

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

Laboratory No.: 977683
Reported: September 10, 2008
Collected: August 6, 2008
Received: August 6, 2008

Quality Control/Quality Assurance Report

				DIGESTED BLANK		IPC				LFB			
Parameter	Method	Batch	Units	LRB	RL	Observed Value	TRUE Value	% Rec	Control Limits	Observed Value	TRUE Value	% Rec	Control Limits %
Mercury	EPA 245.1	08HG08G	µg/L	ND	0.200	0.916	1.00	91.6%	95-105%	1.10	1.00	110%	85-115%

			LABORATORY CONTROL SAMPLES				SAMPLE DUPLICATES				
Parameter	Method	Units	LCS Obs.	LCS Theo.	% Rec.	Control Limits	SAMPLE ID	SAMPLE RESULT	DUP RESULT	% RPD	Precision Control Limits %
Mercury	EPA 245.1	µg/L	0.515	0.500	103%	90-110%	977683-3	ND	ND	0.00%	≤20

MATRIX SPIKE

Sample ID	Parameter	Method	Units	Sample Result	DF	Spike Level	Total Amt. of Spike	Theo. Value	MS Obs.	% Rec.	Accuracy Control Limits %
977683-3	Mercury	EPA 245.1	µg/L	0.00	2.00	0.500	1.00	1.00	0.945	94.5%	75-125%

020

				BLANK		MRCCS				MRCVS			
Parameter	Method	Batch	Units	Blank	RL	Observed Value	TRUE Value	% Rec	Control Limits	Observed Value	TRUE Value	% Rec	Control Limits %
Aluminum	EPA 200.8	082208A	µg/L	ND	50.0	49.3	50.0	98.6%	95-105%	48.8	50.0	97.6%	90-110%
Antimony	EPA 200.8	082208A	µg/L	ND	10.0	48.9	50.0	97.8%	95-105%	52.8	50.0	106%	90-110%
Arsenic	EPA 200.8	082008A	µg/L	ND	0.200	48.8	50.0	97.6%	95-105%	49.3	50.0	98.6%	90-110%
Barium	EPA 200.8	082008A	µg/L	ND	10.0	49.3	50.0	98.6%	95-105%	50.0	50.0	100%	90-110%
Beryllium	EPA 200.8	083108A	µg/L	ND	1.00	49.6	50.0	99.2%	95-105%	51.1	50.0	102%	90-110%
Cadmium	EPA 200.8	090408B	µg/L	ND	3.00	47.6	50.0	95.2%	95-105%	50.4	50.0	101%	90-110%
Chromium	EPA 200.8	082008A	µg/L	ND	1.00	47.8	50.0	95.6%	95-105%	49.2	50.0	98.4%	90-110%
Cobalt	EPA 200.8	082008A	µg/L	ND	5.00	50.9	50.0	102%	95-105%	51.6	50.0	103%	90-110%
Copper	EPA 200.8	082008A	µg/L	ND	5.00	51.3	50.0	103%	95-105%	50.3	50.0	101%	90-110%
Lead	EPA 200.8	082008A	µg/L	ND	10.0	49.2	50.0	98.4%	95-105%	47.6	50.0	95.2%	90-110%
Manganese	EPA 200.8	082008A	µg/L	ND	10.0	50.6	50.0	101%	95-105%	51.5	50.0	103%	90-110%
Molybdenum	EPA 200.8	082008A	µg/L	ND	10.0	49.8	50.0	99.6%	95-105%	50.3	50.0	101%	90-110%
Molybdenum	EPA 200.8	090908A	µg/L	ND	10.0	48.1	50.0	96.2%	95-105%	46.1	50.0	92.2%	90-110%
Nickel	EPA 200.8	082008A	µg/L	ND	10.0	51.1	50.0	102%	95-105%	48.3	50.0	96.6%	90-110%
Selenium	EPA 200.8	082008A	µg/L	ND	10.0	51.8	50.0	104%	95-105%	50.6	50.0	101%	90-110%
Silver	EPA 200.8	090408B	µg/L	ND	5.00	47.6	50.0	95.2%	95-105%	49.1	50.0	98.2%	90-110%
Thallium	EPA 200.8	082008A	µg/L	ND	1.00	51.4	50.0	103%	95-105%	49.7	50.0	99.4%	90-110%
Vanadium	EPA 200.8	082008A	µg/L	ND	5.00	51.6	50.0	103%	95-105%	52.6	50.0	105%	90-110%
Zinc	EPA 200.8	082008A	µg/L	ND	10.0	50.4	50.0	101%	95-105%	48.9	50.0	97.8%	90-110%
Boron	EPA 200.7	090508A	µg/L	ND	200	5050	5000	101%	95-105%	4600	5000	92.0%	90-110%
Iron	EPA 200.7	082008A	µg/L	ND	20.0	5120	5000	102%	95-105%	4870	5000	97.4%	90-110%

Rec'd 08/06/08
977683

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CHAIN OF CUSTODY RECORD

977683

[IM3Plant-WDR-163]

COC Number 977683
Turnaround Time 10 Days
Date _____ Page 1 OF 1

COMPANY E2
PROJECT PG&E Topock
ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612
PHONE (530) 229-3303 FAX (530) 339-3303
P.O. NUM 379209.01.03.01 TEAM 1
SAMPLERS (SIGNATURE)

SAMPLE I.D.	DATE	TIME	Matrix	Container:	250 ml Poly	500 ml Poly	500 ml Poly	1 Liter Poly	1 Liter Poly	1 Liter Poly	1 Liter Poly	250 ml Poly	~~250 ml Poly~~	1 Liter Poly		Number of Containers	COMMENTS
				Preservatives:	(NH4)2SO4/NH4OH, 4°C	HNO3	HNO3	4°C	4°C	4°C	4°C	4°C	4°C	H2SO4, pH<2, 4°C			
				Filtered:	Lab	NA	NA	NA	NA	NA	NA	NA	NA	NA			
				Holding Time:	28	180	180	28	28	28	28	28	28	28			
					Cr6 (218.6) Lab Filtered	Total Metals (200.7) Al,As,Ba,B,Cr,Cu,Pb,Mn,Mo,Ni,Sb,Fe,Zn	Total Metals (200.7) Title 22, Mercury	Specific Conductance (120.1)	PH (SM4500HB)	TDS (SM2540C)	Turbidity (SM2130)	Anions (300.0) Fl	Anions (300.0) Fl, SO4, NO2, NO3	Ammonia (SM4500NH3)			
-1	SC-100B-WDR-163	8/6/08	0945	Water	x	x		x	x	x	x		x	x	100B. PULLED - 0945 TESTED - 0948 LEC - 8.72 pH - 7.4 TEMP - 795	6	PH-2
-2	SC-700B-WDR-163	8/6/08	1005	Water	x	x		x	x	x	x		x	x	700B. PULLED - 1005 TESTED - 1009 LEC 7.57 pH 8.0 TEMP 838	6	PH-2
-3	SC-701-WDR-163	8/6/08	1125	Water	x		x	x	x	x		x			701 PULLED - 1025 TESTED - 1028 pH - 8.0 LEC - 34.1 TEMP. 865	4	PH-2

TOTAL NUMBER OF CONTAINERS 16

1) SAMPLES NEEDING (NH4)2SO4/NH4OH - 218.6 NEED PRESERVITAVE AND FILTERING.

2) SAMPLES SC 100B. AND SC700B. USE 2- 1 LITER BOTTLES. ONE FOR SM4500HB. THE SECOND FOR REMAINING SAMPLES

3) ANIONS - (300.0) Fl, SO4; NO2, NO3 - USED 1-LITER BOTTLE

ALERT!!
Level III QC

CHAIN OF CUSTODY SIGNATURE RECORD

	Signature	Printed Name	Company/ Agency	Date/ Time
(Relinquished)		JADE	OMI	8/6/08 1030
(Received)	Bonifacio Dayag	B. DAYAG	TLI	8-6-08 1515
(Relinquished)	Bonifacio Dayag	B. DAYAG	TLI	8-6-08 2045
(Received)	Rafael Davila	Rafael	J.L.I.	8-6-08 20:50
(Relinquished)				
(Received)				

SAMPLE CONDITIONS
RECEIVED COOL ☐ WARM ☐ °F
CUSTODY SEALED YES ☐ NO ☐
SPECIAL REQUIREMENTS:

TRUESDAIL LABORATORIES, INC.

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August 13, 2008

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-164 PROJECT, GROUNDWATER MONITORING, TLI NO.: 977866

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-164 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, pH, 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 August 13, 2008, 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.

Sean Conda

for Mona Nassimi
Manager, Analytical Services

K. R. P. Iyer

K.R.P. Iyer
Quality Assurance/Quality Control Officer

TRUESDAIL LABORATORIES, INC.

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Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00

Laboratory No.: 977866
Date: August 25, 2008
Collected: August 13, 2008
Received: August 13, 2008

ANALYST LIST

EPA 120.1	Specific Conductivity	Tina Acquiat
SM 4500-H B	pH	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	Jean-Paul Gleeson

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00
Prep. Batch: 081908A

Laboratory No.: 977866
Date: August 25, 2008
Collected: August 13, 2008
Received: August 13, 2008
Prep/ Analyzed: August 19, 2008
Analytical Batch: 081908A

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

Analytical Results Total Chromium

TLI I.D.	Field I.D.	Units	Method	Run Time	DF	RL	Results
977866	SC-700B-WDR-164	µg/L	EPA 200.8	13:02	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	977829-1	ND	ND	0.00%	≤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	977829-1	0.00	1.00	50.0	50.0	51.3	50.0	103%	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	50.2	50.0	100%	90% - 110%	Yes
MRCVS#1	47.9	50.0	95.8%	90% - 110%	Yes
MRCVS#2	46.9	50.0	93.8%	90% - 110%	Yes
MRCVS#3	47.8	50.0	95.6%	90% - 110%	Yes
ICS	49.5	50.0	99.0%	80% - 120%	Yes
LCS	20.1	20.0	101%	90% - 110%	Yes

ND: Not detected at reporting limit
DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sam Cawla
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977866

Date: August 25, 2008
Collected: August 13, 2008
Received: August 13, 2008
Prep/ Analyzed: August 14, 2008
Analytical Batch: 08CrH08K

Investigation: **Hexavalent Chromium by EPA 218.6**

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
977866	SC-700B-WDR-164	13:30	08:51	µg/L	1.05	0.20	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	977828-4	5.93	5.88	0.85%	≤ 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	977866	0.074	1.06	1.00	1.06	1.17	1.13	103%	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	5.00	5.00	100%	90% - 110%	Yes
MRCVS#1	9.96	10.0	99.6%	95% - 105%	Yes
MRCVS#2	9.62	10.0	96.2%	95% - 105%	Yes
MRCVS#3	9.82	10.0	98.2%	95% - 105%	Yes
LCS	5.04	5.00	101%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Carla
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977866
Date: August 25, 2008
Collected: August 13, 2008
Received: August 13, 2008
Prep/ Analyzed: August 14, 2008
Analytical Batch: 08EC08F

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
977866	SC-700B-WDR-164	µmhos/cm	EPA 120.1	1.00	2.00	6750

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	977866	6750	6760	0.15%	≤ 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	700	706	99.2%	90% - 110%	Yes
CVS#1	984	996	98.8%	90% - 110%	Yes
LCS	700	706	99.2%	90% - 110%	Yes
LCSD	700	706	99.2%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Canda
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977866
Date: August 25, 2008
Collected: August 13, 2008
Received: August 13, 2008
Prep/ Analyzed: August 14, 2008
Analytical Batch: 08TUC08L

Investigation: **Turbidity by Method SM 2130B**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
977866	SC-700B-WDR-164	13:30	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	977849-27	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	8.35	8.00	104%	90% - 110%	Yes
LCS	8.20	8.00	103%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conla
fo Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977866
Date: August 25, 2008
Collected: August 13, 2008
Received: August 13, 2008
Prep/ Analyzed: August 14, 2008
Analytical Batch: 08PH08M

Investigation:

pH by SM 4500-H B

Analytical Results pH

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	MDL	RL	Results
977866	SC-700B-WDR-164	13:30	09:20	pH	0.070	2.00	7.90

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	977866	7.90	7.90	0.00	± 0.100 Units	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Difference (Units)	Acceptance Limits	QC Within Control
MRCVS	7.00	7.00	0.00	± 0.100 Units	Yes
LCS	7.01	7.00	0.01	± 0.100 Units	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977866
Date: August 25, 2008
Collected: August 13, 2008
Received: August 13, 2008
Prep/ Analyzed: August 14, 2008
Analytical Batch: 08TDS08F

Investigation: **Total Dissolved Solids by SM 2540C**

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
977866	SC-700B-WDR-164	mg/L	SM 2540C	250	4160

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	977866	4160	4070	1.09%	≤ 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
LCS 2	500	500	100%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
RL: Reporting Limit.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Canla
for - Mona Nassimi, Manager
Analytical Services

RUSH

Rec'd 08/13/08
Lab # 977866

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

977866

CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-164]

COC Number

TURNAROUND TIME 5 Days

DATE 8-13-08 PAGE 1 OF 1

COMPANY	E2
PROJECT NAME	PG&E Topock
PHONE	(530) 229-3303 FAX (530) 339-3303
ADDRESS	155 Grand Ave Ste 1000 Oakland, CA 94612
P.O. NUMBER	358342.TM.02.00 TEAM 1
SAMPLERS (SIGNATURE	

SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Total Metals (200.7) Total Chromium	Specific Conductance (120.1)	TDS (SM2540C)	PH (SM4500HB)	Turbidity (SM2130)	NUMBER OF CONTAINERS	COMMENTS
SC-700B-WDR-164	8-13-08	1330	Water	x	x	x	x	x	x	3	PH 6.6
										3	TOTAL NUMBER OF CONTAINERS

pH 8.0
EC 7.9
Temp 85.4
Time-1335

For Sample Conditions
See Form Attached

ALERT !!
Level III QC

RUSH

CHAIN OF CUSTODY SIGNATURE RECORD

	Signature	Printed Name	Company/ Agency	Date/ Time
Relinquished		J Aide	OMT	8/13/08 1345
Received	Rafael Davila	Rafael	T.L.I	8-13-08 14:35
Relinquished	Rafael Davila	Rafael	T.L.I	8-13-08 20:30
Received	Rafael Davila	Rafael	T.L.I	8-13-08 20:30
Relinquished				
Received				

935

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

TRUESDAIL LABORATORIES, INC.

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September 2, 2008

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-165 PROJECT, GROUNDWATER MONITORING, TLI NO.: 977980

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-165 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, pH, 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 August 19, 2008, 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 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.

Sean Conklin

for Mona Nassimi
Manager, Analytical Services

A. Khanyi

For K.R.P. Iyer
Quality Assurance/Quality Control Officer

TRUESDAIL LABORATORIES, INC.

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Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00

Laboratory No.: 977980
Date: September 2, 2008
Collected: August 19, 2008
Received: August 19, 2008

ANALYST LIST

EPA 120.1	Specific Conductivity	Tina Acquiat
SM 4500-H B	pH	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	Jean-Paul Gleeson

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00
Prep. Batch: 082608A

Laboratory No.: 977980
Date: September 2, 2008
Collected: August 19, 2008
Received: August 19, 2008
Prep/ Analyzed: August 26, 2008
Analytical Batch: 082608A

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

Analytical Results Total Chromium

TLI I.D.	Field I.D.	Units	Method	Run Time	DF	RL	Results
977980	SC-700B-WDR-165	µg/L	EPA 200.8	11:44	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	977825-8	ND	ND	0.00%	≤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	977825-8	0.00	1.00	50.0	50.0	51.9	50.0	104%	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	47.9	50.0	95.8%	90% - 110%	Yes
MRCVS#2	48.8	50.0	97.6%	90% - 110%	Yes
MRCVS#3	49.6	50.0	99.2%	90% - 110%	Yes
ICS	49.3	50.0	98.6%	80% - 120%	Yes
LCS	20.0	20.0	100%	90% - 110%	Yes

ND: Not detected at reporting limit
DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977980

Date: September 2, 2008
Collected: August 19, 2008
Received: August 19, 2008
Prep/ Analyzed: August 20, 2008
Analytical Batch: 08CrH08Q

Investigation: **Hexavalent Chromium by EPA 218.6**

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
977980	SC-700B-WDR-165	08:50	11:49	µg/L	1.05	0.20	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	977978-2	1620	1640	1.23%	< 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	977980	0.00	1.06	1.00	1.06	1.10	1.06	104%	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	5.00	5.00	100%	90% - 110%	Yes
MRCVS#1	10.1	10.0	101%	95% - 105%	Yes
MRCVS#2	10.0	10.0	100%	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.

Sean Condon
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977980
Date: September 2, 2008
Collected: August 19, 2008
Received: August 19, 2008
Prep/ Analyzed: August 20, 2008
Analytical Batch: 08TUC08N

Investigation: Turbidity by Method SM 2130B

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
977980	SC-700B-WDR-165	08:50	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	977963-9	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	7.70	8.00	96.3%	90% - 110%	Yes
LCS	7.75	8.00	96.9%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conklin
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977980
Date: September 2, 2008
Collected: August 19, 2008
Received: August 19, 2008
Prep/ Analyzed: August 20, 2008
Analytical Batch: 08PH08P

Investigation: pH by SM 4500-H B

Analytical Results pH

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	MDL	RL	Results
977980	SC-700B-WDR-165	08:50	08:28	pH	0.070	2.00	7.86

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	977980	7.86	7.86	0.00	± 0.100 Units	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Difference (Units)	Acceptance Limits	QC Within Control
MRCVS	7.02	7.00	0.02	± 0.100 Units	Yes
LCS	7.00	7.00	0.00	± 0.100 Units	Yes
LCSD	7.01	7.00	0.01	± 0.100 Units	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conkle
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977980
Date: September 2, 2008
Collected: August 19, 2008
Received: August 19, 2008
Prep/ Analyzed: August 20, 2008
Analytical Batch: 08EC08H

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
977980	SC-700B-WDR-165	µmhos/cm	EPA 120.1	1.00	2.00	6690

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	977980	6690	6700	0.15%	≤ 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	700	706	99.2%	90% - 110%	Yes
CVS#1	984	996	98.8%	90% - 110%	Yes
LCS	700	706	99.2%	90% - 110%	Yes
LCSD	700	706	99.2%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conda
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977980
Date: September 2, 2008
Collected: August 19, 2008
Received: August 19, 2008
Prep/ Analyzed: August 21, 2008
Analytical Batch: 08TDS08H

Investigation: **Total Dissolved Solids by SM 2540C**

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
977980	SC-700B-WDR-165	mg/L	SM 2540C	250	4420

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	977980	4420	4440	0.23%	≤ 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

ND: Below the reporting limit (Not Detected).
RL: Reporting Limit.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Combs

for Mona Nassimi, Manager
Analytical Services

Rec'd 08/19/08

977980

TRUESDAIL LABORATORIES, INC.
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977980

CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-165]

COC Number 977980
TURNAROUND TIME 10 Days
DATE _____ PAGE 1 OF 1

COMPANY	E2
PROJECT NAME	PG&E Topock
PHONE	(530) 229-3303 FAX (530) 339-3303
ADDRESS	155 Grand Ave Ste 1000 Oakland, CA 94612
P.O. NUMBER	358342.TM.02.00 TEAM 1
SAMPLERS (SIGNATURE	

SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Total Metals (200.7) Total Chromium	Specific Conductance (120.1)	TDS (SM2540C)	PH (SM4500HB)	Turbidity (SM2130)			NUMBER OF CONTAINERS	COMMENTS
SC-700B-WDR-165	8-19-08	0850	Water	x	x	x	x	x	x			3	EC - 7.58 ph - 8.1 Temp - 82.7° Time - 0848 PH - 7

ALERT !!
Level III QC

TOTAL NUMBER OF CONTAINERS

For Sample Condition
See Form Attached

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished) John Deetz	Printed Name John Deetz	Company/ Agency OMI	Date/ Time 8-19-08 0850	
Signature (Received) Rafael Davila	Printed Name Rafael	Company/ Agency T.L.I	Date/ Time 8-19-08 2:00	
Signature (Relinquished) Rafael Davila	Printed Name Rafael	Company/ Agency T.L.I	Date/ Time 8-19-08 20:45	
Signature (Received) Rafael Davila	Printed Name Rafael	Company/ Agency T.L.I	Date/ Time 8-19-08 20:45	
Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time	
Signature (Received)	Printed Name	Company/ Agency	Date/ Time	

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

TRUESDAIL LABORATORIES, INC.

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www.truesdail.com

September 8, 2008

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-166 PROJECT, GROUNDWATER MONITORING, TLI NO.: 978123

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-166 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, pH, 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 August 26, 2008, 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.

Sean Canda

for Mona Nassimi
Manager, Analytical Services

K.R.P. Iyer

For K.R.P. Iyer
Quality Assurance/Quality Control Officer

TRUESDAIL LABORATORIES, INC.

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www.truesdail.com

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00

Laboratory No.: 978123
Date: September 5, 2008
Collected: August 26, 2008
Received: August 26, 2008

ANALYST LIST

[illegible]	[illegible]	[illegible]
EPA 120.1	Specific Conductivity	Tina Acquiat
SM 4500-H B	pH	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	Jean-Paul Gleeson

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00
Prep. Batch: 090408B

Laboratory No.: 978123

Date: September 5, 2008
Collected: August 26, 2008
Received: August 26, 2008
Prep/ Analyzed: September 4, 2008
Analytical Batch: 090408B

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

Analytical Results Total Chromium

TLI I.D.	Field I.D.	Units	Method	Run Time	DF	RL	Results
978123	SC-700B-WDR-166	µg/L	EPA 200.8	17:27	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	977895-4	6.83	7.14	4.44%	≤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	977895-4	6.83	1.00	50.0	50.0	58.1	56.8	103%	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	48.5	50.0	97.0%	90% - 110%	Yes
MRCVS#1	49.6	50.0	99.2%	90% - 110%	Yes
MRCVS#2	49.8	50.0	99.6%	90% - 110%	Yes
ICS	48.2	50.0	96.4%	80% - 120%	Yes
LCS	20.0	20.0	100%	90% - 110%	Yes

ND: Not detected at reporting limit
DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conlon
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Laboratory No.: 978123

Sample: One (1) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Date: September 5, 2008
Collected: August 26, 2008
Received: August 26, 2008
Prep/ Analyzed: August 29, 2008
Analytical Batch: 08CrH08V

Investigation: **Hexavalent Chromium by EPA 218.6**

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
978123	SC-700B-WDR-166	10:35	16:32	µg/L	1.05	0.20	0.65

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	978143-1	1.81	1.76	2.80%	< 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	978123	0.65	1.06	1.00	1.06	1.73	1.71	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	5.19	5.00	104%	90% - 110%	Yes
MRCVS#1	9.64	10.0	96.4%	95% - 105%	Yes
MRCVS#2	10.4	10.0	104%	95% - 105%	Yes
LCS	5.21	5.00	104%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 978123
Date: September 5, 2008
Collected: August 26, 2008
Received: August 26, 2008
Prep/ Analyzed: August 27, 2008
Analytical Batch: 08TUC08Q

Investigation: **Turbidity by Method SM 2130B**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
978123	SC-700B-WDR-166	10:35	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	978113-1	2.12	2.13	0.47%	≤ 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	8.08	8.00	101%	90% - 110%	Yes
LCS	8.02	8.00	100%	90% - 110%	Yes
LCS	8.02	8.00	100%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sean Coulter
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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

Laboratory No.: 978123

Sample: One (1) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Date: September 5, 2008
Collected: August 26, 2008
Received: August 26, 2008
Prep/ Analyzed: August 27, 2008
Analytical Batch: 08PH08V

Investigation:

pH by SM 4500-H B

Analytical Results pH

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	MDL	RL	Results
978123	SC-700B-WDR-166	10:35	09:00	pH	0.070	2.00	7.89

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	978123	7.89	7.90	0.01	± 0.100 Units	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Difference (Units)	Acceptance Limits	QC Within Control
MRCVS	7.02	7.00	0.02	± 0.100 Units	Yes
LCS	7.03	7.00	0.03	± 0.100 Units	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 978123
Date: September 5, 2008
Collected: August 26, 2008
Received: August 26, 2008
Prep/ Analyzed: August 27, 2008
Analytical Batch: 08EC08L

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
978123	SC-700B-WDR-166	µmhos/cm	EPA 120.1	1.00	2.00	6740

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	978123	6740	6750	0.15%	≤ 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	984	996	98.8%	90% - 110%	Yes
LCS	699	706	99.0%	90% - 110%	Yes
LCSD	699	706	99.0%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 978123
Date: September 5, 2008
Collected: August 26, 2008
Received: August 26, 2008
Prep/ Analyzed: August 28, 2008
Analytical Batch: 08TDS08J

Investigation: **Total Dissolved Solids by SM 2540C**

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
978123	SC-700B-WDR-166	mg/L	SM 2540C	250	4210

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	978144-4	2340	2340	0.00%	≤ 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
LCS 2	499	500	99.8%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
RL: Reporting Limit.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Canla

for Mona Nassimi, Manager
Analytical Services

Rec'd 08/26/08
978123

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978123

CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-166]

COC Number

TURNAROUND TIME 5 Days

DATE 8-26-08 PAGE 1 OF 1

COMPANY E2

PROJECT NAME PG&E Topock

PHONE (530) 229-3303 FAX (530) 339-3303

ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612

P.O. NUMBER 358342.TM.02.00 TEAM 1

SAMPLERS (SIGNATURE) CKnight

SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Total Metals (200.7) Total Chromium	Specific Conductance (120.1)	TDS (SM2540C)	PH (SM4500HB)	Turbidity (SM2130)	NUMBER OF CONTAINERS
SC-700B-WDR-166	8-26-08	1035	Water	x	x	x	x	x	x	3
										3

RUSH

TOTAL NUMBER OF CONTAINERS

COMMENTS

pH - 7.9
Ec - 7.29
Temp - 82.4°F
Time - 10:45

pH - 6

ALERT !!
Level III QC

Non Conforming Sample Condition
See Form Attached

CHAIN OF CUSTODY SIGNATURE RECORD

	Signature	Printed Name	Company/ Agency	Date/ Time
Relinquished	CKnight	CHRIS KNIGHT	CMI	8-26-08 12:00
Received	Rafael Davila	Rafael	T.L.I	8-26-08 14:40
Relinquished	Rafael Davila	Rafael	T.L.I	8-26-08 20:45
Received	Rafael Davila	Rafael	T.L.I	8-26-08 20:45
Relinquished				
Received				

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

TRUESDAIL LABORATORIES, INC.

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September 29, 2008

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-167 PROJECT, GROUNDWATER MONITORING,

TLI NO.: 978298

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-167 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 September 4, 2008, 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 straight run for the matrix spike for Hexavalent Chromium analysis by EPA 218.6 for sample 978298-1 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.

The matrix spike run at a dilution of 5x for Hexavalent Chromium analysis by EPA 218.6 for sample 978298-3 was just outside the retention time window. Because the matrix spike recovery was within acceptable limits and the results from the 10x dilution agree with those from the 5x dilution, the data from the 5x dilution is reported.

Sample 977683-3 for Arsenic, Barium, Beryllium, Copper, Lead, Molybdenum, Selenium, and Zinc by EPA 200.8 was analyzed at a dilution of 10x due to possible matrix interference.

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.

Sean Cawthon
for Mona Nassimi
Manager, Analytical Services

K. R. P. Iyer

K.R.P. Iyer
Quality Assurance/Quality Control Officer

TRUESDAIL LABORATORIES, INC.
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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.: 978298
Date: September 29, 2008
Collected: September 4, 2008
Received: September 4, 2008

ANALYST LIST

EPA 120.1	Specific Conductivity	Tina Acquiat
SM 4500-H B	pH	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	Iordan Stavrev
SM 4500-NO2 B	Nitrite as N	Tina Acquiat
EPA 200.7	Metals by ICP	Hao Ton
EPA 200.8	Metals by ICP/MS	Romuel Chaves
EPA 245.1	Mercury	Romuel Chaves
EPA 218.6	Hexavalent Chromium	Jean-Paul Gleeson

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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.: 978298
Date: September 29, 2008
Collected: September 4, 2008
Received: September 4, 2008
Prep/ Analyzed: September 5, 2008
Analytical Batch: 09PH08C

Investigation: **pH by SM 4500-H B**

Analytical Results pH

TLI I.D.	Field I.D.	Run Time	Units	MDL	RL	Results
978298-1	SC-700B-WDR-167	07:50	pH	0.0700	2.00	7.39
978298-2	SC-100B-WDR-167	07:55	pH	0.0700	2.00	7.12
978298-3	SC-701-WDR-167	08:00	pH	0.0700	2.00	7.56

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	978299-2	7.27	7.28	0.01	± 0.100 Units	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Difference (Units)	Acceptance Limits	QC Within Control
MRCVS	7.02	7.00	0.02	± 0.100 Units	Yes
LCS	7.03	7.00	0.03	± 0.100 Units	Yes

ND: Below the reporting limit (Not Detected).
RL: Reporting Limit.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sam Casola
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Laboratory No.: 978298

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

Date: September 29, 2008
Collected: September 4, 2008
Received: September 4, 2008
Prep/ Analyzed: September 5, 2008
Analytical Batch: 09EC08B

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
978298-1	SC-700B-WDR-167	µmhos/cm	EPA 120.1	1.00	2.00	6750
978298-2	SC-100B-WDR-167	µmhos/cm	EPA 120.1	1.00	2.00	7920
978298-3	SC-701-WDR-167	µmhos/cm	EPA 120.1	1.00	2.00	28700

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	978299-2	8460	8470	0.12%	≤ 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	985	996	98.9%	90% - 110%	Yes
LCS	699	706	99.0%	90% - 110%	Yes
LCSD	699	706	99.0%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conlin
fo Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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.: 978298
Date: September 29, 2008
Collected: September 4, 2008
Received: September 4, 2008
Prep/ Analyzed: September 5, 2008
Analytical Batch: 09TDS08E

Investigation: **Total Dissolved Solids by SM 2540C**

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
978298-1	SC-700B-WDR-167	mg/L	SM 2540C	250	4220
978298-2	SC-100B-WDR-167	mg/L	SM 2540C	250	4830
978298-3	SC-701-WDR-167	mg/L	SM 2540C	625	20400

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	978298-3	20400	20400	0.00%	≤ 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
LCS 2	502	500	100%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
RL: Reporting Limit.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

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

Laboratory No.: 978298
Date: September 29, 2008
Collected: September 4, 2008
Received: September 4, 2008
Prep/ Analyzed: September 5, 2008
Analytical Batch: 09TUC08D

Investigation: **Turbidity by Method SM 2130B**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
978298-1	SC-700B-WDR-167	08:10	NTU	1.00	0.100	ND
978298-2	SC-100B-WDR-167	08:28	NTU	1.00	0.100	0.115

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	978235-9	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	7.60	8.00	95.0%	90% - 110%	Yes
LCS	7.72	8.00	96.5%	90% - 110%	Yes

ND: Below 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: Three (3) Groundwaters
Project Name: PG&E Topock Project
Project No.: 379209.01.03.01
P.O. No.: 379209.01.03.01
Prep. Batch: 09CrH08A

Laboratory No.: 978298
Date: September 29, 2008
Collected: September 4, 2008
Received: September 4, 2008
Prep/ Analyzed: September 5, 2008
Analytical Batch: 09CrH08A

Investigation: **Hexavalent Chromium by IC Using Method EPA 218.6**

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
978298-1	SC-700B-WDR-167	08:10	10:03	µg/L	1.05	0.20	ND
978298-2	SC-100B-WDR-167	08:28	11:06	µg/L	105	21.0	1260
978298-3	SC-701-WDR-167	08:48	12:21	µg/L	5.25	1.05	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Sample Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	978297-2	294	300	2.02%	< 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	978298-1	0.00	1.06	1.00	1.06	1.14	1.06	108%	90-110%	Yes
MS	978298-2	1260	105	15.0	1575	2790	2835	97.1%	90-110%	Yes
MS	978298-3	0.00	5.25	1.00	5.25	5.59	5.25	106%	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	5.05	5.00	101%	90% - 110%	Yes
MRCVS#1	10.0	10.0	100%	95% - 105%	Yes
MRCVS#2	9.89	10.0	98.9%	95% - 105%	Yes
MRCVS#3	9.73	10.0	97.3%	95% - 105%	Yes
MRCVS#4	9.63	10.0	96.3%	95% - 105%	Yes
LCS	5.09	5.00	102%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conda

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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.: 978298
Date: September 29, 2008
Collected: September 4, 2008
Received: September 4, 2008
Prep/ Analyzed: September 8, 2008
Analytical Batch: 09NH3-E08A

Investigation: **Ammonia as N by Method SM 4500-NH3 D**

Analytical Results Ammonia as N

TLI I.D.	Field I.D.	Sample Time	Method	Units	DF	RL	Results
978298-1	SC-700B-WDR-167	08:10	SM 4500-NH3 D	mg/L	1.00	0.500	ND
978298-2	SC-100B-WDR-167	08:28	SM 4500-NH3 D	mg/L	1.00	0.500	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	978298-2	ND	ND	0.00%	≤ 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	978298-2	0.00	1.00	6.00	6.00	6.50	6.00	108%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500	---	<0.500	Yes
MRCCS	6.05	6.00	101%	90% - 110%	Yes
MRCVS#1	6.03	6.00	101%	90% - 110%	Yes
MRCVS#2	6.05	6.00	101%	90% - 110%	Yes
LCS	10.2	10.0	102%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sean Conla
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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.: 978298
Date: September 29, 2008
Collected: September 4, 2008
Received: September 4, 2008
Prep/ Analyzed: September 5, 2008
Analytical Batch: 09AN08D

Investigation: **Fluoride by Ion Chromatography using EPA 300.0**

Analytical Results Fluoride

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
978298-1	SC-700B-WDR-167	08:10	11:06	mg/L	5.00	0.500	2.30
978298-2	SC-100B-WDR-167	08:28	11:18	mg/L	5.00	0.500	3.02
978298-3	SC-701-WDR-167	08:48	11:29	mg/L	5.00	0.500	10.3

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	978298-1	2.30	2.30	0.00%	≤ 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	978298-1	2.30	5.00	4.00	20.0	22.8	22.3	103%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500	---	<0.500	Yes
MRCCS	4.14	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
MRCVS#3	3.08	3.00	103%	90% - 110%	Yes
LCS	4.12	4.00	103%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

EXCELLENCE IN INDEPENDENT TESTING

Established 1931

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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.: 978298
Date: September 29, 2008
Collected: September 4, 2008
Received: September 4, 2008
Prep/ Analyzed: September 5, 2008
Analytical Batch: 09AN08D

Investigation: **Sulfate by Method EPA 300.0**

Analytical Results Sulfate

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
978298-1	SC-700B-WDR-167	08:10	13:38	mg/L	25.0	12.5	480
978298-2	SC-100B-WDR-167	08:28	13:49	mg/L	25.0	12.5	573

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	978264-2	283	282	0.35%	≤ 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	978264-2	283	100.0	4.0	400	695	683	103%	85-115%	Yes

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	15.1	15.0	101%	90% - 110%	Yes
MRCVS#2	15.1	15.0	101%	90% - 110%	Yes
LCS	20.3	20.0	102%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conde
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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.: 978298
Date: September 29, 2008
Collected: September 4, 2008
Received: September 4, 2008
Prep/ Analyzed: September 5, 2008
Analytical Batch: 09AN08D

Investigation: **Nitrate as N by Ion Chromatography using EPA 300.0**

Analytical Results Nitrate as N

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
978298-1	SC-700B-WDR-167	08:10	11:06	mg/L	5.00	1.00	2.71
978298-2	SC-100B-WDR-167	08:28	11:18	mg/L	5.00	1.00	3.10

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	978298-1	2.71	2.73	0.74%	≤ 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	978298-1	2.71	5.00	4.00	20.0	22.9	22.7	101%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500	---	<0.500	Yes
MRCCS	4.01	4.00	100%	90% - 110%	Yes
MRCVS#1	3.00	3.00	100%	90% - 110%	Yes
LCS	3.91	4.00	97.8%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sam Cardenas
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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.: 978298
Date: September 29, 2008
Collected: September 4, 2008
Received: September 4, 2008
Prep/ Analyzed: September 5, 2008
Analytical Batch: 09NO208C

Investigation: **Nitrite as N by Method SM 4500-NO2-B**

Analytical Results for Nitrite as N

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
978298-1	SC-700B-WDR-167	08:10	14:03	mg/L	1.00	0.0050	ND
978298-2	SC-100B-WDR-167	08:28	14:04	mg/L	1.00	0.0050	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	978298-1	ND	ND	0.00%	< 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	978298-1	0.00	1.00	0.0200	0.0200	0.0196	0.0200	98.0%	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	0.0192	0.0200	96.0%	90% - 110%	Yes
MRCVS#1	0.0200	0.0200	100%	90% - 110%	Yes
LCS	0.0401	0.0400	100%	90% - 110%	Yes
LCSD	0.0403	0.0400	101%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sam Cunha

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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

Laboratory No.: 978298
Reported: September 29, 2008
Collected: September 4, 2008
Received: September 4, 2008
Analyzed: september 15 - 23, 2008

Analytical Results

SAMPLE ID: SC-700B-WDR-167 **Time Collected:** 08:10 **LAB ID:** 978298-1

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	ND	1.00	µg/L	50.0	091708A	09/17/08	13:40
Antimony	EPA 200.8	ND	1.00	µg/L	10.0	091608A	09/16/08	14:51
Arsenic	EPA 200.8	ND	1.00	µg/L	0.20	091708A	09/17/08	13:40
Barium	EPA 200.8	12.8	1.00	µg/L	10.0	091708A	09/17/08	13:40
Chromium	EPA 200.8	ND	5.00	µg/L	1.00	091608A	09/16/08	14:51
Copper	EPA 200.8	ND	1.00	µg/L	5.00	091708A	09/17/08	13:40
Lead	EPA 200.8	ND	1.00	µg/L	10.0	091708A	09/17/08	13:40
Manganese	EPA 200.8	41.1	1.00	µg/L	10.0	091708A	09/17/08	13:40
Molybdenum	EPA 200.8	19.7	1.00	µg/L	10.0	091708A	09/17/08	13:40
Nickel	EPA 200.8	ND	1.00	µg/L	10.0	091608A	09/16/08	14:51
Zinc	EPA 200.8	ND	1.00	µg/L	10.0	091708A	09/17/08	13:40
Boron	EPA 200.7	1020	1.00	µg/L	200	091808A	09/18/08	12:13
Iron	EPA 200.7	ND	1.00	µg/L	20.0	091808A	09/18/08	12:13

SAMPLE ID: SC-100B-WDR-167 **Time Collected:** 08:28 **LAB ID:** 978298-2

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	ND	1.00	µg/L	50.0	091708A	09/17/08	13:47
Antimony	EPA 200.8	ND	1.00	µg/L	10.0	091608A	09/16/08	15:17
Arsenic	EPA 200.8	3.46	1.00	µg/L	0.20	091708A	09/17/08	13:47
Barium	EPA 200.8	23.5	1.00	µg/L	10.0	091708A	09/17/08	13:47
Chromium	EPA 200.8	1260	5.00	µg/L	1.00	092208A	09/22/08	13:01
Copper	EPA 200.8	ND	1.00	µg/L	5.00	091708A	09/17/08	13:47
Lead	EPA 200.8	ND	1.00	µg/L	10.0	091708A	09/17/08	13:47
Manganese	EPA 200.8	ND	1.00	µg/L	10.0	091708A	09/17/08	13:47
Molybdenum	EPA 200.8	26.2	1.00	µg/L	10.0	091708A	09/17/08	13:47
Nickel	EPA 200.8	ND	1.00	µg/L	10.0	091608A	09/16/08	15:17
Zinc	EPA 200.8	ND	1.00	µg/L	10.0	091708A	09/17/08	13:47
Boron	EPA 200.7	916	1.00	µg/L	200	091808A	09/18/08	12:17
Iron	EPA 200.7	ND	1.00	µg/L	20.0	091808A	09/18/08	12:17

SAMPLE ID: SC-701-WDR-167 **Time Collected:** 08:48 **LAB ID:** 978298-3

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Antimony	EPA 200.8	ND	5.00	µg/L	10.0	091608A	09/16/08	15:45
Arsenic	EPA 200.8	ND	10.0	µg/L	2.00	091708A	09/17/08	14:04
Barium	EPA 200.8	66.3	10.0	µg/L	10.0	091708A	09/17/08	14:04
Beryllium	EPA 200.8	ND	10.0	µg/L	2.00	092308A	09/23/08	10:46
Cadmium	EPA 200.8	ND	5.00	µg/L	3.00	091608A	09/16/08	15:45
Chromium	EPA 200.8	ND	5.00	µg/L	1.00	091608A	09/16/08	15:45
Cobalt	EPA 200.8	ND	5.00	µg/L	5.00	091608A	09/16/08	15:45
Copper	EPA 200.8	ND	10.0	µg/L	5.00	091708A	09/17/08	14:04
Lead	EPA 200.8	ND	10.0	µg/L	10.0	091708A	09/17/08	14:04
Mercury	EPA 245.1	0.54	1.00	µg/L	0.20	09HG08F	09/15/08	N/A
Molybdenum	EPA 200.8	73.4	10.0	µg/L	10.0	091708A	09/17/08	14:04
Nickel	EPA 200.8	14.0	5.00	µg/L	10.0	091608A	09/16/08	15:45
Selenium	EPA 200.8	10.6	10.0	µg/L	10.0	091708A	09/17/08	14:04
Silver	EPA 200.8	ND	5.00	µg/L	5.00	091608A	09/16/08	15:45
Thallium	EPA 200.8	ND	5.00	µg/L	1.00	091608A	09/16/08	15:45
Vanadium	EPA 200.8	ND	5.00	µg/L	5.00	091608A	09/16/08	15:45
Zinc	EPA 200.8	ND	10.0	µg/L	10.0	091708A	09/17/08	14:04

ND: Not detected,or below limit of detection.
DF: Dilution factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sean Conda
Mona Nassimi, Manager
Analytical Services

Rec'd 09/04/08
Lab #: 978298

TRUESDAIL LABORATORIES, INC.
14201 Franklin Avenue, Tustin, CA 92780-7008
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978298

CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-167]

COC Number IM3Plant-WDR-167
TURNAROUND TIME 10 Days
DATE 09/04/08 PAGE 1 OF 1

COMPANY CH2M HILL /E2
PROJECT NAME PG&E Topock IM3
PHONE 530-229-3303 FAX 530-339-3303
ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612
P.O. NUMBER 379209.01.03.01
SAMPLERS (SIGNATURE

SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr(VI) (218.6) Lab Filtered	Title 22 Metals List (200.7, 200.8, 245.1)	EC (120.1), pH (4500H+ B)	TDS (2540 c)	Turb (2130)	Total Metals (200.7) See List Below	Ammonia (4500-NH3)	Anions (300.0) F	Anions (300.0) F, NO3, NO2, SO4	TOC (5310 C)	Total Metals (200.7) Cr	NUMBER OF CONTAINERS	COMMENTS
-1 SC-700B-WDR-167	9/4/08	0820		X		X	X	X	X	X		X			4	pH - 7
-2 SC-100B-WDR-167	9/4/08	0938		X		X	X	X	X	X		X			4	pH - 2
-3 SC-701-WDR-167	9/4/08	0845		X	X	X	X								4	pH - 7
															12	TOTAL NUMBER OF CONTAINERS

ALERT !!
Level III QC

700B
Time-0955 Temp-82.5
EC-7.64 pH 7.9
701
Time-0905 Temp-84.5
EC 35.7 pH 8.2
100B
Time: 0914 Temp-78.9
EC-8.94 pH 7.8

CHAIN OF CUSTODY SIGNATURE RECORD

	Signature	Printed Name	Company/ Agency	Date/ Time
Relinquished	Chris Kruger	CHRIS KRUGER	QA1	9-4-08 1320
Received		Hopkins	TL1	9-4-08 1520
Relinquished		Hopkins	TL1	9-4-08 2100
Received	Rafael Davila	Rafael	T.L.I	9-4-08 21:00
Relinquished				
Received				

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

092

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September 29, 2008

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-168 PROJECT, GROUNDWATER MONITORING, TLI NO.: 978426

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-168 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, pH, 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 September 10, 2008, 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.

Sean Conde
for Mona Nassimi
Manager, Analytical Services

K.R.P. Iyer

K.R.P. Iyer
Quality Assurance/Quality Control Officer

TRUESDAIL LABORATORIES, INC.

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Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00

Laboratory No.: 978426
Date: September 29, 2008
Collected: September 10, 2008
Received: September 10, 2008

ANALYST LIST

EPA 120.1	Specific Conductivity	Tina Acquiat
SM 4500-H B	pH	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	Jean-Paul Gleeson

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00
Prep. Batch: 092308A

Laboratory No.: 978426

Date: September 29, 2008
Collected: September 10, 2008
Received: September 10, 2008
Prep/ Analyzed: September 23, 2008
Analytical Batch: 092308A

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

Analytical Results Total Chromium

TLI I.D.	Field I.D.	Units	Method	Run Time	DF	RL	Results
978426	SC-700B-WDR-168	µg/L	EPA 200.8	10:14	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	978426	ND	ND	0.00%	≤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	978426	0.00	1.00	50.0	50.0	40.5	50.0	81.0%	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	48.9	50.0	97.8%	90% - 110%	Yes
MRCVS#1	48.4	50.0	96.8%	90% - 110%	Yes
MRCVS#2	45.2	50.0	90.4%	90% - 110%	Yes
MRCVS#3	48.4	50.0	96.8%	90% - 110%	Yes
ICS	45.0	50.0	90.0%	80% - 120%	Yes
LCS	18.3	20.0	91.5%	90% - 110%	Yes

ND: Not detected at reporting limit
DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Cunha
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 978426

Date: September 29, 2008
Collected: September 10, 2008
Received: September 10, 2008
Prep/ Analyzed: September 11, 2008
Analytical Batch: 09CrH08C

Investigation: **Hexavalent Chromium by EPA 218.6**

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
978426	SC-700B-WDR-168	07:50	16:27	µg/L	5.25	1.05	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	978391-5	1810	1870	3.26%	< 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	978426	0.00	5.25	1.00	5.25	5.31	5.25	101%	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	4.96	5.00	99.2%	90% - 110%	Yes
MRCVS#1	9.92	10.0	99.2%	95% - 105%	Yes
MRCVS#2	9.88	10.0	98.8%	95% - 105%	Yes
LCS	4.92	5.00	98.4%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conder
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 978426
Date: September 29, 2008
Collected: September 10, 2008
Received: September 10, 2008
Prep/ Analyzed: September 11, 2008
Analytical Batch: 09TDS08E

Investigation: **Total Dissolved Solids by SM 2540C**

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
978426	SC-700B-WDR-168	mg/L	SM 2540C	250	4170

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	978426	4170	4210	0.48%	≤ 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.

for Sean Canda
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 978426
Date: September 29, 2008
Collected: September 10, 2008
Received: September 10, 2008
Prep/ Analyzed: September 11, 2008
Analytical Batch: 09EC08D

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
978426	SC-700B-WDR-168	µmhos/cm	EPA 120.1	1.00	2.00	6700

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	978426	6700	6710	0.15%	≤ 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	700	706	99.2%	90% - 110%	Yes
CVS#1	969	990	97.9%	90% - 110%	Yes
LCS	700	706	99.2%	90% - 110%	Yes
LCSD	700	706	99.2%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sam Cunda
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 978426
Date: September 29, 2008
Collected: September 10, 2008
Received: September 10, 2008
Prep/ Analyzed: September 11, 2008
Analytical Batch: 09TUC08I

Investigation: **Turbidity by Method SM 2130B**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
978426	SC-700B-WDR-168	07:50	NTU	1.00	0.100	0.116

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	978424-27	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	8.30	8.00	104%	90% - 110%	Yes
LCS	8.12	8.00	102%	90% - 110%	Yes
LCS	7.83	8.00	97.9%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sean Cunde
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 978426
Date: September 29, 2008
Collected: September 10, 2008
Received: September 10, 2008
Prep/ Analyzed: September 11, 2008
Analytical Batch: 09PH08F

Investigation:

pH by SM 4500-H B

Analytical Results pH

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	MDL	RL	Results
978426	SC-700B-WDR-168	07:50	07:20	pH	0.070	2.00	7.82

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	978426	7.82	7.83	0.01	± 0.100 Units	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Difference (Units)	Acceptance Limits	QC Within Control
MRCVS	7.02	7.00	0.02	± 0.100 Units	Yes
LCS	7.04	7.00	0.04	± 0.100 Units	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sean Conde
Mona Nassimi, Manager
Analytical Services

978426

Rec'd 09/10/08

978426

TRUESDAIL LABORATORIES, INC.
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CHAIN OF CUSTODY RECORD

[M3Plant-WDR-168]

COC Number

TURNAROUND TIME 10 Days

DATE 09/10/08 PAGE 1 OF 1

COMPANY E2

PROJECT NAME PG&E Topock

PHONE (530) 229-3303 FAX (530) 339-3303

ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612

P.O. NUMBER 379209.01.02 TEAM 1

SAMPLERS (SIGNATURE)

SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Total Metals (200.7) Total Chromium	Specific Conductance (120.1)	TDS (SM2540C)	PH (SM4500HB)	Turbidity (SM2130)	NUMBER OF CONTAINERS	COMMENTS
SC-700B-WDR-168	09/10/08	~~0955~~ 0750 JA	Water	X	X	X	X	X	X	3	PH-6
										3	TOTAL NUMBER OF CONTAINERS

82.7 Ten
7.90 EC
8.0 pH

Sample Reading Time 0800

ALERT !!
Level III QC

CHAIN OF CUSTODY SIGNATURE RECORD

	Signature	Printed Name	Company/ Agency	Date/ Time
Relinquished		Hoe	ORL	9-10-08 0850
Received	Rafael Davila	Rafael	T.L.I	9-10-08 14:50
Relinquished	Rafael Davila	Rafael	T.L.I	9-10-08 20:45
Received	Rafael Davila	Rafael	T.L.I	9-10-08 20:45
Relinquished				
Received				

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

TRUESDAIL LABORATORIES, INC.

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September 29, 2008

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-169 PROJECT, GROUNDWATER MONITORING, TLI NO.: 978643

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-169 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, pH, 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 September 22, 2008, 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.

A. Khanya

For Mona Nassimi
Manager, Analytical Services

K. R. P. Iyer

K.R.P. Iyer
Quality Assurance/Quality Control Officer

TRUESDAIL LABORATORIES, INC.

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Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00

Laboratory No.: 978643
Date: September 29, 2008
Collected: September 22, 2008
Received: September 22, 2008

ANALYST LIST

EPA 120.1	Specific Conductivity	Tina Acquiat
SM 4500-H B	pH	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

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Laboratory No.: 978643

Sample: One (1) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00
Prep. Batch: 092308A

Date: September 29, 2008
Collected: September 22, 2008
Received: September 22, 2008
Prep/ Analyzed: September 23, 2008
Analytical Batch: 092308A

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

Analytical Results Total Chromium

TLI I.D.	Field I.D.	Units	Method	Run Time	DF	RL	Results
978643	SC-700B-WDR-169	µg/L	EPA 200.8	13:19	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	978426	ND	ND	0.00%	≤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	978426	0.00	1.00	50.0	50.0	40.5	50.0	81.0%	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	48.9	50.0	97.8%	90% - 110%	Yes
MRCVS#1	48.4	50.0	96.8%	90% - 110%	Yes
MRCVS#2	45.2	50.0	90.4%	90% - 110%	Yes
MRCVS#3	48.5	50.0	97.0%	90% - 110%	Yes
ICS	45.0	50.0	90.0%	80% - 120%	Yes
LCS	18.3	20.0	91.5%	90% - 110%	Yes

ND: Not detected at reporting limit
DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Laboratory No.: 978643

Sample: One (1) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Date: September 29, 2008
Collected: September 22, 2008
Received: September 22, 2008
Prep/ Analyzed: September 23, 2008
Analytical Batch: 09CrH08J

Investigation: **Hexavalent Chromium by EPA 218.6**

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
978643	SC-700B-WDR-169	11:50	23:01	µg/L	1.05	0.20	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	978599-1	ND	ND	0.00%	≤ 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	978643	0.00	1.06	1.00	1.06	1.06	1.06	100%	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	4.52	5.00	90.4%	90% - 110%	Yes
MRCVS#1	10.0	10.0	100%	95% - 105%	Yes
MRCVS#2	10.0	10.0	100%	95% - 105%	Yes
MRCVS#3	10.2	10.0	102%	95% - 105%	Yes
MRCVS#4	10.2	10.0	102%	95% - 105%	Yes
MRCVS#5	9.83	10.0	98.3%	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.

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 978643
Date: September 29, 2008
Collected: September 22, 2008
Received: September 22, 2008
Prep/ Analyzed: September 23, 2008
Analytical Batch: 09TDS08H

Investigation: **Total Dissolved Solids by SM 2540C**

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
978643	SC-700B-WDR-169	mg/L	SM 2540C	250	4170

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	978643	4170	4060	1.34%	≤ 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.

For Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 978643
Date: September 29, 2008
Collected: September 22, 2008
Received: September 22, 2008
Prep/ Analyzed: September 23, 2008
Analytical Batch: 09EC08H

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
978643	SC-700B-WDR-169	µmhos/cm	EPA 120.1	1.00	2.00	6610

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	978643	6610	6610	0.00%	≤ 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	700	706	99.2%	90% - 110%	Yes
CVS#1	964	990	97.4%	90% - 110%	Yes
LCS	700	706	99.2%	90% - 110%	Yes
LCSD	700	706	99.2%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 978643
Date: September 29, 2008
Collected: September 22, 2008
Received: September 22, 2008
Prep/ Analyzed: September 23, 2008
Analytical Batch: 09TUC08N

Investigation: **Turbidity by Method SM 2130B**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
978643	SC-700B-WDR-169	11:50	NTU	1.00	0.10	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	978632-15	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	7.80	8.00	97.5%	90% - 110%	Yes
LCS	7.85	8.00	98.1%	90% - 110%	Yes
LCS	7.70	8.00	96.3%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 978643
Date: September 29, 2008
Collected: September 22, 2008
Received: September 22, 2008
Prep/ Analyzed: September 23, 2008
Analytical Batch: 09PH08N

Investigation:

pH by SM 4500-H B

Analytical Results pH

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	MDL	RL	Results
978643	SC-700B-WDR-169	11:50	08:40	pH	0.070	2.00	7.60

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	978643	7.60	7.60	0.00	± 0.100 Units	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Difference (Units)	Acceptance Limits	QC Within Control
MRCVS	7.04	7.00	0.04	± 0.100 Units	Yes
LCS	7.06	7.00	0.06	± 0.100 Units	Yes
LCSD	7.04	7.00	0.04	± 0.100 Units	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

For Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.
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(714)730-6239 FAX: (714) 730-6462
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CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-169] 978643

COC Number

TURNAROUND TIME 10 Days

DATE 09/19/08 PAGE 1 OF 1

COMPANY	E2
PROJECT NAME	PG&E Topock
PHONE	(530) 229-3303 FAX (530) 339-3303
ADDRESS	155 Grand Ave Ste 1000 Oakland, CA 94612
P.O. NUMBER	379209.01.02 TEAM 1
SAMPLERS (SIGNATURE	

Rec'd 09/22/08
Lab#: 978643

SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Total Metals (200.7) Total Chromium	Specific Conductance (120.1)	TDS (SM2540C)	PH (SM4500HB)	Turbidity (SM2130)	NUMBER OF CONTAINERS	COMMENTS
SC-700B-WDR-169	09/19/09	11:50	Water	x	x	x	x	x	x	3	pH=6
										3	TOTAL NUMBER OF CONTAINERS

ph - 8.0
EC - 7.80
Temp - 82.2°

ALERT !!
Level III QC

For Sample Conditions
See Form Attached

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	John Deetz	OMI	9-22-08 11:50
Signature (Received)	Holly	TLI	9-22-08 1250
Signature (Relinquished)			
Signature (Received)	Shakumura	TLI	SEP 22 2008, 18:15
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

TRUESDAIL LABORATORIES, INC.

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www.truesdail.com

September 30, 2008

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-170 PROJECT, GROUNDWATER MONITORING, TLI NO.: 978697

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-170 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, pH, 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 September 24, 2008, 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.

Sam Cowles

for Mona Nassimi
Manager, Analytical Services

K. R. P. Iyer

K.R.P. Iyer
Quality Assurance/Quality Control Officer

TRUESDAIL LABORATORIES, INC.

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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: One (1) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00

Laboratory No.: 978697
Date: September 30, 2008
Collected: September 24, 2008
Received: September 24, 2008

ANALYST LIST

EPA 120.1	Specific Conductivity	Tina Acquiat
SM 4500-H B	pH	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

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Sample: One (1) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00
Prep. Batch: 093008A

Laboratory No.: 978697

Date: September 30, 2008
Collected: September 24, 2008
Received: September 24, 2008
Prep/ Analyzed: September 30, 2008
Analytical Batch: 093008A

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

Analytical Results Total Chromium

TLI I.D.	Field I.D.	Units	Method	Run Time	DF	RL	Results
978697	SC-700B-WDR-170	µg/L	EPA 200.8	11:17	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	978697	ND	ND	0.00%	≤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	978697	0.00	1.00	50.0	50.0	39.9	50.0	79.8%	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	47.9	50.0	95.8%	90% - 110%	Yes
MRCVS#1	48.9	50.0	97.8%	90% - 110%	Yes
ICS	47.3	50.0	94.6%	80% - 120%	Yes
LCS	19.0	20.0	95.0%	90% - 110%	Yes

ND: Not detected at reporting limit
DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conklin

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Laboratory No.: 978697

Sample: One (1) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Date: September 30, 2008
Collected: September 24, 2008
Received: September 24, 2008
Prep/ Analyzed: September 25, 2008
Analytical Batch: 09CrH08M

Investigation: **Hexavalent Chromium by EPA 218.6**

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
978697	SC-700B-WDR-170	09:40	09:47	µg/L	1.05	0.20	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	978697	ND	ND	0.00%	< 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	978697	0.00	1.06	1.00	1.06	1.08	1.06	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	5.10	5.00	102%	90% - 110%	Yes
MRCVS#1	9.94	10.0	99.4%	95% - 105%	Yes
MRCVS#2	9.88	10.0	98.8%	95% - 105%	Yes
LCS	5.10	5.00	102%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sean Conde
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 978697
Date: September 30, 2008
Collected: September 24, 2008
Received: September 24, 2008
Prep/ Analyzed: September 25, 2008
Analytical Batch: 09TDS08I

Investigation: **Total Dissolved Solids by SM 2540C**

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
978697	SC-700B-WDR-170	mg/L	SM 2540C	250	4060

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	978697	4060	4170	1.34%	≤ 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	507	500	101%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
RL: Reporting Limit.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sam Conder for
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 978697
Date: September 30, 2008
Collected: September 24, 2008
Received: September 24, 2008
Prep/ Analyzed: September 25, 2008
Analytical Batch: 09EC08J

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
978697	SC-700B-WDR-170	µmhos/cm	EPA 120.1	1.00	2.00	6670

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	978697	6670	6680	0.15%	≤ 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	700	706	99.2%	90% - 110%	Yes
CVS#1	965	990	97.5%	90% - 110%	Yes
LCS	700	706	99.2%	90% - 110%	Yes
LCSD	700	706	99.2%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sean Conklin
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 978697
Date: September 30, 2008
Collected: September 24, 2008
Received: September 24, 2008
Prep/ Analyzed: September 25, 2008
Analytical Batch: 09TUC08O

Investigation: **Turbidity by Method SM 2130B**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
978697	SC-700B-WDR-170	09:40	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	978676-1	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).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sean Conklin
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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 Samples
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 978697
Date: September 30, 2008
Collected: September 24, 2008
Received: September 24, 2008
Prep/ Analyzed: September 25, 2008
Analytical Batch: 09PH08Q

Investigation:

pH by SM 4500-H B

Analytical Results pH

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	MDL	RL	Results
978697	SC-700B-WDR-170	09:40	09:20	pH	0.070	2.00	7.70

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	978697	7.70	7.71	0.01	± 0.100 Units	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Difference (Units)	Acceptance Limits	QC Within Control
MRCVS	7.01	7.00	0.01	± 0.100 Units	Yes
LCS	7.02	7.00	0.02	± 0.100 Units	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi, Manager
Analytical Services

Rec'd 09/24/08
Lab#: 978697

RUSH
RUSH!

978697

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CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-170]

COC Number
TURNAROUND TIME 5 Days
DATE 09/24/08 PAGE 1 OF 1

COMPANY	E2
PROJECT NAME	PG&E Topock
PHONE	(530) 229-3303 FAX (530) 339-3303
ADDRESS	155 Grand Ave Ste 1000 Oakland, CA 94612
P.O. NUMBER	379209.01.02 TEAM 1
SAMPLERS SIGNATURE	

SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Total Metals (200.7) Total Chromium	Specific Conductance (120.1)	TDS (SM2540C)	PH (SM4500H)	Turbidity (SM2130)			NUMBER OF CONTAINERS	COMMENTS
SC-700B-WDR-170	09/24/08	0940	Water	X	X	X	X	X	X		RUSH	3	PH-7
												3	TOTAL NUMBER OF CONTAINERS

pH 8.0
COND 7.71
TEMP - 82.4°F

ALERT !!
Level III QC

For Sample Conditions
See Form Attached

CHAIN OF CUSTODY SIGNATURE RECORD

	Signature	Printed Name	Company/ Agency	Date/ Time
Relinquished	CKnight	CHRIS KNIGHT	OMT	9-24-08 15:50
Received	Bonifacio Dayag	BONIFACIO DAYAG	TLI	9-24-08 1600
Relinquished	Bonifacio Dayag	B. DAYAG	TLI	9-24-08 2145
Received	Rafael Davila	Rafael	T.L.I	9-24-08 21:45
Relinquished				
Received				

SAMPLE CONDITIONS
RECEIVED COOL ☐ WARM ☐ °F
CUSTODY SEALED YES ☐ NO ☐
SPECIAL REQUIREMENTS:

TRUESDAIL LABORATORIES, INC.

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www.truesdail.com

July 30, 2008

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-159 PROJECT, SLUDGE MONITORING,

TLI NO.: 977067

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-159 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 July 10, 2008, 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.

Sean Cambe
for Mona Nassimi
Manager, Analytical Services

K. R. P. Iyer

K.R.P. Iyer
Quality Assurance/Quality Control Officer

TRUESDAIL LABORATORIES, INC.

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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.: 358342.TM.02.00

Laboratory No.: 977067
Date: July 31, 2008
Collected: July 10, 2008
Received: July 10, 2008

ANALYST LIST

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	Linda Saetern
SW 7471A	Mercury	Romuel Chaves
SW 7199	Hexavalent Chromium	David Blackburn

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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.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00
Prep. Batch: 07CrH08F

Laboratory No.: 977067
Date: July 31, 2008
Collected: July 10, 2008
Received: July 10, 2008
Prep/ Analyzed: July 23, 2008
Analytical Batch: 07CrH08F

Investigation: **Hexavalent Chromium by IC Using Method SW 7199**

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
977067	SC-Sludge-WDR-159	08:40	16:30	mg/kg	10.0	16.0	204

QA/QC Summary

QC STD I.D.	Laboratory Number	Sample Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	977067	204	200	1.78%	≤ 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	977067	204	10.0	32.0	320	495	524	91.0%	75-125%	Yes
IMS	977067	204	40.0	78.8	3152	3240	3356	96.3%	75-125%	Yes
PDMS	977067	204	25.0	25.6	640	825	844	97.1%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.400	—	<0.400	Yes
MRCCS	2.16	2.00	108%	80% - 120%	Yes
MRCVS#1	2.14	2.00	107%	80% - 120%	Yes
LCS	2.11	2.00	106%	80% - 120%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sean Comstock
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977067
Date: July 31, 2008
Collected: July 10, 2008
Received: July 10, 2008
Prep/ Analyzed: July 16, 2008
Analytical Batch: 07SOLID08B

Investigation: **Total Solids by SM 2540 B**

Analytical Results % Moisture

TLI I.D.	Field I.D.	Sample Time	Units	Results
977067	SC-Sludge-WDR-159	08:40	%	75.0

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	977067	75.0	74.9	0.13%	< 20%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conlon

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00

Laboratory No.: 977067
Date: July 31, 2008
Collected: July 10, 2008
Received: July 10, 2008
Prep/ Analyzed: July 11, 2008
Analytical Batch: 07AN08I

Investigation: **Fluoride by Ion Chromatography using EPA 300.0**

Analytical Results Fluoride

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
977067	SC-Sludge-WDR-159	08:40	12:53	mg/kg	1.00	16.0	102

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	977067	102	102	0.00%	≤ 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	977067	102	1.00	320	320	428	422	102%	85-115%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.200	---	<0.200	Yes
MRCCS	4.15	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	4.12	4.00	103%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sam Conla
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612

Attention: Shawn Duffy

Samples: One (1) Soil Sample
Project Name: PG&E Topock Project
Project No.: 358342.TM.02.00
P.O. No.: 358342.TM.02.00
Investigation: Total Metal Analyses as Requested

Laboratory No.: 977067
Reported: July 31, 2008
Collected: July 10, 2008
Received: July 10, 2008
Analyzed: See Below

Analytical Results

SAMPLE ID: SC-Sludge-WDR-159 **Time Collected:** 08:40 **LAB ID:** 977067

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Antimony	SW 6010B	211	1.00	mg/kg	3.79	071408A	07/14/08	11:59
Arsenic	SW 6010B	79.5	1.00	mg/kg	2.50	071408A	07/14/08	11:59
Barium	SW 6010B	96.9	1.00	mg/kg	2.50	071408A	07/14/08	11:59
Beryllium	SW 6010B	299	1.00	mg/kg	2.50	071408A	07/14/08	11:59
Cadmium	SW 6010B	43.5	1.00	mg/kg	3.79	072108A	07/21/08	14:04
Chromium	SW 6010B	16400	10.0	mg/kg	19.0	071408A	07/14/08	13:02
Cobalt	SW 6010B	ND	1.00	mg/kg	2.50	071408A	07/14/08	11:59
Copper	SW 6010B	86.6	1.00	mg/kg	2.50	071408A	07/14/08	11:59
Lead	SW 6010B	ND	1.00	mg/kg	3.79	071408A	07/14/08	11:59
Mercury	SW 7471A	0.564	171	mg/kg	0.137	07HG08D	07/29/08	13:11
Molybdenum	SW 6020	31.3	100	mg/kg	18.96	071408B	07/14/08	16:32
Nickel	SW 6010B	ND	1.00	mg/kg	2.50	071408A	07/14/08	11:59
Selenium	SW 6020	ND	100	mg/kg	19.0	071408A	07/14/08	16:32
Silver	SW 6010B	17.4	1.00	mg/kg	3.79	071408A	07/14/08	11:59
Thallium	SW 6010B	ND	1.00	mg/kg	3.79	071408A	07/14/08	11:59
Vanadium	SW 6010B	163	1.00	mg/kg	2.50	071408A	07/14/08	11:59
Zinc	SW 6010B	110	1.00	mg/kg	9.48	071408A	07/14/08	11:59

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.

Sean Comla
for Mona Nassimi, Manager
Analytical Services

Rec'd 07/10/08

977067

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-159]

977067

COC Number

TURNAROUND TIME 10 Days

DATE 07/10/08 PAGE 1 OF 1

COMPANY CH2M HILL

PROJECT NAME PG&E Topock IM3

PHONE 530-229-3303 FAX 530-339-3303

ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612

P.O. NUMBER 358342.TM.02.00

SAMPLERS (SIGNATURE) CKnight

SAMPLE I.D.	DATE	TIME	DESCRIPTION	Anions (300.0) F	Bioassay 96hr Acute	Metals (6010B) Title 22, (Includes Mercury)	Cr6 (7199)	NUMBER OF CONTAINERS	COMMENTS
SC-Sludge-WDR-159	07/10/08	0840	Sludge	X	X	X	X	4	

ALERT!! Level III QC

For Sample Condition, See Form Attached

4 TOTAL NUMBER OF CONTAINERS

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished) CKnight	Printed Name CHRIS KNIGHT	Company/ Agency CHI	Date/ Time 7-10-08 0840	
Signature (Received)	Printed Name	Company/ Agency	Date/ Time 7-10-08 1520	
Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time 7-10-08 21:20	
Signature (Received) Rafael Davila	Printed Name Rafael	Company/ Agency T-L-I	Date/ Time 7-10-08 21:20	
Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time	
Signature (Received)	Printed Name	Company/ Agency	Date/ Time	

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

TRUESDAIL LABORATORIES, INC.

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September 10, 2008

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-163 PROJECT, SLUDGE MONITORING,

TLI NO.: 977684

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-163 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 August 6, 2008, 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.

Mercury by EPA 245.1 was analyzed past the method specified holding time due to analyst error. The analyst was instructed to watch holding times more closely to prevent similar occurrences in the future.

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.

Sean Canda

for Mona Nassimi
Manager, Analytical Services

K. R. P. Iyer

K.R.P. Iyer
Quality Assurance/Quality Control Officer

TRUESDAIL LABORATORIES, INC.

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(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.: 977684
Date: August 25, 2008
Collected: August 6, 2008
Received: August 6, 2008

ANALYST LIST

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

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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
Prep. Batch: 08CrH08O

Laboratory No.: 977684
Date: August 25, 2008
Collected: August 6, 2008
Received: August 6, 2008
Prep/ Analyzed: August 15, 2008
Analytical Batch: 08CrH08O

Investigation: **Hexavalent Chromium by IC Using Method SW 7199**

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
977684	SC-Sludge-WDR-163	11:30	10:09	mg/kg	10.0	8.44	83.1

QA/QC Summary

QC STD I.D.	Laboratory Number	Sample Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	977684	83.1	78.9	5.21%	< 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	977684	83.1	10.0	16.9	169	238	252	91.9%	75-125%	Yes
MS	977684	83.1	40.0	41.6	1664	1630	1747	93.0%	75-125%	Yes
PDMS	977684	83.1	25.0	13.5	338	418	421	99.1%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.400	---	<0.400	Yes
MRCCS	2.12	2.00	106%	80% - 120%	Yes
MRCVS#1	2.12	2.00	106%	80% - 120%	Yes
LCS	1.78	2.00	89.2%	80% - 120%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sean Camden
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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.: 977684
Date: August 25, 2008
Collected: August 6, 2008
Received: August 6, 2008
Prep/ Analyzed: August 11, 2008
Analytical Batch: 08SOLID08B

Investigation: **Total Solids by SM 2540 B**

Analytical Results % Moisture

TLI I.D.	Field I.D.	Sample Time	Units	Results
977684	SC-Sludge-WDR-163	11:30	%	52.6

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	977757-2	4.92	5.05	2.61%	< 20%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sean Carder
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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.: 977684
Date: August 25, 2008
Collected: August 6, 2008
Received: August 6, 2008
Prep/ Analyzed: August 8, 2008
Analytical Batch: 08AN08H

Investigation: **Fluoride by Ion Chromatography using EPA 300.0**

Analytical Results Fluoride

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
977684	SC-Sludge-WDR-163	11:30	21:59	mg/kg	1.00	8.44	28.1

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	977693-2	2.46	2.46	0.00%	≤ 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	977693-2	2.46	1.00	4.00	4.00	6.21	6.46	93.8%	85-115%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500	---	<0.500	Yes
MRCCS	4.08	4.00	102%	90% - 110%	Yes
MRCVS#1	3.08	3.00	103%	90% - 110%	Yes
MRCVS#2	3.08	3.00	103%	90% - 110%	Yes
MRCVS#3	3.10	3.00	103%	90% - 110%	Yes
LCS	4.12	4.00	103%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sean Conlin
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612

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

Laboratory No.: 977684
Reported: August 25, 2008
Collected: August 6, 2008
Received: August 6, 2008
Analyzed: See Below

Analytical Results

SAMPLE ID: SC-Sludge-WDR-163 **Time Collected:** 11:30 **LAB ID:** 977684

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Antimony	SW 6010B	83.5	1.00	mg/kg	2.00	081208A	08/12/08	11:12
Arsenic	SW 6010B	29.5	1.00	mg/kg	0.951	081208A	08/12/08	11:12
Barium	SW 6010B	39.2	1.00	mg/kg	1.00	081208A	08/12/08	11:12
Beryllium	SW 6010B	133	1.00	mg/kg	0.951	081208A	08/12/08	11:12
Cadmium	SW 6010B	15.5	1.00	mg/kg	1.90	081208A	08/12/08	11:12
Chromium	SW 6010B	5650	10.0	mg/kg	9.51	081208A	08/12/08	11:32
Cobalt	SW 6010B	ND	1.00	mg/kg	1.00	081208A	08/12/08	11:12
Copper	SW 6010B	38.6	1.00	mg/kg	1.00	081208A	08/12/08	11:12
Lead	SW 6010B	ND	1.00	mg/kg	1.90	081208A	08/12/08	11:12
Mercury	SW 7471A	0.116	194	mg/kg	0.100	09HG08A	09/10/08	N/A
Molybdenum	SW 6010B	ND	10.0	mg/kg	9.51	081208A	08/12/08	11:32
Nickel	SW 6010B	ND	1.00	mg/kg	1.00	081208A	08/12/08	11:12
Selenium	SW 6010B	101	1.00	mg/kg	4.76	081208A	08/12/08	11:12
Silver	SW 6010B	4.24	1.00	mg/kg	1.90	081808A	08/18/08	14:27
Thallium	SW 6010B	ND	1.00	mg/kg	2.00	081208A	08/12/08	11:12
Vanadium	SW 6010B	62.7	1.00	mg/kg	1.00	081208A	08/12/08	11:12
Zinc	SW 6010B	62.2	1.00	mg/kg	4.76	081208A	08/12/08	11:12

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.

for Sean Conda
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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Established 1931

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(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: 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.: 977684
Reported: August 25, 2008
Collected: August 6, 2008
Received: August 6, 2008

Quality Control/Quality Assurance Report

				DIGESTED BLANK		MRCCS				MRCVS			
Parameter	Method	Batch	Units	LRB	RL	Observed Value	TRUE Value	% Rec	Control Limits	Observed Value	TRUE Value	% Rec	Control Limits %
Mercury	SW 7471A	09HG08A	mg/kg	ND	0.100	0.00098	0.00100	98.0%	90-110%	0.00105	0.00100	105%	85-115%

			LABORATORY CONTROL SAMPLES				SAMPLE DUPLICATES				
Parameter	Method	Units	LCS Obs.	LCS Theo.	% Rec.	Control Limits	SAMPLE ID	SAMPLE RESULT	DUP RESULT	% RPD	Precision Control Limits %
Mercury	SW 7471A	mg/kg	0.0960	0.100	96.0%	80-120%	977684	0.116	0.106	8.95%	≤20

MATRIX SPIKE

Sample ID	Parameter	Method	Units	Sample Result	DF	Spike Level	Total Amt. of Spike	Theo. Value	MS Obs.	% Rec.	Accuracy Control Limits %
977684	Mercury	SW 7471A	mg/kg	0.116	199	0.00105	0.210	0.326	0.357	115%	75-125%

012

				DIGESTED BLANK		MRCCS				MRCVS			
Parameter	Method	Batch	Units	Blank	RL	Observed Value	TRUE Value	% Rec	Control Limits	Observed Value	TRUE Value	% Rec	Control Limits %
Antimony	SW 6010B	081208A	mg/kg	ND	2.00	5.23	5.00	105%	90-110%	5.15	5.00	103%	90-110%
Arsenic	SW 6010B	081208A	mg/kg	ND	0.500	5.19	5.00	104%	90-110%	5.34	5.00	107%	90-110%
Barium	SW 6010B	081208A	mg/kg	ND	1.00	5.07	5.00	101%	90-110%	5.49	5.00	110%	90-110%
Beryllium	SW 6010B	081208A	mg/kg	ND	0.500	4.96	5.00	99.2%	90-110%	5.29	5.00	106%	90-110%
Cadmium	SW 6010B	081208A	mg/kg	ND	0.952	5.30	5.00	106%	90-110%	4.81	5.00	96.2%	90-110%
Chromium	SW 6010B	081208A	mg/kg	ND	1.00	5.15	5.00	103%	90-110%	5.39	5.00	108%	90-110%
Cobalt	SW 6010B	081208A	mg/kg	ND	1.00	5.29	5.00	106%	90-110%	4.70	5.00	94.0%	90-110%
Copper	SW 6010B	081208A	mg/kg	ND	1.00	4.89	5.00	97.8%	90-110%	4.68	5.00	93.6%	90-110%
Lead	SW 6010B	081208A	mg/kg	ND	1.00	5.29	5.00	106%	90-110%	4.82	5.00	96.4%	90-110%
Molybdenum	SW 6010B	081208A	mg/kg	ND	1.00	5.18	5.00	104%	90-110%	5.10	5.00	102%	90-110%
Nickel	SW 6010B	081208A	mg/kg	ND	1.00	5.51	5.00	110%	90-110%	4.76	5.00	95.2%	90-110%
Selenium	SW 6010B	081208A	mg/kg	ND	2.38	5.19	5.00	104%	90-110%	5.43	5.00	109%	90-110%
Silver	SW 6010B	081808A	mg/kg	ND	1.00	4.83	5.00	96.6%	90-110%	4.90	5.00	98.0%	90-110%
Thallium	SW 6010B	081208A	mg/kg	ND	2.00	5.40	5.00	108%	90-110%	4.76	5.00	95.2%	90-110%
Vanadium	SW 6010B	081208A	mg/kg	ND	1.00	5.48	5.00	110%	90-110%	5.47	5.00	109%	90-110%
Zinc	SW 6010B	081208A	mg/kg	ND	2.38	5.39	5.00	108%	90-110%	4.64	5.00	92.8%	90-110%

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Dry Weight Calculations

Date Calculated: 8/25/08

	Sample Result Wet Weight mg/kg	Dilution Factor	% Moisture %	Sample Result Dry* Weight mg/kg	Reported Value mg/kg	Reporting Limit Wet Weight mg/kg	Reporting Limit Dry Weight mg/kg
Fluoride	13.3	---	52.6	28.059	28.1	4.00	8.44
Hexavalent Chromium	39.4	---	52.6	83.122	83.1	4.00	8.44
Hexavalent Chromium - Dup	37.4	---	52.6	78.903	78.9	4.00	8.44
Hexavalent Chromium - MS	113	---	52.6	238.397	238	4.00	8.44
Hexavalent Chromium - IMS	773	---	52.6	1630.802	1630	20.0	42.2
Hexavalent Chromium - PDMS	198	---	52.6	417.722	418	4.00	8.44
Antimony	39.60	1.00	52.6	83.54	83.5	0.902	2.00
Arsenic	14	1.00	52.6	29.54	29.5	0.451	0.951
Barium	18.600	1.00	52.6	39.24	39.2	0.451	1.00
Beryllium	63.10	1.00	52.6	133.122	133	0.451	0.951
Cadmium	7.33	1.00	52.6	15.464	15.5	0.902	1.90
Chromium	2680	10.0	52.6	5654	5650	4.510	9.51
Cobalt	ND	1.00	52.6	ND	ND	0.451	1.00
Copper	18.3	1.00	52.6	38.61	38.6	0.451	1.00
Lead	ND	1.00	52.6	ND	ND	0.902	1.90
Mercury	0.0550000	194	52.6	0.11603	0.116	0.039	0.100
Molybdenum	ND	10.0	52.6	ND	ND	4.510	9.51
Nickel	ND	1.00	52.6	ND	ND	0.451	1.00
Selenium	47.7	1.00	52.6	100.63	101	2.255	4.76
Silver	2.01	1.00	52.6	4.241	4.24	0.902	1.90
Thallium	0.639	1.00	52.6	1.35	ND	0.902	2.00
Vanadium	29.7	1.00	52.6	62.66	62.7	0.451	1.00
Zinc	29.50	1.00	52.6	62.24	62.2	2.255	4.76

Sample Result in Dry Weight = [$Sample_{ww}$ / (100-%Moisture)]*100

where:
$Sample_{ww}$ = Sample result in wet weight

Rec'd 08/06/08
977684

TRUESDAIL LABORATORIES, INC.
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CHAIN OF CUSTODY RECORD

977684 [IM3Plant-WDR-163] (R.D)

COC Number
Turnaround Time 10 Days
Date 8-6-08 Page 1 OF 1

COMPANY E2
PROJECT PG&E Topock
ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612
PHONE (530) 229-3303 FAX (530) 339-3303
P.O. NUM 379209.01.03.01 TEAM 1
SAMPLERS (SIGNATURE

SAMPLE I.D.	DATE	TIME	Matrix	Container:	4 oz jar	Soil Jar(4 oz)	Soil Jar(4 oz)	Number of Containers	COMMENTS
				Preservatives:	4°C	none	none		
				Filtered:	NA	NA	NA		
				Holding Time:	180	NA	NA		
					Cr6 (7199)	Metals (6010B) Title 22, Mercury	Anions (300.0) Fl		
SC-Sludge-WDR-163	8-6-08	1130	Sludge		X	X	X		

TOTAL NUMBER OF CONTAINERS 3

ALERT!!
Level III QC

CHAIN OF CUSTODY SIGNATURE RECORD

	Signature	Printed Name	Company/ Agency	Date/ Time
(Relinquished)		J. Ade	OMT	8-6-08 1130
(Received)	Bonifacio Dayag	B. DAYAG	TLI	8-6-08 1515
(Relinquished)	Bonifacio Dayag	B. DAYAG	TLI	8-6-08 2045
(Received)	Rafael Davila	Rafael	T.L.I	8-6-08 20:50
(Relinquished)				
(Received)				

SAMPLE CONDITIONS
RECEIVED COOL ☐ WARM ☐ °F
CUSTODY SEALED YES ☐ NO ☐
SPECIAL REQUIREMENTS:

TRUESDAIL LABORATORIES, INC.

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www.truesdail.com

October 7, 2008

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-167 PROJECT, SLUDGE MONITORING,

TLI NO.: 978305

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-167 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 September 4, 2008, 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.

Sean Conda

for Mona Nassimi
Manager, Analytical Services

K. R. P. Iyer

K.R.P. Iyer
Quality Assurance/Quality Control Officer

TRUESDAIL LABORATORIES, INC.

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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.: 978305
Date: October 7, 2008
Collected: September 4, 2008
Received: September 4, 2008

ANALYST LIST

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

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
Prep. Batch: 010CrH08B

Laboratory No.: 978305
Date: October 7, 2008
Collected: September 4, 2008
Received: September 4, 2008
Prep/ Analyzed: October 3, 2008
Analytical Batch: 010CrH08B

Investigation: **Hexavalent Chromium by IC Using Method SW 7199**

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
978305	SC-Sludge-WDR-167	13:20	15:00	mg/kg	10.0	24.7	312

QA/QC Summary

QC STD I.D.	Laboratory Number	Sample Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	978305	312	367	16.2%	< 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	978305	312	10.0	49.4	494	673	806	73.0%	75-125%	No
MS	978305	312	40.0	118	4720	4560	5032	90.0%	75-125%	Yes
PDMS	978305	312	25.0	39.5	988	1250	1300	95.0%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.400	—	<0.400	Yes
MRCCS	1.99	2.00	99.3%	90% - 110%	Yes
MRCVS#1	2.01	2.00	100%	90% - 110%	Yes
MRCVS#2	2.00	2.00	100%	90% - 110%	Yes
MRCVS#3	2.00	2.00	100%	90% - 110%	Yes
MRCVS#4	2.02	2.00	101%	90% - 110%	Yes
LCS	1.93	2.00	96.3%	80% - 120%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conklin
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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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.: 978305
Date: October 7, 2008
Collected: September 4, 2008
Received: September 4, 2008
Prep/ Analyzed: September 8, 2008
Analytical Batch: 09SOLID08C

Investigation: **Total Solids by SM 2540 B**

Analytical Results % Moisture

TLI I.D.	Field I.D.	Sample Time	Units	Results
978305	SC-Sludge-WDR-167	13:20	%	83.8

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	978305	83.8	83.3	0.60%	≤ 20%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sean Conda
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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TUSTIN, CALIFORNIA 92780-7008
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www.truesdail.com

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.: 978305
Date: October 7, 2008
Collected: September 4, 2008
Received: September 4, 2008
Prep/ Analyzed: September 5, 2008
Analytical Batch: 09AN08D

Investigation: **Fluoride by Ion Chromatography using EPA 300.0**

Analytical Results Fluoride

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
978305	SC-Sludge-WDR-167	13:20	14:00	mg/kg	1.00	24.7	98.8

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	978298-1	2.30	2.30	0.00%	≤ 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	978298-1	2.30	5.00	4.00	20.0	22.8	22.3	103%	85-115%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500	---	<0.500	Yes
MRCCS	4.14	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
MRCVS#3	3.08	3.00	103%	90% - 110%	Yes
LCS	4.12	4.00	103%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conde
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612

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

Laboratory No.: 978305
Reported: October 7, 2008
Collected: September 4, 2008
Received: September 4, 2008
Analyzed: See Below

Analytical Results

SAMPLE ID: SC-Sludge-WDR-167 **Time Collected:** 13:20 **LAB ID:** 978305

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Antimony	SW 6010B	301	1.00	mg/kg	5.64	092608A	09/26/08	10:41
Arsenic	SW 6020	65.4	100	mg/kg	28.2	092908A	09/29/08	12:34
Barium	SW 6010B	133	1.00	mg/kg	2.82	092608A	09/26/08	10:41
Beryllium	SW 6010B	497	1.00	mg/kg	2.82	092608A	09/26/08	10:41
Cadmium	SW 6010B	56.9	1.00	mg/kg	5.64	092608A	09/26/08	10:41
Chromium	SW 6010B	22000	10.0	mg/kg	28.2	092608A	09/26/08	11:58
Cobalt	SW 6010B	ND	1.00	mg/kg	2.82	092608A	09/26/08	10:41
Copper	SW 6010B	257	1.00	mg/kg	2.82	092608A	09/26/08	10:41
Lead	SW 6010B	ND	1.00	mg/kg	5.64	092608A	09/26/08	10:41
Mercury	SW 7471A	0.667	180	mg/kg	0.222	09HG08A	09/10/08	N/A
Molybdenum	SW 6020	39.0	100	mg/kg	28.2	093008A	09/30/08	12:36
Nickel	SW 6010B	ND	1.00	mg/kg	2.82	092608A	09/26/08	10:41
Selenium	SW 6020	ND	100	mg/kg	28.2	093008A	09/30/08	12:36
Silver	SW 6020	ND	100	mg/kg	28.2	100108A	10/01/08	14:43
Thallium	SW 6010B	ND	1.00	mg/kg	5.64	092608A	09/26/08	10:41
Vanadium	SW 6010B	233	1.00	mg/kg	2.82	092608A	09/26/08	10:41
Zinc	SW 6010B	300	1.00	mg/kg	14.1	092608A	09/26/08	10:41

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.

Sean Conda
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.
14201 Franklin Avenue, Tustin, CA 92780-7008
(714)730-6239 FAX: (714) 730-6462
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CHAIN OF CUSTODY RECORD

[IM3plant-WDR-167]

978305

COC Number

TURNAROUND TIME 10 Days

DATE 09/04/08 PAGE 1 OF 1

COMPANY	CH2M HILL
PROJECT NAME	PG&E Topock IM3
PHONE	530-229-3303 FAX 530-339-3303
ADDRESS	155 Grand Ave Ste 1000 Oakland, CA 94612
P.O. NUMBER	379209.01.03.01
SAMPLERS (SIGNATURE	Chris Knight

SAMPLE I.D.	DATE	TIME	DESCRIPTION	Anions (300.0) F	Bioassay 96hr Acute	Metals (6010B) Title 22, (includes Mercury)	Cr6 (7199)	NUMBER OF CONTAINERS	COMMENTS
SC-Sludge-WDR-167	09/04/08	1320	Sludge	X	X	X	X	4	
								4	TOTAL NUMBER OF CONTAINERS

Rec'd 09/04/08
Lab #: 978305

For Sample Conditions
See Form Attached

ALERT !!
Level III QC

CHAIN OF CUSTODY SIGNATURE RECORD

	Signature	Printed Name	Company/ Agency	Date/ Time
Relinquished	Chris Knight	CHRIS KNIGHT	CH2M	9-4-08 1320
Received	[signature]	Hyalite	TLI	9-4-08 15:30
Relinquished				
Received	L. Shabunina	Shabunina	TLI	9/4/08 21:00
Relinquished				
Received				

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

LABORATORY REPORT

Aquatic Testing Laboratories

"dedicated to providing quality aquatic toxicity testing"

4350 Transport Street, Unit 107
Ventura, CA 93003
(805) 650-0546 FAX (805) 650-0756
CA DOHS ELAP Cert. No.: 1775

Date: July 21, 2008

Client: Truesdail Laboratories, Inc.
14201 Franklin Avenue
Tustin, CA 92780
Attn: Sean Condon

Laboratory No.: A-08071501-001
Sample ID.: 977067

Sample Control: The sample was received by ATL with the chain of custody record attached.

Date Sampled: 07/10/08
Date Received: 07/15/08
Date Tested: 07/16/08 to 07/20/08

Sample Analysis: The following analyses were performed on your sample:

CCR Title 22 Fathead Minnow Hazardous Waste Screen Bioassay (Polisini & Miller 1988).

Attached are the test data generated from the analysis of your sample.

Result Summary:

Sample ID.	Results
977067	PASS (LC50 > 750 mg/l)

Quality Control: Reviewed and approved by:

Joseph A. LeMay
Laboratory Director

LABORATORY REPORT

Aquatic Testing Laboratories

"dedicated to providing quality aquatic toxicity testing"

4350 Transport Street, Unit 107
Ventura, CA 93003
(805) 650-0546 FAX (805) 650-0756
CA DOHS ELAP Cert. No.: 1775

Date: September 14, 2008

Client: Truesdail Laboratories, Inc.
14201 Franklin Avenue
Tustin, CA 92780
Attn: Sean Condon

Laboratory No.: A-08090901-001
Sample ID.: 978305

Sample Control: The sample was received by ATL with the chain of custody record attached.

Date Sampled: 09/04/08
Date Received: 09/09/08
Date Tested: 09/10/08 to 09/14/08

Sample Analysis: The following analyses were performed on your sample:

CCR Title 22 Fathead Minnow Hazardous Waste Screen Bioassay (Polisini & Miller 1988).

Attached are the test data generated from the analysis of your sample.

Result Summary:

Sample ID.	Results
978305	PASS (LC50 > 750 mg/l)

Quality Control: Reviewed and approved by:

Joseph A. LeMay
Laboratory Director