Pacific Gas and Electric Company

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December 15, 2006

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; WDID No. 7B 36 2033 001
PG&E Topock Compressor Station, Needles, California
Interim Measure No. 3 Groundwater Treatment System
Discharge to Injection Wells
November 2006 Monitoring Report

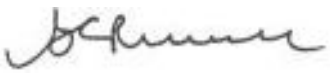
Dear Mr. Perdue:

Enclosed is the Board Order R7-2006-0060 November 2006 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 Colorado River Basin Regional Water Quality Control Board (Water Board) under Order R7-2006-0060 (successor to Order R7-2004-0103). These WDRs apply to IM No. 3 Treatment System discharge by subsurface injection.

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

Sincerely,



Curt Russell
Topock Onsite Project Manager

Enclosures:
Order R7-2006-0060 November 2006 Monitoring Report for the IM No. 3 Groundwater Treatment System.

cc: José Cortez, Water Board
Liann Chavez, Water Board
Tom Vandenberg, Water Board
Aaron Yue, DTSC

November 2006 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

December 15, 2006

CH2MHILL
155 Grand Avenue, Suite 1000
Oakland, CA 94612

November 2006 Monitoring Report
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

December 15, 2006

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

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

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Acronyms and Abbreviations

HMI	human-machine interface
IM	Interim Measure
MRP	Monitoring and Reporting Program
PG&E	Pacific Gas and Electric Company
STL	Severn Trent Laboratories, Inc.
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 Monitoring and Reporting Program (MRP) under the order requires monthly monitoring reports to be submitted by the fifteenth day of the following month.

This report covers monitoring activities related to operation of the IM No. 3 groundwater treatment system during November 2006. 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.

In addition to Board Order No. R7-2006-0060, the Water Board issued Waste Discharge Requirements (WDRs) for IM No. 3 treatment system discharge to the Colorado River (Board Order R7-2004-0100) and IM No. 3 treatment system discharge to the PG&E Compressor Station (Board Order R7-2004-0080). To date, there has been no IM No. 3 treatment system discharge to the Colorado River or the PG&E Compressor Station. PG&E has no plans to discharge IM No. 3 treatment system effluent to the Colorado River or the PG&E Compressor Station at this time. Reporting of Board Order R7-2004-0080 and Board Order R7-2004-0100 activities will be submitted under separate cover.

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 provided in the process and instrumentation diagrams: Figures TP-PR-10-10-04, TP-PR-10-10-08, and TP-PR-10-10-06.

3.0 Description of Activities

The treatment system was initially operated between July 25 and July 28, 2005 for the 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, includes the following components:

- 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 November 2006, extraction wells TW-3D and PE-1 operated at a target pump rate of 135 gallons per minute (gpm) excluding periods of planned and unplanned downtime (planned and unplanned downtime is described in Section 4.0).

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. Occurs each time a sludge waste storage bin reaches capacity or within 90 days of the start date for accumulation in the storage container.

4.0 Groundwater Treatment System Flow Rates

The November 2006 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 well 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).

In addition to groundwater from extraction wells, during November 2006 the IM No. 3 facility treated:

- Approximately 1,040 gallons of water generated from the groundwater monitoring program.
- Approximately 6,000 gallons of purge water generated from injection well IW-02 re-development.

Two containers of solids (approximately 22 cubic yards total) were transported from the IM No. 3 facility to the Chemical Waste Management at the Kettleman Hills facility during November 2006.

Periods of planned and unplanned extraction system down time (that taken together resulted in less than 1 percent down time during November 2006) are summarized below. The times shown are in Pacific Standard Time (PST) to be consistent with other data collected (e.g., water level data) at the site.

- **November 2, 2006 (planned):** The extraction well system was shut down from 9:43 a.m. to 12:02 p.m. to switch to a cleaned set of microfilter modules and to clean the chemical mixing loop and chromium reduction reactor piping. Extraction system downtime was 2 hours 19 minutes.
- **November 21, 2006 (unplanned):** The extraction well system was shut down from 10:58 a.m. to 12:28 p.m. to drain the chromium reduction loop reactor and chemical mixing loop so that the isolation valves around flow sensor FSL-201 could be removed, cleaned and reinstalled. Extraction system downtime was 1 hour 28 minutes.
- **November 28, 2006 (unplanned):** The extraction well system was shut down from 11:44 a.m. until 1:33 p.m. while repairing a connection in the seal water line going into the clarifier feed pump (P-400). Extraction system downtime was 1 hour 49 minutes.

5.0 Sampling and Analytical Procedures

All samples were collected at the designated sampling locations and placed directly into containers provided by Truesdail Laboratories, Inc. (Truesdail) or Severn Trent Laboratories, Inc. (STL). 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 or STL via courier service 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. STL is certified by the California Department of Health Services (Certification No. 1118) under the Environmental Laboratory Accreditation Program.

All 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.

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 was conducted in accordance with the sampling frequency required by the MRP. The sampling analytical results are shown in Tables 3, 4, 5, and 6, respectively.

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 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 prepared by the certified analytical laboratories are presented in Appendix A. The analytical results from groundwater treatment system influent, effluent, reverse osmosis concentrate, and sludge samples are presented in Tables 3, 4, 5, and 6, respectively.

In accordance with the WDR reporting requirements, the following sampling frequency schedule was followed:

- The influent was sampled monthly; sample date November 1, 2006. Results are presented in Table 3.
- The effluent was sampled weekly; sample dates November 1, 8, 15, 21, and 30, 2006. Results are presented in Table 4.
- The reverse osmosis concentrate was sampled monthly; sample date November 1, 2006. Results are presented in Table 5.
- The sludge was sampled monthly; sample date November 1, 2006. In accordance with WDRs, sludge is sampled each time it is transported offsite (unless sludge is transported offsite more frequently than monthly, in which case the sampling frequency is monthly). Results are presented in Table 6.
- The sludge is required to have an aquatic bioassay test quarterly; the 4th Quarter 2006 aquatic bioassay test was performed on the sludge sample collected December 6, 2006. The aquatic bioassay test results will be presented in the December 2006 report.

Table 7 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

To evaluate the overall water chemistry of the IM No. 3 facility, three samples, in addition to the WDR required sampling and analysis, were collected from specified WDR sampling locations:

- Influent, collected November 8, 2006
- Effluent, collected November 8, 2006
- Reverse Osmosis Concentrate (brine), collected November 15, 2006

The laboratory reports are provided in Appendix A. Analytical parameters include pH, TDS, electrical conductivity, turbidity, fluoride, nitrate, nitrite, and metals. There were no exceedances of effluent limitations detected.

7.0 Conclusions

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

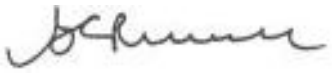
In addition, no incidents of non-compliance were identified during the reporting period, and no events that caused an immediate or potential threat to human health or the environment, or new releases of hazardous waste or hazardous waste constituents, or new solid waste management units were identified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

8.0 Certification

PG&E submitted a signature delegation letter to the Water Board on August 12, 2005. The letter delegated 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 October 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: December 15, 2006

Tables

TABLE 1
Sampling Station Descriptions
November 2006 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
November 2006 Report for Interim Measure No. 3 Groundwater Treatment System

Parameter	System Influent[a,b]	System Effluent[b,c]	Reverse Osmosis Concentrate[b,d]
Average Monthly Flowrate (gpm)	133.0	122.1	10.9

Notes:
gpm: gallons per minute.
[a] Extraction wells TW-2D (on November 4th and 5th), TW-3D and PE-1 were operated during November 2006.
[b] The difference between influent flow rate and the sum of the effluent and reverse osmosis concentrate flow rates was less than 0.1 percent, which is within the range of acceptable accuracy considering the margin of error for onsite instrumentation, the water contained within the sludge, purge water treated at the IM No. 3 facility in addition to the extraction wells, and differences in the inventory of water in the treatment system between the beginning and end of the reporting period.
[c] Effluent was discharged into injection wells IW-02 and IW-03 during November 2006.
[d] Reverse Osmosis Concentrate flow meter reading from FIT-701.

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

Required Sampling Frequency		Monthly																					
Analytes		TDS	Turbidity	Specific Conductance	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	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		64	0.016	7.1	0.057	3.8	1.8	1.6	0.1	0.28	0.25	0.87	0.00017	0.36	0.018	0.25	1.6	0.2	1.5	0.017	0.001	1.5	0.99	2.0
Sample ID	**Date**																							
SC-100B-WDR-071	**11/1/2006**	**5030**	**ND**	**10800**	**7.41**	**2060**	**1720**	**ND**	**0.65**	**ND**	**ND**	**ND**	**1.56**	**40.7**	**2.78**	**ND**	**ND**	**20.8**	**ND**	**3.26**	**0.0126**	**623**	**ND**	**ND**
RL		250	0.1	20	2.0	260	20	52	0.5	3.0	5.0	300	0.2	10	0.2	2.1	500	5.0	20	0.2	0.005	25	300	21

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 reporting limit
J = concentration or reporting limits estimated by laboratory or validation
MDL = method detection limit
RL = project reporting limit

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

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

WDRs Effluent Limits[b]	Ave. Monthly	NA	NA	NA	6.5-8.4	25	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Max Daily	NA	NA	NA	6.5-8.4	50	16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Required Sampling Frequency		**Weekly**						**Monthly**															
Analytes		TDS	Turbidity	Specific Conductance	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	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		64	0.016	7.1	0.057	0.27	0.088	1.6	0.1	0.28	0.25	0.87	0.000087	0.36	0.018	0.25	1.6	0.2	1.5	0.017	0.001	3.1	0.99	2.0
Sample ID	**Date**																						
SC-700B-WDR-071	**11/1/2006**	**3690**	**ND**	**8580**	**8.18**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**1.13**	**43.6**	**2.10**	**4.20**	**ND**	**14.6**	**ND**	**2.58**	**ND**	**448**	**ND**	**ND**
RL		250	0.1	20	2.0	1.0	1.0	52	0.5	3.0	5.0	300	0.2	10	0.2	2.1	500	5.0	20	0.2	0.005	50	300	21
SC-700B-WDR-072	**11/8/2006**	**4230**	**ND**	**8340**	**8.12**	**ND**	**ND**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
RL		250	0.1	20	2.0	1.0	1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SC-700B-WDR-073	**11/15/2006**	**3830**	**ND**	**8620**	**8.16**	**ND**	**ND**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
RL		250	0.1	20	2.0	1.0	0.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SC-700B-WDR-074	**11/21/2006**	**3920**	**ND**	**8590**	**8.11**	**ND**	**ND**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
RL		250	0.1	20	2.0	1.0	1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SC-700B-WDR-075	**11/30/2006**	**4080**	**ND**	**8740**	**7.94**	**ND**	**ND**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
RL		250	0.1	20	2.0	1.0	0.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

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 reporting limit
J = concentration or reporting limits estimated by laboratory or validation
MDL = method detection limit
RL = project reporting limit

[a] 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)

[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

TABLE 5
Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs)
Reverse Osmosis Concentrate Results [a]
November 2006 Monthly Report for Interim Measures No.3 Groundwater Treatment System

Required Sampling Frequency		Monthly																				
Analytes		TDS	Specific Conductance	pH	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	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		320	7.1	0.057	0.00027	0.000088	0.0014	0.0012	0.00087	0.00074	0.0012	0.00075	0.0018	0.18	0.0012	0.00098	0.000049	0.0015	0.0066	0.003	0.00098	0.00089	0.002
Sample ID	**Date**																						
SC-701-WDR-071	**11/1/2006**	**21600**	**36700**	**8.04**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**12.8**	**ND**	**0.069**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
RL		1250	20.0	2.00	0.001	0.001	0.0052	0.0104	0.30	0.0052	0.0052	0.0052	0.0104	0.20	0.0104	0.0052	0.0002	0.02	0.0104	0.0052	0.0052	0.0052	0.0208

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 reporting limit
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

TABLE 6
Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs)
Sludge Monitoring Results[a]
November 2006 Monthly Report for Interim Measures No.3 Groundwater Treatment System

Required Sampling Frequency		Monthly [c]																		
Analytes		Chromium	Hexavalent Chromium	Antimony	Arsenic	Barium	Beryllium	Cadmium	Cobalt	Copper	Fluoride	Lead	Molybdenum	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
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
MDL		1.0	0.52	3.1	2.1	0.52	0.31	0.41	1.0	2.1	0.36	1.3	1.5	0.1	1.5	2.6	0.52	2.6	1.0	5.2
Sample ID	**Date**																			
SC-Sludge-WDR-071	**11/1/2006**	**16000**	**120**	**ND**	**44.0**	**100**	**ND**	**ND**	**ND**	**43.0**	**11.2**	**ND**	**27.0**	**1.80**	**35.0**	**ND**	**ND**	**24.0**	**83.0**	**110**
RL		5.2	2.1	31	5.2	10	2.6	2.6	26	13	4.0	2.6	21	0.52	21	2.6	5.2	5.2	26	10

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 kilogram
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] Sludge shall be tested for the listed constituents each time sludge is transported offsite, unless transport is more frequent than monthly, in which case the sampling frequency shall be monthly

TABLE 7
Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs)
Monitoring Information
November 2006 Monthly 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-071	Gary Sibble	11/1/2006	12:00:00 PM	TLI	EPA 120.1	SC	11/2/2006	Tina Acquiat
					TLI	EPA 150.1	PH	11/2/2006	Tina Acquiat
					TLI	EPA 160.1	TDS	11/6/2006	Tina Acquiat
					TLI	EPA 180.1	TRB	11/2/2006	Gautam Savani
					TLI	EPA 200.7	CRT	11/8/2006	Riddhi Patel
					TLI	EPA 200.7	ZN	11/14/2006	Riddhi Patel
					TLI	EPA 200.7	NI	11/14/2006	Riddhi Patel
					TLI	EPA 200.7	FET	11/14/2006	Riddhi Patel
					TLI	EPA 200.7	BA	11/14/2006	Riddhi Patel
					TLI	EPA 200.7	B	11/14/2006	Riddhi Patel
					TLI	EPA 200.7	AL	11/14/2006	Riddhi Patel
					TLI	EPA 200.7	MN	11/14/2006	Riddhi Patel
					TLI	EPA 200.8	SB	11/10/2006	Riddhi Patel
					TLI	EPA 200.8	AS	11/10/2006	Riddhi Patel
					TLI	EPA 200.8	CU	11/10/2006	Riddhi Patel
					TLI	EPA 200.8	MO	11/10/2006	Riddhi Patel
					TLI	EPA 200.8	PB	11/10/2006	Riddhi Patel
					TLI	EPA 300.0	SO4	11/2/2006	Giawad Ghenniwa
					TLI	EPA 300.0	NO3N	11/2/2006	Giawad Ghenniwa
					TLI	EPA 300.0	FL	11/2/2006	Giawad Ghenniwa
					TLI	EPA 350.2	NH3N	11/3/2006	Iordan Stavrev
					TLI	EPA 354.1	NO2N	11/2/2006	Tina Acquiat
					TLI	EPA Method 218.6	CR6	11/1/2006	Stanley Hsieh
SC-700B	SC-700B-WDR-071	Gary Sibble	11/1/2006	12:50:00 PM	TLI	EPA 120.1	SC	11/2/2006	Tina Acquiat
					TLI	EPA 150.1	PH	11/2/2006	Tina Acquiat
					TLI	EPA 160.1	TDS	11/6/2006	Tina Acquiat
					TLI	EPA 180.1	TRB	11/2/2006	Gautam Savani
					TLI	EPA 200.7	CRT	11/7/2006	Riddhi Patel
					TLI	EPA 200.7	BA	11/14/2006	Riddhi Patel
					TLI	EPA 200.7	B	11/14/2006	Riddhi Patel
					TLI	EPA 200.7	AL	11/14/2006	Riddhi Patel
					TLI	EPA 200.7	ZN	11/14/2006	Riddhi Patel
					TLI	EPA 200.7	NI	11/14/2006	Riddhi Patel
					TLI	EPA 200.7	FET	11/14/2006	Riddhi Patel
					TLI	EPA 200.7	MN	11/14/2006	Riddhi Patel
					TLI	EPA 200.8	PB	11/10/2006	Riddhi Patel
					TLI	EPA 200.8	MO	11/10/2006	Riddhi Patel

TABLE 7
Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs)
Monitoring Information
November 2006 Monthly 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-071	Gary Sibble	11/1/2006	12:50:00 PM	TLI	EPA 200.8	AS	11/10/2006	Riddhi Patel
					TLI	EPA 200.8	SB	11/10/2006	Riddhi Patel
					TLI	EPA 200.8	CU	11/10/2006	Riddhi Patel
					TLI	EPA 300.0	SO4	11/2/2006	Giawad Ghenniwa
					TLI	EPA 300.0	FL	11/2/2006	Giawad Ghenniwa
					TLI	EPA 300.0	NO3N	11/2/2006	Giawad Ghenniwa
					TLI	EPA 350.2	NH3N	11/3/2006	Iordan Stavrev
					TLI	EPA 354.1	NO2N	11/2/2006	Tina Acquiat
					TLI	EPA Method 218.6	CR6	11/1/2006	Stanley Hsieh
SC-700B	SC-700B-WDR-072	Gary Sibble	11/8/2006	1:13:00 PM	TLI	EPA 120.1	SC	11/9/2006	Tina Acquiat
					TLI	EPA 150.1	PH	11/9/2006	Tina Acquiat
					TLI	EPA 160.1	TDS	11/9/2006	Tina Acquiat
					TLI	EPA 180.1	TRB	11/9/2006	Gautam Savani
					TLI	EPA 200.7	CRT	11/14/2006	Riddhi Patel
					TLI	EPA Method 218.6	CR6	11/8/2006	Faisal Raihan
SC-700B	SC-700B-WDR-073	David Chaney	11/15/2006	1:00:00 PM	TLI	EPA 120.1	SC	11/16/2006	Tina Acquiat
					TLI	EPA 150.1	PH	11/16/2006	Tina Acquiat
					TLI	EPA 160.1	TDS	11/16/2006	Tina Acquiat
					TLI	EPA 180.1	TRB	11/16/2006	Gautam Savani
					TLI	EPA 200.7	CRT	11/20/2006	Riddhi Patel
					TLI	EPA Method 218.6	CR6	11/15/2006	Stanley Hsieh
SC-700B	SC-700B-WDR-074	David Chaney	11/21/2006	8:40:00 AM	TLI	EPA 120.1	SC	11/24/2006	Tina Acquiat
					TLI	EPA 150.1	PH	11/22/2006	Gautam Savani
					TLI	EPA 160.1	TDS	11/24/2006	Tina Acquiat
					TLI	EPA 180.1	TRB	11/22/2006	Gautam Savani
					TLI	EPA 200.7	CRT	11/29/2006	Riddhi Patel
					TLI	EPA Method 218.6	CR6	11/22/2006	Stanley Hsieh
SC-700B	SC-700B-WDR-075	Gary Sibble	11/30/2006	1:06:00 PM	TLI	EPA 120.1	SC	12/4/2006	Tina Acquiat
					TLI	EPA 150.1	PH	12/1/2006	Gautam Savani
					TLI	EPA 160.1	TDS	12/4/2006	Tina Acquiat
					TLI	EPA 180.1	TRB	12/1/2006	Gautam Savani
					TLI	EPA 200.7	CRT	12/4/2006	Riddhi Patel
					TLI	EPA Method 218.6	CR6	11/30/2006	Stanley Hsieh
SC-701	SC-701-WDR-071	Gary Sibble	11/1/2006	12:53:00 PM	TLI	EPA 120.1	SC	11/2/2006	Tina Acquiat
					TLI	EPA 150.1	PH	11/2/2006	Tina Acquiat

TABLE 7
Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs)
Monitoring Information
November 2006 Monthly 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-701	SC-701-WDR-071	Gary Sibble	11/1/2006	12:53:00 PM	TLI	EPA 160.1	TDS	11/6/2006	Tina Acquiat
					TLI	EPA 200.7	BA	11/14/2006	Riddhi Patel
					TLI	EPA 200.7	CRT	11/7/2006	Riddhi Patel
					TLI	EPA 200.7	NI	11/14/2006	Riddhi Patel
					TLI	EPA 200.7	ZN	11/14/2006	Riddhi Patel
					TLI	EPA 200.8	CD	11/10/2006	Riddhi Patel
					TLI	EPA 200.8	BE	11/10/2006	Riddhi Patel
					TLI	EPA 200.8	AS	11/10/2006	Riddhi Patel
					TLI	EPA 200.8	CO	11/10/2006	Riddhi Patel
					TLI	EPA 200.8	CU	11/10/2006	Riddhi Patel
					TLI	EPA 200.8	MO	11/10/2006	Riddhi Patel
					TLI	EPA 200.8	PB	11/10/2006	Riddhi Patel
					TLI	EPA 200.8	SB	11/10/2006	Riddhi Patel
					TLI	EPA 200.8	SE	11/10/2006	Riddhi Patel
					TLI	EPA 200.8	TL	11/10/2006	Riddhi Patel
					TLI	EPA 200.8	V	11/10/2006	Riddhi Patel
					TLI	EPA 200.8	AG	11/10/2006	Riddhi Patel
					TLI	EPA 245.1	HG	11/6/2006	Aksiniya Dimitrova
					TLI	EPA 300.0	FL	11/2/2006	Giawad Ghenniwa
					TLI	EPA Method 218.6	CR6	11/1/2006	Stanley Hsieh
SC-Sludge	SC-Sludge-WDR-071	Gary Sibble	11/1/2006	12:53:00 PM	STL	EPA 160.3	MOIST	11/18/2006	Florian Zimmermann
					TLI	EPA 300.0	FL	11/2/2006	Giawad Ghenniwa
					STL	EPA 6010B	NI	11/24/2006	Hao Ton
					STL	EPA 6010B	ZN	11/24/2006	Hao Ton
					STL	EPA 6010B	AS	11/24/2006	Hao Ton
					STL	EPA 6010B	V	11/24/2006	Hao Ton
					STL	EPA 6010B	TL	11/24/2006	Hao Ton
					STL	EPA 6010B	SE	11/24/2006	Hao Ton
					STL	EPA 6010B	SB	11/24/2006	Hao Ton
					STL	EPA 6010B	PB	11/24/2006	Hao Ton
					STL	EPA 6010B	MO	11/24/2006	Hao Ton
					STL	EPA 6010B	CU	11/24/2006	Hao Ton
					STL	EPA 6010B	CRT	11/24/2006	Hao Ton
					STL	EPA 6010B	CO	11/24/2006	Hao Ton
					STL	EPA 6010B	CD	11/24/2006	Hao Ton
					STL	EPA 6010B	BA	11/24/2006	Hao Ton
					STL	EPA 6010B	AG	11/24/2006	Hao Ton

TABLE 7
Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs)
Monitoring Information
November 2006 Monthly 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-Sludge	SC-Sludge-WDR-071	Gary Sibble	11/1/2006	12:53:00 PM	STL	EPA 6010B	BE	11/24/2006	Hao Ton
					STL	EPA 7471A	HG	11/28/2006	Hao Ton
					STL	SW 7199	CR6	11/22/2006	Yuriy Zakhrabov

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)

TLI = Truesdail Laboratories, Inc.
STL = Severn Trent Laboratories, Inc.

SC = specific conductance
PH = pH
TDS = total dissolved solids
TRB = turbidity
CRT = 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

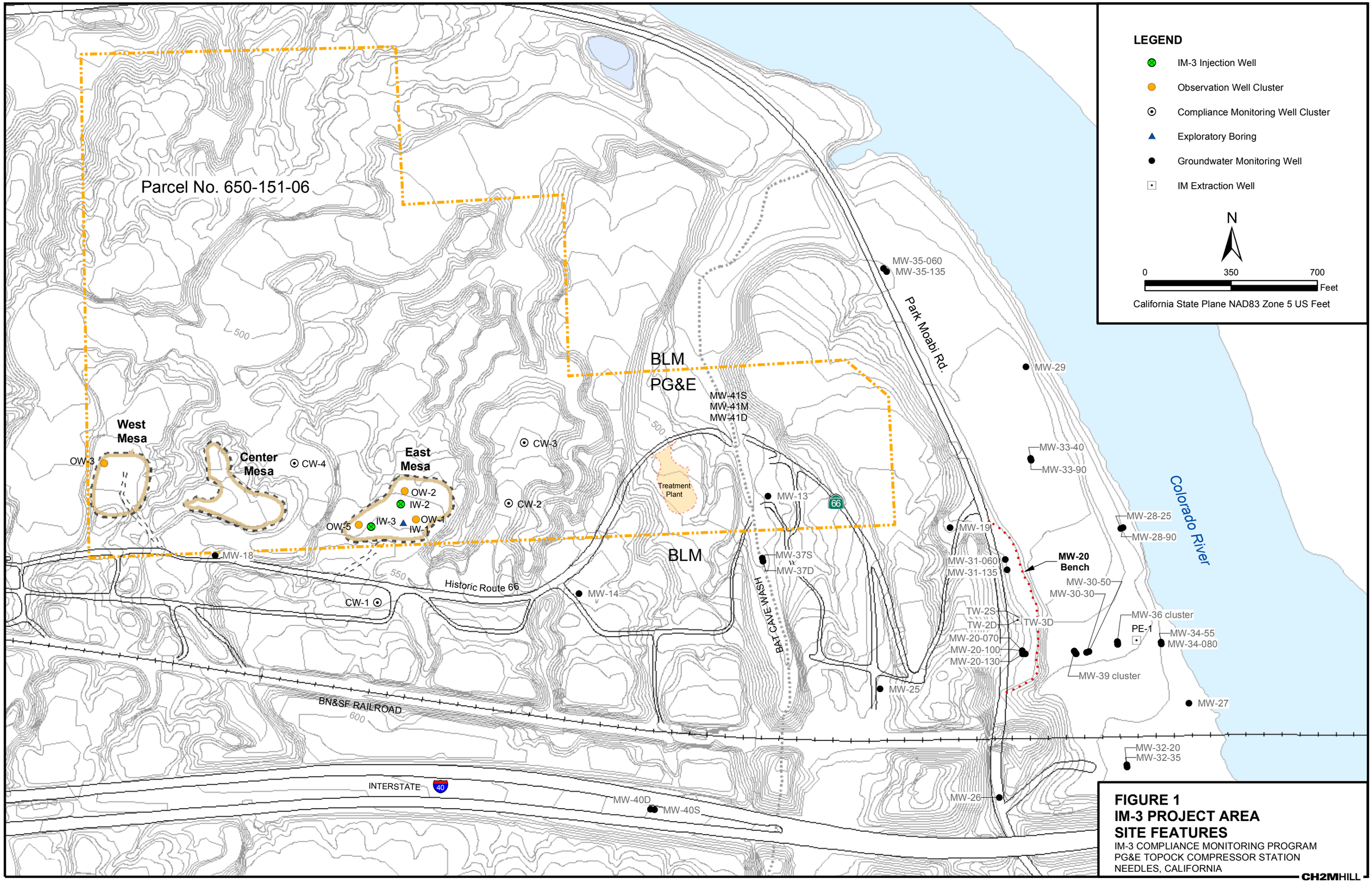


FIGURE 1
IM-3 PROJECT AREA
SITE FEATURES
IM-3 COMPLIANCE MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CH2MHILL

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

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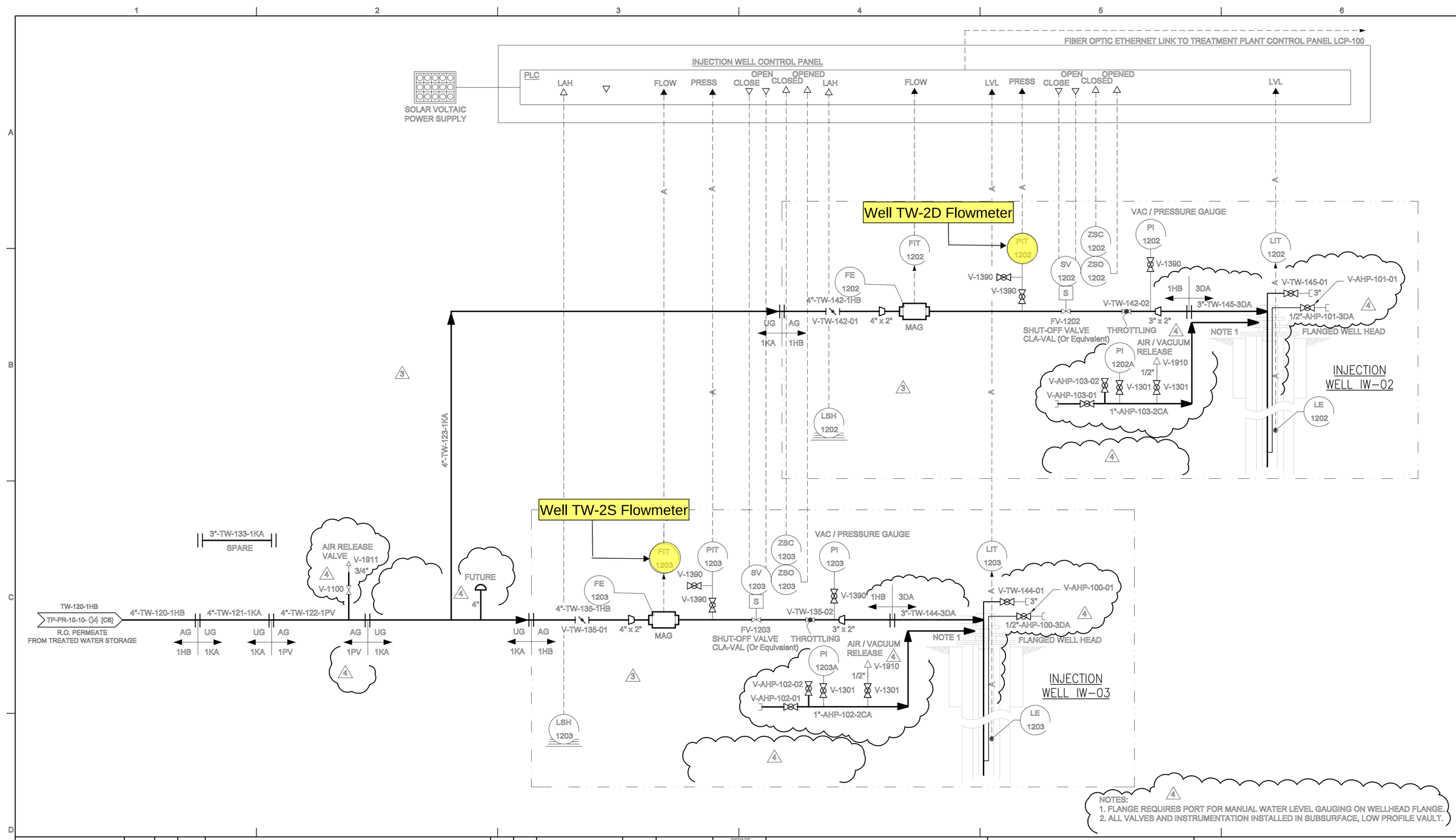

NO.	DATE	REVISION	BY	CHK
A	07/28/04	FOR INTERNAL REVIEW	EFC	AJ
0	09/03/04	APPROVED FOR CONSTRUCTION	EFC	AJ
1	10/13/04	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ
2	01/23/05	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ
3	02/14/05	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ
4	03/10/05	REMOVED HOLD AND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

REVISION APPROVAL		REV 4	DATE 03/10/05	PRINT DISTRIBUTION	
DISCIPLINE	REVIEWED	DISCIPLINE	REVIEWED	DATE	
CIVIL		ELECTRICAL		STATUS	
STRUCTURAL		INST & CONTROL		REV.	
MECHANICAL		ARCHITECTURAL		CLIENT	
PROCESS		ENVIRONMENTAL		FIELD	
PIPING		GEN. ARRANG.		INTRA CO.	

STATUS				
ISSUED	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	/ /		

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

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

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

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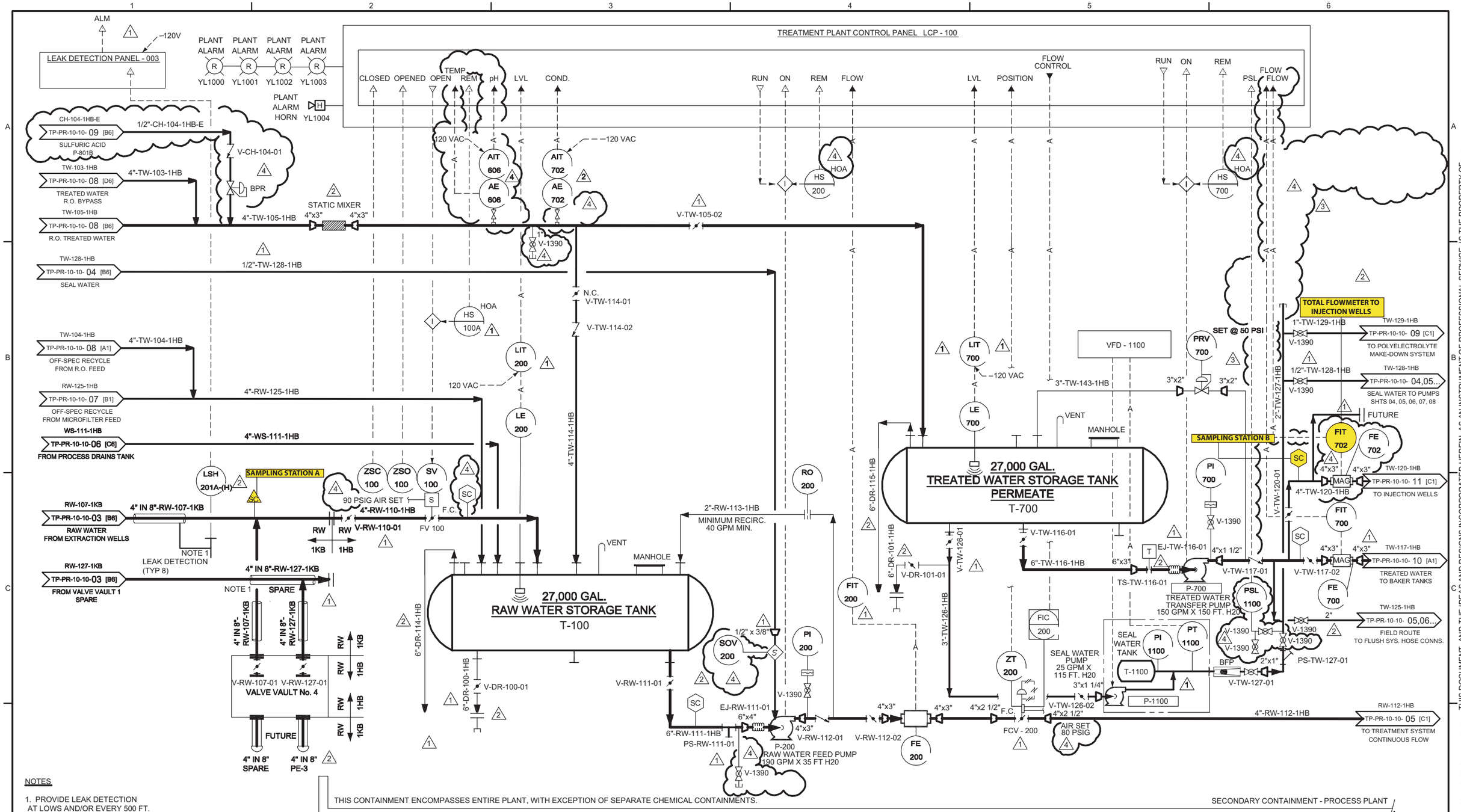

NOTES

1. PROVIDE LEAK DETECTION AT LOWS AND/OR EVERY 500 FT.

THIS CONTAINMENT ENCOMPASSES ENTIRE PLANT, WITH EXCEPTION OF SEPARATE CHEMICAL CONTAINMENTS.

SECONDARY CONTAINMENT - PROCESS PLANT

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
3	02/14/05	ADDED RECIRC. LINE AND PRV VALVE TO T-700 – APPROVED FOR CONSTRUCTION	EFC	AJ
4	09/21/05	REVISED PER AS-BUILT CONDITIONS	EFC	AJ

REVISION APPROVAL					
DISCIPLINE	REVIEWED	DISCIPLINE	REVIEWED	DATE	REV 4 DATE 09/21/05
CIVIL		ELECTRICAL		STATUS	
STRUCTURAL		INST & CONTROL		REV.	
MECHANICAL		ARCHITECTURAL		CLIENT	
PROCESS		ENVIRONMENTAL		FIELD	
PIPING		GEN. ARRANG.		INTRA CO.	

PRINT DISTRIBUTION

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	/ /		

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

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

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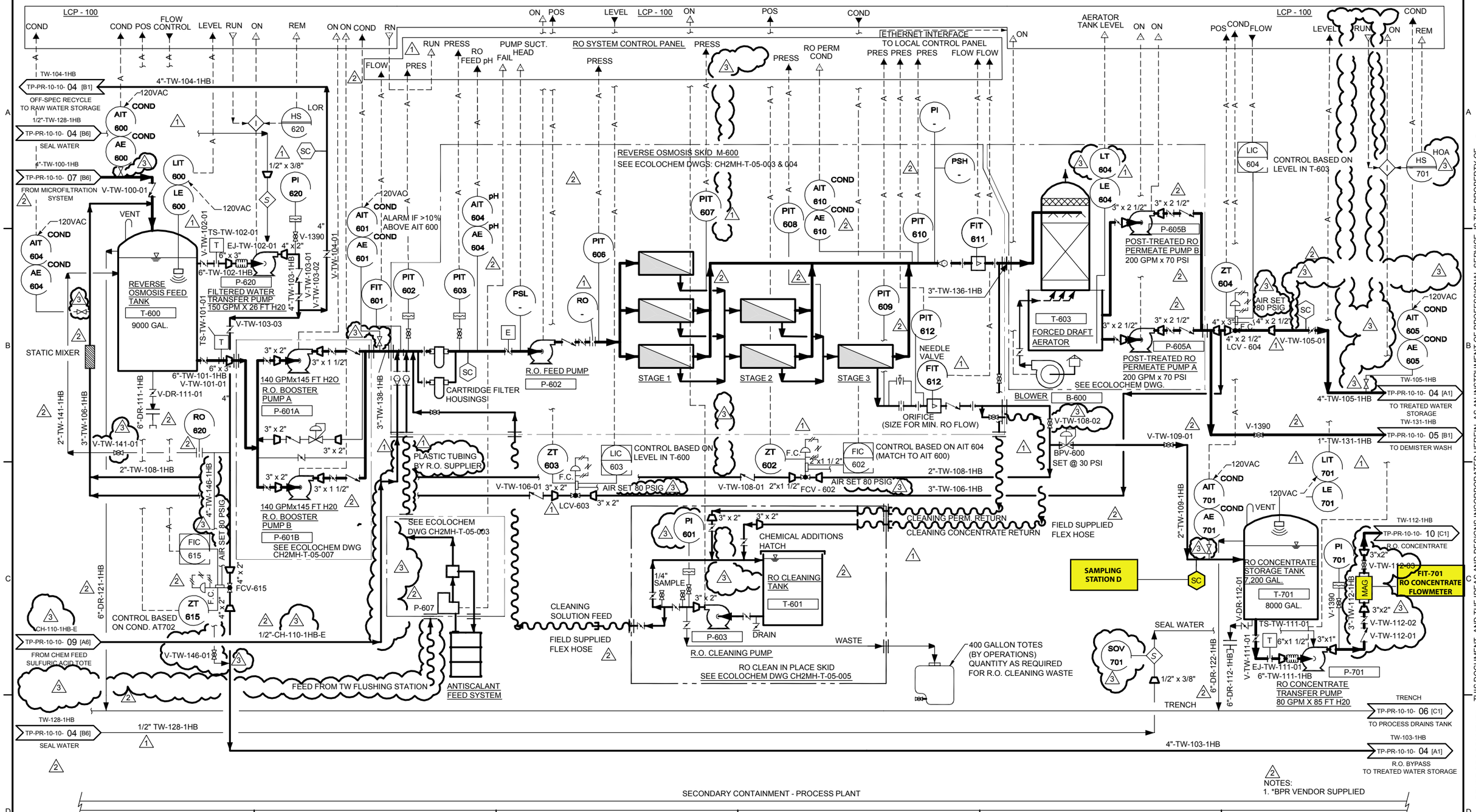

NO.	DATE	REVISION	BY	CHK
D	07/28/04	FOR INTERNAL REVIEW	EFC	AJ
0	09/03/04	APPROVED FOR CONSTRUCTION	EFC	AJ
1	10/13/04	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ
2	01/23/05	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ
3	09/21/05	REVISED PER AS-BUILT CONDITIONS	EFC	AJ

REVISION APPROVAL		REV 3 DATE 09/21/05		PRINT DISTRIBUTION
DISCIPLINE	REVIEWED	DISCIPLINE	REVIEWED	DATE
CIVIL		ELECTRICAL		STATUS
STRUCTURAL		INST & CONTROL		REV.
MECHANICAL		ARCHITECTURAL		CLIENT
PROCESS		ENVIRONMENTAL		FIELD
PIPING		GEN. ARRANG.		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	3	/ /		

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

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
Laboratory Analytical Reports

Table of Contents
TLI Laboratory Data Package

For Laboratory Number: 960311

Section 1.0

Case Narrative

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

Established 1931

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

November 15, 2006

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-071 PROJECT, GROUNDWATER MONITORING,

TLI NO.: 960311

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-071 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, pH, Anions, Ammonia, Total Dissolved Solids, and Title 22 Metals. 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 November 1, 2006, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

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

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

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi
Manager, Analytical Services

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

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

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Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Three (3) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2

Laboratory No.: 960311
Date: November 15, 2006
Collected: November 11, 2006
Received: November 11, 2006

ANALYST LIST

EPA 120.1	Specific Conductivity	Tina Acquiat
EPA 150.1	pH	Tina Acquiat
EPA 160.1	Total Dissolved Solids	Tina Acquiat
EPA 180.1	Turbidity	Gautam Savani
EPA 300.0	Anions	Giawad Ghenniwa
EPA 350.2	Ammonia	Iordan Stavrev
EPA 354.1	Nitrite as N	Tina Acquiat
EPA 200.7	Metals by ICP	Riddhi Patel
EPA 200.8	Metals by ICP/MS	Riddhi Patel
EPA 245.1	Mercury	Aksiniya Dimitrova
EPA 218.6	Hexavalent Chromium	Stanley Hsieh

Section 2.0

Summary Table of Final Results

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

Laboratory No.: 960311
Date Received: November 11, 2006

Attention: Shawn Duffy

Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Analytical Results Summary

Lab I.D.	Sample I.D.	Sample Time	EPA 150.1 *pH*	EPA 120.1 *EC*	EPA 160.1 *TDS*	EPA 180.1 *Turbidity*	EPA 218.6 *Hexavalent Chromium*	EPA 350.2 *Ammonia*
			Units	*µmhos/cm*	*mg/L*	*NTU*	*mg/L*	*mg/L*
960311-1	SC-100B-WDR-071	12:00	7.41	10800	5030	ND	1.72	0.650
960311-2	SC-700B-WDR-071	12:50	8.18	8580	3690	ND	ND	ND
960311-3	SC-701-WDR-071	12:53	8.04	36700	21600	—	ND	—

Lab I.D.	Sample I.D.	Sample Time	EPA 300.0 *Fluoride*	EPA 300.0 *Sulfate*	EPA 300.0 *Nitrate as N*	EPA 354.1 *Nitrite as N*
			mg/L	*mg/L*	*mg/L*	*mg/L*
960311-1	SC-100B-WDR-071	12:00	2.78	623	3.26	0.0126
960311-2	SC-700B-WDR-071	12:50	2.10	448	2.58	ND
960311-3	SC-701-WDR-071	12:53	12.8	---	—	—

ND: Non Detected (below reporting limit)
mg/L: Milligrams per liter.

Note: The following "Significant Figures" rule has been applied to all results:
Results below 0.01ppm will have two (2) significant figures.
Result above or equal to 0.01ppm will have three (3) significant figures.
Quality Control data will always have three (3) significant figures.

505

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

Attention: Shawn Duffy
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960311
Date Received: November 11, 2006

Analytical Results Summary

METALS ANALYSIS: **Total Metal Analyses as Requested**

Lab I.D.	Sample ID	Date of Analysis: / Time Coll.	Aluminum EPA 200.7 11/14/06 mg/L	Antimony EPA 200.8 11/10/06 mg/L	Arsenic EPA 200.8 11/10/06 mg/L	Barium EPA 200.7 04/11/06 mg/L	Beryllium EPA 200.8 11/10/06 mg/L	Cadmium EPA 200.8 11/10/06 mg/L	Chromium EPA 200.7 11/08/06 mg/L	Cobalt EPA 200.8 11/10/06 mg/L	Copper EPA 200.8 11/10/06 mg/L	Lead EPA 200.8 11/10/06 mg/L
960311-1	SC-100B-WDR-071	12:00	ND	ND	ND	ND	—	—	2.06	—	0.0407	ND
960311-2	SC-700B-WDR-071	12:50	ND	ND	ND	ND	—	—	ND	—	0.0436	0.0042
960311-3	SC-701-WDR-071	12:53	—	ND	ND	ND	ND	ND	ND	ND	ND	ND

Lab I.D.	Sample ID	Date of Analysis: / Time Coll.	Manganese EPA 200.7 04/11/06 mg/L	Mercury EPA 245.1 11/06/06 mg/L	Molybdenum EPA 200.8 11/10/06 mg/L	Nickel EPA 200.7 04/11/06 mg/L	Selenium EPA 200.8 11/10/06 mg/L	Silver EPA 200.8 11/10/06 mg/L	Thallium EPA 200.8 11/10/06 mg/L	Vanadium EPA 200.8 11/10/06 mg/L	Zinc EPA 200.7 11/14/06 mg/L
960311-1	SC-100B-WDR-071	12:00	ND	—	0.0208	ND	—	—	—	—	ND
960311-2	SC-700B-WDR-071	12:50	ND	—	0.0146	ND	—	—	—	—	ND
960311-3	SC-701-WDR-071	12:53	—	ND	0.0690	ND	ND	ND	ND	ND	ND

Lab I.D.	Sample ID	Date of Analysis: / Time Coll.	Boron EPA 200.7 11/14/06 mg/L	Iron EPA 200.7 04/11/06 mg/L
960311-1	SC-100B-WDR-071	12:00	1.56	ND
960311-2	SC-700B-WDR-071	12:50	1.13	ND
960311-3	SC-701-WDR-071	12:53	—	—

NOTES:
ND: Not detected, or below limit of detection

Section 3.0

Final Reports

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

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REPORT

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

Sample: Three (3) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960311
Date: November 15, 2006
Collected: November 11, 2006
Received: November 11, 2006
Prep/ Analyzed: November 2, 2006
Analytical Batch: 11PH06B

Investigation: **pH by EPA 150.1**

Analytical Results pH

TLI I.D.	Field I.D.	Run Time	Units	MDL	RL	Results
960311-1	SC-100B-WDR-071	07:53	pH Units	0.0570	2.00	7.41
960311-2	SC-700B-WDR-071	07:56	pH Units	0.0570	2.00	8.18
960311-3	SC-701-WDR-071	07:59	pH Units	0.0570	2.00	8.04

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	960316-2	7.98	8.00	0.02	± 0.100 Units	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Difference (Units)	Acceptance Limits	QC Within Control
LCS	7.01	7.00	0.01	± 0.100 Units	Yes
LCS #1	7.01	7.00	0.01	± 0.100 Units	Yes
LCS #2	7.02	7.00	0.02	± 0.100 Units	Yes

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

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

Laboratory No.: 960311

Sample: Three (3) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Date: November 15, 2006
Collected: November 11, 2006
Received: November 11, 2006
Prep/ Analyzed: November 2, 2006
Analytical Batch: 11EC06A

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
960311-1	SC-100B-WDR-071	µmhos/cm	EPA 120.1	10.0	20.0	10800
960311-2	SC-700B-WDR-071	µmhos/cm	EPA 120.1	10.0	20.0	8580
960311-3	SC-701-WDR-071	µmhos/cm	EPA 120.1	10.0	20.0	36700

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960311-3	36700	36900	0.54%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
CCS	686	706	97.2%	90% - 110%	Yes
CVS#1	940	1000	94.0%	90% - 110%	Yes
CVS#2	947	1000	94.7%	90% - 110%	Yes
LCS	688	706	97.5%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi

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) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960311
Date: November 15, 2006
Collected: November 11, 2006
Received: November 11, 2006
Prep/ Analyzed: November 6, 2006
Analytical Batch: 11TDS06B

Investigation: **Total Dissolved Solids by EPA 160.1**

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
960311-1	SC-100B-WDR-071	mg/L	EPA 160.1	250	5030
960311-2	SC-700B-WDR-071	mg/L	EPA 160.1	250	3690
960311-3	SC-701-WDR-071	mg/L	EPA 160.1	1250	21600

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	960314-2	4920	4860	0.61%	≤ 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS 1	492	500	98.4%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

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REPORT

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

Sample: Three (3) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960311
Date: November 15, 2006
Collected: November 11, 2006
Received: November 11, 2006
Prep/ Analyzed: November 2, 2006
Analytical Batch: 11TUC06B

Investigation: **Turbidity by Method EPA 180.1**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
960311-1	SC-100B-WDR-071	12:00	NTU	1.00	0.100	ND
960311-2	SC-700B-WDR-071	12:50	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	960302-25	0.112	0.113	0.89%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	7.57	8.00	94.6%	90% - 110%	Yes
LCS	7.50	8.00	93.8%	90% - 110%	Yes
LCS	7.45	8.00	93.1%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi

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) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 11CrH06B

Laboratory No.: 960311
Date: November 15, 2006
Collected: November 11, 2006
Received: November 11, 2006
Prep/ Analyzed: November 1, 2006
Analytical Batch: 11CrH06B

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
960311-1	SC-100B-WDR-071	12:00	20:57	mg/L	100	0.0200	1.72
960311-2	SC-700B-WDR-071	12:50	21:26	mg/L	5.00	0.0010	ND
960311-3	SC-701-WDR-071	12:53	21:46	mg/L	5.00	0.0010	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Sample Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960272	0.00331	0.00323	2.45%	< 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	960311-1	1.72	100	0.0200	2.00	3.60	3.72	94.0%	90-110%	Yes
MS	960311-2	0.00	5.00	0.00100	0.00500	0.00478	0.00500	95.6%	90-110%	Yes
MS	960311-3	0.00	5.00	0.00100	0.00500	0.00473	0.00500	94.6%	90-110%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00488	0.00500	97.6%	90% - 110%	Yes
MRCVS#1	0.00962	0.0100	96.2%	95% - 105%	Yes
MRCVS#2	0.0102	0.0100	102%	95% - 105%	Yes
LCS	0.00495	0.00500	99.0%	90% - 110%	Yes
LCSD	0.00502	0.00500	100%	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.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

Established 1931

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

REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Three (3) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960311
Date: November 15, 2006
Collected: November 11, 2006
Received: November 11, 2006
Prep/ Analyzed: November 3, 2006
Analytical Batch: 11NH306A

Investigation: **Ammonia as N by Method EPA 350.2**

Analytical Results Ammonia as N

TLI I.D.	Field I.D.	Sample Time	Method	Units	DF	RL	Results
960311-1	SC-100B-WDR-071	12:00	EPA 350.2	mg/L	1.00	0.500	0.650
960311-2	SC-700B-WDR-071	12:50	EPA 350.2	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	960227-1	ND	ND	0.0%	≤ 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	960227-2	0.00	1.00	10.0	10.0	10.0	10.0	100%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	10.1	10.0	101%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi

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) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960311
Date: November 15, 2006
Collected: November 11, 2006
Received: November 11, 2006
Prep/ Analyzed: November 2, 2006
Analytical Batch: 11AN06B

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
960311-1	SC-100B-WDR-071	12:00	12:39	mg/L	1.00	0.200	2.78
960311-2	SC-700B-WDR-071	12:50	12:50	mg/L	1.00	0.200	2.10
960311-3	SC-701-WDR-071	12:53	17:13	mg/L	10.0	2.00	12.8

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960267-6	1.04	1.01	2.93%	≤ 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	960267-6	1.04	1.00	2.00	2.00	3.01	3.04	98.5%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	4.15	4.00	104%	90% - 110%	Yes
MRCVS#1	3.17	3.00	106%	90% - 110%	Yes
MRCVS#2	3.11	3.00	104%	90% - 110%	Yes
MRCVS#3	3.12	3.00	104%	90% - 110%	Yes
LCS	4.14	4.00	104%	90% - 110%	Yes
LCSD	4.06	4.00	102%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi

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) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960311
Date: November 15, 2006
Collected: November 11, 2006
Received: November 11, 2006
Prep/ Analyzed: November 2, 2006
Analytical Batch: 11AN06B

Investigation: **Sulfate by Method EPA 300.0**

Analytical Results Sulfate

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
960311-1	SC-100B-WDR-071	12:00	16:38	mg/L	50.0	25.0	623
960311-2	SC-700B-WDR-071	12:50	16:04	mg/L	100	50.0	448

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960311-2	448	449	0.22%	≤ 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	960311-2	448	100	10.0	1000	1440	1448	99.2%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	19.9	20.0	99.5%	90% - 110%	Yes
MRCVS#1	15.2	15.0	101%	90% - 110%	Yes
MRCVS#2	14.9	15.0	99%	90% - 110%	Yes
LCS	19.8	20.0	99.0%	90% - 110%	Yes
LCSD	19.5	20.0	97.5%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Three (3) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960311
Date: November 15, 2006
Collected: November 11, 2006
Received: November 11, 2006
Prep/ Analyzed: November 2, 2006
Analytical Batch: 11AN06B

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
960311-1	SC-100B-WDR-071	12:00	12:39	mg/L	1.00	0.200	3.26
960311-2	SC-700B-WDR-071	12:50	12:50	mg/L	1.00	0.200	2.58

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960296-2	13.3	13.3	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	960296-2	13.3	5.00	4.00	20.0	33.6	33.3	102%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	4.02	4.00	101%	90% - 110%	Yes
MRCVS#1	3.04	3.00	101%	90% - 110%	Yes
MRCVS#2	2.95	3.00	98.3%	90% - 110%	Yes
LCS	3.99	4.00	99.8%	90% - 110%	Yes
LCSD	3.94	4.00	98.5%	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: Three (3) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960311
Date: November 15, 2006
Collected: November 11, 2006
Received: November 11, 2006
Prep/ Analyzed: November 2, 2006
Analytical Batch: 11NO206A

Investigation: **Nitrite as N by Method EPA 354.1**

Analytical Results for Nitrite as N

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
960311-1	SC-100B-WDR-071	12:00	10:02	mg/L	1.00	0.0050	0.0126
960311-2	SC-700B-WDR-071	12:50	10:03	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	960311-1	0.0126	0.0132	4.65%	≤ 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	960311-1	0.0126	1.00	0.100	0.100	0.106	0.113	93.4%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.0856	0.0900	95.1%	90% - 110%	Yes
MRCVS#1	0.0939	0.100	93.9%	90% - 110%	Yes
LCS	0.172	0.180	95.6%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi

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

Samples: Three (3) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Investigation: Total Metal Analyses as Requested

Laboratory No.: 960311
Reported: November 15, 2006
Collected: November 11, 2006
Received: November 11, 2006
Analyzed: November 6 - 14, 2006

Analytical Results

SAMPLE ID: SC-100B-WDR-071 **Time Collected:** 12:00 **LAB ID:** 960311-1

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.7	ND	1.04	mg/L	0.0520	111406A	11/14/06	11:45
Antimony	EPA 200.8	ND	2.08	mg/L	0.0030	111006A	11/10/06	15:36
Arsenic	EPA 200.8	ND	2.08	mg/L	0.0050	111006A	11/10/06	15:36
Barium	EPA 200.7	ND	1.04	mg/L	0.300	111406A	11/14/06	11:45
Chromium	EPA 200.7	2.06	5.21	mg/L	0.261	110806A	11/08/06	13:18
Copper	EPA 200.8	0.0407	2.08	mg/L	0.0100	111006A	11/10/06	15:36
Lead	EPA 200.8	ND	2.08	mg/L	0.0021	111006A	11/10/06	15:36
Manganese	EPA 200.7	ND	1.04	mg/L	0.500	111406A	11/14/06	11:45
Molybdenum	EPA 200.8	0.0208	2.08	mg/L	0.0050	111006A	11/10/06	15:36
Nickel	EPA 200.7	ND	1.04	mg/L	0.0200	111406A	11/14/06	11:45
Zinc	EPA 200.7	ND	1.04	mg/L	0.0208	111406A	11/14/06	11:45
Boron	EPA 200.7	1.56	2.08	mg/L	0.200	111406A	11/14/06	13:13
Iron	EPA 200.7	ND	1.04	mg/L	0.300	111406A	11/14/06	11:45

SAMPLE ID: SC-700B-WDR-071 **Time Collected:** 12:50 **LAB ID:** 960311-2

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.7	ND	1.04	mg/L	0.0520	111406A	11/14/06	11:58
Antimony	EPA 200.8	ND	2.08	mg/L	0.0030	111006A	11/10/06	16:18
Arsenic	EPA 200.8	ND	2.08	mg/L	0.0050	111006A	11/10/06	16:18
Barium	EPA 200.7	ND	1.04	mg/L	0.300	111406A	11/14/06	11:58
Chromium	EPA 200.7	ND	1.04	mg/L	0.0010	110706A	11/07/06	10:08
Copper	EPA 200.8	0.0436	2.08	mg/L	0.0100	111006A	11/10/06	16:18
Lead	EPA 200.8	0.0042	2.08	mg/L	0.0021	111006A	11/10/06	16:18
Manganese	EPA 200.7	ND	1.04	mg/L	0.500	111406A	11/14/06	11:58
Molybdenum	EPA 200.8	0.0146	2.08	mg/L	0.0050	111006A	11/10/06	16:18
Nickel	EPA 200.7	ND	1.04	mg/L	0.0200	111406A	11/14/06	11:58
Zinc	EPA 200.7	ND	1.04	mg/L	0.0208	111406A	11/14/06	11:58
Boron	EPA 200.7	1.130	1.04	mg/L	0.200	111406A	11/14/06	11:58
Iron	EPA 200.7	ND	1.04	mg/L	0.300	111406A	11/14/06	11:58

SAMPLE ID: SC-701-WDR-071 **Time Collected:** 12:53 **LAB ID:** 960311-3

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Antimony	EPA 200.8	ND	10.4	mg/L	0.0052	111006A	11/10/06	15:54
Arsenic	EPA 200.8	ND	10.4	mg/L	0.0104	111006A	11/10/06	15:54
Barium	EPA 200.7	ND	1.04	mg/L	0.300	111406A	11/14/06	12:02
Beryllium	EPA 200.8	ND	10.4	mg/L	0.0052	111006A	11/10/06	15:54
Cadmium	EPA 200.8	ND	10.4	mg/L	0.0052	111006A	11/10/06	15:54
Chromium	EPA 200.7	ND	1.04	mg/L	0.0010	110706A	11/07/06	12:21
Cobalt	EPA 200.8	ND	10.4	mg/L	0.0052	111006A	11/10/06	15:54
Copper	EPA 200.8	ND	10.4	mg/L	0.0104	111006A	11/10/06	15:54
Lead	EPA 200.8	ND	10.4	mg/L	0.0104	111006A	11/10/06	15:54
Mercury	EPA 245.1	ND	1.00	mg/L	0.00020	11HG06B	11/06/06	14:47
Molybdenum	EPA 200.8	0.0690	10.4	mg/L	0.0052	111006A	11/10/06	15:54
Nickel	EPA 200.7	ND	1.0	mg/L	0.0200	111406A	11/14/06	12:02
Selenium	EPA 200.8	ND	10.4	mg/L	0.0104	111006A	11/10/06	15:54
Silver	EPA 200.8	ND	10.4	mg/L	0.0052	111006A	11/10/06	15:54
Thallium	EPA 200.8	ND	10.4	mg/L	0.0052	111006A	11/10/06	15:54
Vanadium	EPA 200.8	ND	10.4	mg/L	0.0052	111006A	11/10/06	15:54
Zinc	EPA 200.7	ND	1.0	mg/L	0.0208	111406A	11/14/06	12:02

ND: Not detected,or below limit of detection.

DF: Dilution factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

960311

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

[IM3Plant-WDR-071]

COC Number

TURNAROUND TIME 10 Days

DATE 11-01-06 PAGE 1 OF 1

Rec'd 11/01/06
SLS 960311

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 346129 IM.07.E2

SAMPLERS (SIGNATURE

For Sample Conditions See Form Attached

SAMPLE I.D.	DATE	TIME	DESCRIPTION	CR6 (218.6) Lab Filtered	Total Metals (200.7) Title 22	Total Metals (200.7) Total AL,As,Ba,B,Cr,Cu,Pb,Mo,Mo,Ni,Sb,Fe,Zn	Specific Conductance (120.1)	pH (150.1)	TDS (160.1)	Anions (300) Fl	Anions (300) Fl, SO4, NO2, NO3	Ammonia (350.2)	Turbidity (180.1)					NUMBER OF CONTAINERS	COMMENTS
-1 SC-100B-WDR-071	11-01-06	1200	Groundwater	x		x	x	x	x		x	x	x					4	pH - 7
-2 SC-700B-WDR-071	11-01-06	1250	Groundwater	x		x	x	x	x		x	x	x					4	pH - 7
-3 SC-701-WDR-071	11-01-06	1253	Groundwater	x	x		x	x	x	x								4½	pH - 2
																		11	TOTAL NUMBER OF CONTAINERS

ALERT!!
Level III QC

080

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished)	Printed Name GARY SIBLE	Company/ Agency Topock IM3 CH2MHILL	Date/ Time 11-01-06 1400
Signature (Received)	Printed Name MARGARITA	Company/ Agency T-L 2	Date/ Time 11/01/06 20:30
Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time
Signature (Received)	Printed Name	Company/ Agency	Date/ Time
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:

Table of Contents
TLI Laboratory Data Package

For Laboratory Number: 960529

Section 1.0

Case Narrative

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

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14201 FRANKLIN AVENUE
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November 6, 2006

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-072 PROJECT, GROUNDWATER MONITORING,

TLI NO.: 960529

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-072 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 November 8, 2006, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

No violations or nonconformance actions occurred for this data package.

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

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi
Manager, Analytical Services

K. R. P. 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) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2

Laboratory No.: 960529
Date: November 16, 2006
Collected: November 8, 2006
Received: November 8, 2006

ANALYST LIST

METHOD	ANALYTE	ANALYST
EPA 120.1	Specific Conductivity	Tina Acquiat
EPA 150.1	pH	Tina Acquiat
EPA 160.1	Total Dissolved Solids	Tina Acquiat
EPA 180.1	Turbidity	Gautam Savani
EPA 200.7	Total Chromium	Riddhi Patel
EPA 218.6	Hexavalent Chromium	Faisal Raihan

Section 2.0

Summary Table of Final Results

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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

Laboratory No.: 960529
Date Received: November 8, 2006

Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Analytical Results Summary

Lab I.D.	Sample I.D.	Sample Time	EPA 200.7 *Chromium Total* mg/L	EPA 218.6 *Chromium Hexavalent* mg/L	EPA 180.1 *Turbidity* NTU	EPA 150.1 *pH* Unit	EPA 120.1 *EC* µmhos/cm	EPA 160.1 *TDS* mg/L
960529	SC-700B-WDR-072	13:13	ND	ND	ND	8.12	8340	4230

ND: Non Detected (below reporting limit)

Note: The following "Significant Figures" rule has been applied to all results:
Results below 0.01 will have two (2) significant figures.
Result above or equal to 0.01 will have three (3) significant figures.
Quality Control data will always have three (3) significant figures.

003

Section 3.0

Final Reports

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

Established 1931

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

REPORT

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

Laboratory No.: 960529

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 111406A

Date: November 16, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 14, 2006
Analytical Batch: 111406A

Investigation: **Total Dissolved Chromium by Inductively Coupled Argon Plasma Atomic Emission Spectrometer using EPA 200.7**

Analytical Results Total Chromium

TLI I.D.	Field I.D.	Units	Method	Run Time	DF	RL	Results
960529	SC-700B-WDR-072	mg/L	EPA 200.7	15:40	1.04	0.0010	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	959747-2	0.0346	0.0335	3.23%	≤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	960529	0.00	1.04	0.0100	0.0104	0.00887	0.0104	85.3%	70-130%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.0108	0.0100	108%	90% - 110%	No
MRCVS#1	0.0103	0.0100	103%	90% - 110%	Yes
ICS	0.0108	0.0100	108%	80% - 120%	Yes
LCS	0.0105	0.0100	105%	90% - 110%	Yes

ND: Not detected at reporting limit

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

Laboratory No.: 960529

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Date: November 16, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 8, 2006
Analytical Batch: 11CrH06F

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
960529	SC-700B-WDR-072	13:13	23:04	mg/L	5.00	0.0010	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960522-40	0.0063	0.0062	1.60%	≤ 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	960529	0.00	1.06	0.00100	0.00106	0.00085	0.00106	80.1%	90-110%	No
MSD	960529	0.00	5.00	0.00100	0.00500	0.00500	0.00500	100%	90-110%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00498	0.00500	99.6%	90% - 110%	Yes
MRCVS#1	0.00997	0.0100	99.7%	95% - 105%	Yes
MRCVS#2	0.0100	0.0100	100%	95% - 105%	Yes
MRCVS#3	0.0101	0.0100	101%	95% - 105%	Yes
LCS	0.00503	0.00500	101%	90% - 110%	Yes
LCSD	0.00474	0.00500	94.8%	90% - 110%	Yes

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

Respectfully submitted,
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155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960529
Date: November 16, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 9, 2006
Analytical Batch: 11TUC06L

Investigation: **Turbidity by Method EPA 180.1**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
960529	SC-700B-WDR-072	13:13	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	960525-21	ND	ND	0.00%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	7.45	8.00	93.1%	90% - 110%	Yes
LCS	7.40	8.00	92.5%	90% - 110%	Yes
LCS	7.45	8.00	93.1%	90% - 110%	Yes

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

Respectfully submitted,
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Mona Nassimi, Manager
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REPORT

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

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960529
Date: November 16, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 9, 2006
Analytical Batch: 11PH06G

Investigation:

pH by EPA 150.1

Analytical Results pH

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	MDL	RL	Results
960529	SC-700B-WDR-072	13:13	07:38	pH Units	0.0570	2.00	8.12

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	960530-2	7.43	7.45	0.02	± 0.100 Units	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Difference (Units)	Acceptance Limits	QC Within Control
LCS	7.00	7.00	0.00	± 0.100 Units	Yes
LCS #1	7.01	7.00	0.01	± 0.100 Units	Yes
LCS #2	7.01	7.00	0.01	± 0.100 Units	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

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REPORT

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

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960529
Date: November 16, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 9, 2006
Analytical Batch: 11EC06C

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
960529	SC-700B-WDR-072	µmhos/cm	EPA 120.1	10.0	20.0	8340

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960529	8340	8350	0.12%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
CCS	686	706	97.2%	90% - 110%	Yes
CVS#1	945	1000	94.5%	90% - 110%	Yes
CVS#2	947	1000	94.7%	90% - 110%	Yes
LCS	686	706	97.2%	90% - 110%	Yes

Respectfully submitted,
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Mona Nassimi, Manager
Analytical Services

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REPORT

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

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960529
Date: November 16, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 9, 2006
Analytical Batch: 11TDS06E

Investigation: **Total Dissolved Solids by EPA 160.1**

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
960529	SC-700B-WDR-072	mg/L	EPA 160.1	250	4230

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	960529	4230	4380	1.74%	≤ 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS 1	485	500	97.0%	90% - 110%	Yes
LCS 2	483	500	96.6%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

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14201 Franklin Avenue, Tustin, CA 92780-7008
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960529

CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-072]

COC Number

TURNAROUND TIME 5 Days

DATE 11-08-06 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 346129.1m.02.E2

SAMPLERS (SIGNATURE [signature]

SAMPLE I.D.	DATE	TIME	DESCRIPTION	CR6 (218.6) Lab Filtered	Total Metals (200.7) Total Chromium	Specific Conductance (120.1)	pH (150.1)	TDS (160.1)	Turbidity (180.1)								NUMBER OF CONTAINERS	COMMENTS
SC-700B-WDR-072	11-08-06	1313	Groundwater	x	x	x	x	x	x								3	pH-2
																	3	TOTAL NUMBER OF CONTAINERS

ALERT!! Level III QC

Rec'd 11/08/06
~~17b~~ 960529

For Sample Conditions See Form Attached

RUSH

033

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished) [signature]	Printed Name Gary Sibbe	Company/ Agency CMI Topock IM3	Date/ Time 11-08-06 1316
Signature (Received) Mangarone	Printed Name Mangarine	Company/ Agency TLI	Date/ Time 11-08-06 [illegible]
Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time
Signature (Received)	Printed Name	Company/ Agency	Date/ Time
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:

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November 22, 2006

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-073 PROJECT, GROUNDWATER MONITORING,

TLI NO.: 960746

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-073 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 November 15, 2006, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

No violations or nonconformance actions occurred for this data package.

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

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi
Manager, Analytical Services

K. R. P. Iyer

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

002

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Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2

Laboratory No.: 960746
Date: November 22, 2006
Collected: November 15, 2006
Received: November 15, 2006

ANALYST LIST

METHOD	PARAMETER	ANALYST
EPA 120.1	Specific Conductivity	Tina Acquiat
EPA 150.1	pH	Tina Acquiat
EPA 160.1	Total Dissolved Solids	Tina Acquiat
EPA 180.1	Turbidity	Gautam Savani
EPA 200.7	Total Chromium	Riddhi Patel
EPA 218.6	Hexavalent Chromium	Stanley Hsieh

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

Laboratory No.: 960746
Date Received: November 15, 2006

Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Analytical Results Summary

Lab I.D.	Sample I.D.	Sample Time	EPA 200.7 *Chromium Total*	EPA 218.6 *Chromium Hexavalent*	EPA 180.1 *Turbidity*	EPA 150.1 *pH*	EPA 120.1 *EC*	EPA 160.1 *TDS*
			mg/L	***mg/L***	***NTU***	***Unit***	***µmhos/cm***	***mg/L***
960746	SC-700B-WDR-073	13:00	ND	ND	ND	8.16	8620	3830

ND: Non Detected (below reporting limit)

Note: The following "Significant Figures" rule has been applied to all results:
Results below 0.01 will have two (2) significant figures.
Result above or equal to 0.01 will have three (3) significant figures.
Quality Control data will always have three (3) significant figures.

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REPORT

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

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960746

Date: November 22, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 15, 2006
Analytical Batch: 11CrH06J

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
960746	SC-700B-WDR-073	13:00	21:38	mg/L	1.05	0.00020	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960746	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	960746	0.00	1.06	0.00100	0.00106	0.00114	0.00106	107%	90-110%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00502	0.00500	100%	90% - 110%	Yes
MRCVS#1	0.0102	0.0100	102%	95% - 105%	Yes
MRCVS#2	0.0103	0.0100	103%	95% - 105%	Yes
LCS	0.00502	0.00500	100%	90% - 110%	Yes
LCSD	0.00500	0.00500	100%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

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REPORT

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

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 112006B

Laboratory No.: 960746
Date: November 22, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 20, 2006
Analytical Batch: 112006B

Investigation: **Total Dissolved Chromium by Inductively Coupled Argon Plasma Atomic Emission Spectrometer using EPA 200.7**

Analytical Results Total Chromium

TLI I.D.	Field I.D.	Units	Method	Run Time	DF	RL	Results
960746	SC-700B-WDR-073	mg/L	EPA 200.7	14:33	1.04	0.0010	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960746	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	960746	0.00	1.04	0.0100	0.0104	0.00856	0.0104	82.3%	70-130%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.0101	0.0100	101%	~~90% - 110%~~	Yes
MRCVS#1	0.00916	0.0100	91.6%	90% - 110%	Yes
ICS	0.0106	0.0100	106%	80% - 120%	Yes
LCS	0.0105	0.0100	105%	90% - 110%	Yes

ND: Not detected at reporting limit
DF: Dilution Factor

Respectfully submitted,
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Attention: Shawn Duffy
Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960746
Date: November 22, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 16, 2006
Analytical Batch: 11TUC06P

Investigation: **Turbidity by Method EPA 180.1**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
960746	SC-700B-WDR-073	13:00	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	960737-26	0.156	0.152	2.60%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	7.45	8.00	93.1%	90% - 110%	Yes
LCS	7.65	8.00	95.6%	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

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960746
Date: November 22, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 16, 2006
Analytical Batch: 11PH06M

Investigation:

pH by EPA 150.1

Analytical Results pH

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	MDL	RL	Results
960746	SC-700B-WDR-073	13:00	08:48	pH Units	0.0570	2.00	8.16

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	960747	7.88	7.88	0.00	± 0.100 Units	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Difference (Units)	Acceptance Limits	QC Within Control
LCS	7.00	7.00	0.00	± 0.100 Units	Yes
LCS #1	7.00	7.00	0.00	± 0.100 Units	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.
INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES
Established 1931
14201 FRANKLIN AVENUE
TUSTIN, CALIFORNIA 92780-7008
(714) 730-6239 · FAX (714) 730-6462
www.truesdail.com

REPORT

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

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960746
Date: November 22, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 16, 2006
Analytical Batch: 11EC06F

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
960746	SC-700B-WDR-073	µmhos/cm	EPA 120.1	10.0	20.0	8620

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960747	43300	43400	0.23%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
CCS	667	706	94.5%	90% - 110%	Yes
CVS#1	945	1000	94.5%	90% - 110%	Yes
LCS	667	706	94.5%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

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REPORT

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

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960746
Date: November 22, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 16, 2006
Analytical Batch: 11TDS06G

Investigation: **Total Dissolved Solids by EPA 160.1**

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
960746	SC-700B-WDR-073	mg/L	EPA 160.1	250	3830

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	960747	21800	22200	0.91%	≤ 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS 1	476	500	95.2%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

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-073]

COC Number

TURNAROUND TIME 5 Days

DATE 11-15-06 PAGE 1 OF 1

960746

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	346129.m.02A2
SAMPLERS (SIGNATURE)	

Rec'd 11/15/06
960746

SAMPLE I.D.	DATE	TIME	DESCRIPTION	CR6 (218.6) Lab Filtered	Total Metals (200.7) Total Chromium	Specific Conductance (120.1)	pH (150.1)	TDS (160.1)	Turbidity (180.1)	NUMBER OF CONTAINERS	COMMENTS
SC-700B-WDR-073	11-15-06	13:00	Groundwater	x	x	x	x	x	x	3	pH-2
										3	TOTAL NUMBER OF CONTAINERS

FIELD

ALERT!!
Level III QC

For Sample Conditions
See Form Attached

0320

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Chuck	CMT	1520 11/15/06
Signature (Received)	Mendoza	T-E-2	11/15/06 21:15
Signature (Relinquished)			
Signature (Received)			
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

Table of Contents
TLI Laboratory Data Package

For Laboratory Number: 960934

Section 1.0

Case Narrative

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

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December 4, 2006

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-074 PROJECT, GROUNDWATER MONITORING,

TLI NO.: 960934

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-074 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 November 21, 2006, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

The chain of custody indicates the samples were collected on 11/22/06, but were actually collected on 11/21/06 per Shawn Duffy.

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

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

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi
Manager, Analytical Services

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

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

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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 Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2

Laboratory No.: 960934
Date: December 4, 2006
Collected: November 21, 2006
Received: November 21, 2006

ANALYST LIST

METHOD	PARAMETER	ANALYST
EPA 120.1	Specific Conductivity	Tina Acquiat
EPA 150.1	pH	Gautam Savani
EPA 160.1	Total Dissolved Solids	Tina Acquiat
EPA 180.1	Turbidity	Gautam Savani
EPA 200.7	Total Chromium	Riddhi Patel
EPA 218.6	Hexavalent Chromium	Stanley Hsieh

Section 2.0

Summary Table of Final Results

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

Laboratory No.: 960934
Date Received: November 21, 2006

Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Analytical Results Summary

Lab I.D.	Sample I.D.	Sample Time	EPA 200.7 *Chromium Total* mg/L	EPA 218.6 *Chromium Hexavalent* mg/L	EPA 180.1 *Turbidity* NTU	EPA 150.1 *pH* Unit	EPA 120.1 *EC* µmhos/cm	EPA 160.1 *TDS* mg/L
960934	SC-700B-WDR-074	08:40	ND	ND	ND	8.11	8590	3920

ND: Non Detected (below reporting limit)

Note: The following "Significant Figures" rule has been applied to all results:
Results below 0.01 will have two (2) significant figures.
Result above or equal to 0.01 will have three (3) significant figures.
Quality Control data will always have three (3) significant figures.

Section 3.0

Final Reports

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

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REPORT

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

Laboratory No.: 960934

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 112906A

Date: December 4, 2006
Collected: November 21, 2006
Received: November 21, 2006
Prep/ Analyzed: November 29, 2006
Analytical Batch: 112906A

Investigation: **Total Dissolved Chromium by Inductively Coupled Argon Plasma Atomic Emission Spectrometer using EPA 200.7**

Analytical Results Total Chromium

TLI I.D.	Field I.D.	Units	Method	Run Time	DF	RL	Results
960934	SC-700B-WDR-074	mg/L	EPA 200.7	09:44	1.04	0.0010	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960934	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	960934	0.00	1.04	0.0100	0.0104	0.00841	0.0104	80.9%	70-130%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.0104	0.0100	104%	90% - 110%	Yes
MRCVS#1	0.0108	0.0100	108.0%	90% - 110%	Yes
ICS	0.00956	0.0100	96%	80% - 120%	Yes
LCS	0.0105	0.0100	105%	90% - 110%	Yes

ND: Not detected at reporting limit

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

Laboratory No.: 960934

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Date: December 4, 2006
Collected: November 21, 2006
Received: November 21, 2006
Prep/ Analyzed: November 22, 2006
Analytical Batch: 11CrH06M

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
960934	SC-700B-WDR-074	08:40	06:54	mg/L	5.00	0.0010	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960914	0.00314	0.00314	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	960934	0.00	1.06	0.00100	0.00106	0.00094	0.00106	88.6%	90-110%	No
MS	960934	0.00	5.00	0.00100	0.00500	0.00489	0.00500	97.8%	90-110%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00512	0.00500	102%	90% - 110%	Yes
MRCVS#1	0.0100	0.0100	100%	95% - 105%	Yes
LCS	0.00510	0.00500	102%	90% - 110%	Yes
LCSD	0.00512	0.00500	102%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960934
Date: December 4, 2006
Collected: November 21, 2006
Received: November 21, 2006
Prep/ Analyzed: November 22, 2006
Analytical Batch: 11TUC06U

Investigation: **Turbidity by Method EPA 180.1**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
960934	SC-700B-WDR-074	08:40	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	960932	ND	ND	0.00%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	7.60	8.00	95.0%	90% - 110%	Yes
LCS	7.62	8.00	95.3%	90% - 110%	Yes
LCS	7.43	8.00	92.9%	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 Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960934
Date: December 4, 2006
Collected: November 21, 2006
Received: November 21, 2006
Prep/ Analyzed: November 22, 2006
Analytical Batch: 11PH06R

Investigation:

pH by EPA 150.1

Analytical Results pH

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	MDL	RL	Results
960934	SC-700B-WDR-074	08:40	08:07	pH Units	0.0570	2.00	8.11

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	960934	8.11	8.13	0.02	± 0.100 Units	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Difference (Units)	Acceptance Limits	QC Within Control
LCS	6.99	7.00	0.01	± 0.100 Units	Yes
LCS #1	7.00	7.00	0.00	± 0.100 Units	Yes
LCS #2	7.00	7.00	0.00	± 0.100 Units	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

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REPORT

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

Laboratory No.: 960934

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Date: December 4, 2006
Collected: November 21, 2006
Received: November 21, 2006
Prep/ Analyzed: November 24, 2006
Analytical Batch: 11EC06J

Investigation: **Specific Conductivity by EPA 120.1**

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
960934	SC-700B-WDR-074	µmhos/cm	EPA 120.1	10.0	20.0	8590

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960934	8590	8600	0.12%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
CCS	675	706	95.6%	90% - 110%	Yes
CVS#1	942	1000	94.2%	90% - 110%	Yes
LCS	675	706	95.6%	90% - 110%	Yes

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 Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960934
Date: December 4, 2006
Collected: November 21, 2006
Received: November 21, 2006
Prep/ Analyzed: November 24, 2006
Analytical Batch: 11TDS06J

Investigation: **Total Dissolved Solids by EPA 160.1**

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
960934	SC-700B-WDR-074	mg/L	EPA 160.1	250	3920

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	960934	3920	3910	0.13%	≤ 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS 1	475	500	95.0%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.
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CHAIN OF CUSTODY RECORD

960934 [IM3Plant-WDR-074]

COC Number

TURNAROUND TIME 5 Days

DATE 11-22-06 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	346129 1M.02.E2
SAMPLERS (SIGNATURE	

Rec'd 11/21/06 by 960934

SAMPLE I.D.	DATE	TIME	DESCRIPTION	CR6 (218.6) Lab Filtered	Total Metals (200.7) Total Chromium	Specific Conductance (120.1)	pH (150.1)	TDS (160.1)	Turbidity (180.1)	NUMBER OF CONTAINERS	COMMENTS
SC-700B-WDR-074	11-22-06	8:40	Groundwater	x	x	x	x	x	x	3	pH = 2
										3	TOTAL NUMBER OF CONTAINERS

RUSH

ALERT!! Level III QC

For Sample Conditions See Form Attached

033

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	David Chay	OMF	11-22-06 12:00
Signature (Received)	L. Shabarning	T4	11/22/06 2:00
Signature (Relinquished)			
Signature (Received)			
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

Table of Contents
TLI Laboratory Data Package

For Laboratory Number: 961147

Section 1.0

Case Narrative

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

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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 Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2

Laboratory No.: 961147
Date: December 5, 2006
Collected: November 30, 2006
Received: November 30, 2006

ANALYST LIST

EPA 120.1	Specific Conductivity	Tina Acquiat
EPA 150.1	pH	Gautam Savani
EPA 160.1	Total Dissolved Solids	Tina Acquiat
EPA 180.1	Turbidity	Gautam Savani
EPA 200.7	Total Chromium	Riddhi Patel
EPA 218.6	Hexavalent Chromium	Stanley Hsieh

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

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www.truesdail.com

December 5, 2006

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-075 PROJECT, GROUNDWATER MONITORING,

TLI NO.: 961147

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-075 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 November 30, 2006, 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.

A result for Hexavalent Chromium by EPA 218.6 is reported in the matrix spike calculation although it is below the reporting limit due to the small amount of Hexavalent Chromium present in the sample.

Due to analyst error, no sample duplicate was analyzed on the sample for Hexavalent Chromium but there was a duplicate for the batch by SW 7199. Because the recovery limits for sample duplicates are the same for SW 7199 and EPA 218.6, the duplicate result is reported.

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

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

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi
Manager, Analytical Services

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

Section 2.0

Summary Table of Final Results

TRUESDAIL LABORATORIES, INC.
INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES
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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

Laboratory No.: 961147
Date Received: November 30, 2006

Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Analytical Results Summary

Lab I.D.	Sample I.D.	Sample Time	EPA 200.7 *Chromium Total* mg/L	EPA 218.6 *Chromium Hexavalent* mg/L	EPA 180.1 *Turbidity* NTU	EPA 150.1 *pH* Unit	EPA 120.1 *EC* µmhos/cm	EPA 160.1 *TDS* mg/L
961147	SC-700B-WDR-075	13:06	ND	ND	ND	7.94	8740	4080

0404

ND: Non Detected (below reporting limit)

Note: The following "Significant Figures" rule has been applied to all results:
Results below 0.01 will have two (2) significant figures.
Result above or equal to 0.01 will have three (3) significant figures.
Quality Control data will always have three (3) significant figures.

Section 3.0

Final Reports

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

Established 1931

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

REPORT

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

Laboratory No.: 961147

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 120406A

Date: December 5, 2006
Collected: November 30, 2006
Received: November 30, 2006
Prep/ Analyzed: December 4, 2006
Analytical Batch: 120406A

Investigation: **Total Dissolved Chromium by Inductively Coupled Argon Plasma Atomic Emission Spectrometer using EPA 200.7**

Analytical Results Total Chromium

TLI I.D.	Field I.D.	Units	Method	Run Time	DF	RL	Results
961147	SC-700B-WDR-075	mg/L	EPA 200.7	11:59	1.04	0.0010	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	961147	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	961147	0.00	1.04	0.0100	0.0104	0.00930	0.0104	89.4%	70-130%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00994	0.0100	99.4%	90% - 110%	Yes
MRCVS#1	0.0103	0.0100	103%	90% - 110%	Yes
ICS	0.00957	0.0100	95.7%	80% - 120%	Yes
LCS	0.0102	0.0100	102%	90% - 110%	Yes

ND: Not detected at reporting limit

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

Laboratory No.: 961147

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Date: December 5, 2006
Collected: November 30, 2006
Received: November 30, 2006
Prep/ Analyzed: November 30, 2006
Analytical Batch: 11CrH06P

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
961147	SC-700B-WDR-075	13:06	20:20	mg/L	1.05	0.00020	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	961146-1	0.00037	0.00039	5.26%	< 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	961147	0.00018	1.06	0.00100	0.00106	0.00127	0.00124	103%	90-110%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00507	0.00500	101%	90% - 110%	Yes
MRCVS#1	0.0104	0.0100	104%	95% - 105%	Yes
MRCVS#2	0.0100	0.0100	100%	95% - 105%	Yes
LCS	0.00509	0.00500	102%	90% - 110%	Yes
LCSD	0.00512	0.00500	102%	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 Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 961147
Date: December 5, 2006
Collected: November 30, 2006
Received: November 30, 2006
Prep/ Analyzed: December 1, 2006
Analytical Batch: 12TUC06A

Investigation: **Turbidity by Method EPA 180.1**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
961147	SC-700B-WDR-075	13:06	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	961087	ND	ND	0.00%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	7.25	8.00	90.6%	90% - 110%	Yes
LCS	7.30	8.00	91.3%	90% - 110%	Yes
LCS	7.35	8.00	91.9%	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 Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 961147
Date: December 5, 2006
Collected: November 30, 2006
Received: November 30, 2006
Prep/ Analyzed: December 1, 2006
Analytical Batch: 12PH06A

Investigation: pH by EPA 150.1

Analytical Results pH

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	MDL	RL	Results
961147	SC-700B-WDR-075	13:06	07:50	pH Units	0.0570	2.00	7.94

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	961147	7.94	7.96	0.02	± 0.100 Units	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Difference (Units)	Acceptance Limits	QC Within Control
LCS	6.99	7.00	0.01	± 0.100 Units	Yes
LCS #1	7.00	7.00	0.00	± 0.100 Units	Yes
LCS #2	7.00	7.00	0.00	± 0.100 Units	Yes

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

Laboratory No.: 961147

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Date: December 5, 2006
Collected: November 30, 2006
Received: November 30, 2006
Prep/ Analyzed: December 4, 2006
Analytical Batch: 12EC06A

Investigation: **Specific Conductivity by EPA 120.1**

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
961147	SC-700B-WDR-075	µmhos/cm	EPA 120.1	10.0	20.0	8740

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	961030	85.2	85.3	0.12%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
CCS	675	706	95.6%	90% - 110%	Yes
CVS#1	946	1000	94.6%	90% - 110%	Yes
CVS#2	942	1000	94.2%	90% - 110%	Yes
LCS	677	706	95.9%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

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REPORT

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

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 961147
Date: December 5, 2006
Collected: November 30, 2006
Received: November 30, 2006
Prep/ Analyzed: December 4, 2006
Analytical Batch: 12TDS06A

Investigation: **Total Dissolved Solids by EPA 160.1**

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
961147	SC-700B-WDR-075	mg/L	EPA 160.1	250	4080

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	961147	4080	4180	1.21%	≤ 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS 1	488	500	97.6%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi

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-075]

COC Number

TURNAROUND TIME 5 Days

DATE 11-30-06 PAGE 1 OF 1

961147

ALERT!! Level III QC

Rec'd 11/30/06 via 961147

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	346129.1m.02.E2
SAMPLERS (SIGNATURE	

SAMPLE I.D.	DATE	TIME	DESCRIPTION	CR6 (218.6) Lab Filtered	Total Metals (200.7) Total Chromium	Specific Conductance (120.1)	pH (150.1)	TDS (160.1)	Turbidity (180.1)									NUMBER OF CONTAINERS	COMMENTS
SC-700B-WDR-075	11-30-06	1306	Groundwater	x	x	x	x	x	x									3	pH-2
																		3	TOTAL NUMBER OF CONTAINERS

For Sample Conditions See Form Attached

RUSH!

0331

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished)	Printed Name GLORY SIBBLE	Company/ Agency QMI Topock IM3	Date/ Time 11-30-06 1310	
Signature (Received)	Printed Name MONGAHAN	Company/ Agency T-L-T	Date/ Time 11/30/06 17:30	
Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time	
Signature (Received)	Printed Name	Company/ Agency	Date/ Time	
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:

SEVERN TRENT STL

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705

Tel: 714 258 8610 Fax: 714 258 0921
www.stl-inc.com

December 5, 2006

STL LOT NUMBER: **E6K170388**
PO/CONTRACT: 346129.1M.02.E2

Priya Kumar / E2
CH2M Hill Inc
155 Grand Ave
Suite 1000
Oakland, CA 94612

Dear Ms. Kumar,

This report contains the analytical results for the sample received under chain of custody by STL Los Angeles on November 17, 2006. This sample is associated with your PG&E TOPOCK GWM / E2 project.

STL Los Angeles certifies that the test results provided in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of the report. NELAP Certification Number for STL Los Angeles is 01118CA / E87652.

Any matrix related anomaly is footnoted within the report. A cooler receipt temperature between 2-6 degrees Celsius is within EPA acceptance criteria. The temperature(s) of the cooler received for this project can be found on the Project Receipt Checklist. Historical control limits for the LCS are used to define the estimate of uncertainty for a method. All applicable quality control procedures met method-specified acceptance criteria.

Preliminary results were sent via facsimile on December 1, 2006.

This report contains 000172 pages.

If you have any questions, please feel free to call me at (714) 258-8610.

Sincerely,

Marisol Tabirara
Project Manager

cc: Project File

E6K170388

E6K170388

960313

Severn Trent Laboratories
1721 Grand Ave, Santa Ana, CA 92705
(714)258-8610

CHAIN OF CUSTODY RECORD

[Sludge Sample-14]

COC Number

TURNAROUND TIME 10 Days

DATE 11-01-06 PAGE 1 OF 1

MPANY	E2
OJECT NAME	PG&E Topock GWM
ONE	(530) 229-3303 FAX (530) 339-3303
DRESS	155 Grand Ave Ste 1000 Oakland, CA 94612
NUMBER	346129.1m.02.E2 TEAM 1
MPLERS (SIGNATURE	

For Sample Conditions See Form Attached

MPLE I.D.	DATE	TIME	DESCRIPTION	Metals (6010B) Title 22	Metals (7199)	Mercury (7471A)	NUMBER CONTAINERS	COMMENTS
-Sludge-WDR-071	11-01-06	1253	Soil	x	x	x	4	
							4	TOTAL NUMBER OF CONTAINERS

Rec'd 11/01/06

960313

ALERT!!
Level III QC

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
ature inquished)	GARY SIBBIT	CH2M HILL OMI Topock	11-01-06 1400
ature ceived)	Dana Brown	TLI	11-1-06 20:30
ature inquished)	MANGAERON	T.L.I	11/17/06 14:10
ature ceived)	Vince Padilla	STL	11/17/06 1410
ature inquished)	V Padilla	STL	11/17/06 1445
ature ceived)	S. Gonzales	STL	11/17/06 1445

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

Temp - 5.1 - 0.2 = 4.9

3

STL LOS ANGELES - PROJECT RECEIPT CHECKLIST Date: 11/17/06

Single Cooler Only

LIMS Lot #: E6K170388 Quote #: 71993

Client Name: EZ Project: PG+E Topock GWM

Received by: SG Date/Time Received: 11/17/06, 1445

Delivered by : ☐ Client ☒ STL ☐ DHL ☐ Fed Ex ☐ UPS ☐ Other _____

****

Initial / Date

Custody Seal Status Cooler: ☐ Intact ☐ Broken ☒ None ..... SG 11/17/06

Custody Seal Status Samples: ☐ Intact ☐ Broken ☒ None ..... SG 11/17/06

Custody Seal #(s): N/A ☒ No Seal #..... SG 11/17/06

Sampler Signature on COC ☒ Yes ☐ No ☐ N/A..... SG 11/17/06

IR Gun # __B_ Correction Factor __-.2_°C IR passed daily verification ☒ Yes ☐ No ..... SG 11/17/06

Temperature - **BLANK** 5.1 °C - .2 CF = 4.9 °C ...**Cooler #1 ID** N/A ..... SG 11/17/06

Temperature – **COOLER** (____°C ____°C ____°C ____°C) = _____ avg °C - .2 CF = _____°C..... SG 11/17/06

Samples outside temperature criteria but received within 6 hours of final sampling ☐ Yes ☒ N/A... SG 11/17/06

Sample Container(s): ☒ STL-LA ☐ Client ..... SG 11/17/06

pH measured: ☐ Yes ☐ Anomaly (if checked, notify lab and file NCM) ☒ N/A.. SG 11/17/06

Anomalies: ☒ No ☐ Yes – complete CUR and Create NCM ..... SG 11/17/06

Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times. ☒ Yes ☐ No..... SG 11/17/06

Labeled by: SG ..... SG 11/17/06

****

Turn Around Time: ☐ RUSH–24HR ☐ RUSH–48HR ☐ RUSH–72HR ☒ NORMAL..... SG 11/17/06

********** LEAVE NO BLANK SPACES ; USE N/A **********

Headspace Anomaly ☐ YES ☒ N/A SG 11/17/06

Lab ID	Container(s) #	Headspace	Lab ID	Container(s) #	Headspace
		☐ > 6mm			☐ > 6mm
		☐ > 6mm			☐ > 6mm
		☐ > 6mm			☐ > 6mm
		☐ > 6mm			☐ > 6mm
		☐ > 6mm			☐ > 6mm
		☐ > 6mm			☐ > 6mm
		☐ > 6mm			☐ > 6mm

LIMS Lot # E6K170388

PROJECT RECEIPT CHECKLIST Cont'd

Fraction															
VOAH															
40z (G)	4														

H: HCL, S: H2SO4, N: HNO3, V: VOA, SL, Sleeve, E: Encore, PB: Poly Bottle, CGB: Clear Glass Bottle, AGJ: Amber Glass Jar, T: Terracore AGB: Amber Glass Bottle, n/f/l:HNO3-Lab filtered. n/f:HNO3-Field filtered, znna: Zinc Acetate/Sodium Hydroxide, Na2s2o3: sodium thiosulfate

Condition Upon Receipt Anomaly Form

Anomalies ☐YES ☒N/A 11/17/06

- **COOLERS**
  - ☐ Not Received (received COC only)
  - ☐ Leaking
  - ☐ Other:
- **TEMPERATURE (SPECS 4 ± 2°C)**
  - ☐ Cooler Temp(s)
  - ☐ Temperature Blank(s)
- **CONTAINERS**
  - ☐ Leaking ☐ Voa Vials with Bubbles > 6mm
  - ☐ Broken
  - ☐ Extra
  - ☐ Without Labels
  - ☐ Other:
- **CUSTODY SEALS (COOLER(S)** **CONTAINER(S)**
  - ☐ None ☐ None
  - ☐ Not Intact ☐ Not Intact
  - ☐ Other ☐ Other
- **CHAIN OF CUSTODY (COC)**
  - ☐ Not relinquished by Client; No date/time relinquished
  - ☐ Incomplete information provided
  - ☐ Other ☐ COC not received – notify PM
- **LABELS**
  - ☐ Not the same ID/info as in COC
  - ☐ Incomplete Information
  - ☐ Markings/Info illegible
  - ☐ Torn
- **SAMPLES**
  - ☐ Samples NOT RECEIVED but listed on COC
  - ☐ Samples received but NOT LISTED on COC
  - ☐ Logged based on Label Information
  - ☐ Logged based on info from other samples on COC
  - ☐ Logged according to Work Plan
  - ☐ Logged on HOLD UNTIL FURTHER NOTICE
  - ☐ Will be noted on COC--Client to send samples with new COC
  - ☐ Mislabeled as to tests. preservatives, etc.
  - ☐ Holding time expired – list sample ID and test
  - ☐ Improper container used
  - ☐ Not preserved/Improper preservative used
  - ☐ Improper pH _____ Lab to preserve sample and document
  - ☐ Insufficient quantities for analysis ☐ Other

Comments:

☐ Corrective Action Implemented:

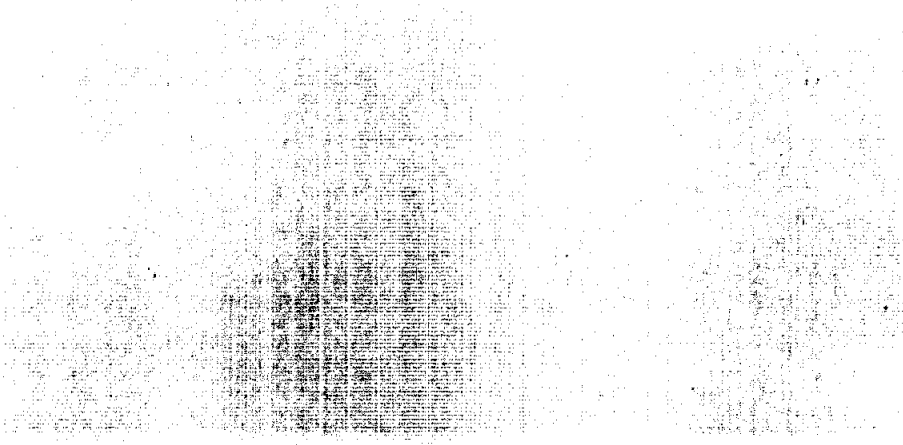
☐ Client Informed: verbally on _____ By: _____ ☐ In writing on _____ By: _____

☐ Sample(s) on hold until: _____ ☐ Sample(s) processed "as is."

Logged by/Date: CA 11/17/06 Logged in by other STL ☐ ____ **PM Review/Date:** MMC 11/17/06

SEVERN TRENT STL

Analytical Report



ANALYTICAL REPORT

PG&E TOPOCK GWM / E2

Lot #: E6K170388

Priya Kumar / E2

CH2M Hill Inc

SEVERN TRENT LABORATORIES, INC.

Marisol Tabirara
Project Manager

December 1, 2006

EXECUTIVE SUMMARY - Detection Highlights

E6K170388

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SC-SLUDGE-WDR-071 11/11/06 12:53 001				
Mercury	1.8	0.52	mg/kg	SW846 7471A
Arsenic	44	5.2	mg/kg	SW846 6010B
Barium	100	10	mg/kg	SW846 6010B
Chromium	16000	5.2	mg/kg	SW846 6010B
Copper	43	13	mg/kg	SW846 6010B
Molybdenum	27	21	mg/kg	SW846 6010B
Nickel	35	21	mg/kg	SW846 6010B
Thallium	24	5.2	mg/kg	SW846 6010B
Vanadium	83	26	mg/kg	SW846 6010B
Zinc	110	10	mg/kg	SW846 6010B
Percent Moisture	81	0.10	%	MCAWW 160.3 MOD
Hexavalent Chromium	120	2.1	mg/kg	SW846 7199

METHODS SUMMARY

E6K170388

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Hexavalent Chromium	SW846 7199	SW846 3060A
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

E6K170388

ANALYTICAL METHOD	ANALYST	ANALYST ID
MCAWW 160.3 MOD	FLORIAN ZIMMERMANN	000064
SW846 6010B	Hao Ton	000023
SW846 7199	Yuriy Zakhrabov	000022
SW846 7471A	Hao Ton	000023

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

E6K170388

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
JJ12R	001	SC-SLUDGE-WDR-071	11/11/06	12:53

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

CH2M Hill Inc

Client Sample ID: SC-SLUDGE-WDR-071

TOTAL Metals

Lot-Sample #...: E6K170388-001 **Matrix.....:** SO
Date Sampled...: 11/11/06 12:53 **Date Received..:** 11/17/06 14:45
% Moisture.....: 81

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 6325298						
Arsenic	**44**	**5.2**	**mg/kg**	**SW846 6010B**	**11/21-11/24/06**	**JJ12R1AA**
		Dilution Factor: 1		Analysis Time..: 19:31	Analyst ID.....: 000023	
		Instrument ID..: M01		MS Run #.....: 6325186		
Antimony	ND	31	mg/kg	SW846 6010B	11/21-11/24/06	JJ12R1AC
		Dilution Factor: 1		Analysis Time..: 19:31	Analyst ID.....: 000023	
		Instrument ID..: M01		MS Run #.....: 6325186		
Barium	**100**	**10**	**mg/kg**	**SW846 6010B**	**11/21-11/24/06**	**JJ12R1AD**
		Dilution Factor: 1		Analysis Time..: 19:31	Analyst ID.....: 000023	
		Instrument ID..: M01		MS Run #.....: 6325186		
Cadmium	ND	2.6	mg/kg	SW846 6010B	11/21-11/24/06	JJ12R1AE
		Dilution Factor: 1		Analysis Time..: 19:31	Analyst ID.....: 000023	
		Instrument ID..: M01		MS Run #.....: 6325186		
Chromium	**16000**	**5.2**	**mg/kg**	**SW846 6010B**	**11/21-11/24/06**	**JJ12R1AF**
		Dilution Factor: 1		Analysis Time..: 19:31	Analyst ID.....: 000023	
		Instrument ID..: M01		MS Run #.....: 6325186		
Beryllium	ND	2.6	mg/kg	SW846 6010B	11/21-11/24/06	JJ12R1AG
		Dilution Factor: 1		Analysis Time..: 19:31	Analyst ID.....: 000023	
		Instrument ID..: M01		MS Run #.....: 6325186		
Lead	ND	2.6	mg/kg	SW846 6010B	11/21-11/24/06	JJ12R1AH
		Dilution Factor: 1		Analysis Time..: 19:31	Analyst ID.....: 000023	
		Instrument ID..: M01		MS Run #.....: 6325186		
Selenium	ND	2.6	mg/kg	SW846 6010B	11/21-11/24/06	JJ12R1AJ
		Dilution Factor: 1		Analysis Time..: 19:31	Analyst ID.....: 000023	
		Instrument ID..: M01		MS Run #.....: 6325186		
Silver	ND	5.2	mg/kg	SW846 6010B	11/21-11/24/06	JJ12R1AK
		Dilution Factor: 1		Analysis Time..: 19:31	Analyst ID.....: 000023	
		Instrument ID..: M01		MS Run #.....: 6325186		

(Continued on next page)

CH2M Hill Inc

Client Sample ID: SC-SLUDGE-WDR-071

TOTAL Metals

Lot-Sample #...: E6K170388-001 Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Cobalt	ND	26	mg/kg	SW846 6010B	11/21-11/24/06	JJ12R1AL
		Dilution Factor: 1		Analysis Time..: 19:31	Analyst ID.....: 000023	
		Instrument ID..: M01		MS Run #.....: 6325186		
Copper	**43**	**13**	**mg/kg**	**SW846 6010B**	**11/21-11/24/06**	**JJ12R1AM**
		Dilution Factor: 1		Analysis Time..: 19:31	Analyst ID.....: 000023	
		Instrument ID..: M01		MS Run #.....: 6325186		
Molybdenum	**27**	**21**	**mg/kg**	**SW846 6010B**	**11/21-11/24/06**	**JJ12R1AN**
		Dilution Factor: 1		Analysis Time..: 19:31	Analyst ID.....: 000023	
		Instrument ID..: M01		MS Run #.....: 6325186		
Nickel	**35**	**21**	**mg/kg**	**SW846 6010B**	**11/21-11/24/06**	**JJ12R1AP**
		Dilution Factor: 1		Analysis Time..: 19:31	Analyst ID.....: 000023	
		Instrument ID..: M01		MS Run #.....: 6325186		
Thallium	**24**	**5.2**	**mg/kg**	**SW846 6010B**	**11/21-11/24/06**	**JJ12R1AQ**
		Dilution Factor: 1		Analysis Time..: 19:31	Analyst ID.....: 000023	
		Instrument ID..: M01		MS Run #.....: 6325186		
Vanadium	**83**	**26**	**mg/kg**	**SW846 6010B**	**11/21-11/24/06**	**JJ12R1AR**
		Dilution Factor: 1		Analysis Time..: 19:31	Analyst ID.....: 000023	
		Instrument ID..: M01		MS Run #.....: 6325186		
Zinc	**110**	**10**	**mg/kg**	**SW846 6010B**	**11/21-11/24/06**	**JJ12R1AT**
		Dilution Factor: 1		Analysis Time..: 19:31	Analyst ID.....: 000023	
		Instrument ID..: M01		MS Run #.....: 6325186		
Prep Batch #...: 6325301						
Mercury	**1.8**	**0.52**	**mg/kg**	**SW846 7471A**	**11/28/06**	**JJ12R1AU**
		Dilution Factor: 1		Analysis Time..: 15:36	Analyst ID.....: 000023	
		Instrument ID..: M04		MS Run #.....: 6325188		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

CH2M Hill Inc

Client Sample ID: SC-SLUDGE-WDR-071

General Chemistry

Lot-Sample #...: E6K170388-001 **Work Order #...:** JJ12R **Matrix.....:** SO
Date Sampled...: 11/11/06 12:53 **Date Received..:** 11/17/06 14:45
% Moisture.....: 81

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Hexavalent Chromium	**120**	**2.1**	**mg/kg**	**SW846 7199**	**11/21-11/22/06**	**6325242**
	Dilution Factor: 2			Analysis Time..: 15:54	Analyst ID.....: 000022	
	Instrument ID..: W18			MS Run #.....: 6325151		
Percent Moisture	**81**	**0.10**	**%**	**MCAWW 160.3 MOD**	**11/17-11/18/06**	**6321679**
	Dilution Factor: 1			Analysis Time..: 14:00	Analyst ID.....: 0000641	
	Instrument ID..: W15			MS Run #.....: 6321416		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Table of Contents
TLI Laboratory Data Package

For Laboratory Number: 960312

Section 1.0

Case Narrative

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

Established 1931

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

November 10, 2006

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

Dear Mr. Duffy:

SUBJECT: CASE NARRATIVE PG&E TOPOCK PROJECT, SLUDGE SAMPLE-14,
TLI NO.: 960312

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock project, Sludge Sample-14. A summary table for this sample delivery group is included in Section 2. Complete laboratory report, 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 sample was received and delivered with the chain of custody on November 1, 2006, intact and in chilled condition. The sample will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

No violations or nonconformance actions occurred for this data package.

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

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi
Manager, Analytical Services

K. R. P. Iyer

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

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

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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.: 346129.IM.02.E2

Laboratory No.: 960312
Date: November 10, 2006
Collected: November 1, 2006
Received: November 1, 2006

ANALYST LIST

METHOD	ANALYTE	ANALYST
EPA 300.0	Fluoride	Giawad Ghenniwa

Section 2.0

Summary Table of Final Results

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

Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960312
Date Received: November 1, 2006

Analytical Results Summary

Lab I.D.	Sample I.D.	Time Sampled	EPA 300.0 *Fluoride* mg/kg
960312	SC-Sludge-WDR-071	12:53	11.2

ND: Non Detected (below reporting limit)
Note: The following "Significant Figures" rule has been applied to all results:
Results below 0.01ppm will have two (2) significant figures.
Results above or equal to 0.01ppm will have three (3) significant figures.
Quality Control data will always have three (3) significant figures.

Section 3.0

Final Report

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

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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.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960312
Date: November 10, 2006
Collected: November 1, 2006
Received: November 1, 2006
Prep/ Analyzed: November 2, 2006
Analytical Batch: 11AN06B

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

Analytical Results Fluoride

TLI I.D.	Field I.D.	Units	Method	Run Time	DF	RL	Results
960312	SC-Sludge-WDR-071	mg/kg	EPA 300.0	17:24	20.0	4.00	11.2

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960267-6	1.04	1.01	2.93%	≤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	960267-6	1.04	1.00	2.00	2.00	3.01	3.04	98.5%	85-115%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	4.15	4.00	104%	90% - 110%	Yes
MRCVS#1	3.17	3.00	106%	90% - 110%	Yes
MRCVS#2	3.11	3.00	104%	90% - 110%	Yes
MRCVS#3	3.12	3.00	104%	90% - 110%	Yes
LCS	4.14	4.00	104%	90% - 110%	Yes
LCSD	4.06	4.00	102%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

960 312

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

CHAIN OF CUSTODY RECORD

[Sludge Sample-14]

COC Number

TURNAROUND TIME 10 Days

DATE 11-01-06 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 346129.1m.02.E2

SAMPLERS (SIGNATURE

SAMPLE I.D.	DATE	TIME	DESCRIPTION	Anions (300.0) FI	For Sample Conditions See Form Attached	NUMBER OF CONTAINERS	COMMENTS
SC-Sludge-WDR-071	11-01-06	1253	Soil	x		1	
						1	TOTAL NUMBER OF CONTAINERS

ALERT!!
Level III QC

Rec'd 11/01/06
s15d 960312

013

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished)	Printed Name GARY SIBBLE	Company/ Agency Topock IR3 CH2MHill	Date/ Time 11-01-06 1400
Signature (Received)	Printed Name Ana Brown	Company/ Agency TLI	Date/ Time 11-01-06 20:30
Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time
Signature (Received)	Printed Name	Company/ Agency	Date/ Time
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:

Table of Contents
TLI Laboratory Data Package

For Laboratory Number: 960530

Section 1.0

Case Narrative

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

Established 1931

14201 FRANKLIN AVENUE
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www.truesdail.com

November 22, 2006

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-32 PROJECT, GROUNDWATER MONITORING,

TLI NO.: 960530

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-32 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 November 8, 2006, 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 samples for Total Metals analysis were received with a pH of 7. The samples were preserved in the lab.

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

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

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi
Manager, Analytical Services

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

Section 2.0

Summary Table of Final Results

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

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

Laboratory No.: 960530
Date Received: November 8, 2006

Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Analytical Results Summary

Lab I.D.	Sample I.D.	Sample Time	EPA 120.1 EC	EPA 160.2 TSS	EPA 160.1 TDS	EPA 150.1 pH	EPA 365.3 Phosphorus total	EPA 415.2 TOC	EPA 354.1 Nitrite as N
			µmhos/cm	mg/L	mg/L	Units	mg/L	mg/L	mg/L
960530-1	SC-700B-WDR-11-8-06	15:00	8630	ND	3980	8.06	0.0711	ND	0.0072
960530-2	SC-100B-WDR-11-8-06	15:00	11600	ND	5380	7.43	0.212	ND	0.0112

Lab I.D.	Sample I.D.	Sample Time	EPA 300.0 Fluoride	EPA 300.0 Sulfate	EPA 300.0 Chloride	EPA 300.0 Nitrate as N	EPA 310.1 Alkalinity	EPA 310.1 Bicarbonate	EPA 310.0 Carbonate
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
960530-1	SC-700B-WDR-11-8-06	15:00	2.05	656	2010	2.53	92.0	112	ND
960530-2	SC-100B-WDR-11-8-06	15:00	2.74	634	2630	3.22	146	178	ND

Lab I.D.	Sample I.D.	Sample Time	EPA 300.0 Ammonia as N	EPA 300.0 Turbidity
			mg/L	NTU
960530-1	SC-700B-WDR-11-8-06	15:00	ND	ND
960530-2	SC-100B-WDR-11-8-06	15:00	ND	0.106

ND: Non Detected (below reporting limit)
mg/L: Milligrams per liter.

Note: The following "Significant Figures" rule has been applied to all results:
Results below 0.01ppm will have two (2) significant figures.
Result above or equal to 0.01ppm will have three (3) significant figures.
Quality Control data will always have three (3) significant figures.

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

Laboratory No.: 960530
Date Received: November 8, 2006

Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Analytical Results Summary

Lab I.D.	Sample I.D.	Sample Time	SW 6010B Manganese	SW 6010B Sodium	SW 6010B Calcium	SW 6010B Magnesium	SW 6010B Potassium	SW 6010B Iron Total
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
960530-1	SC-700B-WDR-11-8-06	15:00	ND	1020	185	19.4	18.4	ND
960530-2	SC-100B-WDR-11-8-06	15:00	ND	1200	243	24.9	25.0	ND

Lab I.D.	Sample I.D.	Sample Time	SW 6010B Strontium	SW 6010B Barium	EPA 370.1 Silica Dissolved	SW 6010B Iron Dissolved
			mg/L	mg/L	mg/L	mg/L
960530-1	SC-700B-WDR-11-8-06	15:00	4.20	ND	7.60	ND
960530-2	SC-100B-WDR-11-8-06	15:00	6.45	ND	20.5	ND

ND: Non Detected (below reporting limit)
mg/L: Milligrams per liter.

Note: The following "Significant Figures" rule has been applied to all results:
Results below 0.01ppm will have two (2) significant figures.
Result above or equal to 0.01ppm will have three (3) significant figures.
Quality Control data will always have three (3) significant figures.

Section 3.0

Final Reports

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

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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: Two (2) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960530
Date: November 21, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 17, 2006
Analytical Batch: 11Si06A

Investigation: **Dissolved Silica by EPA 370.1**

Analytical Results Dissolved Silica

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
960530-1	SC-700B-WDR-11-8-06	15:00	mg/L	25.0	1.00	7.60
960530-2	SC-100B-WDR-11-8-06	15:00	mg/L	25.0	1.00	20.5

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960747	35.5	35.3	0.56%	≤ 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	960747	35.5	25.0	0.400	10.0	44.6	45.5	91.0%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.232	0.228	102%	90% - 110%	Yes
MRCVS#1	0.398	0.400	99.5%	90% - 110%	Yes
LCS	0.442	0.456	96.9%	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: Two (2) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960530
Date: November 21, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 14, 2006
Analytical Batch: 11TP06B

Investigation: **Total Phosphorus by Method EPA 365.3**

Analytical Results Total Phosphorus

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
960530-1	SC-700B-WDR-11-8-06	15:00	mg/L	1.00	0.0200	0.0711
960530-2	SC-100B-WDR-11-8-06	15:00	mg/L	1.00	0.0200	0.212

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960530-1	0.0711	0.0834	15.9%	≤ 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	960560-13	0.194	1.00	0.130	0.130	0.315	0.324	93.1%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.138	0.130	106%	90% - 110%	Yes
MRCVS#1	0.123	0.130	94.6%	90% - 110%	Yes
LCS	0.259	0.261	99.2%	90% - 110%	Yes
LCS	0.261	0.261	100%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

QAR

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: Two (2) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960530
Date: November 21, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 14, 2006
Analytical Batch: 11TOC06C

Investigation: **Total Organic Carbon by EPA 415.2**

Analytical Results for Total Organic Carbon

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
960530-1	SC-700B-WDR-11-8-06	15:00	mg/L	1.00	0.500	ND
960530-2	SC-100B-WDR-11-8-06	15:00	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	960530-1	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	960514	4.14	1.00	20.0	20.0	22.9	24.1	93.8%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	10.0	10.0	100%	90% - 110%	Yes
MRCVS#1	9.42	10.0	94.2%	90% - 110%	Yes
MRCVS#2	9.99	10.0	99.9%	90% - 110%	Yes
LCS	19.9	20.0	99.5%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

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

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

Sample: Two (2) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960530
Date: November 21, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 9, 2006
Analytical Batch: 11EC06C

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	MDL	DF	RL	Results
960530-1	SC-700B-WDR-11-8-06	µmhos/cm	EPA 120.1	0.705	10.0	20.0	8630
960530-2	SC-100B-WDR-11-8-06	µmhos/cm	EPA 120.1	0.705	10.0	20.0	11600

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960529	8340	8350	0.12%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
CCS	686	706	97.2%	90% - 110%	Yes
CVS#1	945	1000	94.5%	90% - 110%	Yes
CVS#2	947	1000	94.7%	90% - 110%	Yes
LCS	686	706	97.2%	90% - 110%	Yes

DF: Dilution Factor.

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Attention: Shawn Duffy
Sample: Two (2) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960530
Date: November 21, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 9, 2006
Analytical Batch: 11TSS06D

Investigation: **Total Suspended Solids by EPA 160.2**

Analytical Results Total Suspended Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
960530-1	SC-700B-WDR-11-8-06	mg/L	EPA 160.2	2.50	ND
960530-2	SC-100B-WDR-11-8-06	mg/L	EPA 160.2	2.50	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	960454-4	84.0	85.0	0.59%	< 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS 1	95.0	100	95.0%	90% - 110%	Yes
LCS 2	98.0	100	98.0%	90% - 110%	Yes

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

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REPORT

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155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Two (2) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960530
Date: November 21, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 9, 2006
Analytical Batch: 11TDS06E

Investigation: **Total Dissolved Solids by EPA 160.1**

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
960530-1	SC-700B-WDR-11-8-06	mg/L	EPA 160.1	250	3980
960530-2	SC-100B-WDR-11-8-06	mg/L	EPA 160.1	250	5380

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	960529	4230	4380	1.74%	< 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS 1	485	500	97.0%	90% - 110%	Yes
LCS 2	483	500	96.6%	90% - 110%	Yes

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Sample: Two (2) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960530
Date: November 21, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 9, 2006
Analytical Batch: 11PH06G

Investigation: **pH by EPA 150.1**

Analytical Results pH

TLI I.D.	Field I.D.	Run Time	Units	MDL	RL	Results
960530-1	SC-700B-WDR-11-8-06	07:41	pH Units	0.0570	2.00	8.06
960530-2	SC-100B-WDR-11-8-06	07:44	pH Units	0.0570	2.00	7.43

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	960530-2	7.43	7.45	0.02	± 0.100 Units	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Difference (Units)	Acceptance Limits	QC Within Control
LCS	7.00	7.00	0.00	± 0.100 Units	Yes
LCS #1	7.01	7.00	0.01	± 0.100 Units	Yes
LCS #2	7.01	7.00	0.01	± 0.100 Units	Yes

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Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960530
Date: November 21, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 9, 2006
Analytical Batch: 11TUC06L

Investigation: **Turbidity by EPA 180.1**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
960530-1	SC-700B-WDR-11-8-06	NTU	EPA 180.1	1.00	0.100	ND
960530-2	SC-100B-WDR-11-8-06	NTU	EPA 180.1	1.00	0.100	0.106

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	960525-21	ND	ND	0.00%	< 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS 1	7.45	8.00	93.1%	90% - 110%	Yes
LCS 2	7.40	8.00	92.5%	90% - 110%	Yes
LCS 3	7.45	8.00	93.1%	90% - 110%	Yes

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

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Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

REPORT

Laboratory No.: 960530
Date: November 21, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 14, 2006
Analytical Batch: 11ALK06B

Investigation: **Alkalinity by Method EPA 310.1**

Analytical Results Total Alkalinity, Bicarbonate, Carbonate

TLI I.D.	Field I.D.	Units	RL	Total Alkalinity	Bicarbonate	Carbonate
960530-1	SC-700B-WDR-11-8-06	mg/L	5.00	92.0	112	ND
960530-2	SC-100B-WDR-11-8-06	mg/L	5.00	146	178	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960530-2	146	147	0.68%	≤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	960530-2	146	1.00	100	100	244	246	98.0%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	102	100	102%	90% - 110%	Yes

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DF: Dilution Factor.

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Attention: Shawn Duffy
Sample: Two (2) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960530
Date: November 21, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 13, 2006
Analytical Batch: 11NH306C

Investigation: **Ammonia as N by EPA 350.2**

Analytical Results for Ammonia as N

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
960530-1	SC-700B-WDR-11-8-06	15:00	mg/L	1.00	0.500	ND
960530-2	SC-100B-WDR-11-8-06	15:00	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	960558-1	5.32	5.37	0.94%	≤ 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	960558-1	5.32	1.00	16.7	16.7	21.4	22.0	96.3%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	9.76	10.0	97.6%	90% - 110%	Yes

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Two (2) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960530
Date: November 21, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 10, 2006
Analytical Batch: 11NO206G

Investigation: **Nitrite as N by EPA 354.1**

Analytical Results Nitrite as N

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
960530-1	SC-700B-WDR-11-8-06	15:00	09:01	mg/L	1.00	0.0050	0.0072
960530-2	SC-100B-WDR-11-8-06	15:00	09:02	mg/L	1.00	0.0050	0.0112

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960530-1	0.0072	0.0066	8.70%	≤ 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	960530-1	0.0072	1.00	0.100	0.100	0.109	0.107	102%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.0894	0.0900	99.3%	90% - 110%	Yes
MRCVS#1	0.0978	0.100	97.8%	90% - 110%	Yes
LCS	0.173	0.180	96.1%	90% - 110%	Yes

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Attention: Shawn Duffy
Sample: Two (2) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960530
Date: November 21, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 9, 2006
Analytical Batch: 11AN06H

Investigation: **Sulfate by Method EPA 300.0**

Analytical Results Sulfate

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
960530-1	SC-700B-WDR-11-8-06	15:00	14:36	mg/L	200	100	656
960530-2	SC-100B-WDR-11-8-06	15:00	16:02	mg/L	50.0	25.0	634

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960530-2	634	634	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	960530-2	634	50.0	20.0	1000	1630	1634	99.6%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	19.8	20.0	99.0%	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
LCS	19.8	20.0	99.0%	90% - 110%	Yes
LCSD	19.8	20.0	99.0%	90% - 110%	Yes

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

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Attention: Shawn Duffy
Sample: Two (2) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960530
Date: November 21, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 9, 2006
Analytical Batch: 11AN06H

Investigation: **Chloride by Method EPA 300.0**

Analytical Results Chloride

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
960530-1	SC-700B-WDR-11-8-06	15:00	16:37	mg/L	500	100	2010
960530-2	SC-100B-WDR-11-8-06	15:00	16:48	mg/L	500	100	2630

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960510	128	128	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	960510	128	50.0	4.00	200	333	328	103%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	3.97	4.00	99.3%	90% - 110%	Yes
MRCVS#1	2.97	3.00	99.0%	90% - 110%	Yes
MRCVS#2	3.30	3.00	110%	90% - 110%	Yes
MRCVS#3	2.96	3.00	98.7%	90% - 110%	Yes
LCS	3.95	4.00	98.8%	90% - 110%	Yes
LCSD	3.98	4.00	99.5%	90% - 110%	Yes

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

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Sample: Two (2) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960530
Date: November 21, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 9, 2006
Analytical Batch: 11AN06H

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
960530-1	SC-700B-WDR-11-8-06	15:00	13:39	mg/L	1.00	0.200	2.05
960530-2	SC-100B-WDR-11-8-06	15:00	13:50	mg/L	1.00	0.200	2.74

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960530-1	2.05	2.04	0.49%	≤ 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	960530-1	2.05	1.00	4.00	4.00	5.83	6.05	94.5%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	4.14	4.00	104%	90% - 110%	Yes
MRCVS#1	3.16	3.00	105%	90% - 110%	Yes
MRCVS#2	3.15	3.00	105%	90% - 110%	Yes
LCS	4.14	4.00	104%	90% - 110%	Yes
LCSD	4.14	4.00	104%	90% - 110%	Yes

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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: Two (2) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960530
Date: November 21, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 9, 2006
Analytical Batch: 11AN06H

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
960530-1	SC-700B-WDR-11-8-06	15:00	13:39	mg/L	1.00	0.200	2.53
960530-2	SC-100B-WDR-11-8-06	15:00	13:50	mg/L	1.00	0.200	3.22

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960522-40	3.37	3.37	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	960522-40	3.37	1.00	4.00	4.00	7.37	7.37	100%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	4.01	4.00	100%	90% - 110%	Yes
MRCVS#1	2.99	3.00	99.7%	90% - 110%	Yes
MRCVS#2	3.00	3.00	100%	90% - 110%	Yes
LCS	4.02	4.00	101%	90% - 110%	Yes
LCSD	4.00	4.00	100%	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: Two (2) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 111606B

Laboratory No.: 960530
Date: November 21, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 16, 2006
Analytical Batch: 111606B

Investigation: **Total Manganese by Inductively Coupled Argon Plasma Atomic Emission Spectrometer using SW 6010B**

Analytical Results Total Manganese

TLI I.D.	Field I.D.	Sample Time	Method	Run Time	Units	DF	RL	Results
960530-1	SC-700B-WDR-11-E	15:00	SW 6010B	15:20	mg/L	1.04	0.500	ND
960530-2	SC-100B-WDR-11-E	15:00	SW 6010B	15:51	mg/L	1.04	0.500	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960530-2T	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	960530-2T	0.00	1.04	0.500	0.520	0.471	0.520	90.6%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.480	0.500	96.0%	90% - 110%	Yes
MRCVS#1	0.528	0.500	106%	90% - 110%	Yes
ICS	0.509	0.500	102%	80% - 120%	Yes
LCS	0.497	0.500	99.4%	90% - 110%	Yes

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Two (2) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 111706A

Laboratory No.: 960530
Date: November 21, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 17, 2006
Analytical Batch: 111706A

Investigation: **Total Dissolved by Inductively Coupled Argon Plasma Atomic Emission Spectrometer using SW 6010B**

Analytical Results Total Sodium

TLI I.D.	Field I.D.	Sample Time	Method	Run Time	Units	DF	RL	Results
960530-1	SC-700B-WDR-11-E	15:00	SW 6010B	13:08	mg/L	52.1	26.1	1020
960530-2	SC-100B-WDR-11-E	15:00	SW 6010B	13:47	mg/L	52.1	26.1	1200

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960530-1	1020	981	3.90%	≤ 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	960530-2	1200	52.1	10.0	521	1730	1721	102%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	9.90	10.0	99.0%	90% - 110%	Yes
MRCVS#1	9.59	10.0	95.9%	90% - 110%	Yes
ICS	2.22	2.00	111%	80% - 120%	Yes
LCS	10.1	10.0	101%	90% - 110%	Yes

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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: Two (2) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 111706A

Laboratory No.: 960530
Date: November 21, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 17, 2006
Analytical Batch: 111706A

Investigation: **Total Calcium by Inductively Coupled Argon Plasma Atomic Emission Spectrometer using SW 6010B**

Analytical Results Total Calcium

TLI I.D.	Field I.D.	Sample Time	Method	Run Time	Units	DF	RL	Results
960530-1	SC-700B-WDR-11-8	15:00	SW 6010B	13:08	mg/L	52.1	26.1	185
960530-2	SC-100B-WDR-11-8	15:00	SW 6010B	13:47	mg/L	52.1	26.1	243

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960530-1	185	183	1.09%	≤ 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	960530-2	243	52.1	10.0	521	733	764	94.0%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	9.87	10.0	98.7%	90% - 110%	Yes
MRCVS#1	10.4	10.0	104%	90% - 110%	Yes
ICS	2.04	2.00	102%	80% - 120%	Yes
LCS	10.1	10.0	101%	90% - 110%	Yes

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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: Two (2) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 111706A

Laboratory No.: 960530
Date: November 21, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 17, 2006
Analytical Batch: 111706A

Investigation: **Total Magnesium by Inductively Coupled Argon Plasma Atomic Emission Spectrometer using SW 6010B**

Analytical Results Total Magnesium

TLI I.D.	Field I.D.	Sample Time	Method	Run Time	Units	DF	RL	Results
960530-1	SC-700B-WDR-11-ξ	15:00	SW 6010B	12:42	mg/L	2.08	1.04	19.4
960530-2	SC-100B-WDR-11-ξ	15:00	SW 6010B	12:45	mg/L	2.08	1.04	24.9

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960530-1	19.4	18.5	4.75%	≤ 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	960530-1	19.4	2.08	10.0	20.8	36.8	40.2	83.7%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	10.1	10.0	101%	90% - 110%	Yes
MRCVS#1	10.6	10.0	106%	90% - 110%	Yes
ICS	2.02	2.00	101%	80% - 120%	Yes
LCS	10.2	10.0	102%	90% - 110%	Yes

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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: Two (2) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 111706A

Laboratory No.: 960530
Date: November 21, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 17, 2006
Analytical Batch: 111706A

Investigation: **Total Potassium by Inductively Coupled Argon Plasma Atomic Emission Spectrometer using SW 6010B**

Analytical Results Total Potassium

TLI I.D.	Field I.D.	Sample Time	Method	Run Time	Units	DF	RL	Results
960530-1	SC-700B-WDR-11-E	15:00	SW 6010B	12:42	mg/L	2.08	1.04	18.4
960530-2	SC-100B-WDR-11-E	15:00	SW 6010B	12:45	mg/L	2.08	1.04	25.0

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960530-1	18.4	18.1	1.64%	≤ 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	960530-1	18.4	2.08	10.0	20.8	43.5	39.2	121%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	9.76	10.0	97.6%	90% - 110%	Yes
MRCVS#1	9.81	10.0	98.1%	90% - 110%	Yes
ICS	1.86	2.00	93.0%	80% - 120%	Yes
LCS	9.85	10.0	98.5%	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: Two (2) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 111606B

Laboratory No.: 960530
Date: November 21, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 16, 2006
Analytical Batch: 111606B

Investigation: **Total Iron by Inductively Coupled Argon Plasma Atomic Emission Spectrometer using SW 6010B**

Analytical Results Total Iron

TLI I.D.	Field I.D.	Sample Time	Method	Run Time	Units	DF	RL	Results
960530-1	SC-700B-WDR-11-8	15:00	SW 6010B	15:20	mg/L	1.04	0.300	ND
960530-2	SC-100B-WDR-11-8	15:00	SW 6010B	15:51	mg/L	1.04	0.300	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960530-1T	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	960530-1T	0.00	1.04	0.500	0.520	0.478	0.520	91.9%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.507	0.500	101%	90% - 110%	Yes
MRCVS#1	0.531	0.500	106%	90% - 110%	Yes
ICS	0.539	0.500	108%	80% - 120%	Yes
LCS	0.505	0.500	101%	90% - 110%	Yes

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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: Two (2) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 111606B

Laboratory No.: 960530
Date: November 21, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 16, 2006
Analytical Batch: 111606B

Investigation: **Total Strontium by Inductively Coupled Argon Plasma Atomic Emission Spectrometer using SW 6010B**

Analytical Results Total Strontium

TLI I.D.	Field I.D.	Sample Time	Method	Run Time	Units	DF	RL	Results
960530-1	SC-700B-WDR-11-8	15:00	SW 6010B	16:29	mg/L	5.21	0.0521	4.20
960530-2	SC-100B-WDR-11-8	15:00	SW 6010B	16:35	mg/L	10.4	0.104	6.45

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960530-2T	6.45	6.09	5.74%	≤ 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	960530-2T	6.45	10.4	0.500	5.20	12.0	11.7	107%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.459	0.500	91.8%	90% - 110%	Yes
MRCVS#1	0.514	0.500	103%	90% - 110%	Yes
LCS	0.474	0.500	94.8%	90% - 110%	Yes

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

Respectfully submitted,
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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Two (2) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 111706B

Laboratory No.: 960530
Date: November 21, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 17, 2006
Analytical Batch: 111706B

Investigation: **Total Barium by Inductively Coupled Argon Plasma Atomic Emission Spectrometer using SW 6010B**

Analytical Results Total Barium

TLI I.D.	Field I.D.	Sample Time	Method	Run Time	Units	DF	RL	Results
960530-1	SC-700B-WDR-11-E	15:00	SW 6010B	17:40	mg/L	1.04	0.300	ND
960530-2	SC-100B-WDR-11-E	15:00	SW 6020	17:53	mg/L	1.04	0.300	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960530-1	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	960530-1	0.00	1.04	2.50	2.60	2.60	2.60	100%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	5.30	5.00	106%	90% - 110%	Yes
MRCVS#1	5.16	5.00	103%	90% - 110%	Yes
MRCVS#2	5.00	5.00	100%	90% - 110%	Yes
LCS	5.14	5.00	103%	90% - 110%	Yes

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Attention: Shawn Duffy
Sample: Two (2) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 111606B

Laboratory No.: 960530
Date: November 21, 2006
Collected: November 8, 2006
Received: November 8, 2006
Prep/ Analyzed: November 16, 2006
Analytical Batch: 111606B

Investigation: **Total Dissolved Iron by Inductively Coupled Argon Plasma Atomic Emission Spectrometer using SW 6010B**

Analytical Results Total Dissolved Iron

TLI I.D.	Field I.D.	Sample Time	Method	Run Time	Units	DF	RL	Results
960530-1	SC-700B-WDR-11-E	15:00	SW 6010B	15:43	mg/L	1.04	0.300	ND
960530-2	SC-100B-WDR-11-E	15:00	SW 6010B	15:47	mg/L	1.04	0.300	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960530-1T	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	960530-1T	0.00	1.04	0.500	0.520	0.478	0.520	91.9%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.507	0.500	101%	90% - 110%	Yes
MRCVS#1	0.531	0.500	106%	90% - 110%	Yes
ICS	0.539	0.500	108%	80% - 120%	Yes
LCS	0.505	0.500	101%	90% - 110%	Yes

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

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Mona Nassimi, Manager
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CHAIN OF CUSTODY RECORD

960530 [IM3Plant-32]

COC Number IM3Plant-32
TURNAROUND TIME 10Days
DATE 11/08/06 PAGE 1 OF 1

COMPANY 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 346129.IM.02.E2
SAMPLERS (SIGNATURE

Rec'd 11/08/06
s17b 960530

	SAMPLE I.D.	DATE	TIME	DESCRIPTION	Ammonia (350.3)	Dissolved Fe (6010B)	EC (120.1), pH (150.1)	TDS (160.1)	TSS (160.2) ALK (310.1), Turb (180.0)	Total Metals (6010B) See List Below	TOC (415.2)	Diss. Silica (370.1)	Anions (Cl,F,NO3, NO2,SO4) (300.0)	Total Phosphorous (365.2)	NUMBER OF CONTAINERS	COMMENTS
-1	SC-700B-WDR-11-8-06	11/08/06	1500		X	X	X	X	X	X	X	X	X	X	7	pH - 7
-2	SC-100B-WDR-11-8-06	11/08/06	1500		X	X	X	X	X	X	X	X	X	X	7	pH - 7
															~~20~~ 14	TOTAL NUMBER OF CONTAINERS

ALERT!! Level III QC

For Sample Conditions See Form Attached

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	GARY SARLE	CH2MHILL QUI FIL-3	11-08-06 1519
Signature (Received)	MARGARITA	T-L-I	11/08/06 21:10
Signature (Relinquished)			
Signature (Received)			
Signature (Relinquished)			
Signature (Received)			

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

SPECIAL REQUIREMENTS:
The metals include: Sb, Ca, Fe, Mg, Mn, K, Na, Sr

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Table of Contents
TLI Laboratory Data Package

For Laboratory Number: 960747

Section 1.0

Case Narrative

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

Established 1931

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

December 1, 2006

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-33 PROJECT, GROUNDWATER MONITORING,

TLI NO.: 960747

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-33 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 November 15, 2006, 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 samples for Total Metals analysis were received with a pH of 7. The samples were preserved in the lab.

Antimony by SW 6010B was requested on the chain of custody but Shawn Duffy cancelled the Antimony analysis and added Barium by the same method.

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

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

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi
Manager, Analytical Services

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

Section 2.0

Summary Table of Final Results

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

Laboratory No.: 960747
Date Received: November 15, 2006

Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Analytical Results Summary

Lab I.D.	Sample I.D.	Sample Time	EPA 120.1 EC	EPA 160.2 TSS	EPA 160.1 TDS	EPA 150.1 pH	EPA 365.3 Phosphorus total	EPA 415.2 TOC	EPA 354.1 Nitrite as N
			µmhos/cm	mg/L	mg/L	Units	mg/L	mg/L	mg/L
960747	SC-701-WDR-11-15-06	14:30	43300	11.3	21800	7.88	1.08	1.82	0.0153

Lab I.D.	Sample I.D.	Sample Time	EPA 300.0 Fluoride	EPA 300.0 Sulfate	EPA 300.0 Chloride	EPA 300.0 Nitrate as N	EPA 310.1 Alkalinity	EPA 310.1 Bicarbonate	EPA 310.1 Carbonate
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
960747	SC-701-WDR-11-15-06	14:30	11.3	2710	10400	11.4	436	532	ND

Lab I.D.	Sample I.D.	Sample Time	EPA 350.2 Ammonia as N	EPA 180.1 Turbidity
			mg/L	NTU
960747	SC-701-WDR-11-15-06	14:30	ND	ND

ND: Non Detected (below reporting limit)
mg/L: Milligrams per liter.

Note: The following "Significant Figures" rule has been applied to all results:
Results below 0.01ppm will have two (2) significant figures.
Result above or equal to 0.01ppm will have three (3) significant figures.
Quality Control data will always have three (3) significant figures.

TRUESDAIL LABORATORIES, INC.

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

Laboratory No.: 960747
Date Received: November 15, 2006

Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Analytical Results Summary

Lab I.D.	Sample I.D.	Sample Time	SW 6010B Manganese	SW 6010B Sodium	SW 6010B Calcium	SW 6010B Magnesium	SW 6010B Potassium	SW 6010B Iron Total
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
960747	SC-701-WDR-11-15-06	14:30	ND	5580	946	110	95.5	ND

Lab I.D.	Sample I.D.	Sample Time	SW 6010B Strontium	SW 6010B Barium	EPA 370.1 Silica Dissolved	SW 6010B Iron Dissolved
			mg/L	mg/L	mg/L	mg/L
960747	SC-701-WDR-11-15-06	14:30	33.3	ND	35.5	ND

ND: Non Detected (below reporting limit)
mg/L: Milligrams per liter.

Note: The following "Significant Figures" rule has been applied to all results:
Results below 0.01ppm will have two (2) significant figures.
Result above or equal to 0.01ppm will have three (3) significant figures.
Quality Control data will always have three (3) significant figures.

004

Section 3.0

Final Reports

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: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960747
Date: December 1, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 17, 2006
Analytical Batch: 11Si06A

Investigation: **Dissolved Silica by EPA 370.1**

Analytical Results Dissolved Silica

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
960747	SC-701-WDR-11-15-06	14:30	mg/L	25.0	1.00	35.5

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960747	35.5	35.3	0.56%	≤ 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	960747	35.5	25.0	0.400	10.0	44.6	45.5	91.0%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.232	0.228	102%	90% - 110%	Yes
MRCVS#1	0.398	0.400	99.5%	90% - 110%	Yes
LCS	0.442	0.456	96.9%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi

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 Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960747
Date: December 1, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 18, 2006
Analytical Batch: 11TP06C

Investigation: **Total Phosphorus by Method EPA 365.3**

Analytical Results Total Phosphorus

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
960747	SC-701-WDR-11-15-06	14:30	mg/L	5.00	0.100	1.08

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960747	1.08	1.07	0.93%	≤ 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	960734-3	0.212	1.00	0.130	0.130	0.340	0.342	98.5%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.130	0.130	100%	90% - 110%	Yes
MRCVS#1	0.140	0.130	108%	90% - 110%	Yes
LCS	0.264	0.261	101%	90% - 110%	Yes
LCSD	0.261	0.261	100%	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 Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960747
Date: December 1, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 21, 2006
Analytical Batch: 11TOC06D

Investigation: **Total Organic Carbon by EPA 415.2**

Analytical Results for Total Organic Carbon

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
960747	SC-701-WDR-11-15-06	14:30	mg/L	1.00	0.500	1.82

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960747	1.82	1.52	18.0%	≤ 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	960732	3.37	1.00	20.0	20.0	21.6	23.4	91.2%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	10.0	10.0	100%	90% - 110%	Yes
MRCVS#1	9.47	10.0	94.7%	90% - 110%	Yes
MRCVS#2	9.69	10.0	96.9%	90% - 110%	Yes
LCS	19.9	20.0	99.5%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960747
Date: December 1, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 16, 2006
Analytical Batch: 11EC06F

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	MDL	DF	RL	Results
960747	SC-701-WDR-11-15-06	µmhos/cm	EPA 120.1	0.705	10.0	20.0	43300

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960747	43300	43400	0.23%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
CCS	667	706	94.5%	90% - 110%	Yes
CVS#1	945	1000	94.5%	90% - 110%	Yes
LCS	667	706	94.5%	90% - 110%	Yes

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 Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960747
Date: December 1, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 16, 2006
Analytical Batch: 11TSS06H

Investigation: **Total Suspended Solids by EPA 160.2**

Analytical Results Total Suspended Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
960747	SC-701-WDR-11-15-06	mg/L	EPA 160.2	2.50	11.3

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	960731-2	12.0	12.2	0.83%	≤ 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS 1	99.0	100	99.0%	90% - 110%	Yes
LCS 2	95.0	100	95.0%	90% - 110%	Yes

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

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 Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960747
Date: December 1, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 16, 2006
Analytical Batch: 11TDS06G

Investigation: **Total Dissolved Solids by EPA 160.1**

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
960747	SC-701-WDR-11-15-06	mg/L	EPA 160.1	1250	21800

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	960747	21800	22200	0.91%	≤ 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS 1	476	500	95.2%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960747
Date: December 1, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 16, 2006
Analytical Batch: 11PH06M

Investigation: **pH by EPA 150.1**

Analytical Results pH

TLI I.D.	Field I.D.	Run Time	Units	MDL	RL	Results
960747	SC-701-WDR-11-15-06	08:52	pH Units	0.0570	2.00	7.88

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	960747	7.88	7.88	0.00	± 0.100 Units	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Difference (Units)	Acceptance Limits	QC Within Control
LCS	7.00	7.00	0.00	± 0.100 Units	Yes
LCS #1	7.00	7.00	0.00	± 0.100 Units	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

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REPORT

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

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960747
Date: December 1, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 16, 2006
Analytical Batch: 11TUC06P

Investigation: **Turbidity by EPA 180.1**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
960747	SC-701-WDR-11-15-06	NTU	EPA 180.1	1.00	0.100	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	960737-26	0.156	0.152	1.30%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS 1	7.45	8.00	93.1%	90% - 110%	Yes
LCS 2	7.65	8.00	95.6%	90% - 110%	Yes
LCS 3	7.70	8.00	96.3%	90% - 110%	Yes

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

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 Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960747
Date: December 1, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 20, 2006
Analytical Batch: 11ALK06C

Investigation: **Alkalinity by Method EPA 310.1**

Analytical Results Total Alkalinity, Bicarbonate, Carbonate

TLI I.D.	Field I.D.	Units	RL	Total Alkalinity	Bicarbonate	Carbonate
960747	SC-701-WDR-11-15-06	mg/L	5.00	436	532	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960747	436	456	4.48%	≤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	960747	436	1.00	100	100	538	536	102%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	102	100	102%	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 Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960747
Date: December 1, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 16, 2006
Analytical Batch: 11NH306E

Investigation: **Ammonia as N by EPA 350.2**

Analytical Results for Ammonia as N

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
960747	SC-701-WDR-11-15-06	14:30	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	960747	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	960560-13	0.00	1.00	10.0	10.0	9.57	10.0	95.7%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	9.20	10.0	92.0%	90% - 110%	Yes
LCSD	9.57	10.0	95.7%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

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INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

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14201 FRANKLIN AVENUE
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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 Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960747
Date: December 1, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 16, 2006
Analytical Batch: 11NO206L

Investigation: **Nitrite as N by EPA 354.1**

Analytical Results Nitrite as N

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
960747	SC-701-WDR-11-15-06	14:30	14:09	mg/L	1.00	0.0050	0.0153

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960747	0.0153	0.0156	1.94%	≤ 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	960734-3	0.0078	1.00	0.100	0.100	0.106	0.108	98.2%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.0863	0.0900	95.9%	90% - 110%	Yes
MRCVS#1	0.0938	0.100	93.8%	90% - 110%	Yes
LCS	0.179	0.180	99.4%	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: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960747
Date: December 1, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 16, 2006
Analytical Batch: 11AN06O

Investigation: **Sulfate by Method EPA 300.0**

Analytical Results Sulfate

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
960747	SC-701-WDR-11-15-06	14:30	12:24	mg/L	500	250	2710

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960747	2710	2690	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	960747	2710	500	20.0	10000	12600	12710	98.9%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	19.6	20.0	98.0%	90% - 110%	Yes
MRCVS#1	14.9	15.0	99.3%	90% - 110%	Yes
LCS	19.6	20.0	98.0%	90% - 110%	Yes
LCSD	19.6	20.0	98.0%	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: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960747
Date: December 1, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 16, 2006
Analytical Batch: 11AN06O

Investigation: **Chloride by Method EPA 300.0**

Analytical Results Chloride

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
960747	SC-701-WDR-11-15-06	14:30	13:29	mg/L	5000	1000	10400

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960747	10400	10400	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	960747	10400	5000	4.00	20000	31400	30400	105%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	3.95	4.00	98.8%	90% - 110%	Yes
MRCVS#1	2.94	3.00	98.0%	90% - 110%	Yes
MRCVS#2	2.93	3.00	97.7%	90% - 110%	Yes
LCS	3.93	4.00	98.3%	90% - 110%	Yes
LCSD	3.95	4.00	98.8%	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: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960747
Date: December 1, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 16, 2006
Analytical Batch: 11AN06O

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
960747	SC-701-WDR-11-15-06	14:30	11:29	mg/L	5.00	1.00	11.3

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960747	11.3	11.5	1.75%	≤ 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	960747	11.3	5.00	4.00	20.0	30.7	31.3	97.0%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	4.13	4.00	103%	90% - 110%	Yes
MRCVS#1	3.12	3.00	104%	90% - 110%	Yes
LCS	4.12	4.00	103%	90% - 110%	Yes
LCSD	4.13	4.00	103%	90% - 110%	Yes

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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: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Laboratory No.: 960747
Date: December 1, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 16, 2006
Analytical Batch: 11AN06O

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
960747	SC-701-WDR-11-15-06	14:30	11:29	mg/L	5.00	1.00	11.4

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960747	11.4	11.4	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	960747	11.4	5.00	4.00	20.0	31.6	31.4	101%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	3.99	4.00	99.8%	90% - 110%	Yes
MRCVS#1	2.96	3.00	98.7%	90% - 110%	Yes
LCS	3.98	4.00	99.5%	90% - 110%	Yes
LCSD	3.99	4.00	99.8%	90% - 110%	Yes

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 111606B

Laboratory No.: 960747
Date: December 1, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 16, 2006
Analytical Batch: 111606B

Investigation: **Total Manganese by Inductively Coupled Argon Plasma Atomic Emission Spectrometer using SW 6010B**

Analytical Results Total Manganese

TLI I.D.	Field I.D.	Sample Time	Method	Run Time	Units	DF	RL	Results
960747	SC-701-WDR-11-15-06	14:30	SW 6010B	16:00	mg/L	1.04	0.500	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960530-2T	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	960530-2T	0.00	1.04	0.500	0.520	0.471	0.520	90.6%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.480	0.500	96.0%	90% - 110%	Yes
MRCVS#1	0.528	0.500	106%	90% - 110%	Yes
ICS	0.509	0.500	102%	80% - 120%	Yes
LCS	0.497	0.500	99.4%	90% - 110%	Yes

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

Respectfully submitted,
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Mona Nassimi, Manager
Analytical Services

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 111706A

Laboratory No.: 960747
Date: December 1, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 17, 2006
Analytical Batch: 111706A

Investigation: **Total Dissolved by Inductively Coupled Argon Plasma Atomic Emission Spectrometer using SW 6010B**

Analytical Results Total Sodium

TLI I.D.	Field I.D.	Sample Time	Method	Run Time	Units	DF	RL	Results
960747	SC-701-WDR-11-15-06	14:30	SW 6010B	14:10	mg/L	104	52.0	5580

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960530-1	1020	981	3.90%	≤ 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	960530-2	1200	52.1	10.0	521	1730	1721	102%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	9.90	10.0	99.0%	90% - 110%	Yes
MRCVS#1	9.59	10.0	95.9%	90% - 110%	Yes
ICS	2.22	2.00	111%	80% - 120%	Yes
LCS	10.1	10.0	101%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
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Respectfully submitted,
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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 111706A

Laboratory No.: 960747
Date: December 1, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 17, 2006
Analytical Batch: 111706A

Investigation: **Total Calcium by Inductively Coupled Argon Plasma Atomic Emission Spectrometer using SW 6010B**

Analytical Results Total Calcium

TLI I.D.	Field I.D.	Sample Time	Method	Run Time	Units	DF	RL	Results
960747	SC-701-WDR-11-15-06	14:30	SW 6010B	13:37	mg/L	52.1	26.1	946

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960530-1	185	183	1.09%	≤ 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	960530-2	243	52.1	10.0	521	733	764	94.0%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	9.87	10.0	98.7%	90% - 110%	Yes
MRCVS#1	10.4	10.0	104%	90% - 110%	Yes
ICS	2.04	2.00	102%	80% - 120%	Yes
LCS	10.1	10.0	101%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi

Mona Nassimi, Manager
Analytical Services

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 111706A

Laboratory No.: 960747
Date: December 1, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 17, 2006
Analytical Batch: 111706A

Investigation: **Total Magnesium by Inductively Coupled Argon Plasma Atomic Emission Spectrometer using SW 6010B**

Analytical Results Total Magnesium

TLI I.D.	Field I.D.	Sample Time	Method	Run Time	Units	DF	RL	Results
960747	SC-701-WDR-11-15-06	14:30	SW 6010B	14:07	mg/L	20.8	10.4	110

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960530-1	19.4	18.5	4.75%	≤ 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	960530-1	19.4	2.08	10.0	20.8	36.8	40.2	83.7%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	10.1	10.0	101%	90% - 110%	Yes
MRCVS#1	10.6	10.0	106%	90% - 110%	Yes
ICS	2.02	2.00	101%	80% - 120%	Yes
LCS	10.2	10.0	102%	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: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 111706A

Laboratory No.: 960747
Date: December 1, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 17, 2006
Analytical Batch: 111706A

Investigation: **Total Potassium by Inductively Coupled Argon Plasma Atomic Emission Spectrometer using SW 6010B**

Analytical Results Total Potassium

TLI I.D.	Field I.D.	Sample Time	Method	Run Time	Units	DF	RL	Results
960747	SC-701-WDR-11-15-06	14:30	SW 6010B	14:07	mg/L	20.8	10.4	95.5

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960530-1	18.4	18.1	1.64%	≤ 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	960530-1	18.4	2.08	10.0	20.8	43.5	39.2	121%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	9.76	10.0	97.6%	90% - 110%	Yes
MRCVS#1	9.81	10.0	98.1%	90% - 110%	Yes
ICS	1.86	2.00	93.0%	80% - 120%	Yes
LCS	9.85	10.0	98.5%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 111606B

Laboratory No.: 960747
Date: December 1, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 16, 2006
Analytical Batch: 111606B

Investigation: **Total Iron by Inductively Coupled Argon Plasma Atomic Emission Spectrometer using SW 6010B**

Analytical Results Total Iron

TLI I.D.	Field I.D.	Sample Time	Method	Run Time	Units	DF	RL	Results
960747	SC-701-WDR-11-15-06	14:30	SW 6010B	16:00	mg/L	1.04	0.300	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960530-1T	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	960530-1T	0.00	1.04	0.500	0.520	0.478	0.520	91.9%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.507	0.500	101%	90% - 110%	Yes
MRCVS#1	0.531	0.500	106%	90% - 110%	Yes
ICS	0.539	0.500	108%	80% - 120%	Yes
LCS	0.505	0.500	101%	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.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

Established 1931

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

REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 111606B

Laboratory No.: 960747
Date: December 1, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 16, 2006
Analytical Batch: 111606B

Investigation: **Total Strontium by Inductively Coupled Argon Plasma Atomic Emission Spectrometer using SW 6010B**

Analytical Results Total Strontium

TLI I.D.	Field I.D.	Sample Time	Method	Run Time	Units	DF	RL	Results
960747	SC-701-WDR-11-15-06	14:30	SW 6010B	16:55	mg/L	104	1.04	33.3

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960530-2T	6.45	6.09	5.74%	≤ 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	960530-2T	6.45	10.4	0.500	5.20	12.0	11.7	107%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.459	0.500	91.8%	90% - 110%	Yes
MRCVS#1	0.514	0.500	103%	90% - 110%	Yes
LCS	0.474	0.500	94.8%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi

Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 111706B

Laboratory No.: 960747
Date: December 1, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 17, 2006
Analytical Batch: 111706B

Investigation: **Total Barium by Inductively Coupled Argon Plasma Atomic Emission Spectrometer using SW 6010B**

Analytical Results Total Barium

TLI I.D.	Field I.D.	Sample Time	Method	Run Time	Units	DF	RL	Results
960747	SC-701-WDR-11-15-06	14:30	SW 6010B	17:57	mg/L	1.04	0.300	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960530-1	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	960530-1	0.00	1.04	2.50	2.60	2.60	2.60	100%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	5.30	5.00	106%	90% - 110%	Yes
MRCVS#1	5.16	5.00	103%	90% - 110%	Yes
MRCVS#2	5.00	5.00	100%	90% - 110%	Yes
LCS	5.14	5.00	103%	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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www.truesdail.com

REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 111606B

Laboratory No.: 960747
Date: December 1, 2006
Collected: November 15, 2006
Received: November 15, 2006
Prep/ Analyzed: November 16, 2006
Analytical Batch: 111606B

Investigation: **Total Dissolved Iron by Inductively Coupled Argon Plasma Atomic Emission Spectrometer using SW 6010B**

Analytical Results Total Dissolved Iron

TLI I.D.	Field I.D.	Sample Time	Method	Run Time	Units	DF	RL	Results
960747	SC-701-WDR-11-15-06	14:30	SW 6010B	15:56	mg/L	1.04	0.300	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	960530-1T	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	960530-1T	0.00	1.04	0.500	0.520	0.478	0.520	91.9%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.507	0.500	101%	90% - 110%	Yes
MRCVS#1	0.531	0.500	106%	90% - 110%	Yes
ICS	0.539	0.500	108%	80% - 120%	Yes
LCS	0.505	0.500	101%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

Rec'd 11/15/06

960747

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

[IM3Plant-33]

COC Number IM3Plant-33
TURNAROUND TIME 10Days
DATE 11/15/06 PAGE 1 OF 1

960747

COMPANY 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 346129.IM.02.E2
SAMPLERS (SIGNATURE)

SAMPLE I.D.	DATE	TIME	DESCRIPTION	Ammonia (350.3)	Dissolved Fe (6010B)	EC (120.1), pH (150.1)	TDS (160.1)	TSS (160.2) ALK (310.1), Turb (180.0)	Total Metals (6010B) See List Below	TOC (415.2)	Diss. Silica (370.1)	Anions (Cl,F,NO3, NO2,SO4) (300.0)	Total Phosphorous (365.2)	NUMBER OF CONTAINERS	COMMENTS
SC-701-WDR-11-15-06	11/15/06	14:30		X	X	X	X	X	X	X	X	X	X	10 DAC 2	pH-7
														DAC	
														12	TOTAL NUMBER OF CONTAINERS

ALERT!!
Level III QC

For Sample Conditions
See Form Attached

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CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	David Carroll	OMI	11-15-06 15:30
Signature (Received)	Mangerow	T-L-I	11-15-06 21:15
Signature (Relinquished)			
Signature (Received)			
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

The metals include: Sb, Ca, Fe, Mg, Mn, K, Na, Sr