Pacific Gas and Electric Company

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February 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 R7-2004-0103**
WDID No. 7B 36 2033 001
PG&E Topock Compressor Station, Needles, California
Interim Measure No. 3 Groundwater Treatment System
Discharge to Injection Well(s)
January 2006 Monitoring Report

Dear Mr. Perdue:

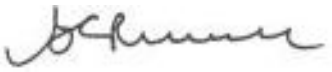
Enclosed is the Board Order R7-2004-0103 January 2006 Monitoring Report for the Pacific Gas and Electric Company (PG&E) Topock Compressor Station, Interim Measure (IM) No. 3 Groundwater Treatment System. This report is being submitted in compliance with the Waste Discharge Requirements (WDRs) issued by the Colorado River Basin Regional Water Quality Control Board (Water Board) under Board Order R7-2004-0103.

WDRs under Board Order R7-2004-0103 apply to IM No. 3 Treatment System discharge by subsurface injection wells only. In addition, the Water Board issued 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 are submitted under separate covers.

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

Sincerely,



Curt Russell
Topock Onsite Project Manager

Enclosures:

Board Order R7-2004-0103 January 2006 Monitoring Report for the IM No. 3 Groundwater Treatment System.

cc: José Cortez, RWQCB
Liann Chavez, RWQCB
Tom Vandenberg, RWQCB
Norman Shopay, DTSC

January 2006 Monitoring Report for Interim Measure No. 3 Groundwater Treatment System

Waste Discharge Requirements
Board Order No. R7-2004-0103
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

February 15, 2006

CH2MHILL
155 Grand Avenue, Suite 1000
Oakland, CA 94612

January 2006 Monitoring Report
Interim Measures No. 3 Groundwater Treatment System
Waste Discharge Requirements Order No. R7-2004-0103
PG&E Topock Compressor Station
Needles, California

Prepared for
Pacific Gas and Electric Company

February 15, 2006

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

Dennis Fink

Dennis Fink, PE No. 68986
Project Engineer

Contents

Tables

Figures

Appendix

Acronyms and Abbreviations

gpm	gallons per minute
IM	Interim Measure
MBC	MBC Applied Environmental Sciences Laboratories
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.

California Regional Water Quality Control Board, Colorado River Basin Region (Water Board) Board Order No. R7-2004-0103 authorizes PG&E to inject treated groundwater into injection wells located on San Bernardino County Assessor's Parcel No. 650-151-06. The Monitoring and Reporting Program (MRP) under the order requires monthly monitoring reports to be submitted by the 15th day of the following month.

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

In addition to Board Order No. R7-2004-0103, 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. The locations of the sampling stations 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 the WDRs. Full-time operation of the treatment system commenced in August 2005.

During January 2006, groundwater was extracted from extraction wells TW-2D and TW-3D from January 1 through January 25. New extraction well PE-1 was commissioned on January 25 and began routine operations on January 26, taking TW-2D offline. The target pump rate was 135 gallons per minute (gpm) during January 2006 (excluding scheduled and unscheduled downtime, which is described in Section 4.0).

4.0 Groundwater Treatment System Flow Rates

The January 2006 treatment system monthly average flow rates are presented in Table 2. 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).

Periods of extraction system downtime (i.e., anytime all extraction wells were shut down simultaneously) during January 2006 are summarized below.

- **January 17, 2006**: A scheduled shutdown of the extraction well system occurred to complete the PE-1 pipeline construction tie-ins to the IM No. 3 facility. Additional IM No. 3 maintenance was completed concurrent with the construction tie-ins. The extraction well system was shut down at 8:08 a.m. and was re-started at 8:00 p.m. at reduced pumping rates, between 40 and 70 gpm. The pump rate was increased to approximately 135 gpm by 8:30 a.m. on January 18, 2006. Extraction system downtime was approximately 11 hours 52 minutes.
- **January 21 and 22, 2006:** The IM No. 3 extraction well system was shut off at 12:26 a.m. on Saturday, January 21, 2006. A hose ruptured during a clean-in-place event of spare microfilter modules inside the facility secondary containment, resulting in approximately 200 gallons of citric acid solution draining into the process drain tank (T-900) and being introduced back into the system. The citric acid affected the iron oxidation process and solids removal in the clarifier; therefore, the system operated in a re-circulation mode until plant conditions returned to normal. The extraction well system was re-started on Sunday, January 22, 2006 at a flow rate of 78 gpm at 12:31 p.m. The flow rate increased to 135 gpm at 7:05 p.m. No non-compliant water was discharged into the injection wells during this event. Extraction system downtime was approximately 36 hours 5 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 cooler at 4° Celsius and transported to Truesdail or STL via courier service under chain-of-custody documentation. Truesdail transported a portion of the sludge sample to MBC Applied Environmental Sciences Laboratories (MBC) for the aquatic bioassay analysis.

Truesdail is certified by the California Department of Health Services (Certification #1237) under the State of California's Environmental Laboratory Accreditation Program. STL is certified by the California Department of Health Services (Certification #1118) under the Environmental Laboratory Accreditation Program. MBC is certified by the California Department of Health Services (Certification # 1788) under the State of California's 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 CFR 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 procedures and schedules approved in the *Groundwater Compliance Monitoring Plan for Interim Measures No. 3 Injection Area* (CH2M HILL 2005). Quarterly groundwater monitoring analytical results will be 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 laboratory(ies) 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 January 11, 2006.
- The effluent was sampled weekly; sample dates January 4, 11, 18, and 25, 2006. Additional total dissolved solids samples were collected between January 19 and February 1, 2006, for process control purposes, to correlate specific conductivity readings with total dissolved solids concentrations.
- The reverse osmosis concentrate was sampled monthly; sample date January 11, 2006.
- The sludge was sampled monthly; sample date January 11, 2006. WDR requirements state that sludge is to be sampled each time sludge is transported offsite unless sludge is transported offsite more frequently than monthly, in which case the sampling frequency shall be monthly. The sludge is required to have an aquatic bioassay test quarterly; an aquatic bioassay test will be conducted during the first quarter of 2006.

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

7.0 Conclusions

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

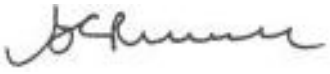
In addition, no incidents of non-compliance were identified during the reporting period, and no events that caused an immediate or potential threat to human health or the environment, or new releases of hazardous waste or hazardous waste constituents, or new solid waste management units were identified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

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: February 15, 2006

Tables

TABLE 1
Sampling Station Descriptions
January 2006 Report for IM 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:
[a] The sample event is included at the end of the sample ID (e.g. SC-100B-WDR-015).

TABLE 2
Flow Monitoring Results
January 2006 Report for IM No. 3 Groundwater Treatment System

Parameter	System Influent[a,d]	System Effluent[b,d]	Reverse Osmosis Concentrate[c,d]
Average Monthly Flowrate (gpm)	124.3	113.5	10.1

gpm: gallons per minute.
[a] Extraction wells TW-2D, TW-3D, and PE-1 were operated during January 2006.
[b] All effluent was discharged into injection well IW-2. Flow meter readings from FIT-702 were used in January 2006 to record system effluent due to communication difficulties with FIT-1202 at the injection wellhead.
[c] Reverse Osmosis flow meter reading from FIT-701.
[d] The difference between influent flow rate and the sum of the effluent and reverse osmosis concentrate flow rates is approximately 0.6 percent, which is within the range of acceptable accuracy considering the margin of error for onsite instrumentation, the water contained within the sludge, and differences in the inventory of water in the treatment system between the beginning and end of the reporting period.

TABLE 3
Board Order No. R7-2004-0103 Waste Discharge Requirements (WDRs)
Influent Monitoring Results [a]
January 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
Sample ID	**Date**																							
SC-100B-WDR-028	1/11/2006	5560	ND (0.1)	9930	7.38	3530	3530	ND (52)	ND (0.5)	ND (3.0)	ND (5.0)	ND (300)	1.46	ND (10)	2.22	ND (2.0)	ND (500)	17.1	ND (20)	4.83	0.009	686	ND (300)	ND (20)

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

[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. R7-2004-0103 Waste Discharge Requirements (WDRs)
Effluent Monitoring Results[a]
January 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 / **Units [c]** / **Sample ID**	**Date**	TDS mg/L	Turbidity NTU	Specific Conductance µmhos/cm	pH pHunits	Chromium µg/L	Hexavalent Chromium µg/L	Aluminium µg/L	Ammonia (as N) mg/L	Antimony µg/L	Arsenic µg/L	Barium µg/L	Boron mg/L	Copper µg/L	Fluoride mg/L	Lead µg/L	Manganese µg/L	Molybdenum µg/L	Nickel µg/L	Nitrate (as N) mg/L	Nitrite (as N) mg/L	Sulfate mg/L	Iron µg/L	Zinc µg/L
SC-700B-WDR-029	1/4/2006	4190	ND (0.1)	7510	7.80	ND (1.0)	ND (1.0)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SC-700B-WDR-028	1/11/2006	4270	ND (0.1)	7620	7.90	ND (1.0)	ND (1.0)	ND (52)	ND (0.5)	ND (3.0)	ND (5.0)	ND (300)	1.28	ND (10)	2.02	ND (2.0)	ND (500)	8.60	ND (20)	3.97	ND (0.005)	515	ND (300)	ND (20)
SC-700B-WDR-030	1/18/2006	4420	ND (0.1)	7460	7.80	10.7	ND (1.0)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SC-700B-1-19-06	1/19/2006	4070	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SC-700B-1-20-06	1/20/2006	4390	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SC-700B-1-23-06	1/23/2006	4350	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SC-700B-1-24-06	1/24/2006	4370	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SC-700B-1-25-06	1/25/2006	4420	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SC-700B-WDR-031	1/25/2006	4400	ND (0.1)	7900	7.89	ND (1.0)	ND (1.0)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SC-700B-1-26-06	1/26/2006	4230	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SC-700B-1-27-06	1/27/2006	4170	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SC-700B-1-28-06	1/28/2006	4230	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SC-700B-1-29-06	1/29/2006	4170	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SC-700B-2-1-06	2/1/2006	4310	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

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

[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. R7-2004-0103 Waste Discharge Requirements (WDRs)
Reverse Osmosis Concentrate Results [a]
January 2006 Monthly Report for Interim Measures No.3 Groundwater Treatment System

Required Sampling Frequency		**Monthly**																				
Analytes / **Units** [b] / **Sample ID**	**Date**	TDS mg/L	Specific Conductance µmhos/cm	pH pHunits	Chromium mg/L	Hexavalent Chromium mg/L	Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Cadmium mg/L	Cobalt mg/L	Copper mg/L	Fluoride mg/L	Lead mg/L	Molybdenum mg/L	Mercury mg/L	Nickel mg/L	Selenium mg/L	Silver mg/L	Thallium mg/L	Vanadium mg/L	Zinc mg/L
SC-701-WDR-028	1/11/2006	23600	38400	7.92	ND (0.001)	ND (0.002)	ND (0.0052)	ND (0.0052)	ND (0.3)	ND (0.0026)	ND (0.0026)	ND (0.0052)	ND (0.01)	11.6	ND (0.0026)	0.0553	ND (0.0002)	ND (0.02)	0.0229	ND (0.0052)	ND (0.0026)	0.0263	ND (0.02)

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

[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. R7-2004-0103 Waste Discharge Requirements (WDRs)
Sludge Monitoring Results[a]
January 2006 Monthly Report for Interim Measures No.3 Groundwater Treatment System

Required Sampling Frequency		Each Time Sludge is Transported Offsite [c]																		
Sample ID	Date	Chromium mg/kg	Hexavalent Chromium mg/kg	Antimony mg/kg	Arsenic mg/kg	Barium mg/kg	Beryllium mg/kg	Cadmium mg/kg	Cobalt mg/kg	Copper mg/kg	Fluoride mg/kg	Lead mg/kg	Molybdenum mg/kg	Mercury mg/kg	Nickel mg/kg	Selenium mg/kg	Silver mg/kg	Thallium mg/kg	Vanadium mg/kg	Zinc mg/kg
SC-Sludge-WDR-28	1/11/2006	35000	230	ND (200)	ND (34)	95.0	ND (17)	ND (17)	ND (170)	100	13.0	ND (17)	ND (140)	2.40	ND (140)	ND (17)	ND (34)	ND (34)	ND (170)	ND (68)

NOTES:

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

[a] Sampling Location for all Sludge Samples is the Sludge Collection Tanks (see attached P&ID TP-PR-10-10-06)

[b] Units reported in this table are those units required in the WDR

[c] Unless transport is more frequent than monthly, in which case the sampling frequency shall be monthly

TABLE 7
Board Order No. R7-2004-0103 Waste Discharge Requirements (WDRs)
Monitoring Information
January 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-028	Brian Dobbs	1/11/2006	2:45:00 PM	TLI	EPA 120.1	SC	1/12/2006	Alex Hernandez
					TLI	EPA 150.1	PH	1/12/2006	Alex Hernandez
					TLI	EPA 160.1	TDS	1/12/2006	Emilia Haley
					TLI	EPA 180.1	TRB	1/12/2006	Gautam Savani
					TLI	EPA 300.0	FL	1/13/2006	Iordan Stavrev
					TLI	EPA 300.0	NO3N	1/13/2006	Iordan Stavrev
					TLI	EPA 300.0	SO4	1/18/2006	Iordan Stavrev
					TLI	EPA 350.2	NH3N	1/12/2006	Alex Hernandez
					TLI	EPA 354.1	NO2N	1/12/2006	Hope Trinidad
					TLI	EPA 6010B	NI	1/13/2006	Riddhi Patel
					TLI	EPA 6010B	ZN	1/13/2006	Riddhi Patel
					TLI	EPA 6010B	MN	1/13/2006	Riddhi Patel
					TLI	EPA 6010B	FE	1/13/2006	Riddhi Patel
					TLI	EPA 6010B	BA	1/13/2006	Riddhi Patel
					TLI	EPA 6010B	B	1/13/2006	Riddhi Patel
					TLI	EPA 6010B	CRT	1/13/2006	Riddhi Patel
					TLI	EPA 6010B	AL	1/13/2006	Riddhi Patel
					TLI	SW 6020A	MO	1/18/2006	Victoria Than
					TLI	SW 6020A	CU	1/18/2006	Victoria Than
					TLI	SW 6020A	SB	1/18/2006	Victoria Than
					TLI	SW 6020A	PB	1/18/2006	Victoria Than
					TLI	SW 6020A	AS	1/18/2006	Victoria Than
					TLI	SW 7199	CR6	1/12/2006	Jorge Arriaga
SC-700B	SC-700B-WDR-028	Brian Dobbs	1/11/2006	2:30:00 PM	TLI	EPA 120.1	SC	1/12/2006	Alex Hernandez
					TLI	EPA 150.1	PH	1/12/2006	Alex Hernandez
					TLI	EPA 160.1	TDS	1/12/2006	Emilia Haley
					TLI	EPA 180.1	TRB	1/12/2006	Gautam Savani
					TLI	EPA 300.0	SO4	1/18/2006	Iordan Stavrev
					TLI	EPA 300.0	NO3N	1/13/2006	Iordan Stavrev
					TLI	EPA 300.0	FL	1/13/2006	Iordan Stavrev
					TLI	EPA 350.2	NH3N	1/12/2006	Alex Hernandez
					TLI	EPA 354.1	NO2N	1/12/2006	Hope Trinidad
					TLI	EPA 6010B	MN	1/13/2006	Riddhi Patel
					TLI	EPA 6010B	AL	1/13/2006	Riddhi Patel
					TLI	EPA 6010B	B	1/13/2006	Riddhi Patel
					TLI	EPA 6010B	BA	1/13/2006	Riddhi Patel

TABLE 7
Board Order No. R7-2004-0103 Waste Discharge Requirements (WDRs)
Monitoring Information
January 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-028	Brian Dobbs	1/11/2006	2:30:00 PM	TLI	EPA 6010B	CRT	1/13/2006	Riddhi Patel
					TLI	EPA 6010B	FE	1/13/2006	Riddhi Patel
					TLI	EPA 6010B	NI	1/13/2006	Riddhi Patel
					TLI	EPA 6010B	ZN	1/13/2006	Riddhi Patel
					TLI	SW 6020A	CU	1/18/2006	Victoria Than
					TLI	SW 6020A	SB	1/18/2006	Victoria Than
					TLI	SW 6020A	MO	1/18/2006	Victoria Than
					TLI	SW 6020A	AS	1/18/2006	Victoria Than
					TLI	SW 6020A	PB	1/18/2006	Victoria Than
					TLI	SW 7199	CR6	1/12/2006	Jorge Arriaga
SC-700B	SC-700B-WDR-029	Chris Knight	1/4/2006	12:10:00 PM	TLI	EPA 120.1	SC	1/5/2006	Alex Hernandez
					TLI	EPA 150.1	PH	1/5/2006	Alex Hernandez
					TLI	EPA 160.1	TDS	1/5/2006	Emilia Haley
					TLI	EPA 180.1	TRB	1/5/2006	Hope Trinidad
					TLI	EPA 6010B	CRT	1/5/2006	Riddhi Patel
					TLI	SW 7199	CR6	1/4/2006	Jorge Arriaga
SC-700B	SC-700B-WDR-030	Brian Dobbs	1/18/2006	2:20:00 PM	TLI	EPA 120.1	SC	1/19/2006	Alex Hernandez
					TLI	EPA 150.1	PH	1/19/2006	Alex Hernandez
					TLI	EPA 160.1	TDS	1/19/2006	Emilia Haley
					TLI	EPA 180.1	TRB	1/19/2006	Gautam Savani
					TLI	EPA 6010B	CRT	1/24/2006	Riddhi Patel
					TLI	SW 7199	CR6	1/19/2006	Jorge Arriaga
SC-700B	SC-700B-WDR-031	Brian Dobbs	1/25/2006	12:05:00 PM	TLI	EPA 120.1	SC	1/27/2006	Alex Hernandez
					TLI	EPA 150.1	PH	1/26/2006	Alex Hernandez
					TLI	EPA 160.1	TDS	1/26/2006	Emilia Haley
					TLI	EPA 180.1	TRB	1/26/2006	Gautam Savani
					TLI	EPA 6010B	CRT	1/31/2006	Riddhi Patel
					TLI	SW 7199	CR6	1/26/2006	Jorge Arriaga
SC-701	SC-701-WDR-028	Brian Dobbs	1/11/2006	2:15:00 PM	TLI	EPA 120.1	SC	1/12/2006	Alex Hernandez
					TLI	EPA 150.1	PH	1/12/2006	Alex Hernandez
					TLI	EPA 160.1	TDS	1/12/2006	Emilia Haley
					TLI	EPA 300.0	FL	1/13/2006	Iordan Stavrev
					TLI	EPA 6010B	ZN	1/13/2006	Riddhi Patel
					TLI	EPA 6010B	NI	1/13/2006	Riddhi Patel
					TLI	EPA 6010B	CRT	1/13/2006	Riddhi Patel

TABLE 7
Board Order No. R7-2004-0103 Waste Discharge Requirements (WDRs)
Monitoring Information
January 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-028	Brian Dobbs	1/11/2006	2:15:00 PM	TLI	EPA 6010B	BA	1/13/2006	Riddhi Patel
					TLI	EPA 7470A	HG	1/16/2006	Riddhi Patel
					TLI	SW 6020A	SB	1/18/2006	Victoria Than
					TLI	SW 6020A	V	1/18/2006	Victoria Than
					TLI	SW 6020A	SE	1/18/2006	Victoria Than
					TLI	SW 6020A	PB	1/18/2006	Victoria Than
					TLI	SW 6020A	MO	1/18/2006	Victoria Than
					TLI	SW 6020A	AG	1/18/2006	Victoria Than
					TLI	SW 6020A	CO	1/18/2006	Victoria Than
					TLI	SW 6020A	CD	1/18/2006	Victoria Than
					TLI	SW 6020A	TL	1/18/2006	Victoria Than
					TLI	SW 6020A	BE	1/18/2006	Victoria Than
					TLI	SW 6020A	AS	1/18/2006	Victoria Than
					TLI	SW 6020A	CU	1/18/2006	Victoria Than
					TLI	SW 7199	CR6	1/12/2006	Jorge Arriaga
SC-Sludge	SC-Sludge-WDR-28	Brian Dobbs	1/11/2006	2:25:00 PM	STL	EPA 160.3	MOIST	1/17/2006	Florian Zimmermann
					TLI	EPA 300.0	FL	1/17/2006	Iordan Stavrev
					STL	EPA 6010B	NI	1/18/2006	Josephine Asuncion
					STL	EPA 6010B	V	1/18/2006	Josephine Asuncion
					STL	EPA 6010B	TL	1/18/2006	Josephine Asuncion
					STL	EPA 6010B	SE	1/18/2006	Josephine Asuncion
					STL	EPA 6010B	SB	1/18/2006	Josephine Asuncion
					STL	EPA 6010B	PB	1/18/2006	Josephine Asuncion
					STL	EPA 6010B	ZN	1/18/2006	Josephine Asuncion
					STL	EPA 6010B	MO	1/18/2006	Josephine Asuncion
					STL	EPA 6010B	CU	1/18/2006	Josephine Asuncion
					STL	EPA 6010B	CRT	1/18/2006	Josephine Asuncion
					STL	EPA 6010B	CO	1/18/2006	Josephine Asuncion
					STL	EPA 6010B	CD	1/18/2006	Josephine Asuncion
					STL	EPA 6010B	BE	1/18/2006	Josephine Asuncion
					STL	EPA 6010B	BA	1/18/2006	Josephine Asuncion
					STL	EPA 6010B	AG	1/18/2006	Josephine Asuncion
					STL	EPA 6010B	AS	1/18/2006	Josephine Asuncion
					STL	EPA 7471A	HG	1/17/2006	Hao Ton
					STL	SW 7199	CR6	1/18/2006	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	MO =	molybdenum
PH =	pH	NI =	nickel
TDS =	total dissolved solids	PB =	lead
TRB =	turbidity	HG =	mercury
CRT =	chromium	SE =	selenium
CR6 =	hexavalent chromium	TL =	thallium
FL =	fluoride	CO =	cobalt
AL =	aluminum	CD =	cadmium
B =	boron	BE =	beryllium
FE =	iron	AG =	silver
MN =	manganese	V =	vanadium
ZN =	zinc	NO3N =	nitrate (as N)
SB =	antimony	NH3N =	ammonia (as N)
AS =	arsenic	NO2N =	nitrite (as N)
BA =	barium	SO4 =	sulfate
CU =	copper		

Figures

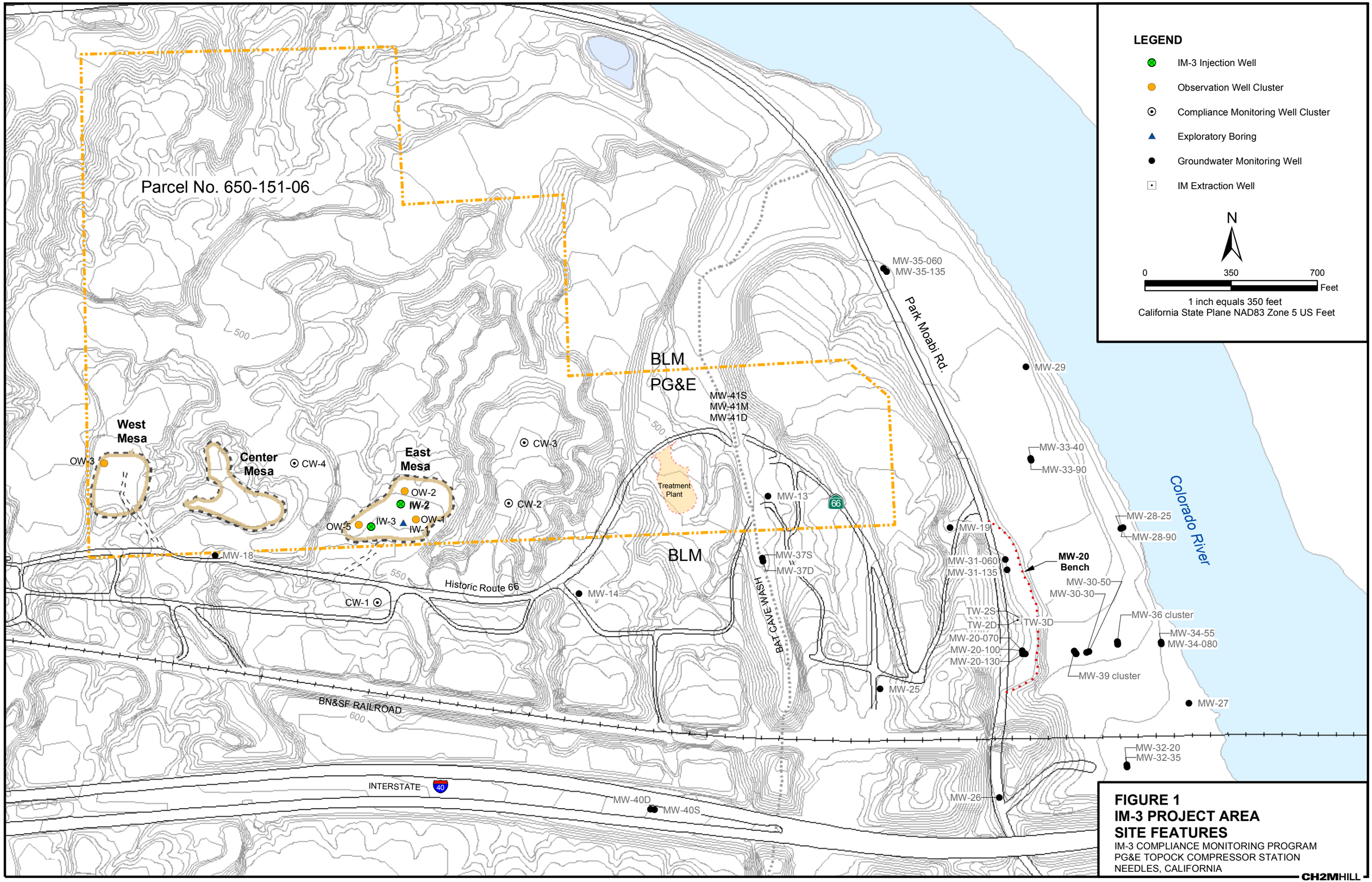


FIGURE 1
IM-3 PROJECT AREA
SITE FEATURES
IM-3 COMPLIANCE MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CH2MHILL

CONTROL PANEL LCP-100

WELL TW-3D CONTROL: LSH, LSH, LVL RUN, LSHH, ON, RM, PRESS, FLOW

WELL TW-2S CONTROL: LSH, LVL RUN, ON, RM, PRESS FLOW, LSH, LSHH

WELL TW-2D CONTROL: LSH, LVL RUN, ON, RM, PRESS FLOW

WELL PE-1 CONTROL: LSH, LVL RUN, ON, RM, PRESS FLOW

ALM, 120V

LEAK DETECTION PANEL - 003

HS 102 HOA

HS 100 HOA

HS 101 HOA

HS 103 HOA

HOLD

LSH 002, LSHH 002

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

FUTURE

4"-RW-140-1HB

V-RW-140-01

NOTE 1

VALVE VAULT No. 2

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

FUTURE

4"-RW-139-1HB

V-RW-139-01

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

Well TW-2S Flowmeter

FE 100

FIT 100

PIT 100

LT 100 VENT

PE 100

3"X2" V-RW-105-02

3"-RW-105-1HB THROTTLING

MAG

3"X2" V-RW-105-01

V-1390

VALVE VAULT No. 1

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

LSH 100A

NOTE 1

1" V-1390

LT 101

Well TW-2D Flowmeter

FE 101

FIT 101

PIT 101

PE 101

4" x 3" EJ-RW-105-01

4"-RW-105-1HB

3"X2" V-RW-102-02

3"-RW-102-1HB THROTTLING

MAG

3"X2" V-RW-102-01

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

LSH 101A

NOTE 1

LT 103 VENT

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

V-RW-105-06 THROTTLING

V-RW-105-03

V-RW-105-04

4" IN 8" RW-107-1KB

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

TO RAW WATER STORAGE

V-RW-108-02 THROTTLING

FE 103

FIT 103

PIT 103

PE 103

3"X2" V-RW-108-01

3"-RW-108-1HB

V-RW-130-02

V-RW-130-01

V-1390

NOTE 1

LSH

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

TO BAKER TANKS V-RW-131-01

LSH 103A

NOTE 1

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

4"x3"

V-RW-132-02

Well TW-3D Flowmeter

VENT LT 102

PI 102

PIT 102

FIT 102

PRV 102

PE 102

FE 102

LSH 102

SET AT 120 PSI

V-1390

3"x2" 3"-RW-134-1HB V-RW-134-01 3"x2"

MAG

4"x3" V-RW-134-02

WELL VAULT No. 4

P-102

LE 102

EXTRACTION WELL TW-3D

135 GPM x 248 FT. H20

PI 100

LSH 100

V-1390

3"-RW-103-1HB V-RW-103-01

V-RW-103-02

WELL VAULT No. 2

P-100

LE 100

EXTRACTION WELL TW-2S

40 GPM x 180 FT. H20

PI 101

PRV 101

LSH 101

SET AT 120 PSI

V-1390

3"-RW-100-1HB V-RW-100-01

V-RW-100-02

WELL VAULT No. 1

P-101

LE 101

EXTRACTION WELL TW-2D

90 GPM x 245 FT. H20

PI 103

PRV 103

LSH 103

SET AT 120 PSI

V-1390

3"-RW-132-1HB

3"x2" V-RW-132-01

V-RW-132-02

WELL VAULT No. 3

P-103

LE 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, CLIENT, FIELD, INTRA CO.

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	7	12/9/05	AJ 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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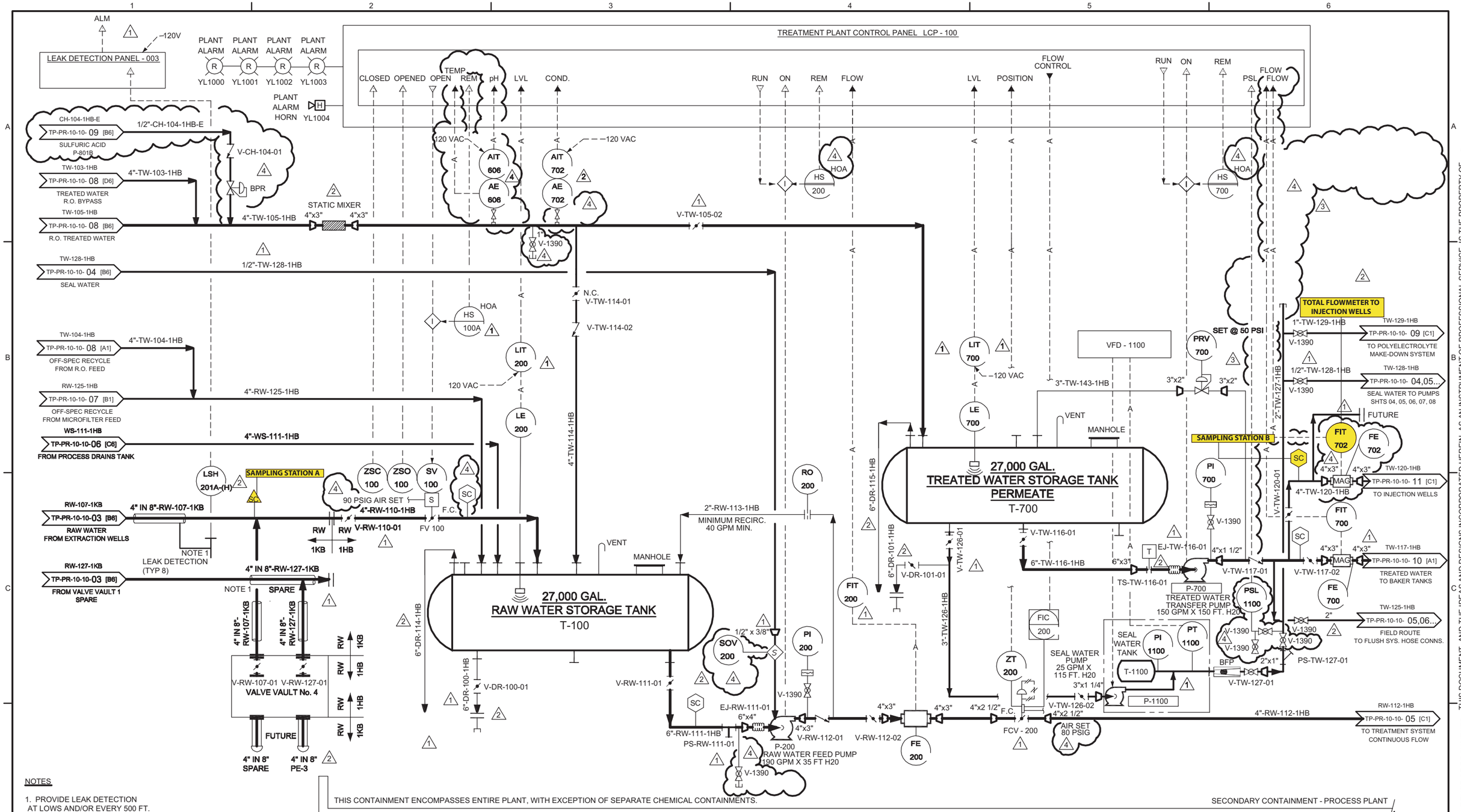

NOTES

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

BAR IS ONE INCH ON ORIGINAL DRAWING

FILENAME: tppr101004.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

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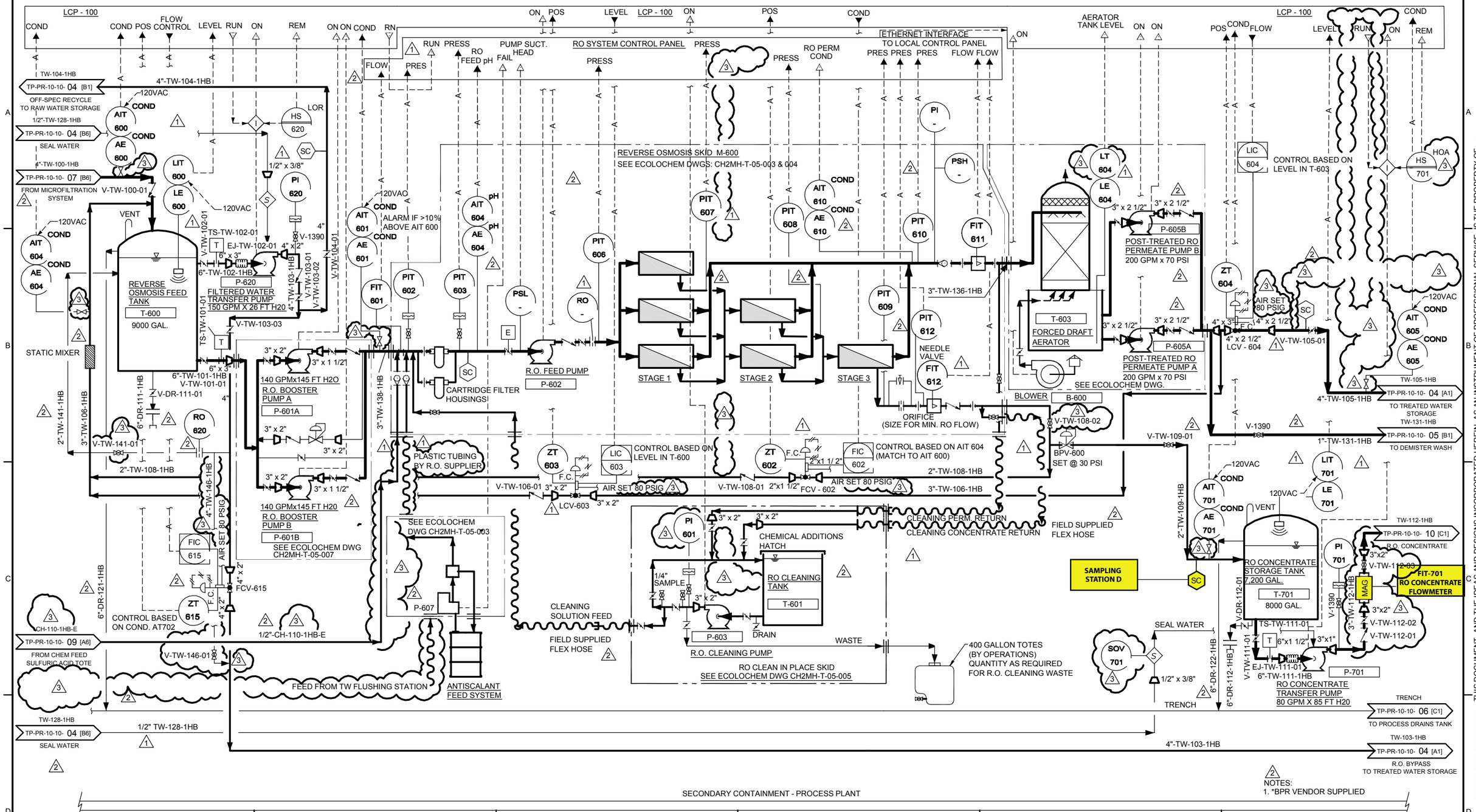


NO.	DATE	REVISION	BY	CHK
D	07/28/04	FOR INTERNAL REVIEW	EFC	AJ
0	09/03/04	APPROVED FOR CONSTRUCTION	EFC	AJ
1	10/13/04	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ
2	01/23/05	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ
3	09/21/05	REVISED PER AS-BUILT CONDITIONS	EFC	AJ

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

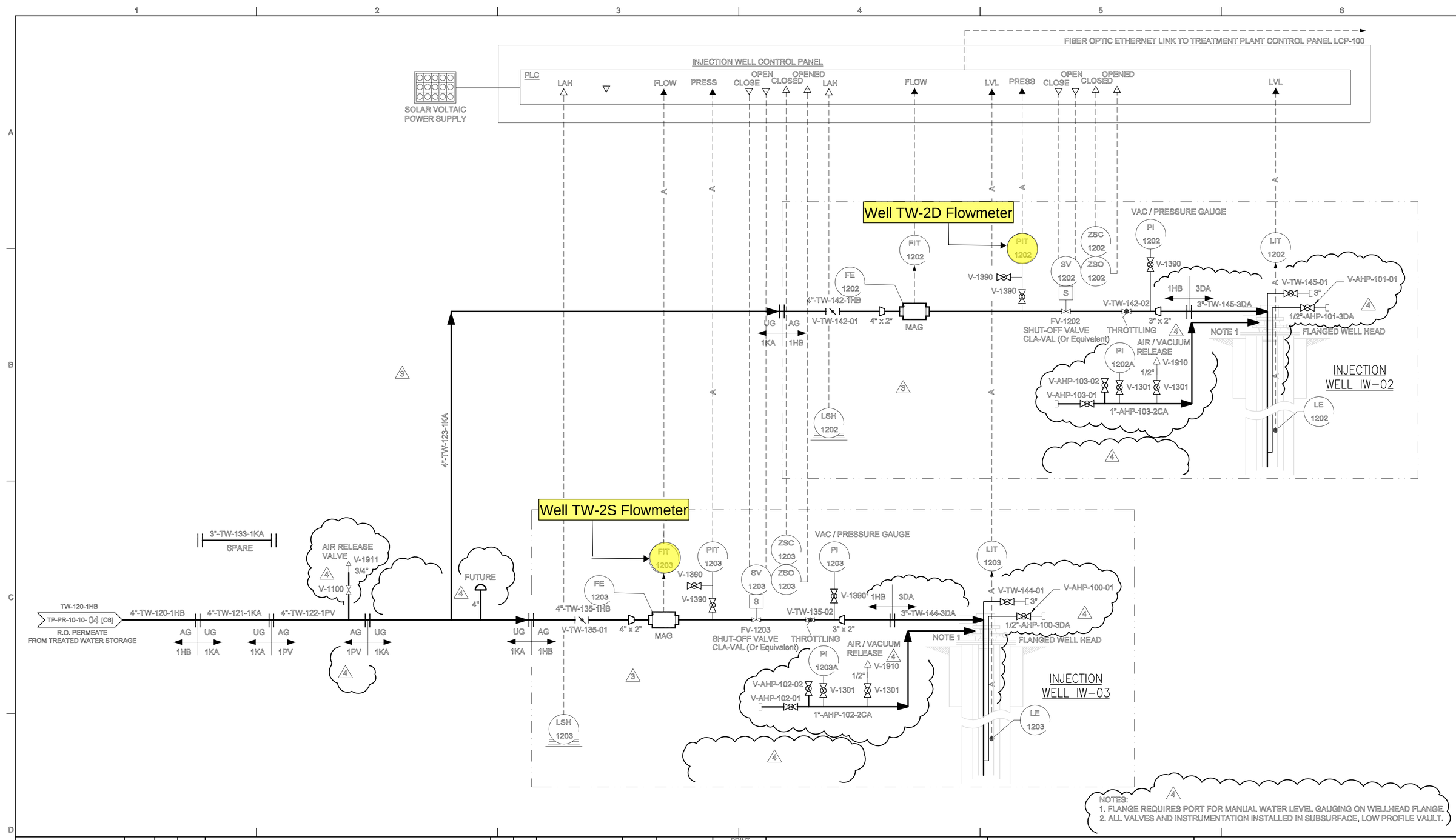
CH2MHILL

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:



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:

BAR IS ONE INCH ON ORIGINAL DRAWING. 0 1"

Appendix A
Laboratory Analytical Reports

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

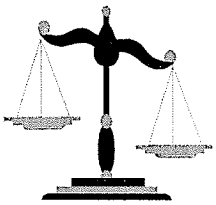
Established 1931

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

CH2M HILL
PG&E Topock Project

Laboratory Number: 950723
Received: January 11, 2006

IM3Plant-WDR-028
Project No.: 334168.IM.04.00
P.O. No.: 911248



Prepared for:

CH2M HILL
Attn: Mark Cichy
2525 Airpark Dr.
Redding, CA 96001

Prepared by:

TRUESDAIL LABORATORIES, INC.
TUSTIN, CALIFORNIA

Table of Contents
TLI Laboratory Data Package
For Laboratory Number: 950723

Section 1.0

Case Narrative

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

Established 1931

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TUSTIN, CALIFORNIA 92780-7008
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www.truesdail.com

January 19, 2006

CH2M HILL
Mr. Shawn Duffy
155 Grand Ave., Suite 1000
Oakland, California 94612

Dear Mr. Duffy:

SUBJECT: CASE NARRATIVE PG&E TOPOCK IM3PLANT-WDR-028 PROJECT, GROUNDWATER MONITORING,

TLI NO.: 950723

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-028 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, pH, Anions, Ammonia, Total Dissolved Solids, Title 22 and metals according to the list provided. A summary table for this laboratory number is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The samples were received and delivered with the chain of custody on January 11, 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.

Sample SC-700B-WDR-028 was sampled on 01/11/06 at 14:30. The sample was analyzed for Nitrate as N by EPA 300.0 within holding time. The sample duplicate and matrix spike runs, however, were out of holding time. The matrix spike had to be performed with 2-fold dilution to avoid exceeding the calibration range. Since, the sample result from the 2x dilution was past holding time, the straight run was reported.

During ICP/MS calibration, the standards for Copper and Silver were too high. The analyst prepared new standards and re-calibrated the Silver and Copper curves. Analysis proceeded normally.

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.

Julia Nayberg
Manager, Analytical Services

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

CC: Mr. Mark Cichy, CH2M HILL Redding CA

Section 2.0

Summary Table of Final Results

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Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Laboratory No.: 950723
Date Received: January 11, 2006

Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

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*	SW 7199 *Hexavalent Chromium*	EPA 350.2 *Ammonia*
			Units	*µmhos/cm*	*mg/L*	*NTU*	*mg/L*	*mg/L*
950723-1	SC-100B-WDR-028	14:45	7.38	9930	5560	ND	3.53	ND
950723-2	SC-700B-WDR-028	14:30	7.90	7620	4270	ND	ND	ND
950723-3	SC-701-WDR-028	14:15	7.92	38400	23600	---	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*
950723-1	SC-100B-WDR-028	14:45	2.22	686	4.83	0.0090
950723-2	SC-700B-WDR-028	14:30	2.02	515	3.97	ND
950723-3	SC-701-WDR-028	14:15	11.6	---	---	---

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: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612

Attention: Shawn Duffy
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Laboratory No.: 950723
Date Received: January 11, 2006

Analytical Results Summary

METALS ANALYSIS: Total Metal Analyses as Requested

Lab I.D.	Sample ID	Time Coll.	Aluminum EPA 6010B Date of Analysis: 01/13/06 mg/L	Antimony EPA 6020 01/18/06 mg/L	Arsenic EPA 6020 01/18/06 mg/L	Barium EPA 6010B 01/13/06 mg/L	Beryllium EPA 6020 01/18/06 mg/L	Cadmium EPA 6020 01/18/06 mg/L	Chromium EPA 6010B 01/13/06 mg/L	Cobalt EPA 6020 01/18/06 mg/L	Copper EPA 6020 01/18/06 mg/L	Lead EPA 6020 01/18/06 mg/L
950723-1	SC-100B-WDR-028	14:45	ND	ND	ND	ND	---	---	3.53	---	ND	ND
950723-2	SC-700B-WDR-028	14:30	ND	ND	ND	ND	---	---	ND	---	ND	ND
950723-3	SC-701-WDR-028	14:15	---	ND	ND	ND	ND	ND	ND	ND	ND	ND

Lab I.D.	Sample ID	Time Coll.	Magnesium EPA 6010B Date of Analysis: --- mg/L	Manganese EPA 6010B 01/13/06 mg/L	Mercury EPA 7470A 01/16/06 mg/L	Molybdenum EPA 6020 01/18/06 mg/L	Nickel EPA 6010B 01/13/06 mg/L	Selenium EPA 6020 01/18/06 mg/L	Silver EPA 6020 01/18/06 mg/L	Thallium EPA 6020 01/18/06 mg/L	Vanadium EPA 6020 01/18/06 mg/L	Zinc EPA 6010B 01/13/06 mg/L
950723-1	SC-100B-WDR-028	14:45	---	ND	---	0.0171	ND	---	---	---	---	ND
950723-2	SC-700B-WDR-028	14:30	---	ND	---	0.0086	ND	---	---	---	---	ND
950723-3	SC-701-WDR-028	14:15	---	---	ND	0.0553	ND	0.0229	ND	ND	0.0263	ND

Lab I.D.	Sample ID	Time Coll.	Boron EPA 6010B Date of Analysis: 01/13/06 mg/L	Calcium EPA 6010B --- mg/L	Iron EPA 6010B 01/13/06 mg/L	Potassium EPA 6010B --- mg/L	Sodium EPA 6010B --- mg/L
950723-1	SC-100B-WDR-028	14:45	1.46	---	ND	---	---
950723-2	SC-700B-WDR-028	14:30	1.28	---	ND	---	---
950723-3	SC-701-WDR-028	14:15	---	---	---	---	---

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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www.truesdail.com

REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Laboratory No.: 950723

Sample: Three (3) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Date: January 18, 2006
Collected: January 11, 2006
Received: January 11, 2006
Prep/ Analyzed: January 12, 2006
Analytical Batch: 01EC06N

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
950723-1	SC-100B-WDR-028	µmhos/cm	EPA 120.1	10.0	20.0	9930
950723-2	SC-700B-WDR-028	µmhos/cm	EPA 120.1	10.0	20.0	7620
950723-3	SC-701-WDR-028	µmhos/cm	EPA 120.1	10.0	20.0	38400

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	950758-1	454	456	0.44%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
CCS	674	706	95.5%	90% - 110%	Yes
CVS#1	927	998	92.9%	90% - 110%	Yes
LCS	677	706	95.9%	90% - 110%	Yes
LCSD	678	706	96.0%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Julia Nayberg, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Sample: Three (3) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Laboratory No.: 950723
Date: January 18, 2006
Collected: January 11, 2006
Received: January 11, 2006
Prep/ Analyzed: January 12, 2006
Analytical Batch: 01PH06P

Investigation: pH by EPA 150.1

Analytical Results pH

TLI I.D.	Field I.D.	Run Time	Units	MDL	RL	Results
950723-1	SC-100B-WDR-028	07:05	pH Units	0.0140	0.100	7.38
950723-2	SC-700B-WDR-028	07:10	pH Units	0.0140	0.100	7.90
950723-3	SC-701-WDR-028	07:15	pH Units	0.0140	0.100	7.92

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	950723-1	7.38	7.39	0.01	± 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
LCS #2	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.

Julia Nayberg, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Three (3) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Laboratory No.: 950723
Date: January 18, 2006
Collected: January 11, 2006
Received: January 11, 2006
Prep/ Analyzed: January 12, 2006
Analytical Batch: 01TDS06E

Investigation: Total Dissolved Solids by EPA 160.1

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
950723-1	SC-100B-WDR-028	mg/L	EPA 160.1	312	5560
950723-2	SC-700B-WDR-028	mg/L	EPA 160.1	250	4270
950723-3	SC-701-WDR-028	mg/L	EPA 160.1	1250	23600

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	950723-2	4270	4270	0.00%	≤ 5%	Yes

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

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Julia Nayberg, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Sample: Three (3) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Laboratory No.: 950723
Date: January 18, 2006
Collected: January 11, 2006
Received: January 11, 2006
Prep/ Analyzed: January 12, 2006
Analytical Batch: 01TUC06L

Investigation: Turbidity by Method EPA 180.1

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
950723-1	SC-100B-WDR-028	14:45	NTU	1.00	0.100	ND
950723-2	SC-700B-WDR-005	14:30	NTU	1.00	0.100	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	950664-7	15.2	16.2	6.37%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	8.20	8.00	103%	90% - 110%	Yes
LCS	8.16	8.00	102%	90% - 110%	Yes
LCS	8.18	8.00	102%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Julia Nayberg

Julia Nayberg, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Three (3) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Laboratory No.: 950723
Date: January 18, 2006
Collected: January 11, 2006
Received: January 11, 2006
Prep/ Analyzed: January 12, 2006
Analytical Batch: 01NO206F

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
950723-1	SC-100B-WDR-028	14:45	15:52	mg/L	1.00	0.0050	0.0090
950723-2	SC-700B-WDR-028	14:30	15:53	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	950723-1	0.0090	0.0081	10.5%	≤ 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	950723-2	0.00	1.00	0.100	0.100	0.110	0.100	110%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.0992	0.100	99.2%	90% - 110%	Yes
MRCVS#1	0.104	0.100	104%	90% - 110%	Yes
MRCVS#2	0.105	0.100	105%	90% - 110%	Yes
LCS	0.201	0.200	101%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Julia Nayberg, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Three (3) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Laboratory No.: 950723
Date: January 18, 2006
Collected: January 11, 2006
Received: January 11, 2006
Prep/ Analyzed: January 12, 2006
Analytical Batch: 01NH306C

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
950723-1	SC-100B-WDR-028	14:45	EPA 350.2	mg/L	1.00	0.500	ND
950723-2	SC-700B-WDR-028	14:30	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	950723-1	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	950723-2	0.00	1.00	10.0	10.0	8.54	10.0	85.4%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	9.69	10.0	96.9%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Julia Nayberg
Julia Nayberg, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

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Client: CH2M HILL
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Attention: Shawn Duffy
Sample: Three (3) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Laboratory No.: 950723
Date: January 18, 2006
Collected: January 11, 2006
Received: January 11, 2006
Prep/ Analyzed: January 13, 2006
Analytical Batch: 01AN06K

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
950723-1	SC-100B-WDR-028	14:45	14:03	mg/L	1.00	0.200	4.83
950723-2	SC-700B-WDR-028	14:30	14:14	mg/L	1.00	0.200	3.97

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	950723-2	3.97	3.98	0.25%	≤ 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	950723-2 2X	3.99	2.00	2.00	4.00	7.90	7.99	97.8%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	3.94	4.00	98.5%	90% - 110%	Yes
MRCVS#1	2.99	3.00	99.7%	90% - 110%	Yes
MRCVS#2	2.98	3.00	99.3%	90% - 110%	Yes
MRCVS#3	3.00	3.00	100%	90% - 110%	Yes
MRCVS#4	2.99	3.00	99.7%	90% - 110%	Yes
LCS	3.94	4.00	98.5%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Julia Nayberg

Julia Nayberg, 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: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Three (3) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Laboratory No.: 950723
Date: January 18, 2006
Collected: January 11, 2006
Received: January 11, 2006
Prep/ Analyzed: January 13, 2006
Analytical Batch: 01AN06K

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
950723-1	SC-100B-WDR-028	14:45	14:03	mg/L	1.00	0.200	2.22
950723-2	SC-700B-WDR-028	14:30	14:14	mg/L	1.00	0.200	2.02
950723-3	SC-701-WDR-028	14:15	18:03	mg/L	5.00	1.00	11.6

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	950723-2	2.02	2.05	1.47%	≤ 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	950723-2	2.02	1.00	2.00	2.00	4.00	4.02	99.0%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	4.06	4.00	102%	90% - 110%	Yes
MRCVS#1	3.12	3.00	104%	90% - 110%	Yes
MRCVS#2	3.10	3.00	103%	90% - 110%	Yes
MRCVS#3	3.21	3.00	107%	90% - 110%	Yes
MRCVS#4	3.16	3.00	105%	90% - 110%	Yes
LCS	4.06	4.00	102%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Julia Nayberg, Manager
Analytical Services

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REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Three (3) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Laboratory No.: 950723
Date: January 18, 2006
Collected: January 11, 2006
Received: January 11, 2006
Prep/ Analyzed: January 18, 2006
Analytical Batch: 01AN06O

Investigation: Sulfate by Method EPA 300.0

Analytical Results Sulfate

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
950723-1	SC-100B-WDR-028	14:45	13:15	mg/L	50.0	25.0	686
950723-2	SC-700B-WDR-028	14:30	13:47	mg/L	25.0	12.5	515

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	950723-1	686	684	0.29%	≤ 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	950723-1	686	50.0	20.0	1000	1730	1686	104%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	20.6	20.0	103%	90% - 110%	Yes
MRCVS#1	15.8	15.0	105%	90% - 110%	Yes
MRCVS#2	15.7	15.0	105%	90% - 110%	Yes
MRCVS#3	15.7	15.0	105%	90% - 110%	Yes
LCS	20.6	20.0	103%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Julia Nayberg

Julia Nayberg, Manager
Analytical Services

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REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Three (3) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248
Prep. Batch: 01CrH06L

Laboratory No.: 950723
Date: January 18, 2006
Collected: January 11, 2006
Received: January 11, 2006
Prep/ Analyzed: January 12, 2006
Analytical Batch: 01CrH06L

Investigation: Hexavalent Chromium by IC Using Method SW 7199.

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
950723-1	SC-100B-WDR-028	14:45	09:42	mg/L	200	0.0400	3.53
950723-2	SC-700B-WDR-028	14:30	10:10	mg/L	5.00	0.0010	ND
950723-3	SC-701-WDR-028	14:15	10:57	mg/L	10.0	0.0020	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Sample Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	950723-1	3.53	3.55	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	950723-1	3.53	200	0.0200	4.00	7.56	7.53	101%	75-125%	Yes
MS	950723-2	0.00	5.00	0.00100	0.00500	0.00473	0.00500	94.6%	75-125%	Yes
MS	949622-3	0.00	10.0	0.00100	0.0100	0.0108	0.0100	108%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00527	0.00500	105%	90% - 110%	Yes
MRCVS#1	0.01040	0.0100	104%	90% - 110%	Yes
MRCVS#2	0.01030	0.0100	103%	90% - 110%	Yes
MRCVS#3	0.01030	0.0100	103%	90% - 110%	Yes
MRCVS#4	0.01020	0.0100	102%	90% - 110%	Yes
LCS	0.00519	0.00500	104%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Julia Nayberg

Julia Nayberg, Manager
Analytical Services

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REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612

Attention: Shawn Duffy

Samples: Three (3) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Investigation: Total Metal Analyses as Requested

Laboratory No.: 950723

Reported: January 18, 2006
Collected: January 11, 2006
Received: January 11, 2006
Analyzed: January 18, 2006

Analytical Results

SAMPLE ID: SC-100B-WDR-028 Time Collected: 14:45 LAB ID: 950723-1

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 6010B	ND	1.04	mg/L	0.0520	011306B	01/13/06	14:31
Antimony	EPA 6020	ND	2.08	mg/L	0.0030	011806A	01/18/06	09:34
Arsenic	EPA 6020	ND	2.08	mg/L	0.0050	011806A	01/18/06	09:34
Barium	EPA 6010B	ND	1.04	mg/L	0.300	011306B	01/13/06	14:31
Chromium	EPA 6010B	3.53	1.04	mg/L	0.0104	011306B	01/13/06	14:31
Copper	EPA 6020	ND	2.08	mg/L	0.0100	011806A	01/18/06	09:34
Lead	EPA 6020	ND	2.08	mg/L	0.0020	011806A	01/18/06	09:34
Manganese	EPA 6010B	ND	1.04	mg/L	0.500	011306B	01/13/06	14:31
Molybdenum	EPA 6020	0.0171	2.08	mg/L	0.0050	011806A	01/18/06	09:34
Nickel	EPA 6010B	ND	1.04	mg/L	0.0200	011306B	01/13/06	14:31
Zinc	EPA 6010B	ND	1.04	mg/L	0.0200	011306B	01/13/06	14:31
Boron	EPA 6010B	1.46	1.04	mg/L	0.200	011306B	01/13/06	14:31
Iron	EPA 6010B	ND	1.04	mg/L	0.300	011306B	01/13/06	14:31

SAMPLE ID: SC-700B-WDR-028 Time Collected: 14:30 LAB ID: 950723-2

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 6010B	ND	1.04	mg/L	0.0520	011306B	01/13/06	14:47
Antimony	EPA 6020	ND	2.08	mg/L	0.0030	011806A	01/18/06	09:40
Arsenic	EPA 6020	ND	2.08	mg/L	0.0050	011806A	01/18/06	09:40
Barium	EPA 6010B	ND	1.04	mg/L	0.300	011306B	01/13/06	14:47
Chromium	EPA 6010B	ND	1.04	mg/L	0.0010	011306A	01/13/06	10:27
Copper	EPA 6020	ND	2.08	mg/L	0.0100	011806A	01/18/06	09:40
Lead	EPA 6020	ND	2.08	mg/L	0.0020	011806A	01/18/06	09:40
Manganese	EPA 6010B	ND	1.04	mg/L	0.500	011306B	01/13/06	14:47
Molybdenum	EPA 6020	0.0086	2.08	mg/L	0.0050	011806A	01/18/06	09:40
Nickel	EPA 6010B	ND	1.04	mg/L	0.0200	011306B	01/13/06	14:47
Zinc	EPA 6010B	ND	1.04	mg/L	0.0200	011306B	01/13/06	14:47
Boron	EPA 6010B	1.28	1.04	mg/L	0.200	011306B	01/13/06	14:47
Iron	EPA 6010B	ND	1.04	mg/L	0.300	011306B	01/13/06	14:47

SAMPLE ID: SC-701-WDR-028		Time Collected:	14:15			LAB ID:	950723-3	
Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Antimony	EPA 6020	ND	5.21	mg/L	0.0052	011806A	01/18/06	09:45
Arsenic	EPA 6020	ND	5.21	mg/L	0.0052	011806A	01/18/06	09:45
Barium	EPA 6010B	ND	1.04	mg/L	0.300	011306B	01/13/06	14:55
Beryllium	EPA 6020	ND	5.21	mg/L	0.0026	011806A	01/18/06	09:45
Cadmium	EPA 6020	ND	5.21	mg/L	0.0026	011806A	01/18/06	09:45
Chromium	EPA 6010B	ND	1.04	mg/L	0.0010	011306A	01/13/06	10:32
Cobalt	EPA 6020	ND	5.21	mg/L	0.0052	011806A	01/18/06	09:45
Copper	EPA 6020	ND	5.21	mg/L	0.0100	011806A	01/18/06	09:45
Lead	EPA 6020	ND	5.21	mg/L	0.0026	011806A	01/18/06	09:45
Mercury	EPA 7470A	ND	1.00	mg/L	0.00020	011606A	01/16/06	NA
Molybdenum	EPA 6020	0.0553	5.21	mg/L	0.0052	011806A	01/18/06	09:45
Nickel	EPA 6010B	ND	1.04	mg/L	0.0200	011306B	01/13/06	14:55
Selenium	EPA 6020	0.0229	5.21	mg/L	0.0104	011806A	01/18/06	09:45
Silver	EPA 6020	ND	5.21	mg/L	0.0052	011806A	01/18/06	09:45
Thallium	EPA 6020	ND	5.21	mg/L	0.0026	011806A	01/18/06	09:45
Vanadium	EPA 6020	0.0263	5.21	mg/L	0.0052	011806A	01/18/06	09:45
Zinc	EPA 6010B	ND	1.04	mg/L	0.0200	011306B	01/13/06	14:55

ND: Not detected,or below limit of detection.

DF: Dilution factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Julia Nayberg

Julia Nayberg, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.
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Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Samples: Three (3) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Laboratory No.: 950723
Reported: January 18, 2006
Collected: January 11, 2006
Received: January 11, 2006

Investigation: Total Metal Analyses as Requested

Quality Control/Quality Assurance Report

				BLANK		MRCCS				MRCVS			
Parameter	Method	Batch	Units	Blank	RL	Observed Value	TRUE Value	% Rec	Control Limits	Observed Value	TRUE Value	% Rec	Control Limits %
Chromium	EPA 6010B	011306B	mg/L	ND	0.0100	5.08	5.00	102%	90-110%	4.92	5.00	98.4%	90-110%

			LABORATORY CONTROL SAMPLES				SAMPLE DUPLICATES				
Parameter	Method	Units	LCS Obs.	LCS Theo.	% Rec.	Control Limits	SAMPLE ID	SAMPLE RESULT	DUP RESULT	% RPD	Precision Control Limits %
Chromium	EPA 6010B	mg/L	4.95	5.00	99.0%	90-110%	950723-1	3.53	3.44	2.58%	≤20

MATRIX SPIKE

Sample ID	Parameter	Method	Units	Sample Result	DF	Spike Level	Total Amt. of Spike	Theo. Value	MS Obs.	% Rec.	Accuracy Control Limits %
950723-1	Chromium	EPA 6010B	mg/L	3.53	1.04	2.50	2.60	6.13	5.92	91.9%	75-125%

				BLANK		MRCCS				MRCVS			
Parameter	**Method**	**Batch**	**Units**	**Blank**	**RL**	Observed Value	TRUE Value	% Rec	Control Limits	Observed Value	TRUE Value	% Rec	Control Limits %
Aluminum	EPA 6010B	011306B	mg/L	ND	0.0500	4.99	5.00	99.8%	90-110%	4.81	5.00	96.2%	90-110%
Antimony	EPA 6020	011806A	mg/L	ND	0.0030	0.0463	0.0500	92.6%	90-110%	0.0452	0.0500	90.4%	90-110%
Arsenic	EPA 6020	011806A	mg/L	ND	0.0050	0.0460	0.0500	92.0%	90-110%	0.0474	0.0500	94.8%	90-110%
Barium	EPA 6010B	011306B	mg/L	ND	0.300	5.01	5.00	100%	90-110%	4.94	5.00	98.8%	90-110%
Beryllium	EPA 6020	011806A	mg/L	ND	0.0010	0.0450	0.0500	90.0%	90-110%	0.0511	0.0500	102%	90-110%
Cadmium	EPA 6020	011806A	mg/L	ND	0.0020	0.0461	0.0500	92.2%	90-110%	0.0488	0.0500	97.6%	90-110%
Chromium	EPA 6010B	011306A	mg/L	ND	0.0010	0.00949	0.0100	94.9%	90-110%	0.00938	0.0100	93.8%	90-110%
Cobalt	EPA 6020	011806A	mg/L	ND	0.0050	0.0486	0.0500	97.2%	90-110%	0.0500	0.0500	100%	90-110%
Copper	EPA 6020	011806A	mg/L	ND	0.0100	0.0530	0.0500	106%	90-110%	0.0504	0.0500	101%	90-110%
Lead	EPA 6020	011806A	mg/L	ND	0.0020	0.0486	0.0500	97.2%	90-110%	0.0501	0.0500	100%	90-110%
Manganese	EPA 6010B	011306B	mg/L	ND	0.500	5.08	5.00	102%	90-110%	4.95	5.00	99.0%	90-110%
Mercury	EPA 7470A	011606A	mg/L	ND	0.00020	0.00104	0.00100	104%	90-110%	0.00092	0.00100	92.0%	80-120%
Molybdenum	EPA 6020	011806A	mg/L	ND	0.0050	0.0469	0.0500	93.8%	90-110%	0.0480	0.0500	96.0%	90-110%
Nickel	EPA 6010B	011306B	mg/L	ND	0.0200	5.06	5.00	101%	90-110%	4.95	5.00	99.0%	90-110%
Selenium	EPA 6020	011806A	mg/L	ND	0.0050	0.0452	0.0500	90.4%	90-110%	0.0471	0.0500	94.2%	90-110%
Silver	EPA 6020	011806A	mg/L	ND	0.0050	0.0472	0.0500	94.4%	90-110%	0.0488	0.0500	97.6%	90-110%
Thallium	EPA 6020	011806A	mg/L	ND	0.0010	0.0487	0.0500	97.4%	90-110%	0.0496	0.0500	99.2%	90-110%
Vanadium	EPA 6020	011806A	mg/L	ND	0.0050	0.0517	0.0500	103%	90-110%	0.0529	0.0500	106%	90-110%
Zinc	EPA 6010B	011306B	mg/L	ND	0.0200	4.64	5.00	92.8%	90-110%	5.01	5.00	100%	90-110%
Boron	EPA 6010B	011306B	mg/L	ND	0.200	5.01	5.00	100%	90-110%	4.96	5.00	99.2%	90-110%
Iron	EPA 6010B	011306B	mg/L	ND	0.300	5.06	5.00	101%	90-110%	4.94	5.00	98.8%	90-110%

			LABORATORY CONTROL SAMPLES				SAMPLE DUPLICATES				
Parameter	**Method**	**Units**	**LCS Obs.**	**LCS Theo.**	**% Rec.**	**Control Limits**	**SAMPLE ID**	**SAMPLE RESULT**	**DUP RESULT**	**% RPD**	**Precision Control Limits %**
Aluminum	EPA 6010B	mg/L	4.90	5.00	98.0%	90-110%	950723-1	ND	ND	0.00%	≤20
Antimony	EPA 6020	mg/L	0.0454	0.0500	90.8%	90-110%	950723-3	ND	ND	0.00%	≤20
Arsenic	EPA 6020	mg/L	0.0476	0.0500	95.2%	90-110%	950723-3	ND	ND	0.00%	≤20
Barium	EPA 6010B	mg/L	4.90	5.00	98.0%	90-110%	950723-1	ND	ND	0.00%	≤20
Beryllium	EPA 6020	mg/L	0.0502	0.0500	100%	90-110%	950723-3	ND	ND	0.00%	≤20
Cadmium	EPA 6020	mg/L	0.0490	0.0500	98.0%	90-110%	950723-3	ND	ND	0.00%	≤20
Chromium	EPA 6010B	mg/L	0.00927	0.0100	92.7%	90-110%	950655-3	0.00498	0.00475	4.73%	≤20
Cobalt	EPA 6020	mg/L	0.0535	0.0500	107%	90-110%	950723-3	ND	ND	0.00%	≤20
Copper	EPA 6020	mg/L	0.0533	0.0500	107%	90-110%	950723-3	ND	ND	0.00%	≤20
Lead	EPA 6020	mg/L	0.0494	0.0500	98.8%	90-110%	950723-3	ND	ND	0.00%	≤20
Manganese	EPA 6010B	mg/L	4.96	5.00	99.2%	90-110%	950723-1	ND	ND	0.00%	≤20
Mercury	EPA 7470A	mg/L	0.00093	0.00100	93.0%	80-120%	950723-3	ND	ND	0.00%	≤20
Molybdenum	EPA 6020	mg/L	0.0498	0.0500	99.6%	90-110%	950723-3	0.0553	0.0568	2.68%	≤20
Nickel	EPA 6010B	mg/L	4.88	5.00	97.6%	90-110%	950723-1	ND	ND	0.00%	≤20
Selenium	EPA 6020	mg/L	0.0493	0.0500	98.6%	90-110%	950723-3	0.0229	0.0261	13.1%	≤20
Silver	EPA 6020	mg/L	0.0500	0.0500	100%	90-110%	950723-3	ND	ND	0.00%	≤20
Thallium	EPA 6020	mg/L	0.0498	0.0500	99.6%	90-110%	950723-3	ND	ND	0.00%	≤20
Vanadium	EPA 6020	mg/L	0.0548	0.0500	110%	90-110%	950723-3	0.0263	0.0282	6.97%	≤20
Zinc	EPA 6010B	mg/L	5.14	5.00	103%	90-110%	950723-1	ND	ND	0.00%	≤20
Boron	EPA 6010B	mg/L	4.88	5.00	97.6%	90-110%	950723-1	1.46	1.42	2.78%	≤20
Iron	EPA 6010B	mg/L	4.91	5.00	98.2%	90-110%	950723-1	ND	ND	0.00%	≤20

MATRIX SPIKE

Sample ID	Parameter	Method	Units	Sample Result	DF	Spike Level	Total Amt. of Spike	Theo. Value	MS Obs.	% Rec.	Accuracy Control Limits %
950723-1	Aluminum	EPA 6010B	mg/L	0.00	1.04	2.50	2.60	2.60	2.79	107%	75-125%
950723-3	Antimony	EPA 6020	mg/L	0.00	5.21	0.0400	0.208	0.208	0.199	95.5%	75-125%
950723-3	Arsenic	EPA 6020	mg/L	0.00	5.21	0.0400	0.208	0.208	0.238	114%	75-125%
950723-1	Barium	EPA 6010B	mg/L	0.00	1.04	2.50	2.60	2.60	2.56	98.5%	75-125%
950723-3	Beryllium	EPA 6020	mg/L	0.00	5.21	0.0400	0.208	0.208	0.168	80.6%	75-125%
950723-3	Cadmium	EPA 6020	mg/L	0.00	5.21	0.0400	0.208	0.208	0.232	111%	75-125%
950655-4	Chromium	EPA 6010B	mg/L	0.00523	1.04	0.0100	0.0104	0.0156	0.0148	92.0%	75-125%
950723-3	Cobalt	EPA 6020	mg/L	0.00	5.21	0.0400	0.208	0.208	0.216	104%	75-125%
950723-3	Copper	EPA 6020	mg/L	0.00	5.21	0.0400	0.208	0.208	0.198	95.0%	75-125%
950723-3	Lead	EPA 6020	mg/L	0.00	5.21	0.0400	0.208	0.208	0.212	102%	75-125%
950723-1	Manganese	EPA 6010B	mg/L	0.00	1.04	2.50	2.60	2.60	2.51	96.5%	75-125%
950723-3	Mercury	EPA 7470A	mg/L	0.00	1.00	0.00100	0.00100	0.00100	0.00105	105%	75-125%
950723-3	Molybdenum	EPA 6020	mg/L	0.0553	5.21	0.0400	0.208	0.264	0.308	121%	75-125%
950723-1	Nickel	EPA 6010B	mg/L	0.00	1.04	2.50	2.60	2.60	2.38	91.5%	75-125%
950723-3	Selenium	EPA 6020	mg/L	0.0229	5.21	0.0400	0.208	0.231	0.268	118%	75-125%
950723-3	Silver	EPA 6020	mg/L	0.00	5.21	0.0400	0.208	0.208	0.217	104%	75-125%
950723-3	Thallium	EPA 6020	mg/L	0.00	5.21	0.0400	0.208	0.208	0.212	102%	75-125%
950723-3	Vanadium	EPA 6020	mg/L	0.0263	5.21	0.0400	0.208	0.235	0.259	112%	75-125%
950723-1	Zinc	EPA 6010B	mg/L	0.00	1.04	2.50	2.60	2.60	2.63	101%	75-125%
950723-1	Boron	EPA 6010B	mg/L	1.46	1.04	2.50	2.60	4.06	4.05	99.6%	75-125%
950723-1	Iron	EPA 6010B	mg/L	0.00	1.04	2.50	2.60	2.60	2.43	93.5%	75-125%

ND: Not detected, or below limit of detection.

DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Julia Nayberg, Manager
Analytical Services

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

CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-028] 950723

COC Number

TURNAROUND TIME 5 Days

DATE 1-11-06 PAGE 1 OF 1

COMPANY	CH2M HILL
PROJECT NAME	PG&E Topock
PHONE	(510) 251-2888 FAX (510) 622-7086
ADDRESS	155 Grand Ave Ste 1000, Oakland, CA 94612
P.O. NUMBER	334168.IM.04.00
SAMPLERS (SIGNATURE	

	SAMPLE I.D.	DATE	TIME	DESCRIPTION	CR6 (7199) Lab Filtered	Total Met (6010B) Title 22	Total Met (6010B) Total Al, Ba,B, Cr, Cu, Pb, Mn, Mo, Ni, Fe, Zn, Sb, As	Metals (1470A)	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-028	1-11-06	14:45	Groundwater	x		x		x	x	x		x	x	x				4	Rec'd 01/11/06 950723 $200
-2	SC-700B-WDR-028	1-11-06	14:30	Groundwater	x		x		x	x	x		x	x	x				4	pH = 2
-3	SC-701-WDR-028	1-11-06	14:15	Groundwater	x	x		x	x	x	x	x							4	
																			12	TOTAL NUMBER OF CONTAINERS

ALERT!! Level III QC

For Sample Conditions See Form Attached

RUSH!

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	BRIAN DOMAS	DMI	1-11-06 14:00
Signature (Received)	Shawna B	TLI	1/11/06 19:45
Signature (Relinquished)			
Signature (Received)			
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

TRUESDAIL LABORATORIES, INC.
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CH2M HILL
PG&E Topock Project

Laboratory Number: 950438
Received: January 4, 2006

IM3Plant-WDR-029
Project No.: 334168.IM.04.00
P.O. No.: 911248

Prepared for:

CH2M HILL
Attn: Mark Cichy
2525 Airpark Dr.
Redding, CA 96001

Prepared by:

TRUESDAIL LABORATORIES, INC.
TUSTIN, CALIFORNIA

Table of Contents
TLI Laboratory Data Package

For Laboratory Number: 950438

Section 1.0

Case Narrative

TRUESDAIL LABORATORIES, INC.

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January 11, 2006

CH2M HILL
Mr. Shawn Duffy
155 Grand Ave., Suite 1000
Oakland, California 94612

Dear Mr. Duffy:

SUBJECT: CASE NARRATIVE PG&E TOPOCK IM3 PLANT–WDR-029 PROJECT, GROUNDWATER MONITORING.

TLI NO.: 950438

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3 Plant-WDR-029 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, pH, and Total Dissolved Solids. A summary table for this laboratory number 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 sample was received and delivered with the chain of custody on January 4, 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.

Julia Nayberg
Manager, Analytical Services

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

CC: Mr. Mark Cichy, CH2M HILL Redding CA

Section 2.0

Summary Table of Final Results

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Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Laboratory No.: 950438
Date Received: January 4, 2006

Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Analytical Results Summary

Lab I.D.	Sample I.D.	Sample Time	SW 6010B *Chromium Total* mg/L	SW 7199 *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
950438	SC-700B-WDR-029	12:10	ND	0.00028	ND	7.80	7510	4190

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

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REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Laboratory No.: 950438

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248
Prep. Batch: 010506A

Date: January 10, 2006
Collected: January 4, 2006
Received: January 4, 2006
Prep/ Analyzed: January 5, 2006
Analytical Batch: 010506A

Investigation: Total Chromium by Inductively Coupled Argon Plasma Using Method SW 6010B

Analytical Results Total Chromium

TLI I.D.	Field I.D.	Units	Method	Run Time	DF	RL	Results
950438	SC-700B-WDR-029	mg/L	SW 6010B	11:07	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	950438	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	950438	0.00	1.04	0.0100	0.0104	0.00973	0.0104	93.6%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00979	0.0100	97.9%	90% - 110%	Yes
MRCVS#1	0.00981	0.0100	98.1%	90% - 110%	Yes
MRCVS#2	0.0103	0.0100	103%	90% - 110%	Yes
ICS	0.0104	0.0100	104%	80% - 120%	Yes
LCS	0.0100	0.0100	100%	90% - 110%	Yes

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Julia Nayberg, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Laboratory No.: 950438

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Date: January 10, 2006
Collected: January 4, 2006
Received: January 4, 2006
Prep/ Analyzed: January 4, 2006
Analytical Batch: 01CrH06B

Investigation: **Hexavalent Chromium by SW 7199**

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
950438	SC-700B-WDR-029	12:10	19:07	mg/L	1.00	0.00020	0.00028

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	950438	0.00028	0.00029	3.51%	≤ 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	950438	0.00028	1.06	0.00100	0.00106	0.00134	0.00134	100%	75-125%	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	0.0101	0.0100	101%	90% - 110%	Yes
MRCVS#2	0.0101	0.0100	101%	90% - 110%	Yes
MRCVS#3	0.0101	0.0100	101%	90% - 110%	Yes
LCS	0.00510	0.00500	102%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Julia Nayberg

Julia Nayberg, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Laboratory No.: 950438
Date: January 10, 2006
Collected: January 4, 2006
Received: January 4, 2006
Prep/ Analyzed: January 5, 2006
Analytical Batch: 01TUC06E

Investigation: **Turbidity by Method EPA 180.1**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
950438	SC-700B-WDR-029	12:10	NTU	1.00	0.100	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	950438	ND	ND	0.00%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	7.62	8.00	95.3%	90% - 110%	Yes
LCS	7.75	8.00	96.9%	90% - 110%	Yes
LCS	7.68	8.00	96.0%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Julia Nayberg, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Laboratory No.: 950438

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Date: January 10, 2006
Collected: January 4, 2006
Received: January 4, 2006
Prep/ Analyzed: January 5, 2006
Analytical Batch: 01PH06E

Investigation:

pH by EPA 150.1

Analytical Results pH

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	MDL	RL	Results
950438	SC-700B-WDR-029	12:10	07:25	pH Units	0.0140	0.100	7.80

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	950443-4	7.75	7.76	0.01	± 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
LCS #2	7.01	7.00	0.01	± 0.100 Units	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Julia Nayberg, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Laboratory No.: 950438

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Date: January 10, 2006
Collected: January 4, 2006
Received: January 4, 2006
Prep/ Analyzed: January 5, 2006
Analytical Batch: 01EC06E

Investigation: Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
950438	SC-700B-WDR-029	µmhos/cm	EPA 120.1	10.0	20.0	7510

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	950443-1	976	977	0.10%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
CCS	673	706	95.3%	90% - 110%	Yes
CVS#1	928	996	93.2%	90% - 110%	Yes
CVS#2	932	996	93.6%	90% - 110%	Yes
LCS	672	706	95.2%	90% - 110%	Yes
LCSD	673	706	95.3%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Julia Nayberg, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Laboratory No.: 950438
Date: January 10, 2006
Collected: January 4, 2006
Received: January 4, 2006
Prep/ Analyzed: January 5, 2006
Analytical Batch: 01TDS06C

Investigation: Total Dissolved Solids by EPA 160.1

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
950438	SC-700B-WDR-029	mg/L	EPA 160.1	250	4190

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	950270	4190	4200	0.12%	≤ 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS 1	499	500	100%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Julia Nayberg, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.
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CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-029]

950438

COC Number
TURNAROUND TIME 5 Days
DATE
PAGE 1 OF 1

COMPANY: CH2M HILL
PROJECT NAME: PG&E Topock
PHONE: (510) 251-2888 FAX: (510) 622-7086
ADDRESS: 155 Grand Ave Ste 1000
Oakland, CA 94612
P.O. NUMBER: 334168.IM.04.00
SAMPLERS (SIGNATURE: Wm. Clough

Rec'd 01/04/06
s18L 950438

SAMPLE I.D.	DATE	TIME	DESCRIPTION	CR6 (7199) Lab Filtered	Total Met (6010B) Total Chromium	Specific Conductance (120.1)	pH (150.1)	TDS (160.1)	Turbidity (180.1)								NUMBER OF CONTAINERS	COMMENTS
SC-700B-WDR-029	1-4-06	12:10	Groundwater	x	x	x	x	x	x								3	pH=2
																		TOTAL NUMBER OF CONTAINERS

RUSH

ALERT!!
Level III QC

CHAIN OF CUSTODY SIGNATURE RECORD

Signature	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished) Wm. Clough	Chris Knight	OMI	1-4-06 12:10
Signature (Received) L. Shakerine	L. Shakerine	TLI	1/4/06 1830
Signature (Relinquished)			
Signature (Received)			
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

For Sample Conditions See Form Attached

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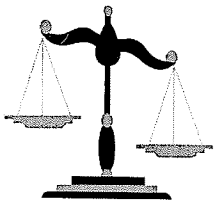
CH2M HILL
PG&E Topock Project

Laboratory Number: 950936
Received: January 19, 2006

IM3Plant-WDR-030
Project No.: 334168.IM.04.00
P.O. No.: 911248



Prepared for:

CH2M HILL
Attn: Mark Cichy
2525 Airpark Dr.
Redding, CA 96001

Prepared by:

TRUESDAIL LABORATORIES, INC.
TUSTIN, CALIFORNIA

Table of Contents
TLI Laboratory Data Package

For Laboratory Number: 950936

Section 1.0

Case Narrative

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

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January 25, 2006

CH2M HILL
Mr. Shawn Duffy
155 Grand Ave., Suite 1000
Oakland, California 94612

Dear Mr. Duffy:

SUBJECT: CASE NARRATIVE PG&E TOPOCK IM3PLANT–WDR-030 PROJECT, GROUNDWATER MONITORING.

TLI NO.: 950936

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-030 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, pH, and Total Dissolved Solids. A summary table for this laboratory number 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 sample was received and delivered with the chain of custody on January 19, 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.

for Julia Nayberg

Julia Nayberg
Manager, Analytical Services

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

CC: Mr. Mark Cichy, CH2M HILL Redding CA

Section 2.0

Summary Table of Final Results

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Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Laboratory No.: 950936
Date Received: January 19, 2006
Date Collected: January 18, 2006

Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Analytical Results Summary

Lab I.D.	Sample I.D.	Sample Time	SW 6010B *Chromium Total* mg/L	SW 7199 *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
950936	SC-700B-WDR-030	14:20	0.0107	ND	ND	7.80	7460	4420

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.
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REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Laboratory No.: 950936

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Date: January 25, 2006
Collected: January 18, 2006
Received: January 19, 2006
Prep/ Analyzed: January 19, 2006
Analytical Batch: 01CrH06Q

Investigation: **Hexavalent Chromium by SW 7199**

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
950936	SC-700B-WDR-030	14:20	12:28	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	950936	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	950936	0.00	5.00	0.00100	0.00500	0.00514	0.00500	103%	75-125%	Yes
MSD	950936	0.00	5.00	0.00100	0.00500	0.00518	0.00500	104%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00484	0.00500	96.8%	90% - 110%	Yes
MRCVS#1	0.00991	0.0100	99.1%	90% - 110%	Yes
MRCVS#2	0.00994	0.0100	99.4%	90% - 110%	Yes
MRCVS#3	0.00985	0.0100	98.5%	90% - 110%	Yes
LCS	0.00498	0.00500	99.6%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Julia Nayberg, Manager
Analytical Services

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www.truesdail.com

REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248
Prep. Batch: 012406A

Laboratory No.: 950936
Date: January 25, 2006
Collected: January 18, 2006
Received: January 19, 2006
Prep/ Analyzed: January 24, 2006
Analytical Batch: 012406A

Investigation: **Total Chromium by Inductively Coupled Argon Plasma Using Method SW 6010B**

Analytical Results Total Chromium

TLI I.D.	Field I.D.	Units	Method	Run Time	DF	RL	Results
950936	SC-700B-WDR-030	mg/L	SW 6010B	10:34	1.04	0.0010	0.0107

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	950937-1	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	950937-1	0.00	1.04	0.0100	0.0104	0.00961	0.0104	92.4%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00951	0.0100	95.1%	90% - 110%	Yes
MRCVS#1	0.00972	0.0100	97.2%	90% - 110%	Yes
MRCVS#2	0.00965	0.0100	96.5%	90% - 110%	Yes
ICS	0.0104	0.0100	104%	80% - 120%	Yes
LCS	0.00950	0.0100	95.0%	90% - 110%	Yes

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Julia Nayberg, Manager
Analytical Services

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REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Laboratory No.: 950936
Date: January 25, 2006
Collected: January 18, 2006
Received: January 19, 2006
Prep/ Analyzed: January 19, 2006
Analytical Batch: 01EC06Q

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
950936	SC-700B-WDR-030	µmhos/cm	EPA 120.1	10.0	20.0	7460

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	950950-1	482	484	0.41%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
CCS	672	706	95.2%	90% - 110%	Yes
CVS#1	923	996	92.7%	90% - 110%	Yes
CVS#2	925	996	92.9%	90% - 110%	Yes
LCS	678	706	96.0%	90% - 110%	Yes
LCSD	674	706	95.5%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Julia Nayberg, Manager
Analytical Services

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REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Laboratory No.: 950936
Date: January 25, 2006
Collected: January 18, 2006
Received: January 19, 2006
Prep/ Analyzed: January 19, 2006
Analytical Batch: 01TUC06Q

Investigation: **Turbidity by Method EPA 180.1**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
950936	SC-700B-WDR-030	14:20	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	950851-2	ND	ND	0.00%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	7.69	8.00	96.1%	90% - 110%	Yes
LCS	7.60	8.00	95.0%	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.

for Julia Nayberg
Julia Nayberg, Manager
Analytical Services

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REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Laboratory No.: 950936
Date: January 25, 2006
Collected: January 18, 2006
Received: January 19, 2006
Prep/ Analyzed: January 5, 2006
Analytical Batch: 01PH06U

Investigation:

pH by EPA 150.1

Analytical Results pH

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	MDL	RL	Results
950936	SC-700B-WDR-030	14:20	09:20	pH Units	0.0140	0.100	7.80

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	950935-1	7.32	7.32	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
LCS #2	7.01	7.00	0.01	± 0.100 Units	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Julia Nayberg
Julia Nayberg, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.
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REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Laboratory No.: 950936
Date: January 25, 2006
Collected: January 18, 2006
Received: January 19, 2006
Prep/ Analyzed: January 19, 2006
Analytical Batch: 01TDS06H

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

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
950936	SC-700B-WDR-030	mg/L	EPA 160.1	250	4420

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	950936	4420	4360	0.68%	≤ 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS 1	538	500	108%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Julia Nayberg, Manager
Analytical Services

950936

TRUESDAIL LABORATORIES, INC.
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CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-030]

COC Number

TURNAROUND TIME 5 Days

DATE _____ PAGE 1 OF 1

COMPANY	CH2M HILL
PROJECT NAME	PG&E Topock
PHONE	(510) 251-2888 FAX (510) 622-7086
ADDRESS	155 Grand Ave Ste 1000 Oakland, CA 94612
P.O. NUMBER	334168.IM.04.00
SAMPLERS (SIGNATURE	

Rec'd 01/19/06
950936

SAMPLE I.D.	DATE	TIME	DESCRIPTION	CR6 (7199) Lab Filtered	Total Met (6010B) Total Chromium	Specific Conductance (120.1)	pH (150.1)	TDS (160.1)	Turbidity (180.1)	NUMBER OF CONTAINERS	COMMENTS
SC-700B-WDR-030	1-18-06	14:20	Groundwater	x	x	x	x	x	x	3	pH: 2
										TOTAL NUMBER OF CONTAINERS	

RUSH

For Sample Conditions See Form Attached

ALERT!!
Level III QC

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	[illegible]	OMF	1-18-06 14:20
Signature (Received)	M. Lagunas	EXECUTIVE	01/18/06 3:25
Signature (Relinquished)	M. Lagunas	EXECUTIVE	01/19/06 9:35
Signature (Received)	[illegible]	TLI	01/19/06 08:40
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: 951145

Section 1.0

Case Narrative

TRUESDAIL LABORATORIES, INC.

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January 31, 2006

CH2M HILL
Mr. Shawn Duffy
155 Grand Ave., Suite 1000
Oakland, California 94612

Dear Mr. Duffy:

SUBJECT: CASE NARRATIVE PG&E TOPOCK IM3PLANT-WDR-031 PROJECT GROUNDWATER MONITORING,

TLI NO.: 951145

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-031 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 sample was received and delivered with the chain of custody on January 25, 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.

Julia Nayberg
Manager, Analytical Services

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

CC: Mr. Mark Cichy, CH2M HILL Redding CA

Section 2.0

Summary Table of Final Results

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Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Laboratory No.: 951145
Date Received: January 25, 2006

Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Analytical Results Summary

Lab I.D.	Sample I.D.	Sample Time	SW 6010B *Chromium Total* mg/L	SW 7199 *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
951145	SC-700B-WDR-031	12:05	ND	ND	ND	7.89	7900	4400

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

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REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Laboratory No.: 951145

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Date: January 31, 2006
Collected: January 25, 2006
Received: January 25, 2006
Prep/ Analyzed: January 26, 2006
Analytical Batch: 01CrH06V

Investigation: **Hexavalent Chromium by SW 7199**

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
951145	SC-700B-WDR-031	12:05	07:22	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	951141-4	0.0181	0.0179	1.11%	≤ 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	951145	0.00	5.00	0.00100	0.00500	0.00475	0.00500	95.0%	75-125%	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	0.0101	0.0100	101%	90% - 110%	Yes
MRCVS#2	0.0100	0.0100	100%	90% - 110%	Yes
MRCVS#3	0.0100	0.0100	100%	90% - 110%	Yes
LCS	0.00505	0.00500	101%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Julia Nayberg, Manager
Analytical Services

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REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Laboratory No.: 951145

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248
Prep. Batch: 013106A

Date: January 31, 2006
Collected: January 25, 2006
Received: January 25, 2006
Prep/ Analyzed: January 31, 2006
Analytical Batch: 013106A

Investigation: **Total Chromium by Inductively Coupled Argon Plasma Using Method SW 6010B**

Analytical Results Total Chromium

TLI I.D.	Field I.D.	Units	Method	Run Time	DF	RL	Results
951145	SC-700B-WDR-031	mg/L	SW 6010B	11:38	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	951145	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	9501145	0.00	1.04	0.0150	0.0156	0.0132	0.0156	84.6%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00989	0.0100	98.9%	90% - 110%	Yes
MRCVS#1	0.00942	0.0100	94.2%	90% - 110%	Yes
ICS	0.0103	0.0100	103%	80% - 120%	Yes
LCS	0.00960	0.0100	96.0%	90% - 110%	Yes

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Julia Nayberg

Julia Nayberg, Manager
Analytical Services

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REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Laboratory No.: 951145
Date: January 31, 2006
Collected: January 25, 2006
Received: January 25, 2006
Prep/ Analyzed: January 26, 2006
Analytical Batch: 01TUC06W

Investigation: **Turbidity by Method EPA 180.1**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
951145	SC-700B-WDR-031	12:05	NTU	1.00	0.100	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	951151-2	0.118	0.120	1.68%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	7.80	8.00	97.5%	90% - 110%	Yes
LCS	7.82	8.00	97.8%	90% - 110%	Yes
LCS	7.80	8.00	97.5%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Julia Nayberg, Manager
Analytical Services

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REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Laboratory No.: 951145
Date: January 31, 2006
Collected: January 25, 2006
Received: January 25, 2006
Prep/ Analyzed: January 26, 2006
Analytical Batch: 01PH06Z

Investigation:

pH by EPA 150.1

Analytical Results pH

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	MDL	RL	Results
951145	SC-700B-WDR-031	12:05	07:05	pH Units	0.0570	2.00	7.89

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	951145	7.89	7.90	0.01	± 0.100 Units	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Julia Nayberg, 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: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Laboratory No.: 951145
Date: January 31, 2006
Collected: January 25, 2006
Received: January 25, 2006
Prep/ Analyzed: January 27, 2006
Analytical Batch: 01EC06S

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
951145	SC-700B-WDR-031	µmhos/cm	EPA 120.1	10.0	20.0	7900

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	951179-1	458	461	0.65%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
CCS	674	706	95.5%	90% - 110%	Yes
CVS#1	922	998	92.4%	90% - 110%	Yes
LCS	673	706	95.3%	90% - 110%	Yes
LCSD	676	706	95.8%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Julia Nayberg

Julia Nayberg, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Laboratory No.: 951145
Date: January 31, 2006
Collected: January 25, 2006
Received: January 25, 2006
Prep/ Analyzed: January 26, 2006
Analytical Batch: 01TDS06J

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

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
951145	SC-700B-WDR-031	mg/L	EPA 160.1	250	4400

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	951145	4400	4410	0.11%	≤ 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS 1	498	500	99.6%	90% - 110%	Yes
LCS 2	492	500	98.4%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Julia Nayberg

Julia Nayberg, 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-031] 951145

COC Number

TURNAROUND TIME 5 Days

DATE _____ PAGE 1 OF 1

COMPANY	CH2M HILL
PROJECT NAME	PG&E Topock
PHONE	(510) 251-2888 FAX (510) 622-7086
ADDRESS	155 Grand Ave Ste 1000 Oakland, CA 94612
P.O. NUMBER	334168.IM.04.00
SAMPLERS (SIGNATURE	

Rec'd 01/25/06 951145

SAMPLE I.D.	DATE	TIME	DESCRIPTION	CR6 (7199) Lab Filtered	Total Met (6010B) Total Chromium	Specific Conductance (120.1)	pH (150.1)	TDS (160.1)	Turbidity (180.1)	NUMBER OF CONTAINERS	COMMENTS
SC-700B-WDR-031	1-25-06	12105	Groundwater	x	x	x	x	x	x	3	pH = 7
										3	TOTAL NUMBER OF CONTAINERS

For Sample Conditions See Form Attached

RUSH

ALERT!!
Level III QC

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Brian Wells	CH2M	1-25-06 12105
Signature (Received)	Brian Blatt	TLI	1/25/06 19:20
Signature (Relinquished)			
Signature (Received)			
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

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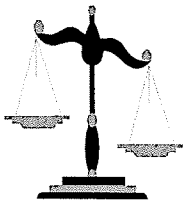
CH2M HILL
PG&E Topock Project

Laboratory Number: 951144
Received: January 25, 2006

IM3Plant-15
Project No.: 334168.IM.04.00
P.O. No.: 911248



Prepared for:

CH2M HILL
Attn: Mark Cichy
2525 Airpark Dr.
Redding, CA 96001

Prepared by:

TRUESDAIL LABORATORIES, INC.
TUSTIN, CALIFORNIA

Table of Contents
TLI Laboratory Data Package

For Laboratory Number: 951144

Section 1.0

Case Narrative

TRUESDAIL LABORATORIES, INC.
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www.truesdail.com

January 31, 2006

CH2M HILL
Mr. Shawn Duffy
155 Grand Ave., Suite 1000
Oakland, California 94612

Dear Mr. Duffy:

SUBJECT: CASE NARRATIVE PG&E TOPOCK IM3PLANT-15 PROJECT GROUNDWATER MONITORING, TLI NO.: 951144

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-15 project groundwater monitoring for Total Dissolved Solids. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The samples were received and delivered with the chain of custody on January 25, 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.

for Julia Nayberg

Julia Nayberg
Manager, Analytical Services

K. R. P. Iyer

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

CC: Mr. Mark Cichy, CH2M HILL Redding CA

TRUESDAIL LABORATORIES, INC.

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Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Five (5) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00

Laboratory No.: 951144
Date: January 30, 2006
Collected: January 19-25, 2006
Received: January 25, 2006

ANALYST LIST

METHOD	PARAMETER	ANALYST
EPA 160.1	Total Dissolved Solids	Emilia Haley

Section 2.0

Summary Table of Final Results

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INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

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REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Laboratory No.: 951144
Date Received: January 25, 2006

Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Analytical Results Summary

Lab I.D.	Sample I.D.	Sample Date &Time	Units	EPA 160.1 *TDS*
951144-1	SC-700B-1-19-06	01/19/06 15:00	mg/L	4070
951144-2	SC-700B-1-20-06	01/20/06 16:00	mg/L	4390
951144-3	SC-700B-1-23-06	01/23/06 15:15	mg/L	4350
951144-4	SC-700B-1-24-06	01/24/06 15:40	mg/L	4370
951144-5	SC-700B-1-25-06	01/25/06 12:00	mg/L	4420

ND: Non Detected (below the 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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(714)730-6239 FAX: (714) 730-6462
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CHAIN OF CUSTODY RECORD

[IM3Plant15]

951144

COC Number

TURNAROUND TIME 10 Days

DATE 01/25/06 PAGE 1 OF 1

COMPANY CH2M HILL

PROJECT NAME PG&E Topock IM3Plant09

PHONE (510) 251-2888 FAX (510) 622-7086

ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612

P.O. NUMBER 911248

SAMPLERS (SIGNATURE

ALERT!! Level III QC

For Sample Conditions See Form Attached

Rec'd 01/25/06
951144

	SAMPLE I.D.	DATE	TIME	DESCRIPTION	TDS (160.1)	NUMBER OF CONTAINERS	COMMENTS
-1	SC-700B-1-19-06	01/19/06	1500		X	1	
-2	SC-700B-1-20-06	01/20/06	1600		X	1	
-3	SC-700B-1-23-06	01/23/06	1515		X	1	
-4	SC-700B-1-24-06	01/24/06	1540		X	1	
-5	SC-700B-1-25-06	01/25/06	1200		X	1	
						TOTAL NUMBER OF CONTAINERS	

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Shawn Duffy	CH2M HILL	1/25/06 1505
Signature (Received)	Shawn Bletter	TLI	1/25/06 1520
Signature (Relinquished)			
Signature (Received)			
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

This sample is for process characterization and does not require QC be analyzed on this sample. No QC analysis should be charged to this sample set.

TRUESDAIL LABORATORIES, INC.

Sample Integrity & Analysis Discrepancy Form

Client: CH2M Hill **Lab #** 951144

Date Delivered: 1/25/06 **Time:** 19:20 **By:** ☐Mail ☐Field Service ☒Client

1.	Was a Chain of Custody received and signed?	☒Yes	☐No	☐N/A
2.	Does Customer require an acknowledgement of the COC?	☐Yes	☐No	☒N/A
3.	Are there any special requirements or notes on the COC?	☐Yes	☐No	☒N/A
4.	If a letter was sent with the COC, does it match the COC?	☐Yes	☐No	☒N/A
5.	Were all requested analyses understood and acceptable?	☒Yes	☐No	☐N/A
6:	Were samples received in a chilled condition? Temperature (if yes)? 4 °C	☒Yes	☐No	☐N/A
7.	Were samples received intact (i.e. broken bottles, leaks, air bubbles, etc..)?	☒Yes	☐No	☐N/A
8.	Were sample custody seals intact?	☐Yes	☐No	☒N/A
9.	Does the number of samples received agree with COC?	☒Yes	☐No	☐N/A
10.	Did sample labels correspond with the client ID's?	☒Yes	☐No	☐N/A
11.	Did sample labels indicate proper preservation? Preserved (if yes) by: ☐**Truesdail** ☐Client	☐Yes	☐No	☒N/A
12.	Were samples pH checked? pH = See C.O.C.	☒Yes	☐No	☐N/A
13.	Were all analyses within holding time at time of receipt? If not, notify Project Manager.	☒Yes	☐No	☐N/A
14.	Have Project due dates been checked and accepted? Turn Around Time (TAT): ☐ **RUSH** ☒Std	☒Yes	☐No	☐N/A

ALERT!! Level IV QC

15. **Sample Matrix:** ☐Liquid ☐Drinking Water ☒Ground Water ☐Waste Water ☐Sludge ☐Soil ☐Wipe ☐Paint ☐Solid ☐Other _____

16. Comments: _____

17. Sample Check-In completed by **Truesdail** Log-In/Receiving: Shane Blattel

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CH2M HILL
PG&E Topock Project

Laboratory Number: 951369
Received: February 1, 2006

IM3Plant-16
Project No.: 334168.IM.04.00
P.O. No.: 911248

Prepared for:

CH2M HILL
Attn: Mark Cichy
2525 Airpark Dr.
Redding, CA 96001

Prepared by:

TRUESDAIL LABORATORIES, INC.
TUSTIN, CALIFORNIA

Table of Contents
TLI Laboratory Data Package

For Laboratory Number: 951369

Section 1.0

Case Narrative

TRUESDAIL LABORATORIES, INC.
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www.truesdail.com

February 7, 2006

CH2M HILL
Mr. Shawn Duffy
155 Grand Ave., Suite 1000
Oakland, California 94612

Dear Mr. Duffy:

SUBJECT: CASE NARRATIVE PG&E TOPOCK IM3PLANT-16 PROJECT GROUNDWATER MONITORING, TLI NO.: 951369

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-16 project groundwater monitoring for Total Dissolved Solids. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The samples were received and delivered with the chain of custody on February 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 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
Senior Chemist, Analytical Services

K. R. P. Iyer

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

CC: Mr. Mark Cichy, CH2M HILL Redding CA

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

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Five (5) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00

Laboratory No.: 951369
Date: February 7, 2006
Collected: 01/26/-02/01/06
Received: February 1, 2006

ANALYST LIST

METHOD	PARAMETER	ANALYST
E PA 160.1	Total Dissolved Solids	Emilia Haley

Section 2.0

Summary Table of Final Results

TRUESDAIL LABORATORIES, INC.
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Established 1931

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

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

REPORT

Laboratory No.: 951369
Date Received: February 1, 2006

Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Analytical Results Summary

Lab I.D.	Sample I.D.	Sample Date &Time	Units	EPA 160.1 *TDS*
951369-1	SC-700B-1-26-06	01/26/06 12:00	mg/L	4230
951369-2	SC-700B-1-27-06	01/27/06 12:30	mg/L	4170
951369-3	SC-700B-1-28-06	01/28/06 12:00	mg/L	4230
951369-4	SC-700B-1-29-06	01/29/06 12:00	mg/L	4170
951369-5	SC-700B-2-1-06	02/01/06 12:15	mg/L	4310

ND: Non Detected (below the 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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CHAIN OF CUSTODY RECORD

Im3 plant 16
951369

☑ TURNAROUND TIME 5 Day

DATE _____ PAGE ____ OF ____

COMPANY CH2m Hill

PROJECT NAME PG&E Topock

PHONE 510 251-2888 FAX 510 622-7086

ADDRESS 155 Grand Ave Ste 1000
Oakland CA 94612

P.O. NUMBER _____

SAMPLERS (SIGNATURE) Brian Dalke Various others

METHODS

SAMPLE I.D.	DATE	TIME	DESCRIPTION	TDS	NUMBER OF CONTAINERS	COMMENTS
-1 SC-700B-126-d	1-26-06	12:00		X	1	
-2 SC700B-127-d	1-27-06	12:30		X	1	
-3 SC700B-128-d	1-28-06	12:00		X	1	pH=7
-4 SC700B-129-d	1-29-06	12:00		X	1	
-5 SC700B2-1-d	2-1-06	12:15		X	1	

ALERT!! Level III QC

Rec'd 02/01/06
951369

For Sample Conditions See Form Attached

RUSH

5 TOTAL NUMBER OF CONTAINERS

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	BRIAN DALKE	OMI	2-1-06 14:40
Signature (Received)	Diane Platter	TLI	2/1/06 19:30
Signature (Relinquished)	FRED DOUGLAS	EXECUTIVE	2/1/06
Signature (Received)			
Signature (Relinquished)			
Signature (Received)			
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ _____ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

This sample is for ~~Spec~~ Process chemistry and does not require QC

TRUESDAIL LABORATORIES, INC.

Sample Integrity & Analysis Discrepancy Form

Client: CH2M HILL **Lab #** 951369

Date Delivered: 2 / __ / 06 **Time:** 1930 **By:** ☐Mail ☐Field Service ☑Client

1.	Was a Chain of Custody received and signed?	☑Yes	☐No	☐N/A
2.	Does Customer require an acknowledgement of the COC?	☐Yes	☐No	☑N/A
3.	Are there any special requirements or notes on the COC?	☐Yes	☐No	☑N/A
4.	If a letter was sent with the COC, does it match the COC?	☐Yes	☐No	☑N/A
5.	Were all requested analyses understood and acceptable?	☑Yes	☐No	☐N/A
6.	Were samples received in a chilled condition? Temperature (if yes)? 4 °C	☑Yes	☐No	☐N/A
7.	Were samples received intact (i.e. broken bottles, leaks, air bubbles, etc.)?	☑Yes	☐No	☐N/A
8.	Were sample custody seals intact?	☐Yes	☐No	☑N/A
9.	Does the number of samples received agree with COC?	☑Yes	☐No	☐N/A
10.	Did sample labels correspond with the client ID's?	☑Yes	☐No	☐N/A
11.	Did sample labels indicate proper preservation? Preserved (if yes) by: ☐**Truesdail** ☐Client	☐Yes	☐No	☑N/A
12.	Were samples pH checked? pH = See COC	☑Yes	☐No	☐N/A
13.	Were all analyses within holding time at time of receipt? If not, notify Project Manager.	☑Yes	☐No	☐N/A
14.	Have Project due dates been checked and accepted? Turn Around Time (TAT): ☑**RUSH** ☐Std	☑Yes	☐No	☐N/A

ALERT! Level IV QC

RUSH

15. ***Sample Matrix:*** ☐Liquid ☐Drinking Water ☐Ground Water ☐Waste Water ☐Sludge ☐Soil ☐Wipe ☐Paint ☐Solid ☑Other Water

16. Comments: _____

17. Sample Check-In completed by **Truesdail** Log-In/Receiving: J Brown

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

January 26, 2006

STL LOT NUMBER: **E6A120369**
PO/CONTRACT: 334168.IM.04.00

Shawn Duffy
CH2M Hill Inc
2525 Air Park
Redding, CA 96001

Dear Mr. Duffy,

This report contains the analytical results for the sample received under chain of custody by STL Los Angeles on January 12, 2006. This sample is associated with your PG&E TOPOCK GWM 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.

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 January 19, 2006.

This report contains 000186 pages.

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

Sincerely,

Marisol Tabirara

Marisol Tabirara
Project Manager

cc: Project File

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

CHAIN OF CUSTODY RECORD

[Sludge Sample-4] E6A120369

COC Number

TURNAROUND TIME 5 Days

DATE 1-11-06 PAGE 1 OF 1

COMPANY	CH2M HILL
PROJECT NAME	PG&E Topock GWM
PHONE	(510) 251-2888 FAX (510) 622-7086
ADDRESS	155 Grand Ave Ste 1000 Oakland, CA 94612
P.O. NUMBER	334168.IM.04.00 TEAM 1
SAMPLERS (SIGNATURE	Tom Ellis

SAMPLE I.D.	DATE	TIME	DESCRIPTION	CR6 (7199) Lab Filtered MT 1/13/06	Total Met (6010B) Title 22	Metals (7470A)	NUMBER OF CONTAINERS	COMMENTS
SC-Sludge-WDR-	1-11-06	14:25	Soil	x	x	x	6	
							6	TOTAL NUMBER OF CONTAINERS

000003

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Brian Wonus	OMI	1-11-06 14:00
Signature (Received)	Vince Padilla	STL	1/12/06 1235
Signature (Relinquished)	Vince Padilla	STL	1/12/06 1245
Signature (Received)	Steve Gonzales	STL	1/12/06 12:45
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

Temp – 7.1 – 0.8 = 6.3

STL LOS ANGELES - PROJECT RECEIPT CHECKLIST Date: 1/12/06

Single Cooler Only

LIMS Lot #: E6A120369 Quote #: 58027

Client Name: CH2M HILL Project: PG+E TOPOCK GWM

Received by: SG Date/Time Received: 1/12/06 12:45

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

****

Initial / Date

Custody Seal Status Cooler: ☐ Intact ☐ Broken ☒ None ..... SG 1/12/06

Custody Seal Status Samples: ☐ Intact ☐ Broken ☒ None .....

Custody Seal #(s): N/A ☒ No Seal #.....

Sampler Signature on COC ☒ Yes ☐ No ☐ N/A.....

IR Gun # _A_ Correction Factor _-.8_ °C IR passed daily verification ☒ Yes ☐ No .....

Temperature - **BLANK** 7.1 °C - .8 CF = 6.3 °C ...**Cooler #1 ID** N/A .....

Temperature – **COOLER** (____°C ____°C ____°C ____°C) = _____ avg °C -__.8__ CF = _____°C.....

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

Sample Container(s): ☒ STL-LA ☐ Client .....

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

Anomalies: ☐ No ☒ Yes – complete CUR and Create NCM .....

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

Labeled by: SG .....

****

Turn Around Time: ☐ RUSH–24HR ☐ RUSH–48HR ☐ RUSH–72HR ☒ NORMAL..... SG 1/12/06

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

Headspace Anomaly ☐ YES ☒ N/A SG 1/12/06

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 # E6A120369

PROJECT RECEIPT CHECKLIST Cont'd

Fraction	1													
VOAH														
40ml CGI	6*													
~~1/13/06~~ 3														

1/12/06

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 1/12/06

- 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:
- 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
- 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
- ☐ 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: TEMPERATURE ~~Temerature~~ was 6.3°C upon arrival 1/26/06

~~*Returned Containers 4/6, 5/6, 6/6 to TRUESDAHL AT THEIR REQUEST 1/13/06 8:45am~~

~~Kept 1/6, 2/6 + 3/6~~ Cancelled per MILA 1/13/06

☐ Corrective Action Implemented:

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

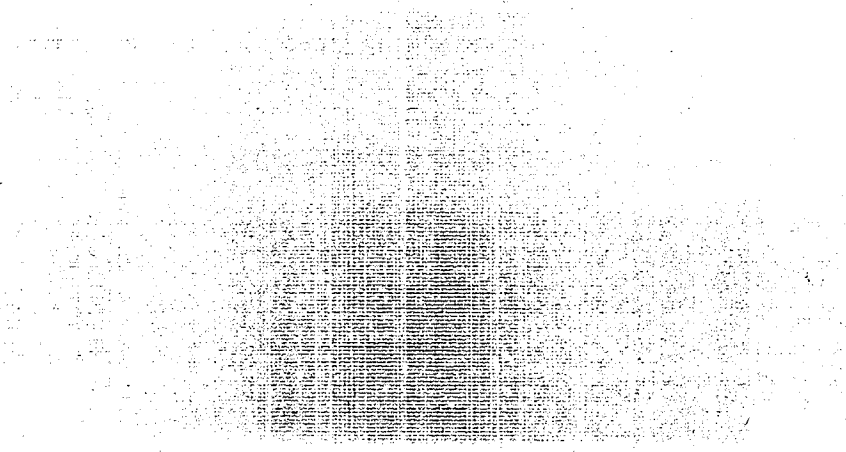
☐ Sample(s) on hold until: ______ ☐ Sample(s) processed "as is."

Logged by/Date: Logged in by other STL ☐ ___ 1-13-06

PM Review/Date: 1/13/06

SEVERN TRENT STL

Analytical Report



ANALYTICAL REPORT

PG&E TOPOCK GWM

Lot #: E6A120369

Shawn Duffy

CH2M Hill Inc

SEVERN TRENT LABORATORIES, INC.

Marisol Tabirara
Project Manager

January 19, 2006

EXECUTIVE SUMMARY - Detection Highlights

E6A120369

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SC-SLUDGE-WDR- 01/11/06 14:25 001				
Mercury	2.4	0.68	mg/kg	SW846 7471A
Barium	95	68	mg/kg	SW846 6010B
Chromium	35000	34	mg/kg	SW846 6010B
Copper	100	84	mg/kg	SW846 6010B
Percent Moisture	85	0.10	%	MCAWW 160.3 MOD
Hexavalent Chromium	230	14	mg/kg	SW846 7199

METHODS SUMMARY

E6A120369

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Hexavalent Chromium	SW846 7199	
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.

SAMPLE SUMMARY

E6A120369

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
HVLT6	001	SC-SLUDGE-WDR-	01/11/06	14:25

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-

TOTAL Metals

Lot-Sample #...: E6A120369-001 Matrix.....: SO
Date Sampled...: 01/11/06 14:25 Date Received..: 01/12/06 12:45
% Moisture.....: 85

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 6016371						
Mercury	**2.4**	**0.68**	**mg/kg**	**SW846 7471A**	**01/17/06**	**HVLT61AW**
		Dilution Factor: 1		Analysis Time..: 14:16	Analyst ID.....: 000023	
		Instrument ID..: M04		MS Run #.....: 6016267		
Prep Batch #...: 6017384						
Arsenic	ND G	34	mg/kg	SW846 6010B	01/17-01/18/06	HVLT61AD
		Dilution Factor: 5		Analysis Time..: 15:27	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 6017226		
Antimony	ND G	200	mg/kg	SW846 6010B	01/17-01/18/06	HVLT61AE
		Dilution Factor: 5		Analysis Time..: 15:27	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 6017226		
Barium	**95**	**68**	**mg/kg**	**SW846 6010B**	**01/17-01/18/06**	**HVLT61AF**
		Dilution Factor: 5		Analysis Time..: 15:27	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 6017226		
Cadmium	ND G	17	mg/kg	SW846 6010B	01/17-01/18/06	HVLT61AG
		Dilution Factor: 5		Analysis Time..: 15:27	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 6017226		
Chromium	**35000**	**34**	**mg/kg**	**SW846 6010B**	**01/17-01/18/06**	**HVLT61AH**
		Dilution Factor: 5		Analysis Time..: 15:27	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 6017226		
Beryllium	ND G	17	mg/kg	SW846 6010B	01/17-01/18/06	HVLT61AJ
		Dilution Factor: 5		Analysis Time..: 15:27	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 6017226		
Lead	ND G	17	mg/kg	SW846 6010B	01/17-01/18/06	HVLT61AK
		Dilution Factor: 5		Analysis Time..: 15:27	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 6017226		
Selenium	ND G	17	mg/kg	SW846 6010B	01/17-01/18/06	HVLT61AL
		Dilution Factor: 5		Analysis Time..: 15:27	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 6017226		

(Continued on next page)

CH2M Hill Inc

Client Sample ID: SC-SLUDGE-WDR-

TOTAL Metals

Lot-Sample #...: E6A120369-001 **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	ND G	34	mg/kg	SW846 6010B	01/17-01/18/06	HVLT61AM
		Dilution Factor: 5		Analysis Time..: 15:27	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 6017226		
Cobalt	ND G	170	mg/kg	SW846 6010B	01/17-01/18/06	HVLT61AN
		Dilution Factor: 5		Analysis Time..: 15:27	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 6017226		
Copper	**100**	**84**	**mg/kg**	**SW846 6010B**	**01/17-01/18/06**	**HVLT61AP**
		Dilution Factor: 5		Analysis Time..: 15:27	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 6017226		
Molybdenum	ND G	140	mg/kg	SW846 6010B	01/17-01/18/06	HVLT61AQ
		Dilution Factor: 5		Analysis Time..: 15:27	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 6017226		
Nickel	ND G	140	mg/kg	SW846 6010B	01/17-01/18/06	HVLT61AR
		Dilution Factor: 5		Analysis Time..: 15:27	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 6017226		
Thallium	ND G	34	mg/kg	SW846 6010B	01/17-01/18/06	HVLT61AT
		Dilution Factor: 5		Analysis Time..: 15:27	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 6017226		
Vanadium	ND G	170	mg/kg	SW846 6010B	01/17-01/18/06	HVLT61AU
		Dilution Factor: 5		Analysis Time..: 15:27	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 6017226		
Zinc	ND G	68	mg/kg	SW846 6010B	01/17-01/18/06	HVLT61AV
		Dilution Factor: 5		Analysis Time..: 15:27	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 6017226		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

CH2M Hill Inc

Client Sample ID: SC-SLUDGE-WDR-

General Chemistry

Lot-Sample #...: E6A120369-001 **Work Order #...:** HVLT6 **Matrix.....:** SO
Date Sampled...: 01/11/06 14:25 **Date Received..:** 01/12/06 12:45
% Moisture.....: 85

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Hexavalent Chromium	**230**	**14**	**mg/kg**	**SW846 7199**	**01/16-01/18/06**	**6013558**
	Dilution Factor: 5			Analysis Time..: 15:47	Analyst ID.....: 000022	
	Instrument ID..: W18			MS Run #.....: 6016137		
Percent Moisture	**85**	**0.10**	**%**	**MCAWW 160.3 MOD**	**01/16-01/17/06**	**6016409**
	Dilution Factor: 1			Analysis Time..: 12:00	Analyst ID.....: 0000647	
	Instrument ID..: W15			MS Run #.....: 6016284		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

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

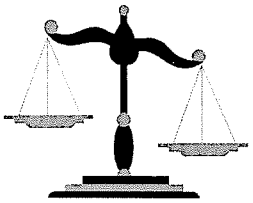
Established 1931

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

CH2M HILL
PG&E Topock Project

Laboratory Number: 950722
Received: January 11, 2006

Sludge Sumple-4
Project No.: 334168.IM.04.00
P.O. No.: 911248



Prepared for:

CH2M HILL
Attn: Mark Cichy
2525 Airpark Dr.
Redding, CA 96001

Prepared by:

TRUESDAIL LABORATORIES, INC.
TUSTIN, CALIFORNIA

Table of Contents
TLI Laboratory Data Package

For Laboratory Number: 950722

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

January 18, 2006

CH2M HILL
Mr. Shawn Duffy
155 Grand Ave., Suite 1000
Oakland, California 94612

Dear Mr. Duffy:

SUBJECT: CASE NARRATIVE PG&E TOPOCK IM3 PLANT–WDR-025 PROJECT, SLUDGE SAMPLE-3, TLI NO.: 950722

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3 Plant-WDR-025 project, Sludge Sample-3. A summary table for this laboratory number 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 January 11, 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.

Julia Nayberg
Manager, Analytical Services

K. R. P. Iyer

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

CC: Mr. Mark Cichy, CH2M HILL Redding CA

Section 2.0

Summary Table of Final Results

TRUESDAIL LABORATORIES, INC.
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REPORT

Laboratory No.: 950722
Date Received: January 11, 2006

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Analytical Results Summary

Lab I.D.	Sample I.D.	EPA 300.0 *Fluoride* *mg/kg*
950722	SC-Sludge-WDR-028	13.0

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.
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REPORT

Client: CH2M HILL
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Soil Sample
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248

Laboratory No.: 950722
Date: January 18, 2006
Collected: January 11, 2006
Received: January 11, 2006
Prep/ Analyzed: January 17, 2006
Analytical Batch: 01AN06M

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
950722	SC-Sludge-WDR-028	mg/kg	EPA 300.0	10:35	1.00	0.200	13.0

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	950722	13.0	13.1	0.77%	≤20%	Yes

QC Std I.D.	Lab Number	Conc.of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	950722	13.0	1.00	39.7	39.7	55.2	52.7	106%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	4.05	4.00	101%	90% - 110%	Yes
MRCVS#1	3.10	3.00	103%	90% - 110%	Yes
MRCVS#2	3.10	3.00	103%	90% - 110%	Yes
LCS	3.79	4.00	94.8%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Julia Nayberg, Manager
Analytical Services

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-4] 950722

COC Number
TURNAROUND TIME 5 Days
DATE 1-11-06 PAGE 1 OF 1

COMPANY CH2M HILL
PROJECT NAME PG&E Topock
PHONE (510) 251-2888 FAX (510) 622-7086
ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612
P.O. NUMBER 334168.IM.04.00
SAMPLERS (SIGNATURE Wm. Clayton

Rec'd 01/11/06
950722

SAMPLE I.D.	DATE	TIME	DESCRIPTION	Anions (300) Fl	~~Bioassay: 96hr Acute~~	NUMBER OF CONTAINERS	COMMENTS
SC-Sludge-WDR-28	1-11-06	14:25	Soil	x	x	1	
						1	TOTAL NUMBER OF CONTAINERS

↑ cancelled per Shawn Duffy on 01/13/06

ALERT!! Level III QC

For Sample Conditions See Form Attached

RUSH!

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished) [signature]	Printed Name [illegible]	Company/ Agency CMI	Date/ Time 1-11-06 14:00
Signature (Received) [signature]	Printed Name Shane B	Company/ Agency TLI	Date/ Time 1/11/06 19:45
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: