



**Pacific Gas and
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September 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)
August 2006 Monitoring Report**

Dear Mr. Perdue:

Enclosed is the Board Order R7-2004-0103 August 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). 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 August 2006 Monitoring Report for the IM No. 3 Groundwater Treatment System.

Robert Perdue
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cc: José Cortez, Water Board
Liann Chavez, Water Board
Tom Vandenberg, Water Board
Chris Guerre, DTSC

August 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

September 15, 2006

CH2MHILL
155 Grand Avenue, Suite 1000
Oakland, CA 94612

**August 2006 Monitoring Report
Interim Measure 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

September 15, 2006

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



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



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Acronyms and Abbreviations

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

1.0 Introduction

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

California Regional Water Quality Control Board, Colorado River Basin Region (Water Board) Board Order No. R7-2004-0103 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 fifteenth day of the following month.

This report covers monitoring activities related to operation of the IM No. 3 groundwater treatment system during August 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. (All tables are located at the end of this report.) Sampling station locations are provided in the process and instrumentation diagrams: Figures TP-PR-10-10-04, TP-PR-10-10-08, and TP-PR-10-10-06.

3.0 Description of Activities

The treatment system was initially operated between August 25 and August 28, 2005 for the WDR-mandated startup phase. Discharge to the injection wells was initiated August 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 August 2006, groundwater was pumped from extraction wells TW-2D (on August 7 and 8), TW-3D and PE-1. The target groundwater extraction system pump rate was 135 gallons per minute during August 2006 (excluding planned and unplanned downtime, which is described in Section 4.0).

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

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

4.0 Groundwater Treatment System Flow Rates

The August 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).

In addition to extracted groundwater, the IM No. 3 facility treated approximately 1,320 gallons of water generated from monitoring well development and aquifer testing during August 2006. Treatment of this water at the IM No. 3 facility was approved by the Water Board on January 26, 2006, according to the conditions of Board Order No. R7-2004-0103. One container of solids (approximately 12 cubic yards) from the IM No. 3 facility was transported to the Chemical Waste Management facility at Kettleman Hills, California during August 2006.

On August 2, 2006, injection well IW-03 was brought into full-time service and IW-02 was taken out of service for well cleaning. No extraction system downtime resulted from this event.

Periods of planned and unplanned extraction system downtime during August 2006 are summarized below. The times shown are in Pacific Standard Time (PST) to be consistent with other data collected (e.g. water level data) at the site.

- **August 7 and 8, 2006 (unplanned):** Extraction well TW-3D was shut down from 5:13 p.m. on Monday, August 7 until 9:18 a.m. on Tuesday, August 8 due to a leaking pipe gasket in the extraction well vault. A water level sensor located within the extraction well vault identified the leak and automatically shut down TW-3D. The leaking gasket was replaced and TW-3D was back online at 8:28 a.m. on Tuesday, August 8. The leak was entirely contained within the well vault, which provides secondary containment at the extraction wellhead. No extraction system downtime resulted from this event.
- **August 9, 2006 (unplanned):** The extraction well system was shut down from 5:03 p.m. until 5:35 p.m. to switch to generator power after a weather-caused power failure. Extraction system downtime was 32 minutes.
- **August 10, 2006 (unplanned):** The extraction well system was shut down from 4:52 a.m. until 5:00 a.m. to return operations to Needles power. Extraction system downtime was 5 minutes.
- **August 22, 2006 (unplanned):** The extraction well system was shut down from 7:30 p.m. until 7:44 p.m. to switch to generator power after a weather-caused power failure. Extraction system downtime was 14 minutes.

- **August 23, 2006 (unplanned):** The extraction well system was shut down from 4:59 a.m. until 5:05 a.m. to return operations to Needles power. Extraction system downtime was 6 minutes.
- **August 23, 2006 (unplanned):** The extraction well system was shut down from 1:36 p.m. until 2:45 p.m. due to a required repair of a valve on the reverse osmosis unit. Extraction system downtime was 1 hour 9 minutes.
- **August 23, 2006 (unplanned):** The extraction well system was shut down from 6:26 p.m. until 7:44 p.m. due to a power outage caused by thunderstorms in the area. Extraction system downtime was 1 hour 18 minutes.
- **August 23, 2006 (planned):** The extraction well system was shut down from 8:53 p.m. until 10:59 p.m. to switch to the offline set of clean microfilter modules as part of normal module maintenance. Extraction system downtime was 2 hours 6 minutes.
- **August 24, 2006 (unplanned):** The extraction well system was shut down from 3:20 a.m. until 4:33 a.m. to troubleshoot and re-start the microfilter which was shutting down due to a backwash strainer alarm condition. Extraction system downtime was 1 hour 13 minutes.
- **August 25, 2006 (unplanned):** The extraction well system was shut down from 6:28 a.m. until 6:35 a.m. to return operations to Needles power. Extraction system downtime was 7 minutes.
- **August 31, 2006 (unplanned):** The extraction well system was shut down from 3:06 p.m. until 3:19 p.m. to switch to generator power after a weather-caused power failure. Extraction system downtime was 13 minutes.

5.0 Sampling and Analytical Procedures

All samples were collected at the designated sampling locations and placed directly into containers provided by Truesdail Laboratories, Inc. (Truesdail) or Severn Trent Laboratories, Inc. (STL). Sample containers were labeled and packaged according to standard sampling procedures.

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

Truesdail is certified by the California Department of Health Services (Certification No. 1237) under the State of California's Environmental Laboratory Accreditation Program. STL is certified by the California Department of Health Services (Certification No. 1118) under the Environmental Laboratory Accreditation Program. Truesdail forwarded the sludge sample to MBC Laboratory. MBC Laboratory conducted the sludge bioassay test, and is certified by the California Department of Health Services (Certification No. 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 Code of Federal Regulations Part 136), promulgated by the United States Environmental Protection Agency.

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

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

Groundwater quality is being monitored in observation and compliance wells according to procedures and schedules approved in the *Groundwater Compliance Monitoring Plan for Interim Measures No. 3 Injection Area* submitted to the Water Board June 17, 2005. Quarterly groundwater monitoring analytical results for the injection area are reported in a separate document, in conjunction with groundwater level maps of the same monitoring wells.

6.0 Analytical Results

Laboratory reports prepared by the certified analytical 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 August 2, 2006.
- The effluent was sampled weekly; sample dates August 2, 9, 16, 23, and 30, 2006.
- The reverse osmosis concentrate was sampled monthly; sample date August 2, 2006.
- The sludge was sampled monthly; sample date August 2, 2006. WDR requirements state that sludge is to be sampled each time it 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; the 3rd Quarter 2006 aquatic bioassay test was conducted with a sludge sample from the July 5, 2006 sampling event; the results were presented in the July 2006 Report.

Table 7 identifies the laboratory that performed each analysis and lists the following required information:

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

7.0 Conclusions

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

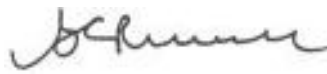
In addition, no incidents of non-compliance were identified during the reporting period, and no events that caused an immediate or potential threat to human health or the environment, or new releases of hazardous waste or hazardous waste constituents, or new solid waste management units were identified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

8.0 Certification

PG&E submitted a signature delegation letter to the Water Board on August 12, 2005. The letter delegated PG&E signature authority to Mr. Curt Russell and Ms. Yvonne Meeks for correspondence regarding Board Order R7-2004-0103.

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: _____ September 15, 2006 _____

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

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

Note:

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

TABLE 2
Flow Monitoring Results
August 2006 Report for Interim Measure No. 3 Groundwater Treatment System

Parameter	System Influent ^{a,b}	System Effluent ^{c,b}	Reverse Osmosis Concentrate ^{d,b}
Average Monthly Flowrate (gpm)	133.5	121.6	11.8

Notes:

gpm: gallons per minute.

^aExtraction wells TW-2D, TW-3D and PE-1 were operated during August 2006.

^bThe difference between influent flow rate and the sum of the effluent and reverse osmosis concentrate flow rates is less than 0.1 percent, which is within the range of acceptable accuracy considering the margin of error for onsite instrumentation, the water contained within the sludge, and differences in the inventory of water in the treatment system between the beginning and end of the reporting period.

^cEffluent was discharged into injection well IW-02 until August 2, 2006, at which time IM-03 was brought into full-time operation and IW-02 was taken out of service for maintenance.

^dReverse Osmosis Concentrate flow meter reading from FIT-701.

TABLE 3
Board Order No. R7-2004-0103 Waste Discharge Requirements (WDRs)
Influent Monitoring Results ^a
August 2006 Monthly Report for Interim Measures No.3 Groundwater Treatment System

Required Sampling Frequency		Monthly																						
<div>Sample ID</div> <div>Date</div>	Analytes Units ^b	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
		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	µg/L	mg/L	mg/L	mg/L	µg/L
SC-100B-WDR-058	8/2/2006	5650	ND (0.1)	9780	7.38	1810	1690	ND (52)	ND (0.5)	ND (3.0)	ND (5.0)	ND (300)	1.26	32.8	2.77	ND (2.0)	ND (500)	22.0	ND (20)	3.19	0.0138	662	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
August 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	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	NA		
Required Sampling Frequency		Weekly						Monthly																		
<div><div></div><div>Analytes Units ^c</div></div>	Date	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		
		mg/L	NTU	µmhos/cm	pHunits	µg/L	µg/L	µg/L	mg/L	µg/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-700B-WDR-058	8/2/2006	3650	ND (0.1)	7180	8.17	ND (1.0)	ND (0.2)	ND (52)	ND (0.5)	ND (3.0)	ND (5.0)	ND (300)	1.09	36.7	1.90	ND (2.0)	ND (500)	12.9	ND (20)	2.32	ND (0.005)	468	ND (300)	ND (20)
SC-700B-WDR-059	8/9/2006	3950	ND (0.1)	7100	8.10	ND (1.0)	ND (0.2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
SC-700B-WDR-060	8/16/2006	4480	ND (0.1)	7270	7.97	ND (1.0)	ND (0.2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
SC-700B-WDR-061	8/23/2006	3600	ND (0.1)	6560	8.01	3.40	ND (0.2)J	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
SC-700B-WDR-062	8/30/2006	3980	ND (0.1)	8020	7.96	ND (1.0)	ND (0.2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	

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

^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
August 2006 Monthly Report for Interim Measures No.3 Groundwater Treatment System

Required Sampling Frequency		Monthly																					
<div><div></div><div>Sample ID</div></div>	<div><div>Analytes</div><div>Units ^b</div></div>	TDS	Specific Conductance	pH	Chromium	Hexavalent Chromium	Antimony	Arsenic	Barium	Beryllium	Cadmium	Cobalt	Copper	Fluoride	Lead	Molybdenum	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
	Date	mg/L	µmhos/cm	pHUnits	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
SC-701-WDR-058	8/2/2006	21600	39500	8.09	ND (0.001)	ND (0.001)	ND (0.01)	ND (0.01)	ND (0.3)	ND (0.0052)	ND (0.0052)	ND (0.01)	ND (0.01)	9.71	ND (0.0052)	0.0645	ND (0.0004)	ND (0.02)	ND (0.021)	ND (0.01)	ND (0.0052)	ND (0.01)	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
August 2006 Monthly Report for Interim Measures No.3 Groundwater Treatment System

Required Sampling Frequency			Monthly ^c																		
Sample ID	Date	Analytes Units ^b	Chromium	Hexavalent Chromium	Antimony	Arsenic	Barium	Beryllium	Cadmium	Cobalt	Copper	Fluoride	Lead	Molybdenum	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SC-Sludge-WDR-058	8/2/2006		16000	140	ND (32)	20.0	97.0	ND (2.7)	3.90	ND (27)	110	12.4	ND (2.7)	36.0	2.70	44.0	8.50	ND (5.3)	10.0	87.0	38.0

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

TABLE 7

Board Order No. R7-2004-0103 Waste Discharge Requirements (WDRs)

Monitoring Information

August 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-058	Gary Sibble	8/2/2006	1:28:00 PM	TLI	EPA 120.1	SC	8/8/2006	Tina Acquiati
					TLI	EPA 150.1	PH	8/3/2006	Tina Acquiati
					TLI	EPA 160.1	TDS	8/8/2006	Tina Acquiati
					TLI	EPA 180.1	TRB	8/3/2006	Gautam Savani
					TLI	EPA 200.7	CRT	8/9/2006	Riddhi Patel
					TLI	EPA 200.7	ZN	8/9/2006	Riddhi Patel
					TLI	EPA 200.7	NI	8/9/2006	Riddhi Patel
					TLI	EPA 200.7	FET	8/9/2006	Riddhi Patel
					TLI	EPA 200.7	BA	8/9/2006	Riddhi Patel
					TLI	EPA 200.7	B	8/9/2006	Riddhi Patel
					TLI	EPA 200.7	AL	8/9/2006	Riddhi Patel
					TLI	EPA 200.7	MN	8/9/2006	Riddhi Patel
					TLI	EPA 200.8	SB	8/10/2006	Riddhi Patel
					TLI	EPA 200.8	AS	8/10/2006	Riddhi Patel
					TLI	EPA 200.8	CU	8/10/2006	Riddhi Patel
					TLI	EPA 200.8	MO	8/10/2006	Riddhi Patel
					TLI	EPA 200.8	PB	8/10/2006	Riddhi Patel
					TLI	EPA 300.0	SO4	8/3/2006	Giawad Ghenniwa
					TLI	EPA 300.0	NO3N	8/3/2006	Giawad Ghenniwa
					TLI	EPA 300.0	FL	8/3/2006	Giawad Ghenniwa
					TLI	EPA 350.2	NH3N	8/8/2006	Iordan Stavrev
					TLI	EPA 354.1	NO2N	8/3/2006	Tina Acquiati
					TLI	EPA Method 218.6	CR6	8/2/2006	Stanley Hsieh
SC-700B	SC-700B-WDR-058	Gary Sibble	8/2/2006	12:36:00 PM	TLI	EPA 120.1	SC	8/8/2006	Tina Acquiati
					TLI	EPA 150.1	PH	8/3/2006	Tina Acquiati
					TLI	EPA 160.1	TDS	8/8/2006	Tina Acquiati
					TLI	EPA 180.1	TRB	8/3/2006	Gautam Savani
					TLI	EPA 200.7	CRT	8/14/2006	Riddhi Patel
					TLI	EPA 200.7	BA	8/9/2006	Riddhi Patel
					TLI	EPA 200.7	B	8/9/2006	Riddhi Patel
					TLI	EPA 200.7	AL	8/9/2006	Riddhi Patel
					TLI	EPA 200.7	ZN	8/9/2006	Riddhi Patel
					TLI	EPA 200.7	NI	8/9/2006	Riddhi Patel
					TLI	EPA 200.7	FET	8/9/2006	Riddhi Patel
					TLI	EPA 200.7	MN	8/9/2006	Riddhi Patel
					TLI	EPA 200.8	PB	8/10/2006	Riddhi Patel
					TLI	EPA 200.8	MO	8/10/2006	Riddhi Patel

TABLE 7

Board Order No. R7-2004-0103 Waste Discharge Requirements (WDRs)

Monitoring Information

August 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-058	Gary Sibble	8/2/2006	12:36:00 PM	TLI	EPA 200.8	AS	8/10/2006	Riddhi Patel
					TLI	EPA 200.8	SB	8/10/2006	Riddhi Patel
					TLI	EPA 200.8	CU	8/10/2006	Riddhi Patel
					TLI	EPA 300.0	SO4	8/3/2006	Giawad Ghenniwa
					TLI	EPA 300.0	FL	8/3/2006	Giawad Ghenniwa
					TLI	EPA 300.0	NO3N	8/3/2006	Giawad Ghenniwa
					TLI	EPA 350.2	NH3N	8/8/2006	Iordan Stavrev
					TLI	EPA 354.1	NO2N	8/3/2006	Tina Acquiati
					TLI	EPA Method 218.6	CR6	8/2/2006	Stanley Hsieh
SC-700B	SC-700B-WDR-059	James Carter	8/9/2006	11:30:00 AM	TLI	EPA 120.1	SC	8/12/2006	Tina Acquiati
					TLI	EPA 150.1	PH	8/10/2006	Tina Acquiati
					TLI	EPA 160.1	TDS	8/14/2006	Tina Acquiati
					TLI	EPA 180.1	TRB	8/10/2006	Gautam Savani
					TLI	EPA 200.7	CRT	8/14/2006	Riddhi Patel
					TLI	EPA Method 218.6	CR6	8/10/2006	Stanley Hsieh
SC-700B	SC-700B-WDR-060	David Chaney	8/16/2006	10:01:00 AM	TLI	EPA 120.1	SC	8/17/2006	Tina Acquiati
					TLI	EPA 150.1	PH	8/17/2006	Tina Acquiati
					TLI	EPA 160.1	TDS	8/17/2006	Tina Acquiati
					TLI	EPA 180.1	TRB	8/17/2006	Gautam Savani
					TLI	EPA 200.7	CRT	8/29/2006	Riddhi Patel
					TLI	EPA Method 218.6	CR6	8/16/2006	Stanley Hsieh
SC-700B	SC-700B-WDR-061	Chris Knight	8/23/2006	12:05:00 PM	TLI	EPA 120.1	SC	8/24/2006	Tina Acquiati
					TLI	EPA 150.1	PH	8/24/2006	Tina Acquiati
					TLI	EPA 160.1	TDS	8/24/2006	Tina Acquiati
					TLI	EPA 180.1	TRB	8/24/2006	Gautam Savani
					TLI	EPA 200.8	CRT	8/25/2006	Laureen Tran
					TLI	EPA Method 218.6	CR6	8/23/2006	Roger Chen
SC-700B	SC-700B-WDR-062	Gary Sibble	8/30/2006	10:37:00 AM	TLI	EPA 120.1	SC	8/31/2006	Tina Acquiati
					TLI	EPA 150.1	PH	8/31/2006	Tina Acquiati
					TLI	EPA 160.1	TDS	8/31/2006	Tina Acquiati
					TLI	EPA 180.1	TRB	8/31/2006	Gautam Savani
					TLI	EPA 200.7	CRT	9/6/2006	Riddhi Patel
					TLI	EPA Method 218.6	CR6	8/30/2006	Roger Chen
SC-701	SC-701-WDR-058	Gary Sibble	8/2/2006	1:18:00 PM	TLI	EPA 120.1	SC	8/8/2006	Tina Acquiati
					TLI	EPA 150.1	PH	8/3/2006	Tina Acquiati
					TLI	EPA 160.1	TDS	8/8/2006	Tina Acquiati

TABLE 7

Board Order No. R7-2004-0103 Waste Discharge Requirements (WDRs)

Monitoring Information

August 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-058	Gary Sibble	8/2/2006	1:18:00 PM	TLI	EPA 200.7	BA	8/9/2006	Riddhi Patel
					TLI	EPA 200.7	CRT	8/14/2006	Riddhi Patel
					TLI	EPA 200.7	NI	8/9/2006	Riddhi Patel
					TLI	EPA 200.7	ZN	8/9/2006	Riddhi Patel
					TLI	EPA 200.8	CD	8/10/2006	Riddhi Patel
					TLI	EPA 200.8	BE	8/12/2006	Riddhi Patel
					TLI	EPA 200.8	AS	8/10/2006	Riddhi Patel
					TLI	EPA 200.8	CO	8/10/2006	Riddhi Patel
					TLI	EPA 200.8	CU	8/10/2006	Riddhi Patel
					TLI	EPA 200.8	MO	8/10/2006	Riddhi Patel
					TLI	EPA 200.8	PB	8/10/2006	Riddhi Patel
					TLI	EPA 200.8	SB	8/10/2006	Riddhi Patel
					TLI	EPA 200.8	SE	8/10/2006	Riddhi Patel
					TLI	EPA 200.8	TL	8/10/2006	Riddhi Patel
					TLI	EPA 200.8	V	8/10/2006	Riddhi Patel
					TLI	EPA 200.8	AG	8/10/2006	Riddhi Patel
					TLI	EPA 245.1	HG	8/14/2006	Aksiniya Dimitrova
					TLI	EPA 300.0	FL	8/9/2006	Giawad Ghenniwa
					TLI	EPA Method 218.6	CR6	8/2/2006	Stanley Hsieh
SC-Sludge	SC-Sludge-WDR-058	Gary Sibble	8/2/2006	12:58:00 PM	STL	EPA 160.3	MOIST	8/9/2006	Janice Salenga
					TLI	EPA 300.0	FL	8/4/2006	Giawad Ghenniwa
					STL	EPA 6010B	NI	8/15/2006	H. Ton/J. Asuncion
					STL	EPA 6010B	ZN	8/15/2006	H. Ton/J. Asuncion
					STL	EPA 6010B	AS	8/15/2006	H. Ton/J. Asuncion
					STL	EPA 6010B	V	8/15/2006	H. Ton/J. Asuncion
					STL	EPA 6010B	TL	8/15/2006	H. Ton/J. Asuncion
					STL	EPA 6010B	SE	8/15/2006	H. Ton/J. Asuncion
					STL	EPA 6010B	SB	8/15/2006	H. Ton/J. Asuncion
					STL	EPA 6010B	PB	8/15/2006	H. Ton/J. Asuncion
					STL	EPA 6010B	MO	8/15/2006	H. Ton/J. Asuncion
					STL	EPA 6010B	CU	8/15/2006	H. Ton/J. Asuncion
					STL	EPA 6010B	CRT	8/15/2006	H. Ton/J. Asuncion
					STL	EPA 6010B	CO	8/15/2006	H. Ton/J. Asuncion
					STL	EPA 6010B	CD	8/15/2006	H. Ton/J. Asuncion
					STL	EPA 6010B	BA	8/15/2006	H. Ton/J. Asuncion
					STL	EPA 6010B	AG	8/15/2006	H. Ton/J. Asuncion
					STL	EPA 6010B	BE	8/15/2006	H. Ton/J. Asuncion

TABLE 7

Board Order No. R7-2004-0103 Waste Discharge Requirements (WDRs)

Monitoring Information

August 2006 Monthly Report for Interim Measures No.3 Groundwater Treatment System

Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician
SC-Sludge	SC-Sludge-WDR-058	Gary Sibble	8/2/2006	12:58:00 PM	STL	EPA 7471A	HG	8/11/2006	Hao Ton
					STL	SW 7199	CR6	8/8/2006	Yuriy Zakhrafov

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)

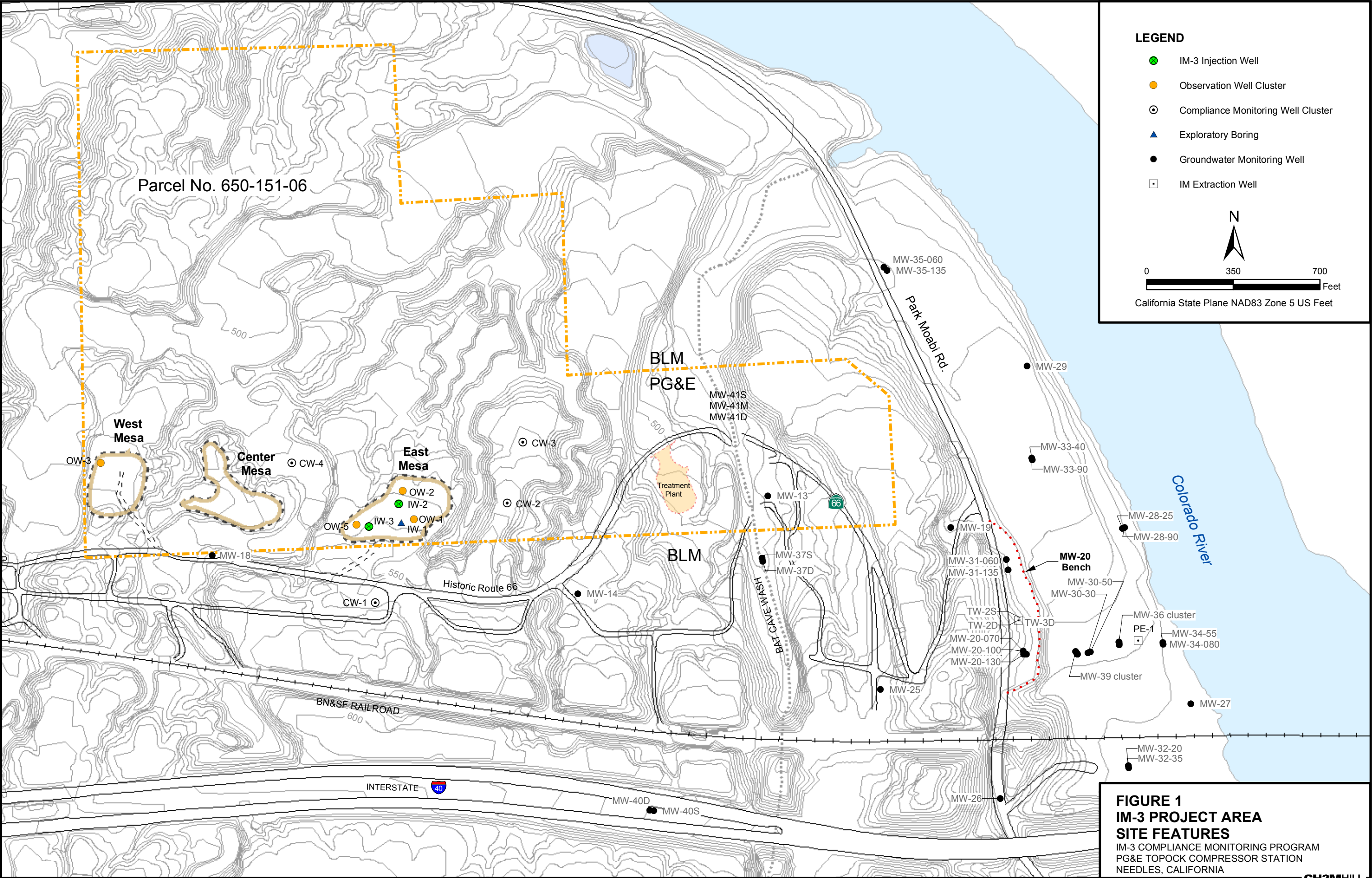
SC-701 = Sampling Location for all Reverse Osmosis Samples is tap on pipe T-701 (see attached P&ID TP-PR-10-10-08)

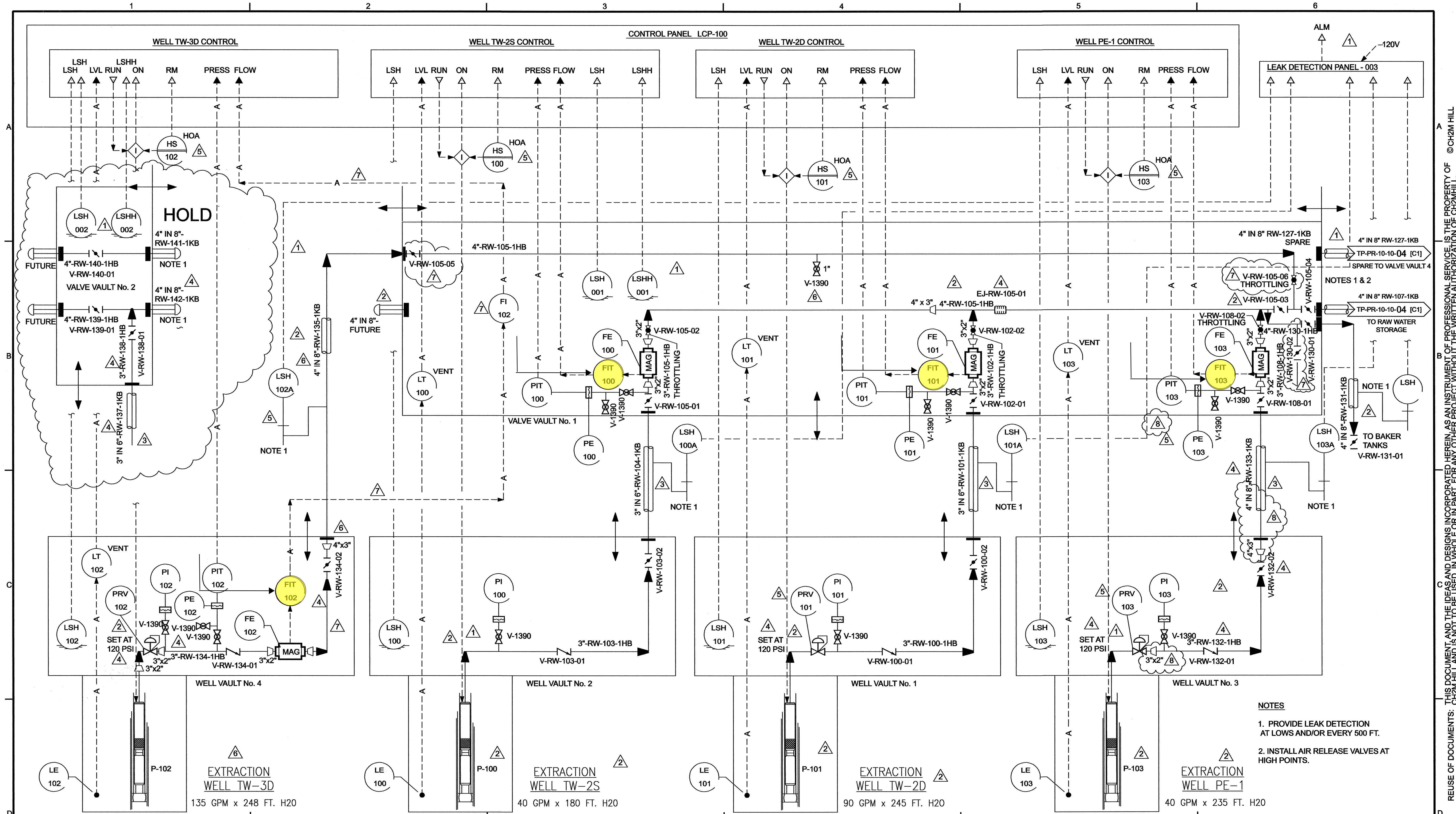
TLI = Truesdail Laboratories, Inc.

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





- 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	REVISION APPROVAL	REV 8	DATE 12/06/05	PRINT DISTRIBUTION	STATUS
8	12/07/05	REMOVED PE-1 HOLDS	JBW	SDH	DISCIPLINE	REVIEWED	DISCIPLINE	REVIEWED	DATE
1	10/13/04	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ	CIVIL	—	ELECTRICAL	—	STATUS
2	01/23/05	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ	STRUCTURAL	—	INST & CONTROL	—	REV.
3	03/16/05	DELETED NOTES. APPROVED FOR CONSTRUCTION	EFC	AJ	MECHANICAL	—	ARCHITECTURAL	—	CLIENT
4	07/20/05	RELIEF VALVE SETTINGS, WELL PE-1 LINE TAGS, HOLDS REMOVED. APPROVED FOR CONSTRUCTION	EFC	AJ	PROCESS	—	ENVIRONMENTAL	—	FIELD
5	09/27/05	FINAL RECORD ISSUE	EFC	AJ	PIPING	SDH	GEN. ARRANG.	—	INTRA CO.
6	10/06/05	REVISED FINAL RECORD - ADDED TW-3D	EFC	AJ	—	—	—	—	—
7	10/19/05	REVISED AS NOTED	EFC	AJ	—	—	—	—	—

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

SCALE NONE

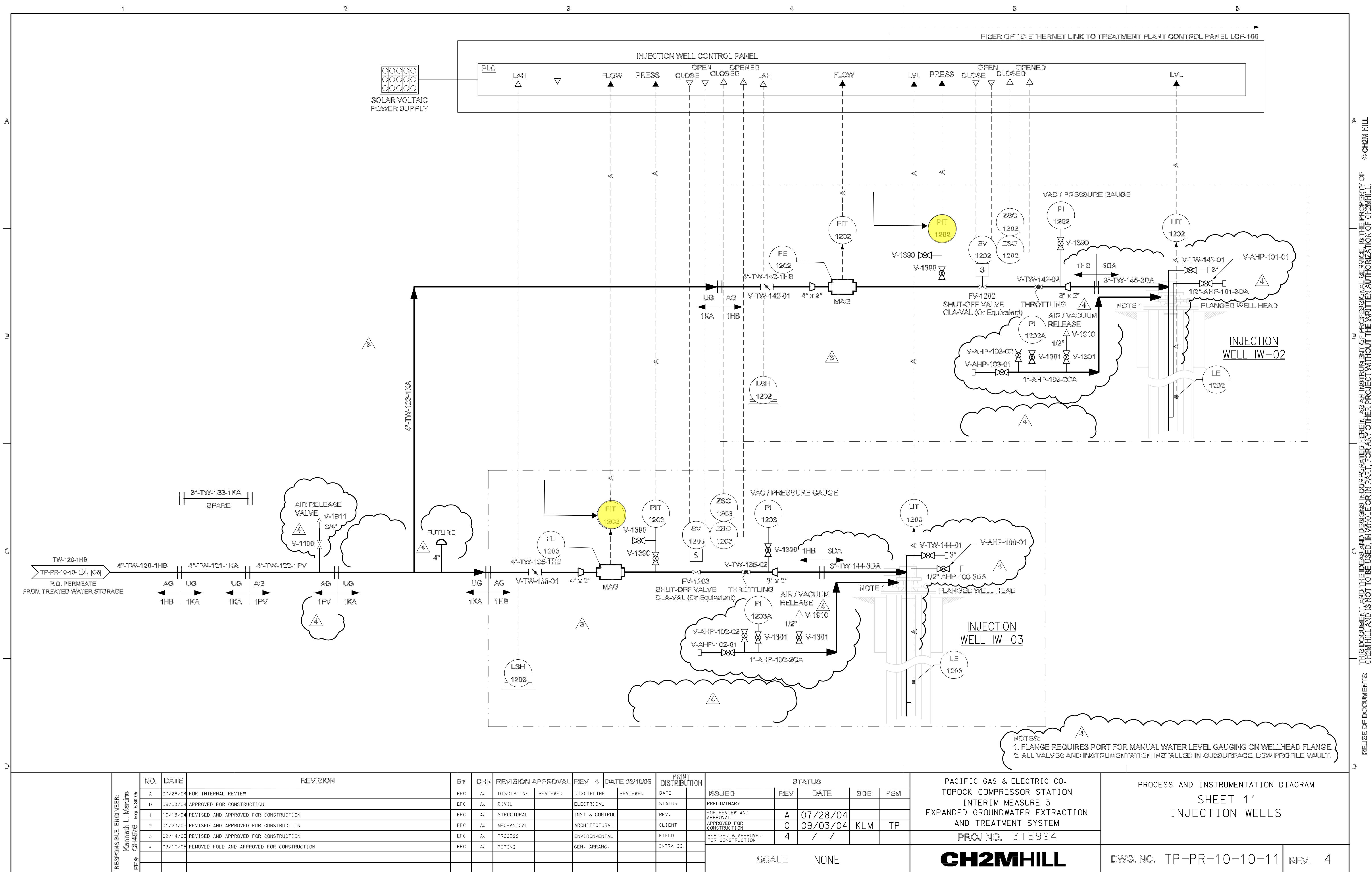
PACIFIC GAS & ELECTRIC CO.
TOPOCK COMPRESSOR STATION
INTERIM MEASURE 3
EXPANDED GROUNDWATER EXTRACTION
AND TREATMENT SYSTEM
PROJ. NO. 315994

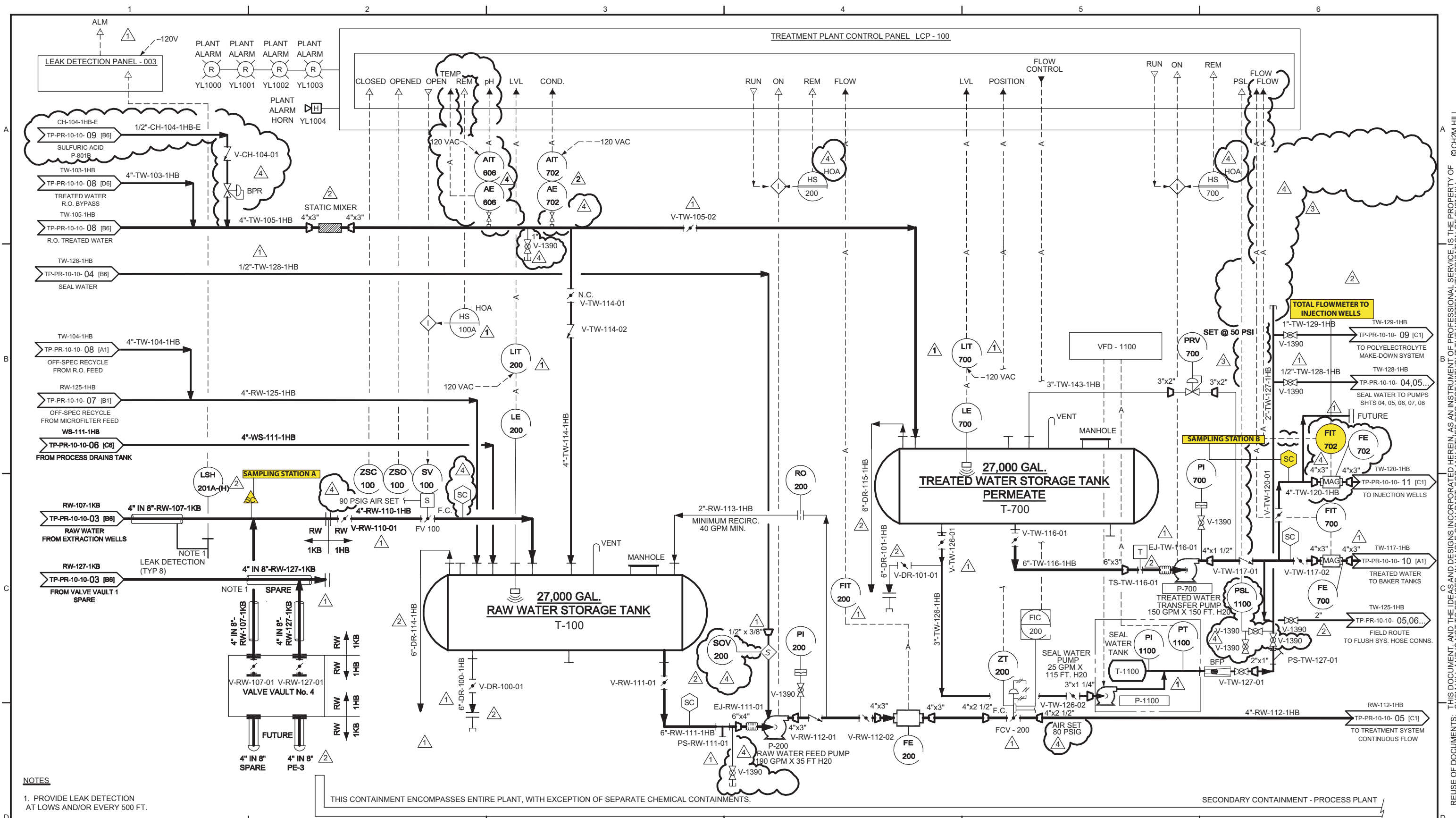
CH2MHILL

PROCESS AND INSTRUMENTATION DIAGRAM
SHEET 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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THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.



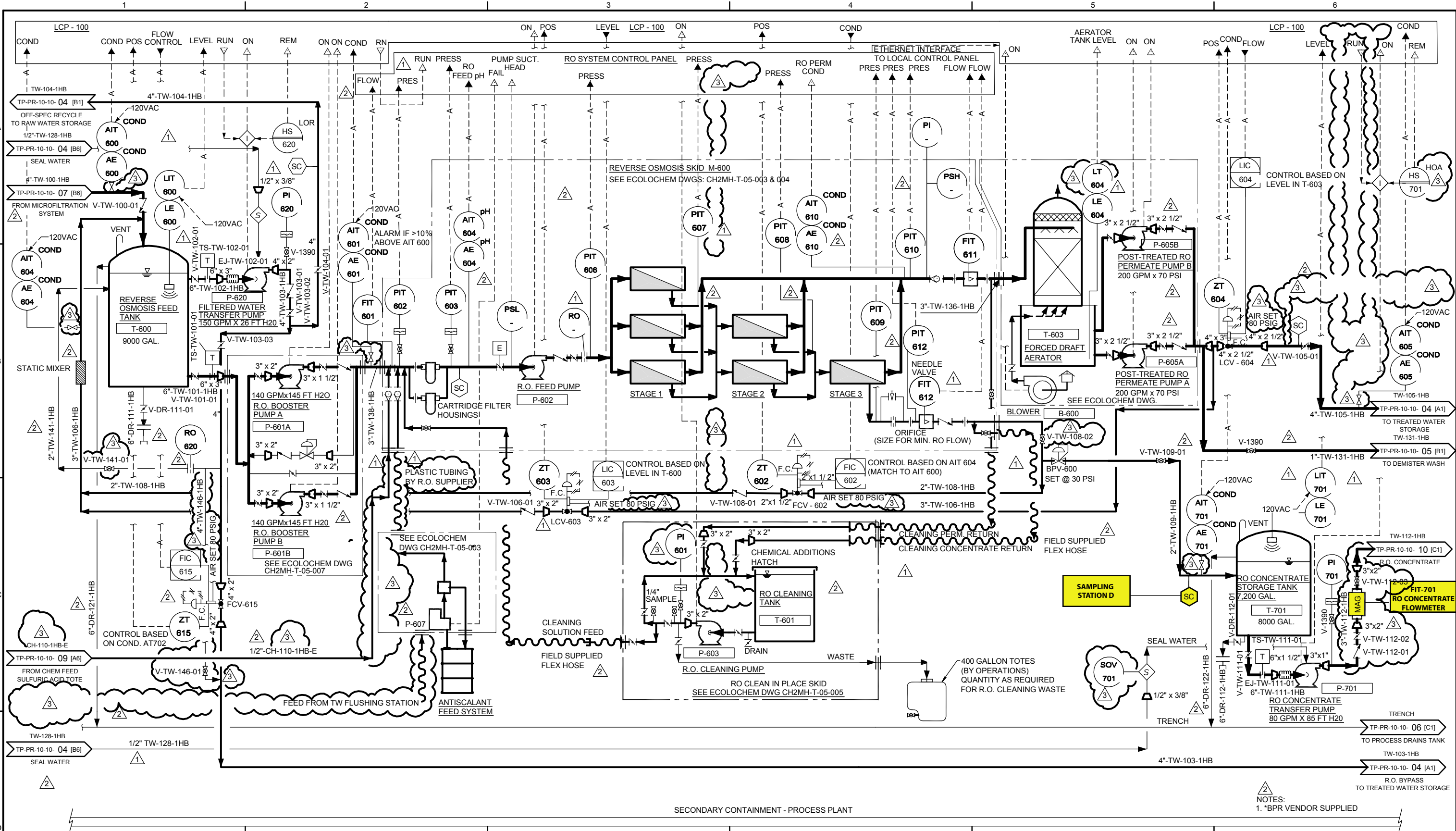


NOTES
1. PROVIDE LEAK DETECTION AT LOWS AND/OR EVERY 500 FT.

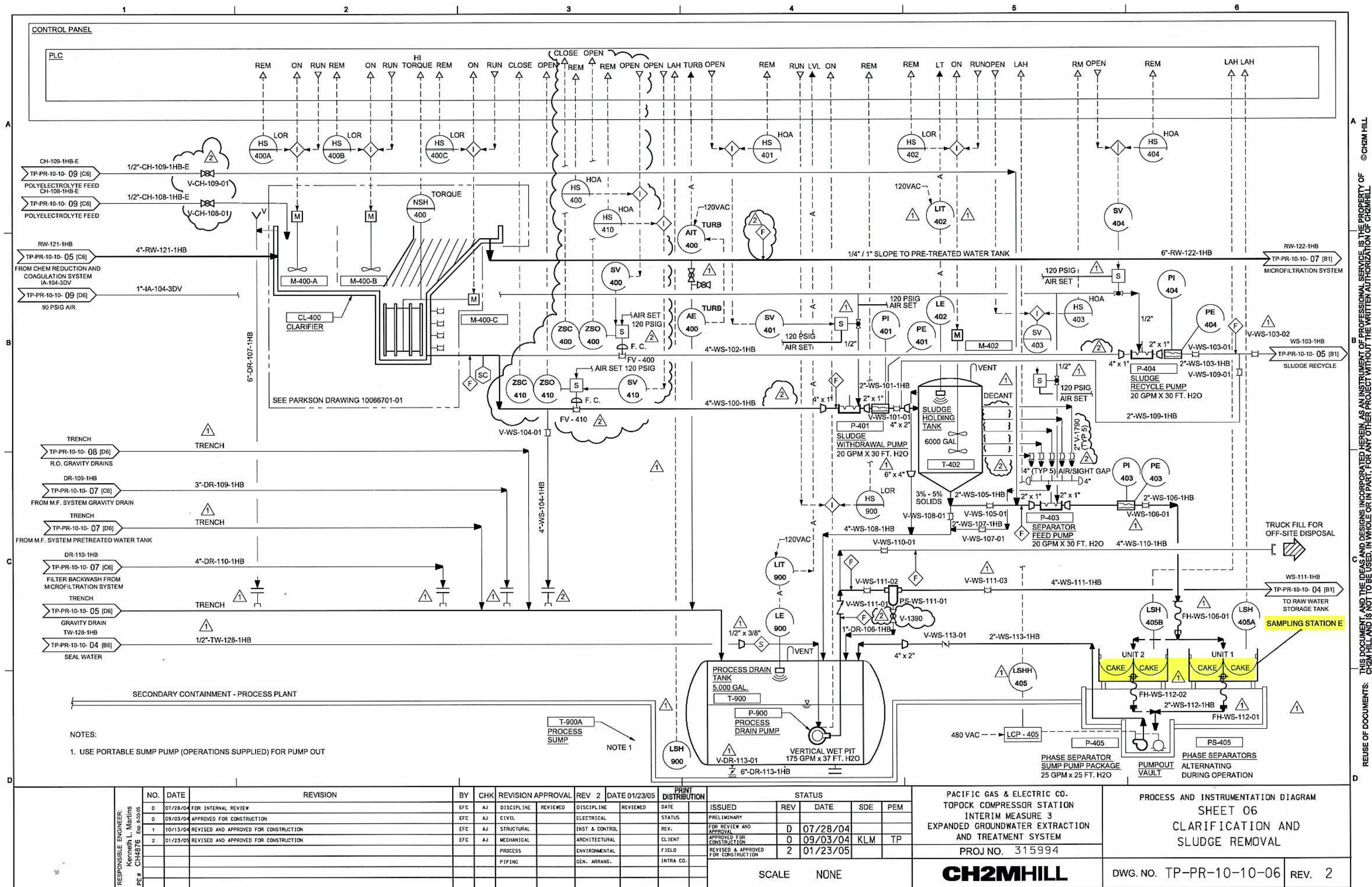
THIS CONTAINMENT ENCOMPASSES ENTIRE PLANT, WITH EXCEPTION OF SEPARATE CHEMICAL CONTAINMENTS.

SECONDARY CONTAINMENT - PROCESS PLANT

REVISION	NO.	DATE	REVISION	BY	CHK	REVISION APPROVAL	REV 4	DATE 09/21/05	PRINT DISTRIBUTION	STATUS				PACIFIC GAS & ELECTRIC CO. TOPOCK COMPRESSOR STATION INTERIM MEASURE 3 EXPANDED GROUNDWATER EXTRACTION AND TREATMENT SYSTEM PROJ NO. 315994	PROCESS AND INSTRUMENTATION DIAGRAM SHEET 04 STORAGE AREA	
										ISSUED	REV	DATE	SDE	PEM		
										PRELIMINARY						
										FOR REVIEW AND APPROVAL						
										APPROVED FOR CONSTRUCTION						
	0	07/28/04	FOR INTERNAL REVIEW	EFC	AJ	DISCIPLINE	REVIEWED	DISCIPLINE	REVIEWED	DATE						
	0	09/03/04	APPROVED FOR CONSTRUCTION	EFC	AJ	CIVIL		ELECTRICAL		STATUS						
	1	10/13/04	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ	STRUCTURAL		INST & CONTROL		REV.						
	2	01/23/05	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ	MECHANICAL		ARCHITECTURAL		CLIENT						
	3	02/14/05	ADDED RECIRC. LINE AND PRV VALVE TO T-700 - APPROVED FOR CONSTRUCTION	EFC	AJ	PROCESS		ENVIRONMENTAL		FIELD						
	4	09/21/05	REVISED PER AS-BUILT CONDITIONS	EFC	AJ	PIPING		GEN. ARRANG.		INTRA CO.						
											SCALE NONE		CH2MHILL		DWG. NO. TP-PR-10-10-04	REV. 4



RESPONSIBLE ENGINEER: Kenneth L. Martins PE # CH43876 Exp. 6-30-06	NO.	DATE	REVISION	BY	CHK	REVISION APPROVAL	REV 3	DATE 09/21/05	PRINT DISTRIBUTION	STATUS					PACIFIC GAS & ELECTRIC CO. TOPOCK COMPRESSOR STATION INTERIM MEASURE 3 EXPANDED GROUNDWATER EXTRACTION AND TREATMENT SYSTEM PROJ NO. 315994	PROCESS AND INSTRUMENTATION DIAGRAM SHEET 08 REVERSE OSMOSIS SYSTEM		
	0	07/28/04	FOR INTERNAL REVIEW	EFC	AJ	DISCIPLINE	REVIEWED	DISCIPLINE	REVIEWED	DATE	ISSUED	REV	DATE	SDE				PEM
	0	09/03/04	APPROVED FOR CONSTRUCTION	EFC	AJ	CIVIL		ELECTRICAL	REVIEWED	STATUS								
	1	10/13/04	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ	STRUCTURAL		INST & CONTROL		REV.	D	07/28/04						
	2	01/23/05	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ	MECHANICAL		ARCHITECTURAL		CLIENT	0	09/03/04	KLM	TP				
	3	09/21/05	REVISED PER AS-BUILT CONDITIONS	EFC	AJ	PROCESS		ENVIRONMENTAL		FIELD	REVISED & APPROVED FOR CONSTRUCTION	3	/ /					
						PIPING		GEN. ARRANG.		INTRA CO.								
										SCALE NONE					CH2MHILL	DWG. NO. TP-PR-10-10-08	REV. 3	



Appendix A

Laboratory Analytical Reports

Table of Contents
TLI Laboratory Data Package
For Laboratory Number: 957393

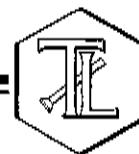
<u>ITEM</u>	<u>Section</u>
Case Narrative	1.0
Summary Table of Final Results	2.0
Final Reports	3.0
Wet Chem Analysis/ Raw Data, Standard, Quality Control and Chain of Custody Records	4.0
Established Retention Time Window and Analytical Raw Data	5.0

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

August 16, 2006

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

Dear Mr. Duffy:

SUBJECT: CASE NARRATIVE PG&E TOPOCK IM3PLANT-WDR-058 PROJECT, GROUNDWATER
MONITORING,
TLI NO.: 957393

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-058 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, pH, Anions, Ammonia, Total Dissolved Solids, and Title 22 Metals. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The samples were received and delivered with the chain of custody on August 2, 2006, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

The analysis for mercury by EPA 245.1 on sample 957393-3 was run at a dilution of 2X due to insufficient sample volume with Shawn Duffy's approval.

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.

Edna C. Hill
for Mona Nassimi
Mona Nassimi
Manager, Analytical Services

K. R. P. Iyer

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

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

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

Attention: Shawn Duffy

Sample: Three (3) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 957393

Date: August 16, 2006

Collected: August 2, 2006

Received: August 2, 2006

ANALYST LIST

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

Section 2.0

Summary Table of Final Results

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



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

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

Attention: Shawn Duffy

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

Laboratory No.: 957393
Date Received: August 2, 2006

Analytical Results Summary

Lab I.D.	Sample I.D.	Sample Time	EPA 150.1 pH	EPA 120.1 EC	EPA 160.1 TDS	EPA 180.1 Turbidity	EPA 218.6 Hexavalent Chromium	EPA 350.2 Ammonia
957393-1	SC-100B-WDR-058	13:28	Units	μ mhos/cm	mg/L	NTU	mg/L	mg/L
957393-2	SC-700B-WDR-058	12:36	7.38	9780	5650	ND	1.69	ND
957393-3	SC-701-WDR-058	13:18	8.17	7180	3650	ND	ND	ND
			8.09	39500	21600	--	ND	--

Lab I.D.	Sample I.D.	Sample Time	EPA 300.0 Fluoride	EPA 300.0 Sulfate	EPA 300.0 Nitrate as N	EPA 354.1 Nitrite as N
957393-1	SC-100B-WDR-058	13:28	mg/L	mg/L	mg/L	mg/L
957393-2	SC-700B-WDR-058	12:36	2.77	662	3.19	0.0138
957393-3	SC-701-WDR-058	13:18	1.90	468	2.32	ND
			9.71	--	--	--

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

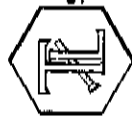
Note: The following "Significant Figures" rule has been applied to all results:
Results below 0.01ppm will have two (2) significant figures.
Result above or equal to 0.01ppm will have three (3) significant figures.
Quality Control data will always have three (3) significant figures.

005

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

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

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

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

Laboratory No.: 957393
Date Received: August 2, 2006

Analytical Results Summary

METALS ANALYSIS: Total Metal Analyses as Requested

Lab I.D.	Sample ID	Time Coll.	Aluminum EPA 200.7	Antimony EPA 200.8	Arsenic EPA 200.8	Barium EPA 200.7	Beryllium EPA 200.8	Cadmium EPA 200.8	Chromium EPA 200.7	Cobalt EPA 200.8	Copper EPA 200.8	Lead EPA 200.8
957393-1	SC-100B-WDR-058	13:28	ND	ND	ND	ND	—	—	1.81	—	0.0328	ND
957393-2	SC-700B-WDR-058	12:36	ND	ND	ND	ND	—	—	ND	—	0.0367	ND
957393-3	SC-701-WDR-058	13:18	—	ND	ND	ND	ND	ND	ND	ND	ND	ND

Lab I.D.	Sample ID	Time Coll.	Manganese EPA 200.7	Mercury EPA 245.1	Molybdenum EPA 200.8	Nickel EPA 200.7	Selenium EPA 200.8	Silver EPA 200.8	Thallium EPA 200.8	Vanadium EPA 200.8	Zinc EPA 200.7
957393-1	SC-100B-WDR-058	13:28	ND	—	0.0220	ND	—	—	—	—	ND
957393-2	SC-700B-WDR-058	12:36	ND	—	0.0129	ND	—	—	—	—	ND
957393-3	SC-701-WDR-058	13:18	—	ND	0.0645	ND	ND	ND	ND	ND	ND

Lab I.D.	Sample ID	Time Coll.	Boron EPA 200.7	Iron EPA 200.7
957393-1	SC-100B-WDR-058	13:28	1.26	ND
957393-2	SC-700B-WDR-058	12:36	1.09	ND
957393-3	SC-701-WDR-058	13:18	—	—

NOTES:

ND: Not detected, or below limit of detection

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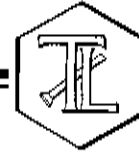
Section 3.0

Final Reports

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

Established 1931



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

REPORT

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

Attention: Shawn Duffy

Laboratory No.: 957393

Date: August 16, 2006

Collected: August 2, 2006

Received: August 2, 2006

Prep/ Analyzed: August 3, 2006

Analytical Batch: 08PH06D

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

Investigation:

pH by EPA 150.1

Analytical Results pH

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Run Time</u>	<u>Units</u>	<u>MDL</u>	<u>RL</u>	<u>Results</u>
957393-1	SC-100B-WDR-058	08:07	pH Units	0.0570	2.00	7.38
957393-2	SC-700B-WDR-058	08:09	pH Units	0.0570	2.00	8.17
957393-3	SC-701-WDR-058	08:11	pH Units	0.0570	2.00	8.09

QA/QC Summary

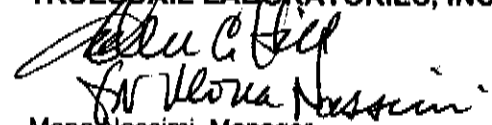
<u>QC STD I.D.</u>	<u>Laboratory Number</u>	<u>Concentration</u>	<u>Duplicate Concentration</u>	<u>Difference (Units)</u>	<u>Acceptance limits</u>	<u>QC Within Control</u>
Duplicate	957393-3	8.09	8.08	0.01	+ 0.100 Units	Yes

<u>QC Std I.D.</u>	<u>Measured Concentration</u>	<u>Theoretical Concentration</u>	<u>Difference (Units)</u>	<u>Acceptance Limits</u>	<u>QC Within Control</u>
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.

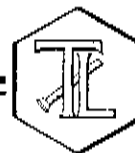
Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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www.truesdail.com

Attention: Shawn Duffy

Laboratory No.: 957393

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

Date: August 16, 2006
Collected: August 2, 2006
Received: August 2, 2006
Prep/ Analyzed: August 8, 2006
Analytical Batch: 08EC06C

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Units</u>	<u>Method</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
957393-1	SC-100B-WDR-058	µmhos/cm	EPA 120.1	10.0	20.0	9780
957393-2	SC-700B-WDR-058	µmhos/cm	EPA 120.1	10.0	20.0	7180
957393-3	SC-701-WDR-058	µmhos/cm	EPA 120.1	10.0	20.0	39500

QA/QC Summary

<u>QC STD I.D.</u>	<u>Laboratory Number</u>	<u>Concentration</u>	<u>Duplicate Concentration</u>	<u>Relative Percent Difference</u>	<u>Acceptance limits</u>	<u>QC Within Control</u>
Duplicate	957393-3	39500	39700	0.51%	≤ 10%	Yes

<u>QC Std I.D.</u>	<u>Measured Concentration</u>	<u>Theoretical Concentration</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>	<u>QC Within Control</u>
CCS	696	706	98.6%	90% - 110%	Yes
CVS#1	928	1000	92.8%	90% - 110%	Yes
CVS#2	925	1000	92.5%	90% - 110%	Yes
LCS	696	706	98.6%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi
for Mona Nassimi, Manager
Analytical Services

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Attention: Shawn Duffy

Laboratory No.: 957393

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

Date: August 16, 2006
Collected: August 2, 2006
Received: August 2, 2006
Prep/ Analyzed: August 8, 2006
Analytical Batch: 08TDS06B

Investigation:

Total Dissolved Solids by EPA 160.1

Analytical Results Total Dissolved Solids

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Units</u>	<u>Method</u>	<u>RL</u>	<u>Results</u>
957393-1	SC-100B-WDR-058	mg/L	EPA 160.1	250	5650
957393-2	SC-700B-WDR-058	mg/L	EPA 160.1	250	3650
957393-3	SC-701-WDR-058	mg/L	EPA 160.1	1250	21600

QA/QC Summary

<u>QC STD I.D.</u>	<u>Laboratory Number</u>	<u>Concentration</u>	<u>Duplicate Concentration</u>	<u>Percent Difference</u>	<u>Acceptance Limits</u>	<u>QC Within Control</u>
Duplicate	957393-2	3650	3570	1.11%	≤ 5%	Yes

<u>QC Std I.D.</u>	<u>Measured Concentration</u>	<u>Theoretical Concentration</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>	<u>QC Within Control</u>
LCS 1	493	500	98.6%	90% - 110%	Yes
LCS 2	498	500	99.6%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

RL: Reporting Limit.

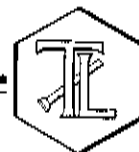
Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi
Mona Nassimi, Manager
Analytical Services

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Attention: Shawn Duffy

Laboratory No.: 957393

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

Date: August 16, 2006
Collected: August 2, 2006
Received: August 2, 2006
Prep/ Analyzed: August 3, 2006
Analytical Batch: 08TUC06F

Investigation:

Turbidity by Method EPA 180.1

Analytical Results Turbidity

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Sample Time</u>	<u>Units</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
957393-1	SC-100B-WDR-058	13:28	NTU	1.00	0.100	ND
957393-2	SC-700B-WDR-058	12:36	NTU	1.00	0.100	ND

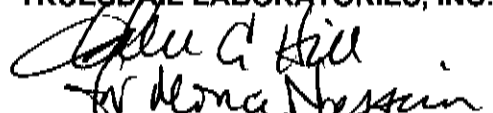
QA/QC Summary

<u>QC STD I.D.</u>	<u>Laboratory Number</u>	<u>Concentration</u>	<u>Duplicate Concentration</u>	<u>Relative Percent Difference</u>	<u>Acceptance Limits</u>	<u>QC Within Control</u>
Duplicate	957386-29	ND	ND	0.00%	< 20%	Yes

<u>QC Std I.D.</u>	<u>Measured Concentration</u>	<u>Theoretical Concentration</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>	<u>QC Within Control</u>
LCS	7.52	8.00	94.0%	90% - 110%	Yes
LCS	7.55	8.00	94.4%	90% - 110%	Yes
LCS	7.52	8.00	94.0%	90% - 110%	Yes

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

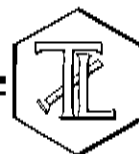
Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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

Attention: Shawn Duffy

Laboratory No.: 957393

Sample: Three (3) Groundwater Samples

Date: August 16, 2006

Project Name: PG&E Topock Project

Collected: August 2, 2006

Project No.: 346129.IM.02.E2

Received: August 2, 2006

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

Prep/ Analyzed: August 2, 2006

Prep. Batch: 08CrH06A

Analytical Batch: 08CrH06A

Investigation:

Hexavalent Chromium by IC Using Method EPA 218.6

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
957393-1	SC-100B-WDR-058	13:28	20:55	mg/L	100	0.0200	1.69
957393-2	SC-700B-WDR-058	12:36	21:05	mg/L	1.05	0.00020	ND
957393-3	SC-701-WDR-058	13:18	22:21	mg/L	5.00	0.0010	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Sample Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	957393-1	1.69	1.67	1.19%	≤ 20%	Yes

QC Std I.D.	Lab Number	Conc. of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	957393-1	1.69	100	0.0200	2.00	3.50	3.69	90.5%	90-110%	Yes
MS	957393-2	0.00	1.06	0.00100	0.00106	0.00103	0.00106	97.2%	90-110%	Yes
MS	957393-3	0.00	1.06	0.00100	0.00106	0.00	0.00106	0%	90-110%	No
MS	957393-3	0.00	5.00	0.00100	0.00500	0.00473	0.00500	94.6%	90-110%	Yes

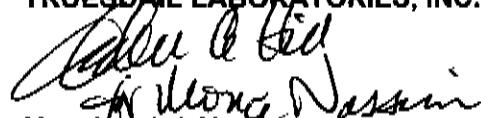
QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00457	0.00500	91.4%	90% - 110%	Yes
MRCVS#1	0.00995	0.0100	99.5%	95% - 105%	Yes
MRCVS#2	0.00952	0.0100	95.2%	95% - 105%	Yes
MRCVS#3	0.00953	0.0100	95.3%	95% - 105%	Yes
MRCVS#4	0.0101	0.0100	101%	95% - 105%	Yes
LCS	0.00500	0.00500	100%	90% - 110%	Yes
LCSD	0.00505	0.00500	101%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,

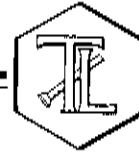
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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Established 1931

REPORT

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

Attention: Shawn Duffy

Sample: Three (3) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

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TUSTIN, CALIFORNIA 92780-7008
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www.truesdail.com

Laboratory No.: 957393

Date: August 16, 2006

Collected: August 2, 2006

Received: August 2, 2006

Prep/ Analyzed: August 8, 2006

Analytical Batch: 08NH306B

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
957393-1	SC-100B-WDR-058	13:28	EPA 350.2	mg/L	1.00	0.500	ND
957393-2	SC-700B-WDR-058	12:36	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	957393-1	ND	ND	0.0%	≤ 20%	Yes

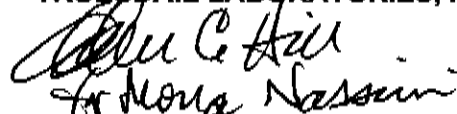
QC Std I.D.	Lab Number	Conc. of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	957393-2	0.00	1.00	10.0	10.0	9.90	10.0	99.0%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	9.71	10.0	97.1%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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

Attention: Shawn Duffy

Sample: Three (3) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 957393

Date: August 16, 2006

Collected: August 2, 2006

Received: August 2, 2006

Prep/ Analyzed: August 3, 2006

Analytical Batch: 08AN06C

Investigation:

Fluoride by Ion Chromatography using EPA 300.0

Analytical Results Fluoride

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Sample Time</u>	<u>Run Time</u>	<u>Units</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
957393-1	SC-100B-WDR-058	13:28	12:30	mg/L	1.00	0.200	2.77
957393-2	SC-700B-WDR-058	12:36	12:42	mg/L	1.00	0.200	1.90

QA/QC Summary

<u>QC STD I.D.</u>	<u>Laboratory Number</u>	<u>Concentration</u>	<u>Duplicate Concentration</u>	<u>Relative Percent Difference</u>	<u>Acceptance limits</u>	<u>QC Within Control</u>
Duplicate	957393-2	1.90	1.88	1.06%	≤ 20%	Yes

<u>QC Std I.D.</u>	<u>Lab Number</u>	<u>Conc. of unspiked sample</u>	<u>Dilution Factor</u>	<u>Added Spike Conc.</u>	<u>MS Amount</u>	<u>Measured Conc. of spiked sample</u>	<u>Theoretical Conc. of spiked sample</u>	<u>MS% Recovery</u>	<u>Acceptance limits</u>	<u>QC Within Control</u>
MS	957393-2	1.90	1.00	4.00	4.00	5.72	5.90	95.5%	75-125%	Yes

<u>QC Std I.D.</u>	<u>Measured Concentration</u>	<u>Theoretical Concentration</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>	<u>QC Within Control</u>
MRCCS	4.15	4.00	104%	90% - 110%	Yes
MRCVS#1	3.22	3.00	107%	90% - 110%	Yes
MRCVS#2	3.18	3.00	106%	90% - 110%	Yes
LCS	4.14	4.00	104%	90% - 110%	Yes
LCSD	4.15	4.00	104%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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

Attention: Shawn Duffy

Sample: Three (3) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 957393

Date: August 16, 2006

Collected: August 2, 2006

Received: August 2, 2006

Prep/ Analyzed: August 9, 2006

Analytical Batch: 08AN061

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
957393-3	SC-701-WDR-058	13:18	13:02	mg/L	5.00	1.00	9.71

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance Limits	QC Within Control
Duplicate	957393-3	9.71	9.82	1.13%	≤ 20%	Yes

QC Std I.D.	Lab Number	Conc. of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	957393-3	9.71	5.00	4.00	20.0	28.3	29.7	93.0%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	4.13	4.00	103%	90% - 110%	Yes
MRCVS#1	3.11	3.00	104%	90% - 110%	Yes
MRCVS#2	3.11	3.00	104%	90% - 110%	Yes
LCS	4.12	4.00	103%	90% - 110%	Yes
LCSD	4.12	4.00	103%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi
Mona Nassimi, Manager
Analytical Services

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TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

REPORT

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

Attention: Shawn Duffy

Sample: Three (3) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

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

Laboratory No.: 957393

Date: August 16, 2006

Collected: August 2, 2006

Received: August 2, 2006

Prep/ Analyzed: August 3, 2006

Analytical Batch: 08AN06C

Investigation:

Sulfate by Method EPA 300.0

Analytical Results Sulfate

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
957393-1	SC-100B-WDR-058	13:28	16:17	mg/L	50.0	25.0	662
957393-2	SC-700B-WDR-058	12:36	16:51	mg/L	50.0	25.0	468

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	957393-2	468	468	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	957393-2	468	50.0	10.0	500	971	968	101%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	19.9	20.0	99.5%	90% - 110%	Yes
MRCVS#1	15.1	15.0	101%	90% - 110%	Yes
MRCVS#2	15.1	15.0	101%	90% - 110%	Yes
MRCVS#3	15.0	15.0	100%	90% - 110%	Yes
LCS	19.8	20.0	99.0%	90% - 110%	Yes
LCSD	19.9	20.0	99.5%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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REPORT

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

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

Attention: Shawn Duffy

Sample: Three (3) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 957393

Date: August 16, 2006

Collected: August 2, 2006

Received: August 2, 2006

Prep/ Analyzed: August 3, 2006

Analytical Batch: 08AN06C

Investigation: Nitrate as N by Ion Chromatography using EPA 300.0

Analytical Results Nitrate as N

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Sample Time</u>	<u>Run Time</u>	<u>Units</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
957393-1	SC-100B-WDR-058	13:28	12:30	mg/L	1.00	0.200	3.19
957393-2	SC-700B-WDR-058	12:36	12:42	mg/L	1.00	0.200	2.32

QA/QC Summary

<u>QC STD I.D.</u>	<u>Laboratory Number</u>	<u>Concentration</u>	<u>Duplicate Concentration</u>	<u>Relative Percent Difference</u>	<u>Acceptance limits</u>	<u>QC Within Control</u>
Duplicate	957393-2	2.32	2.32	0.00%	≤ 20%	Yes

<u>QC Std I.D.</u>	<u>Lab Number</u>	<u>Conc. of unspiked sample</u>	<u>Dilution Factor</u>	<u>Added Spike Conc.</u>	<u>MS Amount</u>	<u>Measured Conc. of spiked sample</u>	<u>Theoretical Conc. of spiked sample</u>	<u>MS% Recovery</u>	<u>Acceptance limits</u>	<u>QC Within Control</u>
MS	957393-2	2.32	1.00	4.00	4.00	6.23	6.32	97.8%	75-125%	Yes

<u>QC Std I.D.</u>	<u>Measured Concentration</u>	<u>Theoretical Concentration</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>	<u>QC Within Control</u>
MRCOS	4.01	4.00	100%	90% - 110%	Yes
MRCVS#1	3.01	3.00	100%	90% - 110%	Yes
MRCVS#2	3.00	3.00	100%	90% - 110%	Yes
MRCVS#3	2.98	3.00	99.3%	90% - 110%	Yes
LCS	4.02	4.00	101%	90% - 110%	Yes
LCSD	4.03	4.00	101%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



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REPORT

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

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

Attention: Shawn Duffy

Sample: Three (3) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 957393

Date: August 16, 2006

Collected: August 2, 2006

Received: August 2, 2006

Prep/ Analyzed: August 3, 2006

Analytical Batch: 08NO206C

Investigation:

Nitrite as N by Method EPA 354.1

Analytical Results for Nitrite as N

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Sample Time</u>	<u>Run Time</u>	<u>Units</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
957393-1	SC-100B-WDR-058	13:28	14:38	mg/L	1.00	0.0050	0.0138
957393-2	SC-700B-WDR-058	12:36	14:39	mg/L	1.00	0.0050	ND

QA/QC Summary

<u>QC STD I.D.</u>	<u>Laboratory Number</u>	<u>Concentration</u>	<u>Duplicate Concentration</u>	<u>Relative Percent Difference</u>	<u>Acceptance limits</u>	<u>QC Within Control</u>
Duplicate	957393-2	ND	ND	0.00%	≤ 20%	Yes

<u>QC Std I.D.</u>	<u>Lab Number</u>	<u>Conc. of unspiked sample</u>	<u>Dilution Factor</u>	<u>Added Spike Conc.</u>	<u>MS Amount</u>	<u>Measured Conc. of spiked sample</u>	<u>Theoretical Conc. of spiked sample</u>	<u>MS% Recovery</u>	<u>Acceptance limits</u>	<u>QC Within Control</u>
MS	957393-2	0.00	1.00	0.100	0.100	0.108	0.100	108%	75-125%	Yes

<u>QC Std I.D.</u>	<u>Measured Concentration</u>	<u>Theoretical Concentration</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>	<u>QC Within Control</u>
MRCCS	0.0939	0.0900	104%	90% - 110%	Yes
MRCVS#1	0.0985	0.100	98.5%	90% - 110%	Yes
LCS	0.187	0.180	104%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

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TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

REPORT

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

Attention: Shawn Duffy

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

Investigation: Total Metal Analyses as Requested

14201 FRANKLIN AVENUE
TUSTIN, CALIFORNIA 92780-7008
(714) 730-6239 · FAX (714) 730-6462
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Laboratory No.: 957393

Reported: August 16, 2006

Collected: August 2, 2006

Received: August 2, 2006

Analyzed: August 9 - 14, 2006

Analytical Results

SAMPLE ID: SC-100B-WDR-058		Time Collected: 13:28		LAB ID: 957393-1				
Parameter	Method	Reported		Units	RL	Batch	Date	Time
		Value	DF				Analyzed	Analyzed
Aluminum	EPA 200.7	ND	1.04	mg/L	0.0520	080906A	08/09/06	11:14
Antimony	EPA 200.8	ND	2.08	mg/L	0.0030	081006A	08/10/06	17:50
Arsenic	EPA 200.8	ND	2.08	mg/L	0.0050	081006A	08/10/06	17:50
Barium	EPA 200.7	ND	1.04	mg/L	0.300	080906A	08/09/06	11:14
Chromium	EPA 200.7	1.81	1.04	mg/L	0.0104	080906A	08/09/06	11:14
Copper	EPA 200.8	0.0328	2.08	mg/L	0.0100	081006A	08/10/06	17:50
Lead	EPA 200.8	ND	2.08	mg/L	0.0020	081006A	08/10/06	17:50
Manganese	EPA 200.7	ND	1.04	mg/L	0.500	080906A	08/09/06	11:14
Molybdenum	EPA 200.8	0.0220	2.08	mg/L	0.0050	081006A	08/10/06	17:50
Nickel	EPA 200.7	ND	1.04	mg/L	0.0200	080906A	08/09/06	11:14
Zinc	EPA 200.7	ND	1.04	mg/L	0.0200	080906A	08/09/06	11:14
Boron	EPA 200.7	1.26	1.04	mg/L	0.200	080906A	08/09/06	11:14
Iron	EPA 200.7	ND	1.04	mg/L	0.300	080906A	08/09/06	11:14

SAMPLE ID: SC-700B-WDR-058		Time Collected: 12:36		LAB ID: 957393-2				
Parameter	Method	Reported		Units	RL	Batch	Date	Time
		Value	DF				Analyzed	Analyzed
Aluminum	EPA 200.7	ND	1.04	mg/L	0.0520	080906A	08/09/06	11:31
Antimony	EPA 200.8	ND	2.08	mg/L	0.0030	081006A	08/10/06	17:57
Arsenic	EPA 200.8	ND	2.08	mg/L	0.0050	081006A	08/10/06	17:57
Barium	EPA 200.7	ND	1.04	mg/L	0.300	080906A	08/09/06	11:31
Chromium	EPA 200.7	ND	1.04	mg/L	0.0010	081406A	08/14/06	11:38
Copper	EPA 200.8	0.0367	2.08	mg/L	0.0100	081006A	08/10/06	17:57
Lead	EPA 200.8	ND	2.08	mg/L	0.0020	081006A	08/10/06	17:57
Manganese	EPA 200.7	ND	1.04	mg/L	0.500	080906A	08/09/06	11:31
Molybdenum	EPA 200.8	0.0129	2.08	mg/L	0.0050	081006A	08/10/06	17:57
Nickel	EPA 200.7	ND	1.04	mg/L	0.0200	080906A	08/09/06	11:31
Zinc	EPA 200.7	ND	1.04	mg/L	0.0200	080906A	08/09/06	11:31
Boron	EPA 200.7	1.09	1.04	mg/L	0.200	080906A	08/09/06	11:31
Iron	EPA 200.7	ND	1.04	mg/L	0.300	080906A	08/09/06	11:31

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TRUESDAIL LABORATORIES, INC.

Report Continued

SAMPLE ID: SC-701-WDR-058		Time Collected: 13:18		LAB ID: 957393-3			
Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed Time Analyzed
Antimony	EPA 200.8	ND	10.4	mg/L	0.0104	081006A	08/10/06 18:03
Arsenic	EPA 200.8	ND	10.4	mg/L	0.0104	081006A	08/10/06 18:03
Barium	EPA 200.7	ND	1.04	mg/L	0.300	080906A	08/09/06 11:38
Beryllium	EPA 200.8	ND	10.4	mg/L	0.0052	081206A	08/12/06 11:21
Cadmium	EPA 200.8	ND	10.4	mg/L	0.0052	081006A	08/10/06 18:03
Chromium	EPA 200.7	ND	1.04	mg/L	0.0010	081406A	08/14/06 11:43
Cobalt	EPA 200.8	ND	10.4	mg/L	0.0104	081006A	08/10/06 18:03
Copper	EPA 200.8	ND	10.4	mg/L	0.0104	081006A	08/10/06 18:03
Lead	EPA 200.8	ND	10.4	mg/L	0.0052	081006A	08/10/06 18:03
Mercury	EPA 245.1	ND	2.00	mg/L	0.00040	08Hg08D	08/14/06 15:02
Molybdenum	EPA 200.8	0.0645	10.4	mg/L	0.0104	081006A	08/10/06 18:03
Nickel	EPA 200.7	ND	1.04	mg/L	0.0200	080906A	08/09/06 11:38
Selenium	EPA 200.8	ND	10.4	mg/L	0.0208	081006A	08/10/06 18:03
Silver	EPA 200.8	ND	10.4	mg/L	0.0104	081006A	08/10/06 18:03
Thallium	EPA 200.8	ND	10.4	mg/L	0.0052	081006A	08/10/06 18:03
Vanadium	EPA 200.8	ND	10.4	mg/L	0.0104	081006A	08/10/06 18:03
Zinc	EPA 200.7	ND	1.04	mg/L	0.0200	080906A	08/09/06 11:38

ND: Not detected, or below limit of detection.

DF: Dilution factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mohamed Nassimi
Mohamed Nassimi, Manager
Analytical Services

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Table of Contents
TLI Laboratory Data Package
For Laboratory Number: 957653

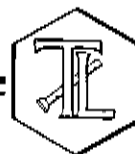
<u>ITEM</u>	<u>Section</u>
Case Narrative and Analyst List	1.0
Summary Table of Final Results	2.0
Final Reports	3.0
Wet Chem Analysis/ Raw Data, Standard, Quality Control and Chain of Custody Records	4.0
Established Retention Time Window and Analytical Raw Data	5.0

Section 1.0

Case Narrative

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

August 16, 2006

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

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

Dear Mr. Duffy:

SUBJECT: CASE NARRATIVE PG&E TOPOCK IM3PLANT-WDR-059 PROJECT, GROUNDWATER
MONITORING,

TLI NO.: 957653

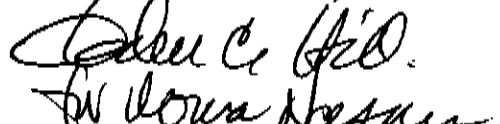
Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-059 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, pH, and Total Dissolved Solids. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

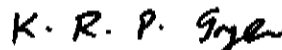
The samples were received and delivered with the chain of custody on August 9, 2006, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

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

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

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.

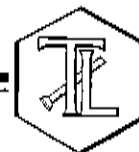

Mona Nassimi
Manager, Analytical Services



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

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

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

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 957653

Date: August 16, 2006

Collected: August 9, 2006

Received: August 9, 2006

ANALYST LIST

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

Section 2.0

Summary Table of Final Results

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



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

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

Laboratory No.: 957653
Date Received: August 9, 2006

Analytical Results Summary

<u>Lab I.D.</u>	<u>Sample I.D.</u>	<u>Sample Time</u>	<u>EPA 200.7</u> Chromium Total mg/L	<u>EPA 218.6</u> Chromium Hexavalent mg/L	<u>EPA 180.1</u> Turbidity NTU	<u>EPA 150.1</u> pH Unit	<u>EPA 120.1</u> EC µmhos/cm	<u>EPA 160.1</u> TDS mg/L
957653	SC-700B-WDR-059	11:30	ND	ND	ND	8.10	7100	3950

ND: Non Detected (below reporting limit)

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

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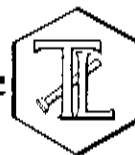
005

Section 3.0

Final Reports

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



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REPORT

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

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

Attention: Shawn Duffy

Laboratory No.: 957653

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 081406A

Date: August 16, 2006
Collected: August 9, 2006
Received: August 9, 2006
Prep/ Analyzed: August 14, 2006
Analytical Batch: 081406A

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

Analytical Results Total Chromium

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Units</u>	<u>Method</u>	<u>Run Time</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
957653	SC-700B-WDR-059	mg/L	EPA 200.7	11:25	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	957653	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	957653	0.00	1.04	0.0100	0.0104	0.00995	0.0104	95.7%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.0103	0.0100	103%	90% - 110%	Yes
MRCVS#1	0.00907	0.0100	90.7%	90% - 110%	Yes
ICS	0.0114	0.0100	114%	80% - 120%	Yes
LCS	0.0104	0.0100	104%	90% - 110%	Yes

ND: Not detected at reporting limit

DF: Dilution Factor

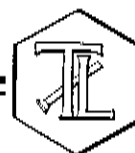
Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



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REPORT

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

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

Attention: Shawn Duffy

Laboratory No.: 957653

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

Date: August 16, 2006
Collected: August 9, 2006
Received: August 9, 2006
Prep/ Analyzed: August 10, 2006
Analytical Batch: 08CrH06C

Investigation:

Hexavalent Chromium by EPA 218.6

Analytical Results Hexavalent Chromium

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Sample Time</u>	<u>Run Time</u>	<u>Units</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
957653	SC-700B-WDR-059	11:30	01:09	mg/L	1.05	0.00020	ND

QA/QC Summary

QC STD I.D.		Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate		957650-6	0.00357	0.00354	0.84%	< 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	957653	0.00	1.06	0.00100	0.00106	0.00115	0.00106	108%	90-110%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00492	0.00500	98.4%	90% - 110%	Yes
MRCVS#1	0.00990	0.0100	99.0%	95% - 105%	Yes
MRCVS#2	0.00980	0.0100	98.0%	95% - 105%	Yes
MRCVS#3	0.00966	0.0100	96.6%	95% - 105%	Yes
MRCVS#4	0.00983	0.0100	98.3%	95% - 105%	Yes
LCS	0.00492	0.00500	98.4%	90% - 110%	Yes
LCSD	0.00498	0.00500	99.6%	90% - 110%	Yes

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

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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REPORT

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

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

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 957653

Date: August 16, 2006

Collected: August 9, 2006

Received: August 9, 2006

Prep/ Analyzed: August 10, 2006

Analytical Batch: 08TUC06M

Investigation:

Turbidity by Method EPA 180.1

Analytical Results Turbidity

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Sample Time</u>	<u>Units</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
957653	SC-700B-WDR-059	11:30	NTU	1.00	0.100	ND

QA/QC Summary

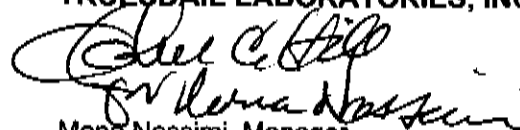
QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance Limits	QC Within Control
Duplicate	957642-13	0.166	0.168	1.20%	≤ 20%	Yes

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	7.22	8.00	90.3%	90% - 110%	Yes
LCS	7.25	8.00	90.6%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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

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

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 957653

Date: August 16, 2006

Collected: August 9, 2006

Received: August 9, 2006

Prep/ Analyzed: August 10, 2006

Analytical Batch: 08PH06K

Investigation:

pH by EPA 150.1

Analytical Results pH

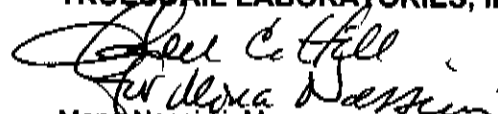
<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Sample Time</u>	<u>Run Time</u>	<u>Units</u>	<u>MDL</u>	<u>RL</u>	<u>Results</u>
957653	SC-700B-WDR-059	11:30	08:31	pH Units	0.0570	2.00	8.10

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	957653	8.10	8.11	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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

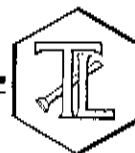

Mona Nassimi, Manager
Analytical Services

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

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

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 957653

Date: August 16, 2006

Collected: August 9, 2006

Received: August 9, 2006

Prep/ Analyzed: August 12, 2006

Analytical Batch: 08EC06E

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Units</u>	<u>Method</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
957653	SC-700B-WDR-059	µmhos/cm	EPA 120.1	10.0	20.0	7100

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	957651-2	9280	9290	0.11%	≤ 10%	Yes

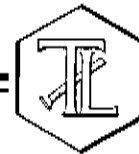
QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
CCS	688	706	97.5%	90% - 110%	Yes
CVS#1	926	1000	92.6%	90% - 110%	Yes
LCS	688	706	97.5%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

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

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

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TUSTIN, CALIFORNIA 92780-7008
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Laboratory No.: 957653

Date: August 16, 2006

Collected: August 9, 2006

Received: August 9, 2006

Prep/ Analyzed: August 14, 2006

Analytical Batch: 08TDS06E

Investigation:

Total Dissolved Solids by EPA 160.1

Analytical Results Total Dissolved Solids

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Units</u>	<u>Method</u>	<u>RL</u>	<u>Results</u>
957653	SC-700B-WDR-059	mg/L	EPA 160.1	250	3950

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	957653	3950	3870	1.02%	≤ 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS 1	479	500	95.8%	90% - 110%	Yes
LCS 2	483	500	96.6%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

RL: Reporting Limit.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

[Signature]
[Signature]
Mona Nassimi, Manager
Analytical Services

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957 (653

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

COC Number

5 Days

TURNAROUND TIME

DATE 8-9-06 PAGE 1 OF 1

CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-059]

COMPANY E2	PROJECT NAME PG&E Topock	PHONE (530) 229-3303	FAX (530) 339-3303	ADDRESS 155 Grand Ave Ste 1000 Oakland, CA 94612	P.O. NUMBER 346129.1M-02.E2	SAMPLERS (SIGNATURE) <i>James L Carter</i>	DATE 8-9-06	TIME 1130	DESCRIPTION Groundwater	CR6 (2186) Lab Filtered	Total Metals (200.7) Total Chromium	Specific Conductance (120.7)	PH (150.7)	TDS (160.7)	Turbidity (180.7)	Rec'd s20d 08/09/06 957653	COMMENTS
SAMPLE I.D. SC-700B-WDR-059											NUMBER OF CONTAINERS 3		TOTAL NUMBER OF CONTAINERS 3		pH-2		

ALERT!!
Level III QC

**For Sample Conditions
See Form Attached**

CHAIN OF CUSTODY SIGNATURE RECORD									
Signature (Relinquished)	<i>James L Carter</i>	Printed Name	James L Carter	Company/Agency	Topock IM-3	Date/Time	8-9-06 1208	SAMPLE CONDITIONS RECEIVED <input type="checkbox"/> COOL <input type="checkbox"/> WARM <input type="checkbox"/> °F	
Signature (Received)	<i>M. Shelly Blount</i>	Printed Name	M. Shelly Blount	Company/Agency	N.B.	Date/Time	8/9/06 5:50	CUSTODY SEALED YES <input type="checkbox"/> NO <input type="checkbox"/>	
Signature (Relinquished)		Printed Name		Company/Agency		Date/Time		SPECIAL REQUIREMENTS:	
Signature (Received)		Printed Name		Company/Agency		Date/Time			
Signature (Relinquished)		Printed Name		Company/Agency		Date/Time			
Signature (Received)		Printed Name		Company/Agency		Date/Time			

Table of Contents
TLI Laboratory Data Package
For Laboratory Number: 957918

<u>ITEM</u>	<u>Section</u>
Case Narrative and Analyst List	1.0
Summary Table of Final Results	2.0
Final Reports	3.0
Wet Chem Analysis/ Raw Data, Standard, Quality Control and Chain of Custody Records	4.0
Established Retention Time Window and Analytical Raw Data	5.0

Section 1.0

Case Narrative

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



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August 30, 2006

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

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

Dear Mr. Duffy:

SUBJECT: CASE NARRATIVE PG&E TOPOCK IM3PLANT-WDR-060 PROJECT, GROUNDWATER
MONITORING,
TLI No.: 957918

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-060 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, pH, and Total Dissolved Solids. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The samples were received and delivered with the chain of custody on August 16, 2006, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

The sample for Total Chromium analysis was received with a pH of 3. Preservative was added in the lab to bring the pH down to 2.

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

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

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi
Manager, Analytical Services

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

TRUESDAIL LABORATORIES, Inc.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



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

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

14201 FRANKLIN AVENUE
TUSTIN, CALIFORNIA 92780-7008
(714) 730-8239 · FAX (714) 730-6462
www.truesdail.com

Laboratory No.: 957918

Date: August 30, 2006

Collected: August 16, 2006

Received: August 16, 2006

ANALYST LIST

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

Section 2.0

Summary Table of Final Results

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

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

Laboratory No.: 957918
Date Received: August 16, 2006

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

Analytical Results Summary

<u>Lab I.D.</u>	<u>Sample I.D.</u>	<u>Sample Time</u>	<u>EPA 200.7</u> <i>Chromium</i> Total mg/L	<u>EPA 218.6</u> <i>Chromium</i> Hexavalent mg/L	<u>EPA 180.1</u> <i>Turbidity</i> NTU	<u>EPA 150.1</u> <i>pH</i> Unit	<u>EPA 120.1</u> <i>EC</i> μ mhos/cm	<u>EPA 160.1</u> <i>TDS</i> mg/L
957918	SC-700B-WDR-060	10:01	ND	ND	ND	7.97	7270	4480

ND: Non Detected (below reporting limit)

Note: The following "Significant Figures" rule has been applied to all results:

Results below 0.01 will have two (2) significant figures.

Result above or equal to 0.01 will have three (3) significant figures.

Quality Control data will always have three (3) significant figures.

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Section 3.0

Final Reports

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



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

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

Attention: Shawn Duffy

Laboratory No.: 957918

Date: August 30, 2006

Collected: August 16, 2006

Received: August 16, 2006

Prep/ Analyzed: August 29, 2006

Analytical Batch: 082906A

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 082906A

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

Analytical Results Total Chromium

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Units</u>	<u>Method</u>	<u>Run Time</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
957918	SC-700B-WDR-060	mg/L	EPA 200.7	13:06	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	958222-4	0.155	0.138	11.6%	≤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	957918	0.00	1.04	0.0100	0.0104	0.00946	0.0104	91.0%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.0101	0.0100	101%	90% - 110%	Yes
MRCVS#1	0.00993	0.0100	99.3%	90% - 110%	Yes
ICS	0.00971	0.0100	97.1%	80% - 120%	Yes
LCS	0.0101	0.0100	101%	90% - 110%	Yes

ND: Not detected at reporting limit

DF: Dilution Factor

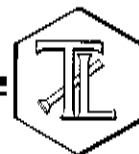
Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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

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

Attention: Shawn Duffy

Laboratory No.: 957918

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

Date: August 30, 2006
Collected: August 16, 2006
Received: August 16, 2006
Prep/ Analyzed: August 16, 2006
Analytical Batch: 08CrH06L

Investigation:

Hexavalent Chromium by EPA 218.6

Analytical Results Hexavalent Chromium

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Sample Time</u>	<u>Run Time</u>	<u>Units</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
957918	SC-700B-WDR-060	10:01	20:14	mg/L	1.05	0.00020	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	957918	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	957918	0.00	1.06	0.00100	0.00106	0.000984	0.00106	92.8%	90-110%	Yes

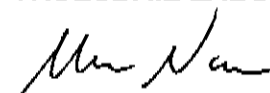
QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00474	0.00500	94.8%	90% - 110%	Yes
MRCVS#1	0.00980	0.0100	98.0%	95% - 105%	Yes
LCS	0.00458	0.00500	91.6%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

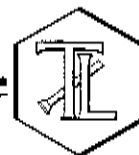

Mona Nassimi, Manager
Analytical Services

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TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

Established 1931



REPORT

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

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

Attention: Shawn Duffy

Laboratory No.: 957918

Date: August 30, 2006

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

Collected: August 16, 2006

Project No.: 346129.IM.02.E2

Received: August 16, 2006

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

Prep/ Analyzed: August 17, 2006

Analytical Batch: 08TUC06Q

Investigation:

Turbidity by Method EPA 180.1

Analytical Results Turbidity

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Sample Time</u>	<u>Units</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
957918	SC-700B-WDR-060	10:01	NTU	1.00	0.100	ND

QA/QC Summary

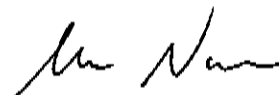
QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	957911	ND	ND	0.00%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	7.25	8.00	90.6%	90% - 110%	Yes
LCS	7.52	8.00	94.0%	90% - 110%	Yes
LCS	7.41	8.00	92.6%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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www.truesdail.com

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

Attention: Shawn Duffy

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

Laboratory No.: 957918

Date: August 30, 2006
Collected: August 16, 2006
Received: August 16, 2006
Prep/ Analyzed: August 17, 2006
Analytical Batch: 08PH06P

Investigation:

pH by EPA 150.1

Analytical Results pH

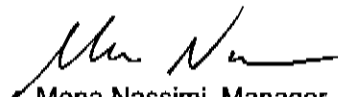
<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Sample Time</u>	<u>Run Time</u>	<u>Units</u>	<u>MDL</u>	<u>RL</u>	<u>Results</u>
957918	SC-700B-WDR-060	10:01	08:12	pH Units	0.0570	2.00	7.97

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance Limits	QC Within Control
Duplicate	957918	7.97	7.97	0.00	+ 0.100 Units	Yes

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

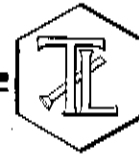
Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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www.truesdail.com

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

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 957918

Date: August 30, 2006

Collected: August 16, 2006

Received: August 16, 2006

Prep/ Analyzed: August 17, 2006

Analytical Batch: 08EC06F

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Units</u>	<u>Method</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
957918	SC-700B-WDR-060	µmhos/cm	EPA 120.1	10.0	20.0	7270

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance Limits	QC Within Control
Duplicate	957918	7270	7280	0.14%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
CCS	687	706	97.3%	90% - 110%	Yes
CVS#1	923	1000	92.3%	90% - 110%	Yes
LCS	687	706	97.3%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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

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

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 957918

Date: August 30, 2006

Collected: August 16, 2006

Received: August 16, 2006

Prep/ Analyzed: August 17, 2006

Analytical Batch: 08TDS06G

Investigation:

Total Dissolved Solids by EPA 160.1

Analytical Results Total Dissolved Solids

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Units</u>	<u>Method</u>	<u>RL</u>	<u>Results</u>
957918	SC-700B-WDR-060	mg/L	EPA 160.1	250	4480

QA/QC Summary


QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	957918	4480	4440	0.45%	≤ 5%	Yes

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

ND: Below the reporting limit (Not Detected).

RL: Reporting Limit.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-060]

COC Number

TURNAROUND TIME

5 Days

DATE

PAGE 1 OF 1

957918

COMPANY	E2	PROJECT NAME	PG&E Topock	PHONE	(530) 229-3303	FAX	(530) 339-3303	ADDRESS	155 Grand Ave Ste 1000 Oakland, CA 94612	P.O. NUMBER	346129 VM-07 EP	SAMPLERS (SIGNATURE)	<i>[Signature]</i>	SAMPLE ID.	SC-700B-WDR-060	DATE	8/16/06	TIME	10:01	DESCRIPTION	Groundwater	CR6 (218.6) Lab Filtered	X	Total Metals (200.7) Total Chromium	X	Specific Conductance (120.1)	X	PH (150.1)	X	TDS (160.1)	X	Turbidity (180.1)	X	COMMENTS	Rec'd 08/16/06 957918	NUMBER OF CONTAINERS	3	TOTAL NUMBER OF CONTAINERS	3
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RUSH

For Sample Conditions
See Form Attached

ALERT!!

Level III QC

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished)	<i>[Signature]</i>	Printed Name	David Chang	Company/Agency	OMI	Date/Time	8/16/06 12:00
Signature (Received)	<i>[Signature]</i>	Printed Name	L. Shabunina	Company/Agency	721	Date/Time	8/16/06 10:00
Signature (Relinquished)		Printed Name		Company/Agency		Date/Time	
Signature (Received)		Printed Name		Company/Agency		Date/Time	
Signature (Relinquished)		Printed Name		Company/Agency		Date/Time	
Signature (Received)		Printed Name		Company/Agency		Date/Time	

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

Table of Contents
TLI Laboratory Data Package
For Laboratory Number: 958154

<u>ITEM</u>	<u>Section</u>
Case Narrative and Analyst List	1.0
Summary Table of Final Results	2.0
Final Reports	3.0
Wet Chem Analysis/ Raw Data, Standard, Quality Control and Chain of Custody Records	4.0
Established Retention Time Window and Analytical Raw Data	5.0

Section 1.0

Case Narrative

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



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September 1, 2006

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

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

Dear Mr. Duffy:

SUBJECT: CASE NARRATIVE PG&E TOPOCK IM3PLANT-WDR-061 PROJECT, GROUNDWATER
MONITORING,
TLI No.: 958154

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-061 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, pH, and Total Dissolved Solids. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The samples were received and delivered with the chain of custody on August 23, 2006, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.


The sample for Total Chromium analysis was received with a pH of 7. Preservative was added in the lab.

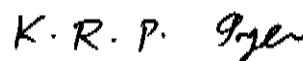
Due to instrument problems, the Total Dissolved Chromium was analyzed by EPA 200.8, with Shawn Duffy's approval, rather than EPA 200.7 as requested on the chain of custody.

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

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

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi
Manager, Analytical Services


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

TRUESDAIL LABORATORIES, Inc.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



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

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 958154

Date: September 1, 2006

Collected: August 23, 2006

Received: August 23, 2006

ANALYST LIST

METHOD	PARAMETER	ANALYST
EPA 120.1	Specific Conductivity	Tina Acquiat
EPA 150.1	pH	Tina Acquiat
EPA 160.1	Total Dissolved Solids	Tina Acquiat
EPA 180.1	Turbidity	Gautam Savani
EPA 200.7	Total Chromium	Laureen Tran
EPA 218.6	Hexavalent Chromium	Roger Chen

Section 2.0

Summary Table of Final Results

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

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

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

Laboratory No.: 958154
Date Received: August 23, 2006

Analytical Results Summary

<u>Lab I.D.</u>	<u>Sample I.D.</u>	<u>Sample Time</u>	<u>EPA 200.7</u> Chromium Total mg/L	<u>EPA 218.6</u> Chromium Hexavalent mg/L	<u>EPA 180.1</u> Turbidity NTU	<u>EPA 150.1</u> pH	<u>EPA 120.1</u> EC $\mu\text{mhos/cm}$	<u>EPA 160.1</u> TDS mg/L
958154	SC-700B-WDR-061	12:05	0.0034	ND	ND	8.01	6560	3600

ND: Non Detected (below reporting limit)

Note: The following "Significant Figures" rule has been applied to all results:

Results below 0.01 will have two (2) significant figures.

Result above or equal to 0.01 will have three (3) significant figures.

Quality Control data will always have three (3) significant figures.

003

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Section 3.0

Final Reports

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



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REPORT

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

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

Attention: Shawn Duffy

Laboratory No.: 958154

Date: September 1, 2006

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

Collected: August 23, 2006

Project No.: 346129.IM.02.E2

Received: August 23, 2006

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

Prep/ Analyzed: August 25, 2006

Prep. Batch: 082506A

Analytical Batch: 082506A

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

Analytical Results Total Chromium

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Units</u>	<u>Method</u>	<u>Run Time</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
958154	SC-700B-WDR-061	mg/L	EPA 200.8	11:13	1.04	0.0010	0.0034

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	958153-2	1.44	1.49	3.4%	≤20%	Yes

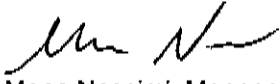
QC Std I.D.	Lab Number	Conc. of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	958155-1	0.00248	1.04	0.0500	0.0520	0.0477	0.0545	87.0%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.0511	0.0500	102%	90% - 110%	Yes
MRCVS#1	0.0512	0.0500	102%	90% - 110%	Yes
MRCVS#2	0.0501	0.0500	100%	90% - 110%	Yes
ICS	0.104	0.100	104%	80% - 120%	Yes
LCS	0.0496	0.0500	99.2%	90% - 110%	Yes

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

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REPORT

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

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

Attention: Shawn Duffy

Laboratory No.: 958154

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

Date: September 1, 2006
Collected: August 23, 2006
Received: August 23, 2006
Prep/ Analyzed: August 23, 2006
Analytical Batch: 08CrH060

Investigation:

Hexavalent Chromium by EPA 218.6

Analytical Results Hexavalent Chromium

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Sample Time</u>	<u>Run Time</u>	<u>Units</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
958154	SC-700B-WDR-061	12:05	18:41	mg/L	1.05	0.00020	ND

QA/QC Summary

QC STD I.D.		Laboratory Number		Concentration		Duplicate Concentration		Relative Percent Difference	Acceptance limits	QC Within Control	
Duplicate		958143		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	958143	0.00	1.06	0.00100	0.00106	0.000962	0.00106	90.8%	90-110%	Yes

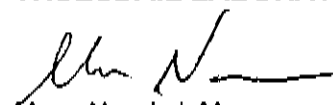
QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00496	0.00500	99.2%	90% - 110%	Yes
MRCVS#1	0.0101	0.0100	101%	95% - 105%	Yes
MRCVS#2	0.00987	0.0100	98.7%	95% - 105%	Yes
LCS	0.00492	0.00500	98.4%	90% - 110%	Yes
LCSD	0.00490	0.00500	98.0%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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REPORT

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

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

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 958154

Date: September 1, 2006

Collected: August 23, 2006

Received: August 23, 2006

Prep/ Analyzed: August 24, 2006

Analytical Batch: 08TUC06V

Investigation:

Turbidity by Method EPA 180.1

Analytical Results Turbidity

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Sample Time</u>	<u>Units</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
958154	SC-700B-WDR-061	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	958146-37	ND	ND	0.00%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	7.64	8.00	95.5%	90% - 110%	Yes
LCS	7.60	8.00	95.0%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

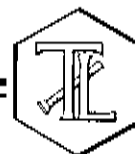
Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



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REPORT

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

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

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 958154

Date: September 1, 2006

Collected: August 23, 2006

Received: August 23, 2006

Prep/ Analyzed: August 24, 2006

Analytical Batch: 08PH06U

Investigation:

pH by EPA 150.1

Analytical Results pH


<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Sample Time</u>	<u>Run Time</u>	<u>Units</u>	<u>MDL</u>	<u>RL</u>	<u>Results</u>
958154	SC-700B-WDR-061	12:05	09:14	pH Units	0.0570	2.00	8.01

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	958154	8.01	8.01	0.00	+ 0.100 Units	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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www.truesdail.com

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

Attention: Shawn Duffy

Laboratory No.: 958154

Date: September 1, 2006

Collected: August 23, 2006

Received: August 23, 2006

Prep/ Analyzed: August 24, 2006

Analytical Batch: 08EC06I

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

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

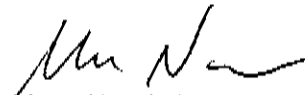
<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Units</u>	<u>Method</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
958154	SC-700B-WDR-061	µmhos/cm	EPA 120.1	10.0	20.0	6560

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	958154	6560	6570	0.15%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
CCS	688	706	97.5%	90% - 110%	Yes
CVS#1	960	1000	96.0%	90% - 110%	Yes
LCS	688	706	97.5%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

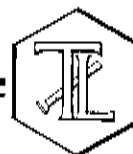

Mona Nassimi, Manager
Analytical Services

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REPORT

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

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

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

Laboratory No.: 958154

Date: September 1, 2006

Collected: August 23, 2006

Received: August 23, 2006

Prep/ Analyzed: August 24, 2006

Analytical Batch: 08TDS06L

Investigation:

Total Dissolved Solids by EPA 160.1

Analytical Results Total Dissolved Solids

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Units</u>	<u>Method</u>	<u>RL</u>	<u>Results</u>
958154	SC-700B-WDR-061	mg/L	EPA 160.1	125	3600

QA/QC Summary

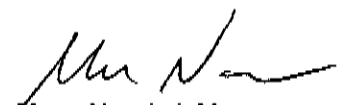
QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	958154	3600	3540	0.84%	≤ 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS 1	493	500	98.6%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

RL: Reporting Limit.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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www.truesdail.com

CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-061]

COC Number

TURNAROUND TIME 5 Days

DATE PAGE 1 OF 1

COMPANY E2	PROJECT NAME PG&E Topock	PHONE (530) 229-3303	FAX (530) 339-3303	ADDRESS 155 Grand Ave Ste 1000 Oakland, CA 94612	P.O. NUMBER 3461291m.02.E2	SAMPLERS (SIGNATURE) <i>Mr. Elzy</i>	SAMPLE ID. SC-700B-WDR-061	DATE 8-23-06	TIME 12:05	DESCRIPTION Groundwater	CR6 (218g) Lab Filtered	Total Metals (200.7) Total Chromium	Specific Conductance (120.7)	PH (150.1)	TDS (160.1)	Turbidity (180.1)	NUMBER OF CONTAINERS 3	COMMENTS
TOTAL NUMBER OF CONTAINERS 3																		

ALERT!!
Level III QC

Rec'd 08/23/06

S2 958154

PUSH!

032

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished)	<i>Mr. Elzy</i>	Printed Name	<i>Mr. Elzy</i>	Company/Agency	<i>PG&E Topock</i>	Date/Time	<i>8/23/06</i>
Signature (Received)	<i>Mr. Elzy</i>	Printed Name	<i>Mr. Elzy</i>	Company/Agency	<i>PG&E Topock</i>	Date/Time	<i>8/23/06</i>
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

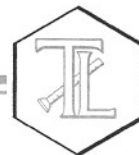
CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

For Sample Conditions
See Form Attached

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INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



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September 6, 2006

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

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

Dear Mr. Duffy:

SUBJECT: CASE NARRATIVE PG&E TOPOCK IM3PLANT-WDR-062 PROJECT, GROUNDWATER
MONITORING,
TLI No.: 958364

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-062 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, pH, and Total Dissolved Solids. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The samples were received and delivered with the chain of custody on August 30, 2006, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

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.

Ali Kharrag
For
Mona Nassimi
Manager, Analytical Services

K. R. P. Iyer

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

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



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

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 958364

Date: September 6, 2006

Collected: August 30, 2006

Received: August 30, 2006

ANALYST LIST

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

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155 Grand Ave. Suite 1000
Oakland, CA 94612

Attention: Shawn Duffy

Laboratory No.: 958364
Date Received: August 30, 2006

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Analytical Results Summary

<u>Lab I.D.</u>	<u>Sample I.D.</u>	<u>Sample Time</u>	<u>EPA 200.7</u> <i>Chromium Total mg/L</i>	<u>EPA 218.6</u> <i>Chromium Hexavalent mg/L</i>	<u>EPA 180.1</u> <i>Turbidity NTU</i>	<u>EPA 150.1</u> <i>pH Unit</i>	<u>EPA 120.1</u> <i>EC μmhos/cm</i>	<u>EPA 160.1</u> <i>TDS mg/L</i>
958364	SC-700B-WDR-062	10:37	ND	ND	ND	7.96	8020	3980

ND: Non Detected (below reporting limit)

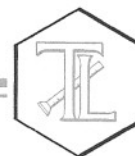
Note: The following "Significant Figures" rule has been applied to all results:
Results below 0.01 will have two (2) significant figures.
Result above or equal to 0.01 will have three (3) significant figures.
Quality Control data will always have three (3) significant figures.

005

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REPORT

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www.truesdail.com

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

Attention: Shawn Duffy

Laboratory No.: 958364

Date: September 6, 2006

Sample: One (1) Groundwater Sample

Collected: August 30, 2006

Project Name: PG&E Topock Project

Received: August 30, 2006

Project No.: 346129.IM.02.E2

Prep/ Analyzed: September 6, 2006

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

Analytical Batch: 090606A

Prep. Batch: 090606A

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

Analytical Results Total Chromium

TLI I.D.	Field I.D.	Units	Method	Run Time	DF	RL	Results
958364	SC-700B-WDR-062	mg/L	EPA 200.7	12:57	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	958364	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	958364	0.00	1.04	0.0100	0.0104	0.00995	0.0104	95.7%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.0104	0.0100	104%	90% - 110%	Yes
MRCVS#1	0.00985	0.0100	98.5%	90% - 110%	Yes
ICS	0.00897	0.0100	89.7%	80% - 120%	Yes
LCS	0.00991	0.0100	99.1%	90% - 110%	Yes

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

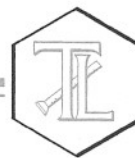
Mona Nassimi
For Mona Nassimi, Manager
Analytical Services

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www.truesdail.com

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

Attention: Shawn Duffy

Laboratory No.: 958364

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

Date: September 6, 2006
Collected: August 30, 2006
Received: August 30, 2006
Prep/ Analyzed: August 30, 2006
Analytical Batch: 08CrH06W

Investigation:

Hexavalent Chromium by EPA 218.6

Analytical Results Hexavalent Chromium

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Sample Time</u>	<u>Run Time</u>	<u>Units</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
958364	SC-700B-WDR-062	10:37	20:40	mg/L	1.05	0.00020	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	958313	0.00288	0.00286	0.70%	≤ 20%	Yes

QC Std I.D.	Lab Number	Conc. of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	958364	0.00	1.06	0.00100	0.00106	0.00107	0.00106	101%	90-110%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00483	0.00500	96.6%	90% - 110%	Yes
MRCVS#1	0.00994	0.0100	99.4%	95% - 105%	Yes
MRCVS#2	0.0101	0.0100	101%	95% - 105%	Yes
LCS	0.00482	0.00500	96.4%	90% - 110%	Yes
LCSD	0.00479	0.00500	95.8%	90% - 110%	Yes

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

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

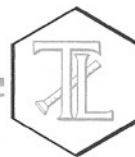
Mona Nassimi
For Mona Nassimi, Manager
Analytical Services

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TUSTIN, CALIFORNIA 92780-7008
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www.truesdail.com

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

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 958364

Date: September 6, 2006

Collected: August 30, 2006

Received: August 30, 2006

Prep/ Analyzed: August 31, 2006

Analytical Batch: 08EC06M

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Units</u>	<u>Method</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
958364	SC-700B-WDR-062	μmhos/cm	EPA 120.1	10.0	20.0	8020

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	958365-3	7340	7350	0.14%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
CCS	694	706	98.3%	90% - 110%	Yes
CVS#1	952	1001	95.1%	90% - 110%	Yes
CVS#2	954	1001	95.3%	90% - 110%	Yes
LCS	693	706	98.2%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

For Mona Nassimi, Manager
Analytical Services

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www.truesdail.com

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

Attention: Shawn Duffy

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

Laboratory No.: 958364

Date: September 6, 2006

Collected: August 30, 2006

Received: August 30, 2006

Prep/ Analyzed: August 31, 2006

Analytical Batch: 08PH06Z

Investigation:

pH by EPA 150.1

Analytical Results pH

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Sample Time</u>	<u>Run Time</u>	<u>Units</u>	<u>MDL</u>	<u>RL</u>	<u>Results</u>
958364	SC-700B-WDR-062	10:37	08:42	pH Units	0.0570	2.00	7.96

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	958365-3	7.69	7.70	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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi
For Mona Nassimi, Manager
Analytical Services

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

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

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 958364

Date: September 6, 2006

Collected: August 30, 2006

Received: August 30, 2006

Prep/ Analyzed: August 31, 2006

Analytical Batch: 08TDS060

Investigation:

Total Dissolved Solids by EPA 160.1

Analytical Results Total Dissolved Solids

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Units</u>	<u>Method</u>	<u>RL</u>	<u>Results</u>
958364	SC-700B-WDR-062	mg/L	EPA 160.1	312	3980

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	958364	3980	3900	1.02%	≤ 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS 1	499	500	99.8%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

RL: Reporting Limit.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi
For Mona Nassimi, Manager
Analytical Services

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

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

REPORT

14201 FRANKLIN AVENUE
TUSTIN, CALIFORNIA 92780-7008
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Laboratory No.: 958364

Date: September 6, 2006

Collected: August 30, 2006

Received: August 30, 2006

Prep/ Analyzed: August 31, 2006

Analytical Batch: 08TUC06Z

Investigation:

Turbidity by Method EPA 180.1

Analytical Results Turbidity

<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Sample Time</u>	<u>Units</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
958364	SC-700B-WDR-062	10:37	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	958364	ND	ND	0.00%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	7.51	8.00	93.9%	90% - 110%	Yes
LCS	7.50	8.00	93.8%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

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14201 Franklin Avenue, Tustin, CA 92780-7008
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CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-062]

COC Number

TURNAROUND TIME 5 Days

DATE 8-30-06 PAGE 1 OF 1

COMPANY	E2											COMMENTS	
PROJECT NAME	PG&E Topock												
PHONE	(530) 229-3303	FAX	(530) 339-3303										
ADDRESS	155 Grand Ave Ste 1000 Oakland, CA 94612												
P.O. NUMBER	346129.1m.02. E2												
SAMPLERS (SIGNATURE)	<i>J.M. Sible</i>												
SAMPLE I.D.	DATE	TIME	DESCRIPTION	CR6 (218.6)	Lab Filtered	Total Metals (200.7)	Total Chromium	Specific Conductance (120.1)	pH (150.1)	TDS (160.1)	Turbidity (180.1)	NUMBER OF CONTAINERS	TOTAL NUMBER OF CONTAINERS
SC-700B-WDR-062	8-30-06	1037	Groundwater	x	x	x	x	x	x			3	
													3

ALERT!!
Level III QC

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished)	<i>J.M. Sible</i>	Printed Name	GARY SIBBLE	Company/Agency	TOPACK IM3 OMT	Date/Time	8-30-06 1046
Signature (Received)	<i>L. Shabunina</i>	Printed Name	L. Shabunina	Company/Agency	TCI	Date/Time	8/30/06
Signature (Relinquished)		Printed Name		Company/Agency		Date/Time	8:30pm
Signature (Received)		Printed Name		Company/Agency		Date/Time	
Signature (Relinquished)		Printed Name		Company/Agency		Date/Time	
Signature (Received)		Printed Name		Company/Agency		Date/Time	

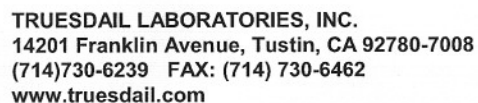
SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

For Sample Conditions
See Form Attached



[IM3Plant-WDR-062]

COC Number

TURNAROUND TIME 5 Days

DATE 8-30-06 PAGE 1 OF 1

COMPANY		E2																COMMENTS	
PROJECT NAME		PG&E Topock																	
PHONE		(530) 229-3303						FAX		(530) 339-3303									
ADDRESS		155 Grand Ave Ste 1000 Oakland, CA 94612																	
P.O. NUMBER		346129.1m.02.EZ																	
SAMPLERS (SIGNATURE)		<i>J.M. Jibble</i>																	
SAMPLE I.D.	DATE	TIME	DESCRIPTION	CR6 (218.6)	Lab Filtered	Total Metals (200.7)	Total Chromium	Specific Conductance (120.1)	pH (150.1)	TDS (160.1)	Turbidity (180.1)							NUMBER OF CONTAINERS	
SC-700B-WDR-062	8-30-05	1037	Groundwater	X	X	X	X	X	X	X								3	
																		3	TOTAL NUMBER OF CONTAINERS

034

CHAIN OF CUSTODY SIGNATURE RECORD				SAMPLE CONDITIONS	
Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time	RECEIVED	COOL <input type="checkbox"/> WARM <input type="checkbox"/> °F
Signature (Received)	Printed Name	Company/ Agency	Date/ Time	CUSTODY SEALED	YES <input type="checkbox"/> NO <input type="checkbox"/>
Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time	SPECIAL REQUIREMENTS:	
Signature (Received)	Printed Name	Company/ Agency	Date/ Time		
Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time		
Signature (Received)	Printed Name	Company/ Agency	Date/ Time		



STL

STL Los Angeles

1721 South Grand Avenue
Santa Ana, CA 92705

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

August 31, 2006

STL LOT NUMBER: **E6H030310**

Chip Poalinelli
E2 Consulting Engineers, Inc
1900 Powell Street, Suite 250
Emeryville, CA 94608

Dear Mr. Poalinelli,

This report contains the analytical results for the sample received under chain of custody by STL Los Angeles on August 3, 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 / E87652.

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

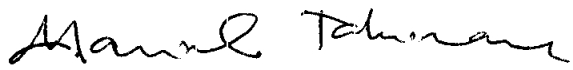
This report shall not be reproduced except in full, without the written approval of the laboratory.

This report contains **000243** pages.



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

Sincerely,

A handwritten signature in black ink, appearing to read "Marisol Tabirara". The signature is fluid and cursive, with the first name "Marisol" written in a larger, more prominent script than the last name "Tabirara".

Marisol Tabirara
Project Manager

cc: Project File

~~E6H030309~~ CA 8/2/06 E6H030310

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

CHAIN OF CUSTODY RECORD

[Sludge Sample-11]

COC Number
TURNAROUND TIME 10 Days
DATE 8-2-06 PAGE 1 OF 1

COMPANY E2	PROJECT NAME PG&E Topock GWM		PHONE (530) 229-3303	FAX (530) 339-3303	COMMENTS NUMBER OF CONTAINERS TOTAL NUMBER OF CONTAINERS
ADDRESS 155 Grand Ave Ste 1000 Oakland, CA 94612	P.O. NUMBER		TEAM 1		
SAMPLERS (SIGNATURE)		DATE 8-2-06		TIME 1258	
SAMPLE I.D. SC-Sludge-WDR-058		DESCRIPTION Soil			

CHAIN OF CUSTODY SIGNATURE RECORD				SAMPLE CONDITIONS	
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time	RECEIVED	COOL
Signature (Received)	Printed Name	Company/Agency	Date/Time	CUSTODY SEALED	YES
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time	WARM	NO
Signature (Received)	Printed Name	Company/Agency	Date/Time	SPECIAL REQUIREMENTS:	
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time		
Signature (Received)	Printed Name	Company/Agency	Date/Time		

5.1-2-4.9

STL LOS ANGELES - PROJECT RECEIPT CHECKLIST

Date: 8/3/06

Single Cooler Only

LIMS Lot #: E6H030310

Quote #: 58027

Client Name: E2

Project: PG+E Topock GWM

Received by: SG

Date/Time Received: 8/3/06 1050

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

Custody Seal Status Cooler: ☐ Intact ☐ Broken ☒ None

Custody Seal Status Samples: ☐ Intact ☐ Broken ☒ None

Custody Seal #(s): N/A ☒ No Seal #

Sampler Signature on COC ☒ Yes ☐ No N/A

IR Gun # B Correction Factor -2 °C IR passed daily verification ☒ Yes ☐ No

Temperature - BLANK 5.1 °C - 2 °C = 4.9 °C Cooler #1 ID N/A

Temperature - COOLER (°C °C °C °C) = avg °C - 2 °C = °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

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

Headspace Anomaly				<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	
Lab ID	Container(s) #	Headspace	Lab ID	Container(s) #	Headspace
		<input type="checkbox"/> > 6mm			<input type="checkbox"/> > 6mm
		<input type="checkbox"/> > 6mm			<input type="checkbox"/> > 6mm
		<input type="checkbox"/> > 6mm			<input type="checkbox"/> > 6mm
		<input type="checkbox"/> > 6mm			<input type="checkbox"/> > 6mm
		<input type="checkbox"/> > 6mm			<input type="checkbox"/> > 6mm
		<input type="checkbox"/> > 6mm			<input type="checkbox"/> > 6mm
		<input type="checkbox"/> > 6mm			<input type="checkbox"/> > 6mm
		<input type="checkbox"/> > 6mm			<input type="checkbox"/> > 6mm

~~8/3/12~~

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:1:HNO3-Lab filtered, n/f:HNO3-Field filtered, znna: Zinc Acetate/Sodium Hydroxide, Na2s2o3: sodium thiosulfate

Condition Upon Receipt Anomaly Form		Anomalies <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A <i>8/13/06</i>	
COOLERS <input type="checkbox"/> Not Received (received COC only) <input type="checkbox"/> Leaking <input type="checkbox"/> Other:	CUSTODY SEALS (COOLER(S) CONTAINER(S)) <input type="checkbox"/> None <input type="checkbox"/> Not Intact <input type="checkbox"/> Other	<input type="checkbox"/> None <input type="checkbox"/> Not Intact <input type="checkbox"/> Other	
TEMPERATURE (SPECS $4 \pm 2^{\circ}\text{C}$) <input type="checkbox"/> Cooler Temp(s) <input type="checkbox"/> Temperature Blank(s)	CHAIN OF CUSTODY (COC) <input type="checkbox"/> Not relinquished by Client; No date/time relinquished <input type="checkbox"/> Incomplete information provided <input type="checkbox"/> Other <input type="checkbox"/> COC not received – notify PM		
CONTAINERS <input type="checkbox"/> Leaking <input type="checkbox"/> Voa Vials with Bubbles > 6mm <input type="checkbox"/> Broken <input type="checkbox"/> Extra <input type="checkbox"/> Without Labels <input type="checkbox"/> Other:	LABELS <input type="checkbox"/> Not the same ID/info as in COC <input type="checkbox"/> Incomplete Information <input type="checkbox"/> Markings/Info illegible <input type="checkbox"/> Torn		
SAMPLES <input type="checkbox"/> Samples NOT RECEIVED but listed on COC <input type="checkbox"/> Samples received but NOT LISTED on COC <input type="checkbox"/> Logged based on Label Information <input type="checkbox"/> Logged based on info from other samples on COC <input type="checkbox"/> Logged according to Work Plan <input type="checkbox"/> Logged on HOLD UNTIL FURTHER NOTICE	<input type="checkbox"/> Will be noted on COC--Client to send samples with new COC <input type="checkbox"/> Misabeled as to tests, preservatives, etc. <input type="checkbox"/> Holding time expired – list sample ID and test <input type="checkbox"/> Improper container used <input type="checkbox"/> Not preserved/Improper preservative used <input type="checkbox"/> Improper pH _____ Lab to preserve sample and document <input type="checkbox"/> Insufficient quantities for analysis <input type="checkbox"/> Other		
Comments: <i>* No moisture test added, per DATA TO BR</i> <i>dry weight corrected. MT 8/22/06</i>			
Corrective Action Implemented: <input type="checkbox"/> Client Informed: verbally on _____ <input type="checkbox"/> Sample(s) on hold until: _____			
Logged by/Date: <i>CA- 8/13/06</i>		PM Review/Date: <i>MT 8/22/06</i>	

Analytical Report

ANALYTICAL REPORT

PG&E TOPOCK GWM

Lot #: E6H030310

Chip Poalinelli

E2 Consulting Engineers, Inc

SEVERN TRENT LABORATORIES, INC.

Marisol Tabirara
Project Manager

August 31, 2006

EXECUTIVE SUMMARY - Detection Highlights

E6H030310

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SC-SLUDGE-WDR-058 08/02/06 12:58 001				
Mercury	2.7	0.53	mg/kg	SW846 7471A
Arsenic	20	5.3	mg/kg	SW846 6010B
Barium	97	11	mg/kg	SW846 6010B
Cadmium	3.9	2.7	mg/kg	SW846 6010B
Chromium	16000	5.3	mg/kg	SW846 6010B
Selenium	8.5	2.7	mg/kg	SW846 6010B
Copper	110	13	mg/kg	SW846 6010B
Molybdenum	36	21	mg/kg	SW846 6010B
Nickel	44	21	mg/kg	SW846 6010B
Thallium	10	5.3	mg/kg	SW846 6010B
Vanadium	87	27	mg/kg	SW846 6010B
Zinc	38	11	mg/kg	SW846 6010B
Percent Moisture	81	0.10	%	MCAWW 160.3 MOD
Hexavalent Chromium	140	2.1	mg/kg	SW846 7199

METHODS SUMMARY

E6H030310

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

References:

- MCAWW "Methods for Chemical Analysis of Water and Wastes",
EPA-600/4-79-020, March 1983 and subsequent revisions.
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical
Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

E6H030310

ANALYTICAL METHOD	ANALYST	ANALYST ID
MCAWW 160.3 MOD	Janice Salenga	403147
SW846 6010B	Hao Ton	000023
SW846 6010B	Josephine Asuncion	021088
SW846 7199	Yuriy Zakhrabov	000022
SW846 7471A	Hao Ton	000023

References:

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

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

SAMPLE SUMMARY

E6H030310

WO #	SAMPLE#	CLIENT	SAMPLE ID	SAMPLED DATE	SAMP TIME
JAK5M	001	SC-SLUDGE-WDR-058		08/02/06	12:58

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.

E2 Consulting Engineers, Inc

Client Sample ID: SC-SLUDGE-WDR-058

TOTAL Metals

Lot-Sample #... E6H030310-001

Matrix..... SO

Date Sampled... 08/02/06 12:58 **Date Received...** 08/03/06 10:50

% Moisture..... 81

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #... 6221454						
Arsenic	20	5.3	mg/kg	SW846 6010B	08/09-08/15/06	JAK5M1AC
		Dilution Factor: 1		Analysis Time..: 13:37	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 6222350		
Antimony	ND	32	mg/kg	SW846 6010B	08/09-08/15/06	JAK5M1AD
		Dilution Factor: 1		Analysis Time..: 13:37	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 6222350		
Barium	97	11	mg/kg	SW846 6010B	08/09-08/15/06	JAK5M1AE
		Dilution Factor: 1		Analysis Time..: 13:37	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 6222350		
Cadmium	3.9	2.7	mg/kg	SW846 6010B	08/09-08/15/06	JAK5M1AF
		Dilution Factor: 1		Analysis Time..: 13:37	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 6222350		
Chromium	16000	5.3	mg/kg	SW846 6010B	08/09-08/15/06	JAK5M1AG
		Dilution Factor: 1		Analysis Time..: 13:37	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 6222350		
Beryllium	ND	2.7	mg/kg	SW846 6010B	08/09-08/15/06	JAK5M1AH
		Dilution Factor: 1		Analysis Time..: 13:37	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 6222350		
Lead	ND	2.7	mg/kg	SW846 6010B	08/09-08/15/06	JAK5M1AJ
		Dilution Factor: 1		Analysis Time..: 13:37	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 6222350		
Selenium	8.5	2.7	mg/kg	SW846 6010B	08/09-08/15/06	JAK5M1AK
		Dilution Factor: 1		Analysis Time..: 13:37	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 6222350		
Silver	ND	5.3	mg/kg	SW846 6010B	08/09-08/15/06	JAK5M1AL
		Dilution Factor: 1		Analysis Time..: 13:37	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 6222350		

(Continued on next page)

E2 Consulting Engineers, Inc

Client Sample ID: SC-SLUDGE-WDR-058

TOTAL Metals

Lot-Sample #...: E6H030310-001

Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Cobalt	ND	27	mg/kg	SW846 6010B	08/09-08/15/06	JAK5M1AM
		Dilution Factor: 1		Analysis Time...: 13:37	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 6222350		
Copper	110	13	mg/kg	SW846 6010B	08/09-08/15/06	JAK5M1AN
		Dilution Factor: 1		Analysis Time...: 13:37	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 6222350		
Molybdenum	36	21	mg/kg	SW846 6010B	08/09-08/15/06	JAK5M1AP
		Dilution Factor: 1		Analysis Time...: 13:37	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 6222350		
Nickel	44	21	mg/kg	SW846 6010B	08/09-08/15/06	JAK5M1AQ
		Dilution Factor: 1		Analysis Time...: 13:37	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 6222350		
Thallium	10	5.3	mg/kg	SW846 6010B	08/09-08/15/06	JAK5M1AR
		Dilution Factor: 1		Analysis Time...: 13:37	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 6222350		
Vanadium	87	27	mg/kg	SW846 6010B	08/09-08/15/06	JAK5M1AT
		Dilution Factor: 1		Analysis Time...: 13:37	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 6222350		
Zinc	38	11	mg/kg	SW846 6010B	08/09-08/15/06	JAK5M1AU
		Dilution Factor: 1		Analysis Time...: 13:37	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 6222350		

Prep Batch #...: 6221461

Mercury	2.7	0.53	mg/kg	SW846 7471A	08/11/06	JAK5M1AV
		Dilution Factor: 1		Analysis Time...: 14:03	Analyst ID.....: 000023	
		Instrument ID...: M04		MS Run #.....: 6223296		

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

E2 Consulting Engineers, Inc

Client Sample ID: SC-SLUDGE-WDR-058

General Chemistry

Lot-Sample #....: E6H030310-001 Work Order #....: JAK5M Matrix.....: SO
Date Sampled....: 08/02/06 12:58 Date Received...: 08/03/06 10:50
% Moisture.....: 81

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Hexavalent Chromium	140	2.1	mg/kg	SW846 7199	08/05-08/08/06	6217109
		Dilution Factor: 2		Analysis Time...: 10:18	Analyst ID.....: 000022	
		Instrument ID...: W18		MS Run #.....: 6217060		
Percent Moisture	81	0.10	%	MCAWW 160.3 MOD	08/08-08/09/06	6220175
		Dilution Factor: 1		Analysis Time...: 08:00	Analyst ID.....: 4031470	
		Instrument ID...: W15		MS Run #.....: 6220106		

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Table of Contents
TLI Laboratory Data Package
For Laboratory Number: 957394

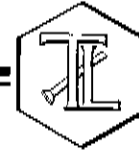
<u>ITEM</u>	<u>Section</u>
Case Narrative	1.0
Summary Table of Final Results	2.0
Final Report	3.0
Standard, Quality Control and Chain of Custody Records	4.0
Established Retention Time Window and Analytical Raw Data	5.0

Section 1.0

Case Narrative

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

August 10, 2006

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

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

Dear Mr. Duffy:

SUBJECT: CASE NARRATIVE PG&E TOPOCK PROJECT, SLUDGE SAMPLE-11,
TLI NO.: 957394

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock project, Sludge Sample-11. A summary table for this sample delivery group is included in Section 2. Complete laboratory report, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The sample was received and delivered with the chain of custody on August 2, 2006, intact and in chilled condition. The sample will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

No violations or nonconformance actions occurred for this data package.

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

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi
Manager, Analytical Services

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

CC: Mr. Mark Cichy, CH2M HILL Redding CA

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

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

Attention: Shawn Duffy

Sample: One (1) Soil Sample

Project Name: PG&E Topock Project

Project No.: NA

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

Laboratory No.: 957394

Date: August 10, 2006

Collected: August 2, 2006

Received: August 2, 2006

ANALYST LIST

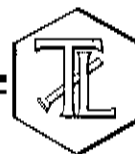
EPA 300.0	Fluoride	Giawad Ghenniwa

Section 2.0

Summary Table of Final Results

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



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TUSTIN, CALIFORNIA 92780-7008
(714) 730-6239 · FAX (714) 730-6462
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Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612

Attention: Shawn Duffy

Project Name: PG&E Topock Project

Project No.: NA

P.O. No.: NA

Laboratory No.: 957394

Date Received: August 2, 2006

Analytical Results Summary

<u>Lab I.D.</u>	<u>Sample I.D.</u>	<u>Time Sampled</u>	<u>EPA 300.0</u> <u>Fluoride</u> <u>mg/kg</u>
957394	SC-Sludge-WDR-058	12:58	12.4

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.

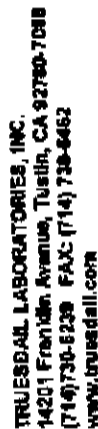
Quality Control data will always have three (3) significant figures.

Section 3.0

Final Report

CH2N HILL

012



[Sludge Sample-11]

10 Days

TIME AND HUBBARD TIME

PAGE 1 OF

1

ALERT!!
Level III QC

**For Sample Conditions
See Form Attached**

CHAIN OF CUSTODY SIGNATURE RECORD				SAMPLE CONDITIONS			
Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time	RECEIVED	COOL <input type="checkbox"/>	WARM <input type="checkbox"/>	*F _____
Signature (Received)	Printed Name	Company/ Agency	Date/ Time	CUSTODY SEALED	YES <input type="checkbox"/>	NO <input type="checkbox"/>	
Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time	SPECIAL REQUIREMENTS:			
Signature (Received)	Printed Name	Company/ Agency	Date/ Time				
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				