



**Pacific Gas and
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February 15, 2007

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

**Subject: Board Order R7-2006-0060
PG&E Topock Compressor Station, Needles, California
Interim Measure No. 3 Groundwater Treatment System
Discharge to Injection Wells
January 2007 Monitoring Report**

Dear Mr. Perdue:

Enclosed is the Board Order R7-2006-0060 January 2007 Monitoring Report for the Pacific Gas and Electric Company (PG&E) Topock Compressor Station, Interim Measure (IM) No. 3 Groundwater Treatment System.

This report is being submitted in compliance with the Waste Discharge Requirements (WDRs) issued September 20, 2006 by the Colorado River Basin Regional Water Quality Control Board (Water Board) under Order R7-2006-0060 (successor to Order R7-2004-0103). These WDRs apply to IM No. 3 Treatment System discharge by subsurface injection.

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

Sincerely,

Curt Russell
Topock Onsite Project Manager

Enclosures:

Order R7-2006-0060 January 2007 Monitoring Report for the IM No. 3 Groundwater Treatment System.

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

January 2007 Monitoring Report for Interim Measure No. 3 Groundwater Treatment System

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

Prepared for
**California Regional Water Quality Control Board
Colorado River Basin Region**

on behalf of
Pacific Gas and Electric Company

February 15, 2007

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Oakland, CA 94612

**January 2007 Monitoring Report
Interim Measure No. 3 Groundwater Treatment System
Waste Discharge Requirements Order No. R7-2006-0060
PG&E Topock Compressor Station
Needles, California**

Prepared for
Pacific Gas and Electric Company

February 15, 2007

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

Dennis Fink

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



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Acronyms and Abbreviations

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

1.0 Introduction

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

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

This report covers monitoring activities related to operation of the IM No. 3 groundwater treatment system during January 2007. The groundwater monitoring results for wells OW-1S/M/D, OW-2S/M/D, OW-5S/M/D, CW-1M/D, CW-2M/D, CW-3M/D, and CW-4M/D will be submitted under separate cover, as part of the Compliance Monitoring Program.

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

2.0 Sampling Station Locations

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

3.0 Description of Activities

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

Influent to the treatment facility, permitted by Order R7-2006-0060, includes the following components:

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

During January 2007, extraction wells TW-3D and PE-1 operated at a target pump rate of 135 gallons per minute (gpm) excluding periods of planned and unplanned downtime (planned and unplanned downtime is described in Section 4.0).

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

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

4.0 Groundwater Treatment System Flow Rates

The January 2007 treatment system monthly average flow rates (influent, effluent, and reverse osmosis concentrate) are presented in Table 2.

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

In addition to groundwater from extraction wells, during January 2007 the IM No. 3 facility treated approximately 1,500 gallons of water generated from the groundwater monitoring program. One container of solids (approximately 12 cubic yards) was transported from the IM No. 3 facility to the Chemical Waste Management at the Kettleman Hills facility during January 2007.

Periods of planned and unplanned extraction system down time (that taken together resulted in less than 1 percent down time during January 2007) 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.

- **January 15, 2007 (unplanned):** The extraction well system was temporarily offline from 11:11 am until 12:25 pm due to a level indicator failure in the microfilter feed tank (T-500) that resulted in a facility shutdown. The failed level indicator transmitter was replaced with a shelf spare. Extraction system downtime was 1 hour 14 minutes.
- **January 17, 2007 (unplanned):** The extraction well system was temporarily offline from 12:24 pm to 1:55 pm to put a temporary rented plant air compressor into service, after the facility backup air compressor had an oil seal failure. The primary plant air compressor was being serviced by the manufacturer during this time and was subsequently returned to service on January 29, 2007. Extraction system downtime was 1 hour 31 minutes.

5.0 Sampling and Analytical Procedures

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

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

Truesdail is certified by the California Department of Health Services (Certification No. 1237) under the State of California's Environmental Laboratory Accreditation Program. STL is certified by the California Department of Health Services (Certification No. 1118) under the Environmental Laboratory Accreditation Program.

All analyses were performed in accordance with the latest edition of the "Guidelines Establishing Test Procedures for Analysis of Pollutants" (40 Code of Federal Regulations Part 136), promulgated by the United States Environmental Protection Agency.

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

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

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

6.0 Analytical Results

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

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

- The influent was sampled monthly; sample date January 3, 2007. Results are presented in Table 3.
- The effluent was sampled weekly; sample dates January 3, 10, 17, 23, and 31, 2007. Results are presented in Table 4.
- The reverse osmosis concentrate was sampled monthly; sample date January 3, 2007. Results are presented in Table 5.
- The sludge was sampled monthly; sample date January 3, 2007. In accordance with WDRs, sludge is sampled each time it is transported offsite (unless sludge is transported offsite more frequently than monthly, in which case the sampling frequency is monthly). Results are presented in Table 6.
- The sludge is required to have an aquatic bioassay test quarterly; the 1st Quarter 2007 aquatic bioassay test was performed on a sludge sample collected in January 3, 2007. Results are presented in Table 6.

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

In addition to the WDR required parameters, seven samples were analyzed for total organic carbon (TOC) to evaluate the overall water chemistry of the IM No. 3 facility. The additional analyses were conducted on samples collected from specified WDR sampling locations:

- Influent, collected January 3, 10, 17, 24 and 31, 2007
- Effluent, collected January 3, 2007
- Reverse Osmosis Concentrate (brine), collected January 3, 2007

The additional analyses for TOC were completed for treatment process evaluation. The TOC results remain comparable to baseline conditions and are included in the laboratory reports provided in Appendix A of this report.

7.0 Conclusions

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

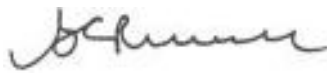
In addition, no incidents of non-compliance were identified during the reporting period, and no events that caused an immediate or potential threat to human health or the environment, or new releases of hazardous waste or hazardous waste constituents, or new solid waste management units were identified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

8.0 Certification

PG&E submitted a signature delegation letter to the Water Board on August 12, 2005. The letter delegated PG&E signature authority to Mr. Curt Russell and Ms. Yvonne Meeks for correspondence regarding Board Order R7-2004-0103. Order R7-2006-0600 is the successor to Order R7-2004-0103; an additional signature authority delegation is not required, as confirmed in an email from Jose Cortez dated October 12, 2006.

Certification Statement:

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

Signature:  _____

Name: _____ Curt Russell

Company: _____ Pacific Gas and Electric Company

Title: _____ Topock Onsite Project Manager

Date: _____ February 15, 2007

TABLE 1
Sampling Station Descriptions
January 2007 Report for Interim Measure No. 3 Groundwater Treatment System

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

Note:

= Sequential sample identification number at each sample station.

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

TABLE 2
Flow Monitoring Results
January 2007 Report for Interim Measure No. 3 Groundwater Treatment System

Parameter	System Influent ^{a,b}	System Effluent ^{b,c}	Reverse Osmosis Concentrate ^{b,d}
Average Monthly Flowrate (gpm)	132.1	123.5	9.3

Notes:

gpm: gallons per minute.

^a Extraction wells TW-3D and PE-1 were operated during January 2007.

^b The difference between influent flow rate and the sum of the effluent and reverse osmosis concentrate flow rates was approximately 0.4 percent, which is within the range of acceptable accuracy considering the margin of error for onsite instrumentation, the water contained within the sludge, purge water treated at the IM-3 facility in addition to the extraction wells, and differences in the inventory of water in the treatment system between the beginning and end of the reporting period.

^c Effluent was discharged into injection well IW-03 during January 2007.

^d Reverse Osmosis Concentrate flow meter reading from FIT-701.

TABLE 3
Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs)
Influent Monitoring Results ^a
January 2007 Monthly Report for Interim Measures No.3 Groundwater Treatment System

Required Sampling Frequency		Monthly																							
<div><div></div><div>Analytes</div><div>Units ^b</div><div>MDL</div></div>	<div><div></div><div>Date</div></div>	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	µg/L
		64	0.016	0.7	0.057	0.78	1.8	1.8	0.1	0.28	0.25	0.87	0.000087	0.36	0.018	0.25	1.6	0.98	1.5	0.017	0.001	0.77	0.99	2.0	
SC-100B-WDR-080	1/3/2007	5250	0.207	8590	7.36	2140	1910	ND	ND	ND	ND	ND	1.15	47.4	2.82	6.80	ND	27.2	ND	3.45	0.0087	644	ND	ND	
RL		250	0.1	2.0	2.0	5.2	20	50	0.5	3.0	5.0	300	0.2	10	0.2	1.0	500	5.2	20	0.2	0.005	25	300	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
MDL = method detection limit
RL = project reporting limit

^a Sampling Location for all Influent Samples is tap on pipe from extraction wells into tank T-100 (see attached P&ID TP-PR-10-10-04)
^b Units reported in this table are those units required in the WDRs

TABLE 4
Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs)
Effluent Monitoring Results^a
January 2007 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>Sample ID</div>	<div>Date</div>	<div>Analytes Units^c</div>																							
			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	mg/L	mg/L	mg/L	µg/L	µg/L
MDL		64	0.016	0.7	0.057	0.75	0.18	1.8	0.1	0.28	0.25	0.87	0.000087	0.36	0.018	0.25	1.6	0.2	1.5	0.017	0.001	1.5	0.99	2.0	
SC-700B-WDR-080	1/3/2007	4380	ND	6950	7.95	2.80	ND	ND	ND	ND	ND	ND	1.15	43.3	2.18	7.80	ND	20.4	ND	2.18	ND	491	ND	ND	
RL		250	0.1	2.0	2.0	1.0	0.2	50	0.5	3.0	5.0	300	0.2	10	0.2	1.0	500	5.0	20	0.2	0.005	50	300	20	
SC-700B-WDR-081	1/10/2007	4340	ND	6810	7.85	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
RL		250	0.1	2.0	2.0	1.0	1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
SC-700B-WDR-082	1/17/2007	4190	ND	6880	7.97	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
RL		250	0.1	2.0	2.0	1.0	0.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
SC-700B-WDR-083	1/24/2007	4290	ND	6980	7.91	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
RL		250	0.1	2.0	2.0	1.0	2.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
SC-700B-WDR-084	1/31/2007	4210	ND	6850	8.16	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
RL		250	0.1	2.0	2.0	1.0	2.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	

NOTES:

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

NA = not applicable

µg/L = micrograms per liter

mg/L = milligrams per liter

NTU = nephelometric turbidity units

µmhos/cm = micromhos per centimeter

ND = parameter not detected at the listed reporting limit

J = concentration or reporting limits estimated by laboratory or validation

MDL = method detection limit

RL = project reporting limit

^a Sampling location for all Effluent Samples is tap on pipe downstream from tank T-700 to injection well IW-2 (see attached P&ID TP-PR-10-10-04)

^b In addition to the listed effluent limits, the WDRs state that the effluent shall not contain heavy metals, chemicals, pesticides or other constituents in concentrations toxic to human health

^c Units reported in this table are those units required in the WDRs

TABLE 5
Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs)
Reverse Osmosis Concentrate Results ^a
January 2007 Monthly Report for Interim Measures No.3 Groundwater Treatment System

Required Sampling Frequency		Monthly																							
<div>Sample ID</div>	<div>Date</div>	<div>Analytes Units ^b MDL</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	
			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	mg/L
			320	0.7	0.057	0.00016	0.000088	0.0014	0.0012	0.00087	0.00074	0.0012	0.00075	0.0018	0.18	0.0012	0.00098	0.000049	0.0015	0.0066	0.003	0.00098	0.00089	0.002	
SC-701-WDR-080	1/3/2007		20900	31100	7.89	0.0012	ND	ND	ND	ND	ND	ND	ND	0.0418	11.8	ND	0.0787	ND	ND	0.0132	0.0067	ND	ND	ND	
RL			1250	2.00	2.00	0.001	0.001	0.0052	0.0104	0.30	0.0052	0.0052	0.0052	0.0104	2.00	0.0052	0.0052	0.0002	0.02	0.0104	0.0052	0.0052	0.0052	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
MDL = method detection limit
RL = project reporting limit

^a Sampling Location for all Reverse Osmosis Samples is tap on pipe T-701 (see attached P&ID TP-PR-10-10-08)
^b Units reported in this table are those units required in the WDRs

TABLE 6
Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs)
Sludge Monitoring Results^a
January 2007 Monthly Report for Interim Measures No.3 Groundwater Treatment System

Required Sampling Frequency		Monthly ^c																			Quarterly ^d		
<div><div></div><div></div><div></div></div>	Analytes	Chromium	Hexavalent Chromium	Antimony	Arsenic	Barium	Beryllium	Cadmium	Cobalt	Copper	Fluoride	Lead	Molybdenum	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Bioassay % Survival	Bioassay % Survival	Bioassay % Survival
	Units ^b	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	at 750 mg/L ^e	at 500 mg/L ^e	at 250 mg/L ^e
	MDL	0.94	0.94	2.8	1.9	0.47	0.28	0.38	0.94	1.9	0.36	1.2	1.4	0.094	1.4	2.3	0.47	2.3	0.94	4.7	100	100	100
Sample ID	Date																						
SC-SLUDGE-WDR-080	1/3/2007	15000	84.0	ND	40.0	100	ND	ND	ND	31.0	16.6	ND	ND	1.60	20.0	3.10	ND	21.0	96.0	9.70	100	100	100
RL		4.7	1.9	28	4.7	9.4	2.3	2.3	23	12	4.0	2.3	19	0.47	19	2.3	4.7	4.7	23	9.4	100	100	100

NOTES:

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

ND = parameter not detected at the listed reporting limit

J = concentration or reporting limits estimated by laboratory or validation

mg/kg = milligrams per killogram

mg/L = milligrams per liter

MDL = method detection limit

RL = project reporting limit

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

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

^c 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

^d Sludge shall have an aquatic bioassay test performed each time sludge is transported offsite, unless transport is more frequent than quaterly, in which case the sampling frequency shall be quarterly.

^e Concentration of sludge per 1 liter of water.

TABLE 7

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

Monitoring Information

January 2007 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-080	David Chaney	1/3/2007	1:00:00 PM	TLI	EPA 120.1	SC	1/5/2007	Tina Acquiati
					TLI	EPA 150.1	PH	1/4/2007	Tina Acquiati
					TLI	EPA 160.1	TDS	1/5/2007	Tina Acquiati
					TLI	EPA 180.1	TRB	1/4/2007	Gautam Savani
					TLI	EPA 200.7	MN	1/4/2007	Riddhi Patel
					TLI	EPA 200.7	NI	1/4/2007	Riddhi Patel
					TLI	EPA 200.7	FE	1/4/2007	Riddhi Patel
					TLI	EPA 200.7	BA	1/4/2007	Riddhi Patel
					TLI	EPA 200.7	B	1/4/2007	Riddhi Patel
					TLI	EPA 200.7	ZN	1/4/2007	Riddhi Patel
					TLI	EPA 200.8	SB	1/8/2007	Laureen Tan
					TLI	EPA 200.8	AL	1/10/2007	Laureen Tan
					TLI	EPA 200.8	AS	1/8/2007	Laureen Tan
					TLI	EPA 200.8	CR	1/10/2007	Laureen Tan
					TLI	EPA 200.8	CU	1/8/2007	Laureen Tan
					TLI	EPA 200.8	MO	1/10/2007	Laureen Tan
					TLI	EPA 200.8	PB	1/8/2007	Laureen Tan
					TLI	EPA 300.0	SO4	1/4/2007	Giawad Ghenniwa
					TLI	EPA 300.0	NO3N	1/4/2007	Giawad Ghenniwa
					TLI	EPA 300.0	FL	1/4/2007	Giawad Ghenniwa
					TLI	EPA 350.2	NH3N	1/9/2007	Iordan Stavrev
					TLI	EPA 354.1	NO2N	1/5/2007	Tina Acquiati
					TLI	EPA Method 218.6	CR6	1/3/2007	Stanley Hsieh
SC-700B	SC-700B-WDR-080	David Chaney	1/3/2007	12:45:00 PM	TLI	EPA 120.1	SC	1/5/2007	Tina Acquiati
					TLI	EPA 150.1	PH	1/4/2007	Tina Acquiati
					TLI	EPA 160.1	TDS	1/5/2007	Tina Acquiati
					TLI	EPA 180.1	TRB	1/4/2007	Gautam Savani
					TLI	EPA 200.7	FE	1/4/2007	Riddhi Patel
					TLI	EPA 200.7	BA	1/4/2007	Riddhi Patel
					TLI	EPA 200.7	B	1/4/2007	Riddhi Patel
					TLI	EPA 200.7	MN	1/4/2007	Riddhi Patel
					TLI	EPA 200.7	NI	1/4/2007	Riddhi Patel
					TLI	EPA 200.7	ZN	1/4/2007	Riddhi Patel
					TLI	EPA 200.8	CR	1/10/2007	Laureen Tan
					TLI	EPA 200.8	AL	1/10/2007	Laureen Tan
					TLI	EPA 200.8	AS	1/8/2007	Laureen Tan
					TLI	EPA 200.8	SB	1/8/2007	Laureen Tan

TABLE 7

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

Monitoring Information

January 2007 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-080	David Chaney	1/3/2007	12:45:00 PM	TLI	EPA 200.8	PB	1/8/2007	Laureen Tan
					TLI	EPA 200.8	CU	1/8/2007	Laureen Tan
					TLI	EPA 200.8	MO	1/10/2007	Laureen Tan
					TLI	EPA 300.0	FL	1/4/2007	Giawad Ghenniwa
					TLI	EPA 300.0	NO3N	1/4/2007	Giawad Ghenniwa
					TLI	EPA 300.0	SO4	1/4/2007	Giawad Ghenniwa
					TLI	EPA 350.2	NH3N	1/9/2007	Iordan Stavrev
					TLI	EPA 354.1	NO2N	1/5/2007	Tina Acquiati
					TLI	EPA Method 218.6	CR6	1/3/2007	Stanley Hsieh
SC-700B	SC-700B-WDR-081	David Chaney	1/10/2007	10:00:00 AM	TLI	EPA 120.1	SC	1/15/2007	Tina Acquiati
					TLI	EPA 150.1	PH	1/11/2007	Tina Acquiati
					TLI	EPA 160.1	TDS	1/15/2007	Tina Acquiati
					TLI	EPA 180.1	TRB	1/11/2007	Gautam Savani
					TLI	EPA 200.7	CR	1/29/2007	Riddhi Patel
					TLI	EPA Method 218.6	CR6	1/10/2007	Stanley Hsieh
SC-700B	SC-700B-WDR-082	Erik Johannsen	1/17/2007	1:10:00 PM	TLI	EPA 120.1	SC	1/18/2007	Tina Acquiati
					TLI	EPA 150.1	PH	1/18/2007	Tina Acquiati
					TLI	EPA 160.1	TDS	1/18/2007	Tina Acquiati
					TLI	EPA 180.1	TRB	1/18/2007	Gautam Savani
					TLI	EPA 200.7	CR	1/24/2007	Riddhi Patel
					TLI	EPA Method 218.6	CR6	1/18/2007	Faisal Raihan
SC-700B	SC-700B-WDR-083	Erik Johannsen	1/24/2007	12:45:00 PM	TLI	EPA 120.1	SC	1/25/2007	Tina Acquiati
					TLI	EPA 150.1	PH	1/25/2007	Tina Acquiati
					TLI	EPA 160.1	TDS	1/25/2007	Tina Acquiati
					TLI	EPA 180.1	TRB	1/25/2007	Gautam Savani
					TLI	EPA 200.7	CR	1/29/2007	Riddhi Patel
					TLI	EPA Method 218.6	CR6	1/25/2007	Stanley Hsieh
SC-700B	SC-700B-WDR-084	Erik Johannsen	1/31/2007	12:40:00 PM	TLI	EPA 120.1	SC	2/1/2007	Tina Acquiati
					TLI	EPA 150.1	PH	2/1/2007	Tina Acquiati
					TLI	EPA 160.1	TDS	2/1/2007	Tina Acquiati
					TLI	EPA 180.1	TRB	2/1/2007	Gautam Savani
					TLI	EPA 200.7	CR	2/5/2007	Riddhi Patel
					TLI	EPA Method 218.6	CR6	2/1/2007	Faisal Raihan
SC-701	SC-701-WDR-080	David Chaney	1/3/2007	1:15:00 PM	TLI	EPA 120.1	SC	1/5/2007	Tina Acquiati
					TLI	EPA 150.1	PH	1/4/2007	Tina Acquiati

TABLE 7

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

Monitoring Information

January 2007 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-080	David Chaney	1/3/2007	1:15:00 PM	TLI	EPA 160.1	TDS	1/5/2007	Tina Acquiat
					TLI	EPA 200.7	BA	1/4/2007	Riddhi Patel
					TLI	EPA 200.7	NI	1/4/2007	Riddhi Patel
					TLI	EPA 200.7	ZN	1/4/2007	Riddhi Patel
					TLI	EPA 200.8	CO	1/8/2007	Laureen Tan
					TLI	EPA 200.8	V	1/8/2007	Laureen Tan
					TLI	EPA 200.8	AS	1/8/2007	Laureen Tan
					TLI	EPA 200.8	CD	1/8/2007	Laureen Tan
					TLI	EPA 200.8	BE	1/8/2007	Laureen Tan
					TLI	EPA 200.8	CR	1/17/2007	Laureen Tan
					TLI	EPA 200.8	CU	1/8/2007	Laureen Tan
					TLI	EPA 200.8	MO	1/10/2007	Laureen Tan
					TLI	EPA 200.8	PB	1/8/2007	Laureen Tan
					TLI	EPA 200.8	SB	1/8/2007	Laureen Tan
					TLI	EPA 200.8	SE	1/8/2007	Laureen Tan
					TLI	EPA 200.8	TL	1/8/2007	Laureen Tan
					TLI	EPA 200.8	AG	1/10/2007	Laureen Tan
					TLI	EPA 245.1	HG	1/4/2007	Aksiniya Dimitrova
					TLI	EPA 300.0	FL	1/4/2007	Giawad Ghenniwa
					TLI	EPA Method 218.6	CR6	1/3/2007	Stanley Hsieh
SC-Sludge	SC-SLUDGE-WDR-080	Chris Knight	1/3/2007	1:20:00 PM	STL	EPA 160.3	MOIST	1/5/2007	Florian Zimmermann
					TLI	EPA 300.0	FL	1/5/2007	Chris Lim, Yi Young
					STL	EPA 6010B	NI	1/11/2007	Josephine Asuncion
					STL	EPA 6010B	AG	1/11/2007	Josephine Asuncion
					STL	EPA 6010B	ZN	1/11/2007	Josephine Asuncion
					STL	EPA 6010B	V	1/11/2007	Josephine Asuncion
					STL	EPA 6010B	TL	1/11/2007	Josephine Asuncion
					STL	EPA 6010B	SE	1/11/2007	Josephine Asuncion
					STL	EPA 6010B	SB	1/11/2007	Josephine Asuncion
					STL	EPA 6010B	PB	1/11/2007	Josephine Asuncion
					STL	EPA 6010B	MO	1/11/2007	Josephine Asuncion
					STL	EPA 6010B	CU	1/11/2007	Josephine Asuncion
					STL	EPA 6010B	CR	1/11/2007	Josephine Asuncion
					STL	EPA 6010B	CO	1/11/2007	Josephine Asuncion
					STL	EPA 6010B	CD	1/11/2007	Josephine Asuncion
					STL	EPA 6010B	BE	1/11/2007	Josephine Asuncion
					STL	EPA 6010B	AS	1/11/2007	Josephine Asuncion

TABLE 7

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

Monitoring Information

January 2007 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-080	Chris Knight	1/3/2007	1:20:00 PM	STL	EPA 6010B	BA	1/11/2007	Josephine Asuncion
					STL	EPA 7471A	HG	1/12/2007	Hao ton
					STL	SW 7199	CR6	1/12/2007	Yuriy Zakhrafov
Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician
SC-Sludge	SC-Sludge-WDR-076	David Chaney	12/06/2006	13:01:00 PM	MBC	96-Hour Acute Aquatic Toxicity Screening Test	BIO	1/4//2007 - 01/8/2007	Chris Lim, Yi Young

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.

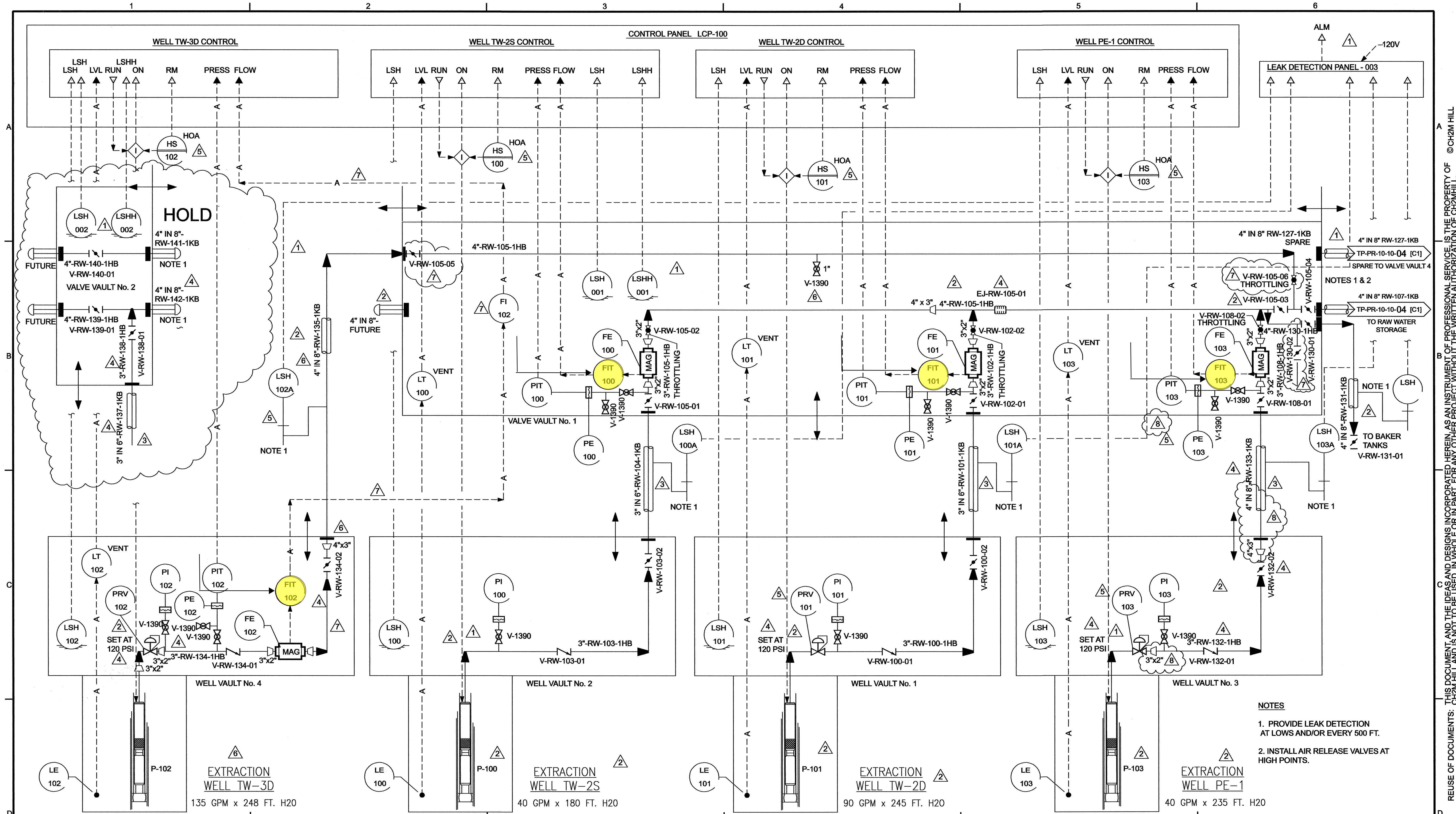
STL = Severn Trent Laboratories, Inc.

MBC = MBC Applied Environmental Sciences

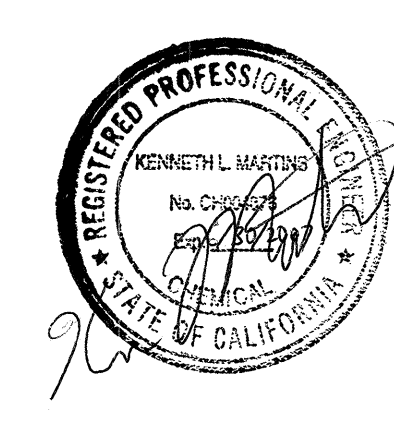
SC = specific conductance	MO = molybdenum
PH = pH	NI = nickel
TDS = total dissolved solids	PB = lead
TRB = turbidity	HG = mercury
CR = chromium	SE = selenium
CR6 = hexavalent chromium	TL = thallium
FL = fluoride	CO = cobalt
AL = aluminum	CD = cadmium
B = boron	BE = beryllium
FE = iron	AG = silver
MN = 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.



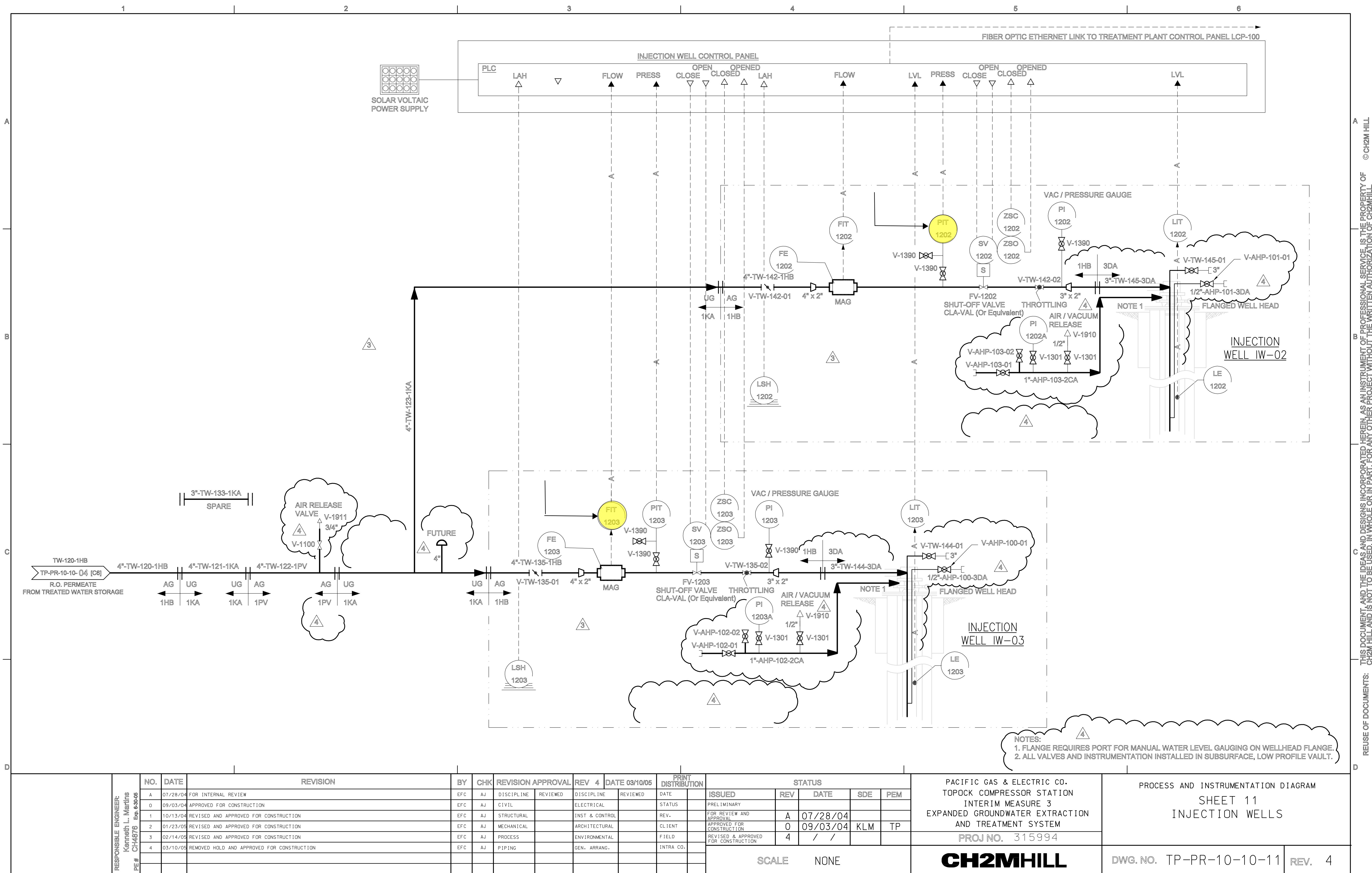
NO.	DATE	REVISION	BY	CHK	REVISION APPROVAL	REV 8	DATE 12/06/05	PRINT DISTRIBUTION	STATUS				
									ISSUED	REV	DATE	SDE	PEM
8	12/07/05	REMOVED PE-1 HOLDS	JBW	SDH	DISCIPLINE	REVIEWED	DISCIPLINE	REVIEWED	DATE				
1	10/13/04	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ	CIVIL		ELECTRICAL		STATUS				
2	01/23/05	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ	STRUCTURAL		INST & CONTROL		REV.	D	07/28/04		
3	03/16/05	DELETED NOTES. APPROVED FOR CONSTRUCTION	EFC	AJ	MECHANICAL		ARCHITECTURAL		FOR REVIEW AND APPROVAL	0	09/03/04	KLM	TP
4	07/20/05	RELIEF VALVE SETTINGS, WELL PE-1 LINE TAGS, HOLDS REMOVED. APPROVED FOR CONSTRUCTION	EFC	AJ	PROCESS		ENVIRONMENTAL		APPROVED FOR CONSTRUCTION	7	12/19/05		
5	09/27/05	FINAL RECORD ISSUE	EFC	AJ	PIPING	SDH	GEN. ARRANG.		REVISED & APPROVED FOR CONSTRUCTION				
6	10/06/05	REVISED FINAL RECORD - ADDED TW-3D	EFC	AJ									
7	10/19/05	REVISED AS NOTED	EFC	AJ									

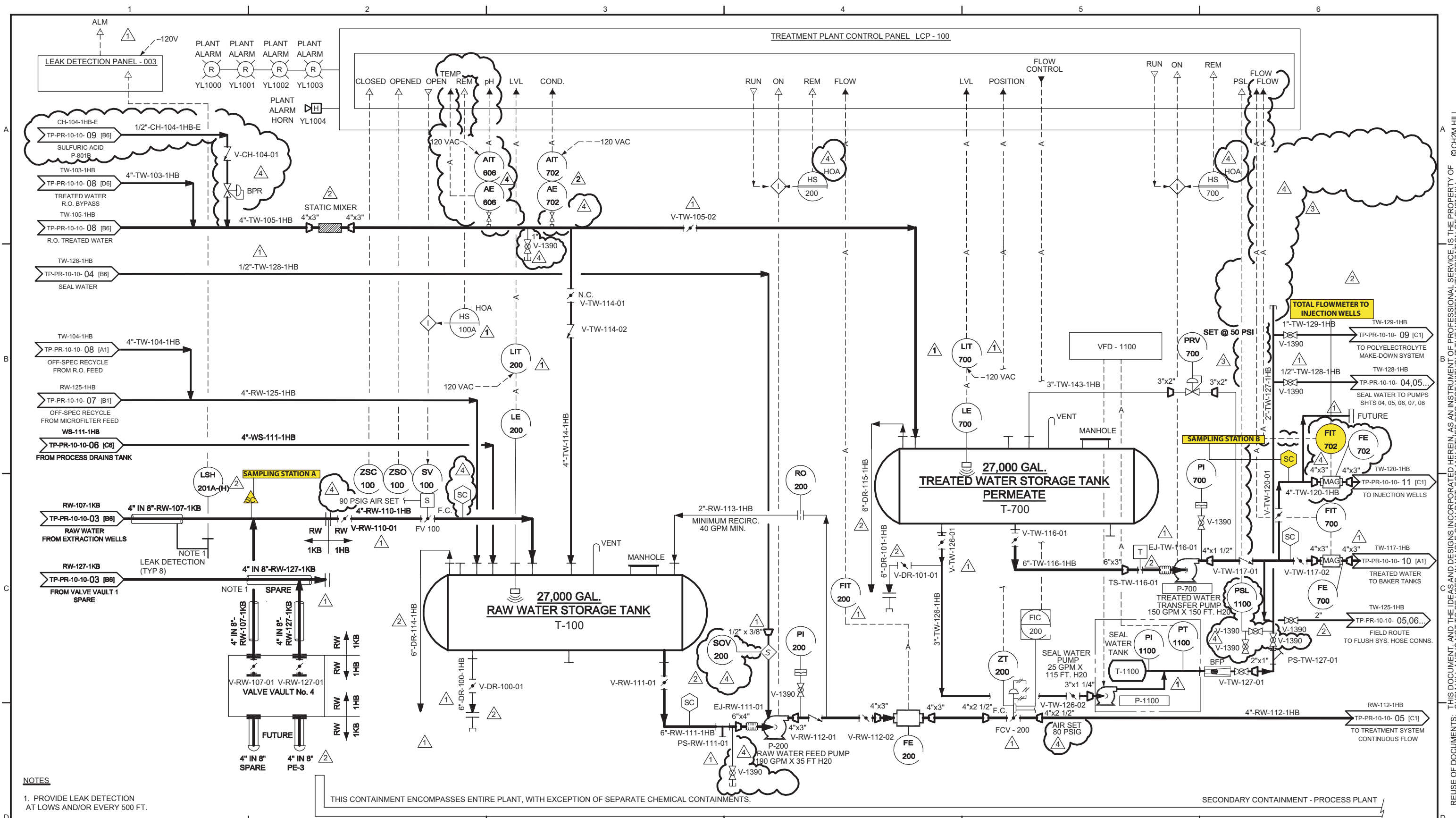
SCALE NONE

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

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		



BAR IS ONE INCH

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

Appendix A

Laboratory Analytical Reports

Table of Contents
TLI Laboratory Data Package
For Laboratory Number: 962100

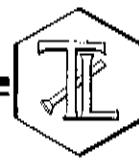
<u>ITEM</u>	<u>Section</u>
Case Narrative	1.0
Summary Table of Final Results	2.0
Final Reports	3.0
Wet Chem Analysis/ Raw Data, Standard, Quality Control and Chain of Custody Records	4.0
Established Retention Time Window and Analytical Raw Data	5.0

Section 1.0

Case Narrative

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

January 17, 2007

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

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

Dear Mr. Duffy:

SUBJECT: CASE NARRATIVE PG&E TOPOCK IM3PLANT-WDR-080 PROJECT, GROUNDWATER
MONITORING,
TLI NO.: 962100

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-080 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, pH, Anions, Ammonia, Total Dissolved Solids, Total Organic Carbon, 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 January 3, 2007, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

No violations or nonconformance actions occurred for this data package.

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

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi
Manager, Analytical Services

K.R.P. Iyer
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.: 962100

Date: January 17, 2007

Collected: January 3, 2007

Received: January 3, 2007

ANALYST LIST

METHOD	PARAMETER	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 415.2	Total Organic Carbon	Aksiniya Dimitrova
EPA 200.7	Metals by ICP	Riddhi Patel
EPA 200.8	Metals by ICP/MS	Laureen Tan
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
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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.: 962100
Date Received: January 3, 2007

Analytical Results Summary

Lab I.D.	Sample I.D.	Sample Time	EPA 150.1 pH	EPA 120.1 EC	EPA 160.1 TDS	EPA 180.1 Turbidity	EPA 218.6 Hexavalent Chromium	EPA 350.2 Ammonia
			Units	$\mu\text{mhos/cm}$	mg/L	NTU	mg/L	mg/L
962100-1	SC-700B-WDR-080	12:45	7.95	6950	4380	ND	ND	ND
962100-2	SC-100B-WDR-080	13:00	7.36	8590	5250	0.207	1.91	ND
962100-3	SC-701-WDR-080	13:15	7.89	31100	20900	—	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	EPA 415.2 TOC
			mg/L	mg/L	mg/L	mg/L	mg/L
962100-1	SC-700B-WDR-080	12:45	2.18	491	2.18	ND	ND
962100-2	SC-100B-WDR-080	13:00	2.82	844	3.45	0.0087	0.416
962100-3	SC-701-WDR-080	13:15	11.8	—	—	—	1.58

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



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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.: 962100
Date Received: January 3, 2007

Analytical Results Summary

METALS ANALYSIS: Total Metal Analyses as Requested

Lab I.D.	Sample ID	Time Coll.	Aluminum EPA 200.8 mg/L	Antimony EPA 200.8 mg/L	Arsenic EPA 200.8 mg/L	Barium EPA 200.7 mg/L	Beryllium EPA 200.8 mg/L	Cadmium EPA 200.8 mg/L	Chromium EPA 200.8 mg/L	Cobalt EPA 200.8 mg/L	Copper EPA 200.8 mg/L	Lead EPA 200.8 mg/L
962100-1	SC-700B-WDR-080	12:45	ND	ND	ND	ND	--	--	0.0028	--	0.0433	0.0078
962100-2	SC-100B-WDR-080	13:00	ND	ND	ND	ND	--	--	2.14	--	0.0474	0.0068
962100-3	SC-701-WDR-080	13:15	--	ND	ND	ND	ND	ND	0.0012	ND	0.0418	ND

Lab I.D.	Sample ID	Time Coll.	Manganese EPA 200.7 mg/L	Mercury EPA 245.1 mg/L	Molybdenum EPA 200.8 mg/L	Nickel EPA 200.7 mg/L	Selenium EPA 200.8 mg/L	Silver EPA 200.8 mg/L	Thallium EPA 200.8 mg/L	Vanadium EPA 200.8 mg/L	Zinc EPA 200.7 mg/L
962100-1	SC-700B-WDR-080	12:45	ND	--	0.0204	ND	--	--	--	--	ND
962100-2	SC-100B-WDR-080	13:00	ND	--	0.0272	ND	--	--	--	--	ND
962100-3	SC-701-WDR-080	13:15	--	ND	0.0787	ND	0.0132	0.0067	ND	ND	ND

Lab I.D.	Sample ID	Time Coll.	Boron EPA 200.7 mg/L	Iron EPA 200.7 mg/L
962100-1	SC-700B-WDR-080	12:45	1.15	ND
962100-2	SC-100B-WDR-080	13:00	1.15	ND
962100-3	SC-701-WDR-080	13:15	--	--

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

Laboratory No.: 962100

Date: January 17, 2007

Collected: January 3, 2007

Received: January 3, 2007

Prep/ Analyzed: January 4, 2007

Analytical Batch: 01PH07C

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

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>
962100-1	SC-700B-WDR-080	09:04	pH Units	0.0570	2.00	7.95
962100-2	SC-100B-WDR-080	09:08	pH Units	0.0570	2.00	7.36
962100-3	SC-701-WDR-080	09:12	pH Units	0.0570	2.00	7.89

QA/QC Summary

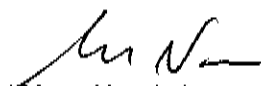
<u>QC STD I.D.</u>	<u>Laboratory Number</u>	<u>Concentration</u>	<u>Duplicate Concentration</u>	<u>Difference (Units)</u>	<u>Acceptance Limits</u>	<u>QC Within Control</u>
Duplicate	962100-2	7.36	7.38	0.02	+ 0.100 Units	Yes

<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

ND: Below the reporting limit (Not Detected).

RL: Reporting Limit.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

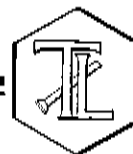
008

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www.truesdail.com

Attention: Shawn Duffy

Laboratory No.: 962100

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: January 17, 2007
Collected: January 3, 2007
Received: January 3, 2007
Prep/ Analyzed: January 5, 2007
Analytical Batch: 01EC07C

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

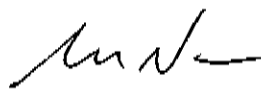
<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Units</u>	<u>Method</u>	<u>DF</u>	<u>RL</u>	<u>Results</u>
962100-1	SC-700B-WDR-080	µmhos/cm	EPA 120.1	1.00	2.00	6950
962100-2	SC-100B-WDR-080	µmhos/cm	EPA 120.1	1.00	2.00	8590
962100-3	SC-701-WDR-080	µmhos/cm	EPA 120.1	1.00	2.00	31100

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	962100-3 10x	40100	40400	0.75%	≤ 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	688	706	97.5%	90% - 110%	Yes
CVS#1	948	1000	94.8%	90% - 110%	Yes
LCS	690	706	97.7%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

009

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Attention: Shawn Duffy

Laboratory No.: 962100

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: January 17, 2007
Collected: January 3, 2007
Received: January 3, 2007
Prep/ Analyzed: January 5, 2007
Analytical Batch: 01TDS07B

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>
962100-1	SC-700B-WDR-080	mg/L	EPA 160.1	250	4380
962100-2	SC-100B-WDR-080	mg/L	EPA 160.1	250	5250
962100-3	SC-701-WDR-080	mg/L	EPA 160.1	1250	20900


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	962100-3	20900	19700	2.96%	≤ 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	460	500	92.0%	90% - 110%	Yes
LCS 2	479	500	95.8%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

010

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Established 1931

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

REPORT

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www.truesdail.com

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.: 962100

Date: January 17, 2007
Collected: January 3, 2007
Received: January 3, 2007
Prep/ Analyzed: January 4, 2007
Analytical Batch: 01TUC07F

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>
962100-1	SC-700B-WDR-080	12:45	NTU	1.00	0.100	ND
962100-2	SC-100B-WDR-080	13:00	NTU	1.00	0.100	0.207

QA/QC Summary


QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance Limits	QC Within Control
Duplicate	962093-9	0.302	0.303	0.33%	< 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	7.35	8.00	91.9%	90% - 110%	Yes
LCS	7.42	8.00	92.8%	90% - 110%	Yes
LCS	7.35	8.00	91.9%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

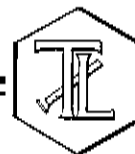

Mona Nassimi, Manager
Analytical Services

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REPORT

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

Attention: Shawn Duffy

Sample: Three (3) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Prep. Batch: 01TOC07A

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Laboratory No.: 962100

Date: January 17, 2007

Collected: January 3, 2007

Received: January 3, 2007

Prep/ Analyzed: January 4, 2007

Analytical Batch: 01TOC07A

Investigation:

Total Organic Carbon by EPA 415.2

Analytical Results Total Organic Carbon

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
962100-1	SC-700B-WDR-080	12:45	17:18	mg/L	1.00	0.300	ND
962100-2	SC-100B-WDR-080	13:00	17:48	mg/L	1.00	0.300	0.416
962100-3	SC-701-WDR-080	13:15	18:00	mg/L	1.00	0.300	1.58

QA/QC Summary

QC STD I.D.	Laboratory Number	Sample Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	962100-1	ND	ND	0.00%	< 20%	Yes

QC Std I.D.	Lab Number	Conc. of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	962100-1	0.00	1.00	20.0	20.0	17.2	20.0	86.0%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	10.2	10.0	102%	90% - 110%	Yes
MRCVS#1	9.59	10.0	95.9%	90% - 110%	Yes
MRCVS#2	9.66	10.0	96.6%	90% - 110%	Yes
LCS	20.5	20.0	103%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



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TUSTIN, CALIFORNIA 92780-7008
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www.truesdail.com

Attention: Shawn Duffy

Laboratory No.: 962100

Sample: Three (3) Groundwater Samples

Date: January 17, 2007

Project Name: PG&E Topock Project

Collected: January 3, 2007

Project No.: 346129.IM.02.E2

Received: January 3, 2007

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

Prep/ Analyzed: January 3, 2007

Prep. Batch: 01CrH07B

Analytical Batch: 01CrH07B

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
962100-1	SC-700B-WDR-080	12:45	22:28	mg/L	1.05	0.00020	ND
962100-2	SC-100B-WDR-080	13:00	22:19	mg/L	100	0.0200	1.91
962100-3	SC-701-WDR-080	13:15	23:44	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	962100-2	1.91	1.92	0.52%	≤ 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	962100-1	0.00	1.06	0.00100	0.00106	0.00100	0.00106	94.3%	90-110%	Yes
MS	962100-2	1.91	100	0.0200	2.00	3.91	3.91	100%	90-110%	Yes
MS	962100-3	0.00	1.06	0.00100	0.00106	0.00	0.00106	0.00%	90-110%	No
MS	962100-3	0.00	5.00	0.00100	0.00500	0.00469	0.00500	93.8%	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	0.0103	0.0100	103%	95% - 105%	Yes
MRCVS#3	0.0102	0.0100	102%	95% - 105%	Yes
LCS	0.00485	0.00500	97.0%	90% - 110%	Yes
LCSD	0.00496	0.00500	99.2%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

013

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Oakland, CA 94612

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Attention: Shawn Duffy

Laboratory No.: 962100

Sample: Three (3) Groundwater Samples

Date: January 17, 2007

Project Name: PG&E Topock Project

Collected: January 3, 2007

Project No.: 346129.IM.02.E2

Received: January 3, 2007

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

Prep/ Analyzed: January 9, 2007

Analytical Batch: 01NH307A

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
962100-1	SC-700B-WDR-080	12:45	EPA 350.2	mg/L	1.00	0.500	ND
962100-2	SC-100B-WDR-080	13:00	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	962157-1	2.05	2.01	1.97%	≤ 20%	Yes

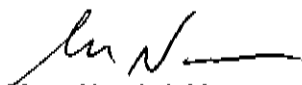
QC Std I.D.	Lab Number	Conc. of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	962184-1	0.00	1.00	10.0	10.0	10.1	10.0	101%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	9.90	10.0	99.0%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

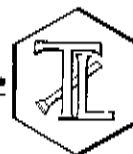

Mona Nassimi, Manager
Analytical Services

014

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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

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.: 962100

Date: January 17, 2007

Collected: January 3, 2007

Received: January 3, 2007

Prep/ Analyzed: January 4, 2007

Analytical Batch: 01AN07C

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
962100-1	SC-700B-WDR-080	12:45	11:50	mg/L	1.00	0.200	2.18
962100-2	SC-100B-WDR-080	13:00	12:12	mg/L	1.00	0.200	2.82
962100-3	SC-701-WDR-080	13:15	16:01	mg/L	10.0	2.00	11.8

QA/QC Summary

QC STD I.D.		Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate		962073-2	2.24	2.23	0.45%	≤ 20%	Yes

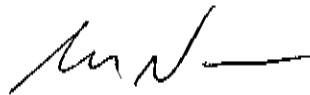
QC Std I.D.	Lab Number	Conc.of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	962073-2	2.24	1.00	4.00	4.00	6.08	6.24	96.0%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	4.17	4.00	104%	90% - 110%	Yes
MRCVS#1	3.16	3.00	105%	90% - 110%	Yes
MRCVS#2	3.18	3.00	106%	90% - 110%	Yes
MRCVS#3	3.19	3.00	106%	90% - 110%	Yes
MRCVS#4	3.20	3.00	107%	90% - 110%	Yes
LCS	4.15	4.00	104%	90% - 110%	Yes
LCSD	4.18	4.00	105%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

015

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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.: 962100

Date: January 17, 2007

Collected: January 3, 2007

Received: January 3, 2007

Prep/ Analyzed: January 4, 2007

Analytical Batch: 01AN07C

Investigation:

Sulfate by Method EPA 300.0

Analytical Results Sulfate

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
962100-1	SC-700B-WDR-080	12:45	15:38	mg/L	50.0	50.0	491
962100-2	SC-100B-WDR-080	13:00	15:49	mg/L	25.0	25.0	644

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	962047-4	69.2	69.0	0.29%	≤ 20%	Yes

QC Std I.D.	Lab Number	Conc. of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	962047-4	69.2	10.0	10.0	100	171	169	102%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	20.1	20.0	101%	90% - 110%	Yes
MRCVS#1	15.2	15.0	101%	90% - 110%	Yes
MRCVS#2	15.4	15.0	103%	90% - 110%	Yes
MRCVS#3	15.4	15.0	103%	90% - 110%	Yes
MRCVS#4	15.4	15.0	103%	90% - 110%	Yes
LCS	20.1	20.0	101%	90% - 110%	Yes
LCSD	20.0	20.0	100%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

016

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

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.: 962100

Date: January 17, 2007

Collected: January 3, 2007

Received: January 3, 2007

Prep/ Analyzed: January 4, 2007

Analytical Batch: 01AN07C

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>
962100-1	SC-700B-WDR-080	12:45	11:50	mg/L	1.00	0.200	2.18
962100-2	SC-100B-WDR-080	13:00	12:12	mg/L	1.00	0.200	3.45

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	962096-1	2.06	2.07	0.48%	≤ 20%	Yes

QC Std I.D.	Lab Number	Conc. of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	962096-1	2.06	1.00	4.00	4.00	6.19	6.06	103%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	4.00	4.00	100%	90% - 110%	Yes
MRCVS#1	3.01	3.00	100%	90% - 110%	Yes
MRCVS#2	3.07	3.00	102%	90% - 110%	Yes
LCS	3.99	4.00	99.8%	90% - 110%	Yes
LCSD	4.02	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

017

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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

Laboratory No.: 962100

Sample: Three (3) Groundwater Samples

Date: January 17, 2007

Project Name: PG&E Topock Project

Collected: January 3, 2007

Project No.: 346129.IM.02.E2

Received: January 3, 2007

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

Prep/ Analyzed: January 5, 2007

Analytical Batch: 01NO207C

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>
962100-1	SC-700B-WDR-080	12:45	11:37	mg/L	1.00	0.0050	ND
962100-2	SC-100B-WDR-080	13:00	11:38	mg/L	1.00	0.0050	0.0087

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	962100-2	0.0087	0.0095	8.79%	< 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	962100-2	0.0087	1.00	0.100	0.100	0.105	0.109	96.3%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.0857	0.0900	95.2%	90% - 110%	Yes
MRCSV#1	0.0944	0.100	94.4%	90% - 110%	Yes
LCS	0.176	0.180	97.8%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

018

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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
www.truesdail.com

Laboratory No.: 962100

Reported: January 17, 2007

Collected: January 3, 2007

Received: January 3, 2007

Analyzed: January 4 - 10, 2007

Analytical Results

SAMPLE ID: SC-700B-WDR-080		Time Collected: 12:45		LAB ID: 962100-1				
Parameter	Method	Reported			Batch	Date	Time	
		Value	DF	Units		RL	Analyzed	Analyzed
Aluminum	EPA 200.8	ND	2.08	mg/L	0.0500	011007A	01/10/07	11:17
Antimony	EPA 200.8	ND	2.08	mg/L	0.0030	010807A	01/08/07	12:00
Arsenic	EPA 200.8	ND	2.08	mg/L	0.0050	010807A	01/08/07	12:00
Barium	EPA 200.7	ND	1.04	mg/L	0.300	010407A	01/04/07	13:56
Chromium	EPA 200.8	0.0028	2.08	mg/L	0.0010	011007A	01/10/07	11:17
Copper	EPA 200.8	0.0433	2.08	mg/L	0.0100	010807A	01/08/07	12:00
Lead	EPA 200.8	0.0078	2.08	mg/L	0.0021	010807A	01/08/07	12:00
Manganese	EPA 200.7	ND	1.04	mg/L	0.500	010407A	01/04/07	13:56
Molybdenum	EPA 200.8	0.0204	2.08	mg/L	0.0050	011007A	01/10/07	11:17
Nickel	EPA 200.7	ND	1.04	mg/L	0.0200	010407A	01/04/07	13:56
Zinc	EPA 200.7	ND	1.04	mg/L	0.0200	010407A	01/04/07	13:56
Boron	EPA 200.7	1.15	1.04	mg/L	0.200	010407A	01/04/07	13:56
Iron	EPA 200.7	ND	1.04	mg/L	0.300	010407A	01/04/07	13:56

SAMPLE ID: SC-100B-WDR-080		Time Collected: 13:00		LAB ID: 962100-2			
Parameter	Method	Reported			Batch	Date	Time
		Value	DF	Units		RL	Analyzed
Aluminum	EPA 200.8	ND	2.08	mg/L	0.0500	011007A	01/10/07 11:29
Antimony	EPA 200.8	ND	2.08	mg/L	0.0030	010807A	01/08/07 12:06
Arsenic	EPA 200.8	ND	2.08	mg/L	0.0050	010807A	01/08/07 12:06
Barium	EPA 200.7	ND	1.04	mg/L	0.300	010407A	01/04/07 14:07
Chromium	EPA 200.8	2.14	10.4	mg/L	0.0052	011007A	01/10/07 11:23
Copper	EPA 200.8	0.0474	2.08	mg/L	0.0100	010807A	01/08/07 12:06
Lead	EPA 200.8	0.0068	2.08	mg/L	0.0021	010807A	01/08/07 12:06
Manganese	EPA 200.7	ND	1.04	mg/L	0.500	010407A	01/04/07 14:07
Molybdenum	EPA 200.8	0.0272	10.4	mg/L	0.0052	011007A	01/10/07 11:29
Nickel	EPA 200.7	ND	2.08	mg/L	0.0208	010407A	01/04/07 14:07
Zinc	EPA 200.7	ND	1.04	mg/L	0.0200	010407A	01/04/07 14:07
Boron	EPA 200.7	1.15	1.04	mg/L	0.200	010407A	01/04/07 14:07
Iron	EPA 200.7	ND	1.04	mg/L	0.300	010407A	01/04/07 14:07

019

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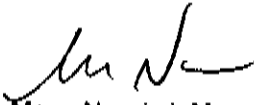
**TRUESDAIL LABORATORIES, INC.**

Report Continued

SAMPLE ID: SC-701-WDR-080		Time Collected: 13:15		LAB ID: 962100-3				
Parameter	Method	Reported		Units	RL	Batch	Date	Time
		Value	DF				Analyzed	Analyzed
Antimony	EPA 200.8	ND	10.4	mg/L	0.0052	010807A	01/08/07	12:12
Arsenic	EPA 200.8	ND	10.4	mg/L	0.0104	010807A	01/08/07	12:12
Barium	EPA 200.7	ND	1.04	mg/L	0.300	010407A	01/04/07	14:25
Beryllium	EPA 200.8	ND	10.4	mg/L	0.0052	010807A	01/08/07	12:12
Cadmium	EPA 200.8	ND	10.4	mg/L	0.0052	010807A	01/08/07	12:12
Chromium	EPA 200.8	0.0012	2.08	mg/L	0.0010	011707A	01/17/07	13:24
Cobalt	EPA 200.8	ND	10.4	mg/L	0.0052	010807A	01/08/07	12:12
Copper	EPA 200.8	0.0418	10.4	mg/L	0.0104	010807A	01/08/07	12:12
Lead	EPA 200.8	ND	10.4	mg/L	0.0104	010807A	01/08/07	12:12
Mercury	EPA 245.1	ND	1.00	mg/L	0.00020	01HG07Aa	01/04/07	13:31
Molybdenum	EPA 200.8	0.0787	10.4	mg/L	0.0052	011007A	01/10/07	11:41
Nickel	EPA 200.7	ND	1.04	mg/L	0.0200	010407A	01/04/07	14:25
Selenium	EPA 200.8	0.0132	10.4	mg/L	0.0104	010807A	01/08/07	12:12
Silver	EPA 200.8	0.0067	10.4	mg/L	0.0052	011007A	01/10/07	11:41
Thallium	EPA 200.8	ND	10.4	mg/L	0.0052	010807A	01/08/07	12:12
Vanadium	EPA 200.8	ND	10.4	mg/L	0.0052	010807A	01/08/07	12:12
Zinc	EPA 200.7	ND	1.04	mg/L	0.0200	010407A	01/04/07	14:25

ND: Not detected, or below limit of detection.

DF: Dilution factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.
Mona Nassimi, Manager
Analytical Services

020

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Rec'd 01/03/07
962100

962100



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14201 Franklin Avenue, Tustin, CA 92780-7008
(714) 730-8239 FAX: (714) 730-8462
www.truedail.com

CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-080]

COC Number	IN3P1ant-WDR-080
TURNAROUND TIME	10 Days
DATE 1/3/07	PAGE 1 OF 1

[illegible]

**For Sample Conditions
See Form Attached**

CHAIN OF CUSTODY SIGNATURE RECORD

CHAIN OF CUSTODY SIGNATURE RECORD				RECEIVED <input type="checkbox"/> COOL <input type="checkbox"/> WARM <input type="checkbox"/> CUSTODY SEALED YES <input type="checkbox"/> NO <input type="checkbox"/> SPECIAL REQUIREMENTS: The metals include: Cr, Al, Sb, As, Ba, B, Cu, Pb, Mn, Mo, Ni, Fe, Zn			
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				
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: 962282

<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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14201 FRANKLIN AVENUE
TUSTIN, CALIFORNIA 92780-7008
(714) 730-6239 · FAX (714) 730-6462
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January 30, 2007

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

Dear Mr. Duffy:

SUBJECT: REVISED CASE NARRATIVE PG&E TOPOCK IM3PLANT-WDR-081 PROJECT,
GROUNDWATER MONITORING,
TLI NO.: 962282

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-081 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, pH, Total Dissolved Solids, and Total Organic Carbon. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The samples were received and delivered with the chain of custody on January 10, 2007, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

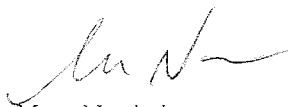
Due to instrument problems, the sample for Total Chromium analysis was analyzed by method EPA 200.8 rather than EPA 200.7 as requested on the chain of custody.

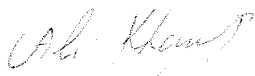
Shawn Duffy requested that sample 962282-1 be scanned for Chromium. The scan showed a Chromium level of <1.00 ug/L, therefore, the sample was re-analyzed by EPA 200.7 for Total Chromium and the result reported. The higher result from the first run was a result of an elevated baseline due to the 2x dilution.

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.

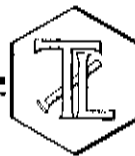
Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.


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: Two (2) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 962282

Date: January 23, 2007

Collected: January 10, 2007

Received: January 10, 2007

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 180.1	Total Organic Carbon	Kim Luck
EPA 200.7	Total Chromium	Riddhi Patel
EPA 218.6	Hexavalent Chromium	Stanley Hsieh

Section 2.0

Summary Table of Final Results



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.: 962282
Date Received: January 10, 2007
Revision 1

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 µmhos/cm	<u>EPA 160.1</u> TDS mg/L	<u>EPA 415.2</u> TOC mg/L
962282-1	SC-700B-WDR-081	10:00	ND	ND	ND	7.85	6810	4340	---
962282-2	SC-100B-WDR-081	12:30	---	---	---	---	---	---	0.400

ND: Non Detected (below reporting limit)

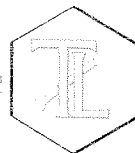
Note: The following "Significant Figures" rule has been applied to all results:
Results below 0.01 will have two (2) significant figures.
Result above or equal to 0.01 will have three (3) significant figures.
Quality Control data will always have three (3) significant figures.

Section 3.0

Final Reports

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



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REPORT

14201 FRANKLIN AVENUE
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

Laboratory No.: 962282

Sample: Two (2) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 012907A

Date: January 30, 2007
Collected: January 10, 2007
Received: January 10, 2007
Prep/ Analyzed: January 29, 2007
Analytical Batch: 012907A
Revision 1

Investigation: Total 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
962282-1	SC-700B-WDR-081	mg/L	EPA 200.7	15:31	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	962671-2	0.00294	0.00279	5.24%	≤20%	Yes

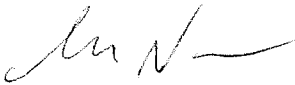
QC Std I.D.	Lab Number	Conc. of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	962671-2	0.00294	1.04	0.0100	0.0104	0.0129	0.0133	95.8%	70-130%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00994	0.0100	99.4%	90% - 110%	Yes
MRCVS#1	0.0102	0.0100	102%	90% - 110%	Yes
MRCVS#2	0.0102	0.0100	102%	90% - 110%	Yes
ICS	0.0103	0.0100	103%	80% - 120%	Yes
LCS	0.0107	0.0100	107%	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



Established 1931

REPORT

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

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

Attention: Shawn Duffy

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

Laboratory No.: 962282

Date: January 23, 2007
Collected: January 10, 2007
Received: January 10, 2007
Prep/ Analyzed: January 10, 2007
Analytical Batch: 01CrH07E

Investigation:

Hexavalent Chromium by EPA 218.6

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
962282-1	SC-700B-WDR-081	10:00	23:05	mg/L	5.00	0.0010	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	962274-3	0.00620	0.00619	0.16%	≤ 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	962282-1	0.00	1.06	0.00100	0.00106	0.00095	0.00106	89.6%	90-110%	No
MS	962282-1	0.00	5.00	0.00100	0.00500	0.00497	0.00500	99.4%	90-110%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCSS	0.00508	0.00500	102%	90% - 110%	Yes
MRCVS#1	0.00974	0.0100	97.4%	95% - 105%	Yes
MRCVS#2	0.00990	0.0100	99.0%	95% - 105%	Yes
MRCVS#3	0.00992	0.0100	99.2%	95% - 105%	Yes
LCS	0.00509	0.00500	102%	90% - 110%	Yes
LCSD	0.00511	0.00500	102%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

008

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

Attention: Shawn Duffy

Sample: Two (2) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 962282

Date: January 23, 2007

Collected: January 10, 2007

Received: January 10, 2007

Prep/ Analyzed: January 11, 2007

Analytical Batch: 01TUC07L

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>
962282-1	SC-700B-WDR-081	10:00	NTU	1.00	0.100	ND

QA/QC Summary

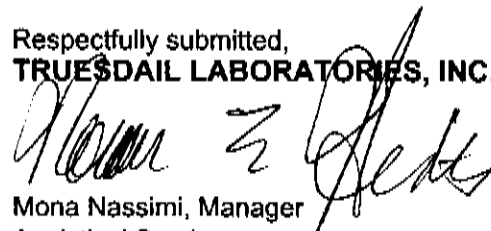
QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance Limits	QC Within Control
Duplicate	962278-14	0.103	0.104	0.97%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	7.40	8.00	92.5%	90% - 110%	Yes
LCS	7.42	8.00	92.8%	90% - 110%	Yes
LCS	7.40	8.00	92.5%	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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Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612

Attention: Shawn Duffy

Sample: Two (2) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 962282

Date: January 23, 2007

Collected: January 10, 2007

Received: January 10, 2007

Prep/ Analyzed: January 11, 2007

Analytical Batch: 01PH07J

Investigation:

pH by EPA 150.1

Analytical Results pH

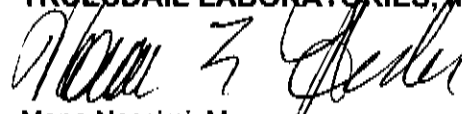
<u>TLI I.D.</u>	<u>Field I.D.</u>	<u>Sample Time</u>	<u>Run Time</u>	<u>Units</u>	<u>MDL</u>	<u>RL</u>	<u>Results</u>
962282-1	SC-700B-WDR-081	10:00	08:25	pH Units	0.0570	2.00	7.85

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	962282	7.85	7.85	0.00	+ 0.100 Units	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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

Attention: Shawn Duffy

Sample: Two (2) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 962282

Date: January 23, 2007

Collected: January 10, 2007

Received: January 10, 2007

Prep/ Analyzed: January 15, 2007

Analytical Batch: 01EC07F

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>
962282-1	SC-700B-WDR-081	µmhos/cm	EPA 120.1	1.00	2.00	6810

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	962281-1 10X	10900	10900	0.00%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
CCS	685	706	97.0%	90% - 110%	Yes
CVS#1	950	1000	95.0%	90% - 110%	Yes
CVS#2	954	1000	95.4%	90% - 110%	Yes
LCS	689	706	97.6%	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: Two (2) 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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Laboratory No.: 962282

Date: January 23, 2007

Collected: January 10, 2007

Received: January 10, 2007

Prep/ Analyzed: January 15, 2007

Analytical Batch: 01TDS07F

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>
962282-1	SC-700B-WDR-081	mg/L	EPA 160.1	250	4340

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	962282-1	4340	4250	1.05%	≤ 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS 1	489	500	97.8%	90% - 110%	Yes
LCS 2	491	500	98.2%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

RL: Reporting Limit.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

012

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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.: 962282

Sample: Two (2) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 01TOC07D

Date: January 23, 2007
Collected: January 10, 2007
Received: January 10, 2007
Prep/ Analyzed: January 19, 2007
Analytical Batch: 01TOC07D

Investigation:

Total Organic Carbon by EPA 415.2

Analytical Results Total Organic Carbon

<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>
962282-2	SC-100B-WDR-081	mg/L	EPA 415.2	15:21	1.00	0.300	0.400

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	962462-1	0.425	0.390	8.59%	≤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	962462-1	0.425	1.00	20.0	20.0	16.8	20.4	81.9%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	10.2	10.0	102%	90% - 110%	Yes
MRCVS#1	9.86	10.0	98.6%	90% - 110%	Yes
MRCVS#2	9.70	10.0	97.0%	90% - 110%	Yes
LCS	21.9	20.0	110%	90% - 110%	Yes
LCSD	21.6	20.0	108%	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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Rec'd 01/10/07
462282

62282



TRUEMAIL LABORATORIES, INC.
14201 Franklin Avenue, Tustin, CA 92780-7008
(714) 730-4239 FAX: (714) 730-6462
www.truemail.com

CHAIN OF CUSTODY RECORD

TM3Plant-WDR-081]

HW3 Plant-WDR-081

10 Days

PAGE 1

PAGE 1 OF 1

[illegible]

CHAIN OF CUSTODY SIGNATURE RECORD			
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

ALERT!!

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐

CUSTODY SEALED YES ☐ NO ☐

*F _____

SPECIAL REQUIREMENTS:

ALERT!!

Level III OC

**or Sample Conditions
See Form Attached**

Table of Contents
TLI Laboratory Data Package
For Laboratory Number: 962462

<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

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14201 FRANKLIN AVENUE
TUSTIN, CALIFORNIA 92780-7008
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www.truesdail.com

January 29, 2007

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-082 PROJECT, GROUNDWATER
MONITORING,
TLI No.: 962462

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-082 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, pH, Total Dissolved Solids, and Total Organic Carbon. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The samples were received and delivered with the chain of custody on January 17, 2007, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

No violations or nonconformance actions occurred for this data package.

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

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi
Manager, Analytical Services

K.R.P. Iyer
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: Two (2) 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.: 962462

Date: January 29, 2007

Collected: January 17, 2007

Received: January 17, 2007

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 180.1	Total Organic Carbon	Kim Luck
EPA 200.7	Total Chromium	Riddhi Patel
EPA 218.6	Hexavalent Chromium	Faisal Raihan

Section 2.0

Summary Table of Final Results

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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.: 962462
Date Received: January 17, 2007

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 µmhos/cm	<u>EPA 160.1</u> TDS mg/L	<u>EPA 415.2</u> TOC mg/L
962462-1	SC-100B-WDR-082	13:10	--	--	--	--	--	--	0.425
962462-2	SC-700B-WDR-082	13:10	ND	ND	ND	7.97	6880	4190	--

ND: Non Detected (below reporting limit)

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

0001

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Section 3.0

Final Reports

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

Attention: Shawn Duffy

Sample: Two (2) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Prep. Batch: 012407A

Laboratory No.: 962462

Date: January 29, 2007

Collected: January 17, 2007

Received: January 17, 2007

Prep/ Analyzed: January 24, 2007

Analytical Batch: 012407A

Investigation: Total 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>
962462-2	SC-700B-WDR-082	mg/L	EPA 200.7	11:54	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	962462-2	ND	ND	0.00%	≤20%	Yes

QC Std I.D.	Lab Number	Conc. of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	962462-2	0.00	1.04	0.0100	0.0104	0.00848	0.0104	81.5%	70-130%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00962	0.0100	96.2%	90% - 110%	Yes
MRCVS#1	0.00970	0.0100	97.0%	90% - 110%	Yes
ICS	0.00942	0.0100	94.2%	80% - 120%	Yes
LCS	0.00934	0.0100	93.4%	90% - 110%	Yes

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

007

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

Attention: Shawn Duffy

Laboratory No.: 962462

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

Date: January 29, 2007
Collected: January 17, 2007
Received: January 17, 2007
Prep/ Analyzed: January 18, 2007
Analytical Batch: 01CrH07G

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>
962462-2	SC-700B-WDR-082	13:10	08:26	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	962462-2 5x	ND	ND	0.00%	< 20%	Yes

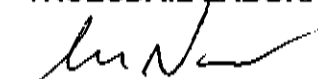
QC Std I.D.	Lab Number	Conc. of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	962462-2	0.00	1.06	0.00100	0.00106	0.00098	0.00106	92.5%	90-110%	Yes
MS	962462-2	0.00	5.00	0.00100	0.00500	0.00520	0.00500	104%	90-110%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00506	0.00500	101%	90% - 110%	Yes
MRCVS#1	0.00966	0.0100	96.6%	95% - 105%	Yes
LCS	0.00504	0.00500	101%	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

008

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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: Two (2) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 962462

Date: January 29, 2007

Collected: January 17, 2007

Received: January 17, 2007

Prep/ Analyzed: January 18, 2007

Analytical Batch: 01TUC07Q

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>
962462-2	SC-700B-WDR-082	13:10	NTU	1.00	0.100	ND

QA/QC Summary

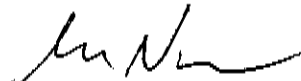
QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	962451-3	ND	ND	0.00%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	7.52	8.00	94.0%	90% - 110%	Yes
LCS	7.47	8.00	93.4%	90% - 110%	Yes
LCS	7.45	8.00	93.1%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

009

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www.truesdail.com

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

Attention: Shawn Duffy

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

Laboratory No.: 962462

Date: January 29, 2007
Collected: January 17, 2007
Received: January 17, 2007
Prep/ Analyzed: January 18, 2007
Analytical Batch: 01PH07M

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>
962462-2	SC-700B-WDR-082	13:10	09:49	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	962462-2	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	7.02	7.00	0.02	+ 0.100 Units	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

010

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

Attention: Shawn Duffy

Sample: Two (2) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 962462

Date: January 29, 2007

Collected: January 17, 2007

Received: January 17, 2007

Prep/ Analyzed: January 18, 2007

Analytical Batch: 01EC07G

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>
962462-2	SC-700B-WDR-082	µmhos/cm	EPA 120.1	1.00	2.00	6880

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance Limits	QC Within Control
Duplicate	962462-2	6880	6890	0.15%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
CCS	695	706	98.4%	90% - 110%	Yes
CVS#1	945	1000	94.5%	90% - 110%	Yes
LCS	695	706	98.4%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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

Attention: Shawn Duffy

Sample: Two (2) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 962462

Date: January 29, 2007

Collected: January 17, 2007

Received: January 17, 2007

Prep/ Analyzed: January 18, 2007

Analytical Batch: 01TDS07H

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>
962462-2	SC-700B-WDR-082	mg/L	EPA 160.1	250	4190

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	962462-2	4190	4080	1.33%	≤ 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS 1	491	500	98.2%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

RL: Reporting Limit.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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

Attention: Shawn Duffy

Laboratory No.: 962462

Sample: Two (2) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 01TOC07D

Date: January 29, 2007
Collected: January 17, 2007
Received: January 17, 2007
Prep/ Analyzed: January 19, 2007
Analytical Batch: 01TOC07D

Investigation:

Total Organic Carbon by EPA 415.2

Analytical Results Total Organic Carbon

<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>
962462-1	SC-100B-WDR-082	mg/L	EPA 415.2	15:30	1.00	0.300	0.425

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	962462-1	0.425	0.390	8.59%	≤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	962462-1	0.425	1.00	20.0	20.0	16.8	20.4	81.9%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	10.2	10.0	102%	90% - 110%	Yes
MRCVS#1	9.86	10.0	98.6%	90% - 110%	Yes
MRCVS#2	9.70	10.0	97.0%	90% - 110%	Yes
LCS	21.9	20.0	110%	90% - 110%	Yes
LCSD	21.6	20.0	108%	90% - 110%	Yes

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

013

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CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-082]

COC Number

TURNAROUND TIME 10 Days

DATE 1-17-07 PAGE 1 OF 1

COMPANY E2	PROJECT NAME PG&E Topock	PHONE (530) 229-3303	FAX (530) 339-3303	ADDRESS 155 Grand Ave Ste 1000 Oakland, CA 94612	P.O. NUMBER 346129.IM.02.00	TEAM 1	SAMPLERS (SIGNATURE) 					
SAMPLE ID.	DATE	TIME	DESCRIPTION	CR6 (218.6) Lab Filtered	Total Metals (200.7) Total Chromium	Specific Conductance (120.7)	pH (150.7)	TDS (160.7)	Total Organic Carbon (415.2)	Turbidity (180.7)	NUMBER OF CONTAINERS	COMMENTS
SC-100B-WDR-082	1-17-07	1310	Groundwater								2	
SC-700B-WDR-082	1-17-07	1310	Groundwater								2	pH=2
											TOTAL NUMBER OF CONTAINERS	

Rec'd 01/17/07

962462

ALERT!!

Level III QC

For Sample Conditions
See Form Attached

053

CHAIN OF CUSTODY SIGNATURE RECORD				SAMPLE CONDITIONS			
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time	RECEIVED	COOL <input checked="" type="checkbox"/>	WARM <input type="checkbox"/>	°F
	David S. TLI	Company/Agency	1-17-07 1300				4
Signature (Received)	Printed Name	Company/Agency	Date/Time	CUSTODY SEALED	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	
	David S. TLI	Company/Agency	1-17-07 1310				
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: 962672

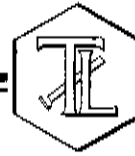
<u>ITEM</u>	<u>Section</u>
Case Narrative and Analyst List	1.0
Summary Table of Final Results	2.0
Final Reports	3.0
Wet Chem Analysis/ Raw Data, Standard, Quality Control and Chain of Custody Records	4.0
Established Retention Time Window and Analytical Raw Data	5.0

Section 1.0

Case Narrative

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



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January 30, 2007

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-083 PROJECT, GROUNDWATER
MONITORING,
TLI No.: 962672

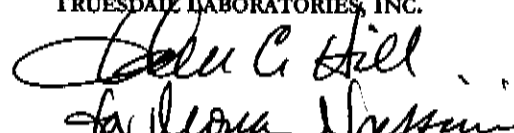
Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-083 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, pH, Total Dissolved Solids, and Total Organic Carbon. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The samples were received and delivered with the chain of custody on January 24, 2007, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

No violations or nonconformance actions occurred for this data package.

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

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi
Manager, Analytical Services



K.R.P. Iyer
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: Two (2) 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.: 962672

Date: January 30, 2007

Collected: January 24, 2007

Received: January 24, 2007

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 180.1	Total Organic Carbon	Hope Trinidad
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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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.: 962672
Date Received: January 24, 2007

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	<u>EPA 415.2</u> TOC mg/L
962672-1	SC-100B-WDR-083	12:45	--	--	--	--	--	--	0.363
962672-2	SC-700B-WDR-083	12:45	ND	ND	ND	7.91	6980	4290	--

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.

0051

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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
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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.: 962672

Sample: Two (2) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 012907A

Date: January 30, 2007
Collected: January 24, 2007
Received: January 24, 2007
Prep/ Analyzed: January 29, 2007
Analytical Batch: 012907A

Investigation: Total 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>
962672-2	SC-700B-WDR-083	mg/L	EPA 200.7	13:49	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	962672-2	ND	ND	0.00%	≤20%	Yes

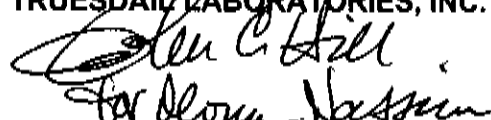
QC Std I.D.	Lab Number	Conc. of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	962672-2	0.00	1.04	0.0100	0.0104	0.0112	0.0104	108%	70-130%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00994	0.0100	99.4%	90% - 110%	Yes
MRCVS#1	0.0102	0.0100	102%	90% - 110%	Yes
ICS	0.0103	0.0100	103%	80% - 120%	Yes
LCS	0.0107	0.0100	107%	90% - 110%	Yes

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

007

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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.: 962672

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

Date: January 30, 2007
Collected: January 24, 2007
Received: January 24, 2007
Prep/ Analyzed: January 25, 2007
Analytical Batch: 01CrH07K

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>
962672-2	SC-700B-WDR-083	12:45	06:53	mg/L	10.0	0.0020	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	962672-2	ND	ND	0.00%	< 20%	Yes

QC Std I.D.	Lab Number	Conc. of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	962672-2	0.00	1.06	0.00100	0.00106	0.00095	0.00106	89.6%	90-110%	No
MS	962672-2	0.00	5.00	0.00100	0.00500	0.00442	0.00500	88.4%	90-110%	No
MS	962672-2	0.00	10.0	0.00100	0.0100	0.00945	0.0100	94.5%	90-110%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00498	0.00500	99.6%	90% - 110%	Yes
MRCVS#1	0.0103	0.0100	103%	95% - 105%	Yes
MRCVS#2	0.0101	0.0100	101%	95% - 105%	Yes
MRCVS#3	0.00970	0.0100	97.0%	95% - 105%	Yes
LCS	0.00497	0.00500	99.4%	90% - 110%	Yes
LCSD	0.00502	0.00500	100%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

008

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

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

Attention: Shawn Duffy

Sample: Two (2) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 962672

Date: January 30, 2007

Collected: January 24, 2007

Received: January 24, 2007

Prep/ Analyzed: January 25, 2007

Analytical Batch: 01TUC07V

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>
962672-2	SC-700B-WDR-083	12:45	NTU	1.00	0.100	ND

QA/QC Summary

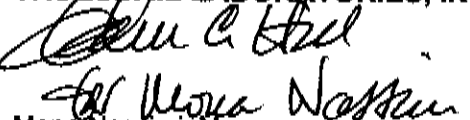
QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	962667-31	ND	ND	0.00%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	7.37	8.00	92.1%	90% - 110%	Yes
LCS	7.40	8.00	92.5%	90% - 110%	Yes
LCS	7.35	8.00	91.9%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

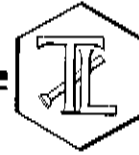

Mona Nassimi, Manager
Analytical Services

009

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www.truesdail.com

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

Attention: Shawn Duffy

Sample: Two (2) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 962672

Date: January 30, 2007

Collected: January 24, 2007

Received: January 24, 2007

Prep/ Analyzed: January 25, 2007

Analytical Batch: 01PH07Q

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>
962672-2	SC-700B-WDR-083	12:45	10:10	pH Units	0.0570	2.00	7.91

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	962672-2	7.91	7.92	0.01	+ 0.100 Units	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

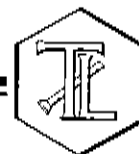

Mona Nassimi, Manager
Analytical Services

010

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www.truesdail.com

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

Attention: Shawn Duffy

Sample: Two (2) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 962672

Date: January 30, 2007

Collected: January 24, 2007

Received: January 24, 2007

Prep/ Analyzed: January 25, 2007

Analytical Batch: 01EC07J

Investigation:

Specific Conductivity by EPA 120.1

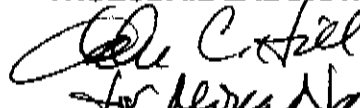
Analytical Results Specific Conductivity

<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>
962672-2	SC-700B-WDR-083	µmhos/cm	EPA 120.1	1.00	2.00	6980

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	962672-2	6980	7000	0.29%	≤ 10%	Yes
	QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
	CCS	689	706	97.6%	90% - 110%	Yes
	CVS#1	946	1000	94.6%	90% - 110%	Yes
	LCS	689	706	97.6%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

011

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

Attention: Shawn Duffy

Sample: Two (2) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 962672

Date: January 30, 2007

Collected: January 24, 2007

Received: January 24, 2007

Prep/ Analyzed: January 25, 2007

Analytical Batch: 01TDS07L

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>
962672-2	SC-700B-WDR-083	mg/L	EPA 160.1	250	4290

QA/QC Summary

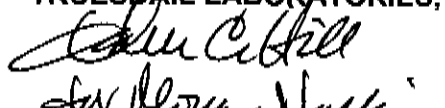
QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	962672-2	4290	4090	2.39%	≤ 5%	Yes

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

ND: Below the reporting limit (Not Detected).

RL: Reporting Limit.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

012

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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.: 962672

Sample: Two (2) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 01TOC07E

Date: January 30, 2007
Collected: January 24, 2007
Received: January 24, 2007
Prep/ Analyzed: January 25, 2007
Analytical Batch: 01TOC07E

Investigation:

Total Organic Carbon by EPA 415.2

Analytical Results Total Organic Carbon

<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>
962672-1	SC-100B-WDR-083	mg/L	EPA 415.2	13:04	1.00	0.300	0.363

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	962672-1	0.363	0.336	7.73%	≤20%	Yes

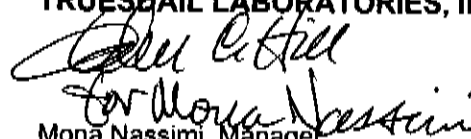
QC Std I.D.	Lab Number	Conc. of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	962672-1	0.363	1.00	20.0	20.0	17.0	20.4	83.2%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	10.5	10.0	105%	90% - 110%	Yes
MRCVS#1	9.87	10.0	98.7%	90% - 110%	Yes
LCS	21.9	20.0	110%	90% - 110%	Yes
LCSD	22.0	20.0	110%	90% - 110%	Yes

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

013

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

CHAIN OF CUSTODY RECORD

[IM3] Plant-WDR-083]

962672

COC Number

10 Days

TURNAROUND TIME

DATE 1-24-07 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 IM 02.00	TEAM 1												
SAMPLERS (SIGNATURE)														
SAMPLE I.D.	DATE	TIME	DESCRIPTION											
SC-100B-WDR-083	1-24-07	12:45	Groundwater											
SC-700B-WDR-083	1-24-07	12:45	Groundwater											

Rec'd 01/24/07
#62672

ALERT!!
Level III QG

CR6 (218.6) Lab Filtered
Total Metals (200.7) Total Chromium
Specific Conductance (120.1)
PH (150.1)
TDS (160.1)
Total Organic Carbon (415.2)
Turbidity (180.1)

For Sample Conditions
See Form Attached

CHAIN OF CUSTODY SIGNATURE RECORD				SAMPLE CONDITIONS			
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time	RECEIVED	COOL	WARM	°F
Signature (Received)	Printed Name	Company/Agency	Date/Time	CUSTODY SEALED	YES	NO	
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: 962850

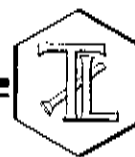
<u>ITEM</u>	<u>Section</u>
Case Narrative and Analyst List	1.0
Summary Table of Final Results	2.0
Final Reports	3.0
Wet Chem Analysis/ Raw Data, Standard, Quality Control and Chain of Custody Records	4.0
Established Retention Time Window and Analytical Raw Data	5.0

Section 1.0

Case Narrative

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



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February 6, 2007

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

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

Dear Mr. Duffy:

SUBJECT: CASE NARRATIVE PG&E TOPOCK IM3PLANT-WDR-084 PROJECT, GROUNDWATER
MONITORING,
TLI NO.: 962850

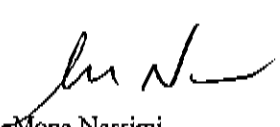
Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-084 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, pH, Total Dissolved Solids, and Total Organic Carbon. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

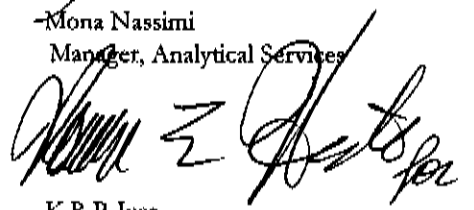
The samples were received and delivered with the chain of custody on January 31, 2007, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

No violations or nonconformance actions occurred for this data package.

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

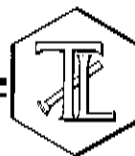
Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi
Manager, Analytical Services


K.R.P. Iyer
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: Two (2) 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.: 962850

Date: February 8, 2007

Collected: January 31, 2007

Received: January 31, 2007

Revision 1

ANALYST LIST

TEST METHOD	PARAMETER	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 180.1	Total Organic Carbon	Hope Trinidad
EPA 200.7	Total Chromium	Riddhi Patel
EPA 218.6	Hexavalent Chromium	Faisal Raihan

Section 2.0

Summary Table of Final Results

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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.: 962850
Date Received: January 31, 2007
Revision: 1

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 µmhos/cm	<u>EPA 160.1</u> TDS mg/L	<u>EPA 415.2</u> TOC mg/L
962850-1	SC-100B-WDR-084	12:40	—	—	—	—	—	—	0.485
962850-2	SC-700B-WDR-084	12:40	ND	ND	ND	8.16	6850	4120	—

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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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.: 962850

Sample: Two (2) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 020507A

Date: February 6, 2007
Collected: January 31, 2007
Received: January 31, 2007
Prep/ Analyzed: February 5, 2007
Analytical Batch: 020507A

Investigation: Total 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>
962850-2	SC-700B-WDR-084	mg/L	EPA 200.7	14:20	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	962850-2	ND	ND	0.00%	≤20%	Yes

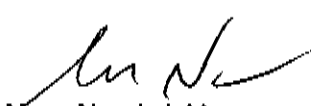
QC Std I.D.	Lab Number	Conc. of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	962850-2	0.00	1.04	0.0100	0.0104	0.00947	0.0104	91.1%	70-130%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00977	0.0100	97.7%	90% - 110%	Yes
MRCVS#1	0.00924	0.0100	92.4%	90% - 110%	Yes
ICS	0.00836	0.0100	83.6%	80% - 120%	Yes
LCS	0.0103	0.0100	103%	90% - 110%	Yes

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

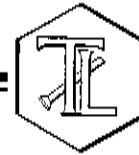

Mona Nassimi, Manager
Analytical Services

007

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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.: 962850

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

Date: February 6, 2007
Collected: January 31, 2007
Received: January 31, 2007
Prep/ Analyzed: February 1, 2007
Analytical Batch: 02CrH07A

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>
962850-2	SC-700B-WDR-084	12:40	08:24	mg/L	10.0	0.0020	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	962850-2	ND	ND	0.00%	< 20%	Yes

QC Std I.D.	Lab Number	Conc. of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	962850-2	0.00	1.06	0.00100	0.00106	0.00134	0.00106	126%	90-110%	No
MS	962850-2	0.00	5.00	0.00100	0.00500	0.00630	0.00500	126%	90-110%	No
MS	962850-2	0.00	10.0	0.00100	0.0100	0.00982	0.0100	98.2%	90-110%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00514	0.00500	103%	90% - 110%	Yes
MRCVS#1	0.0103	0.0100	103%	95% - 105%	Yes
LCS	0.00509	0.00500	102%	90% - 110%	Yes
LCSD	0.00507	0.00500	101%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

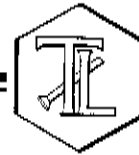

Mona Nassimi, Manager
Analytical Services

008

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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

Sample: Two (2) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 962850

Date: February 6, 2007

Collected: January 31, 2007

Received: January 31, 2007

Prep/ Analyzed: February 1, 2007

Analytical Batch: 02TUC07A

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>
962850-2	SC-700B-WDR-084	12:40	NTU	1.00	0.100	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	962863-4	0.385	0.415	7.50%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	8.03	8.00	100%	90% - 110%	Yes
LCS	8.05	8.00	101%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

009

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

Attention: Shawn Duffy

Sample: Two (2) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 962850

Date: February 6, 2007

Collected: January 31, 2007

Received: January 31, 2007

Prep/ Analyzed: February 1, 2007

Analytical Batch: 02PH07A

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>
962850-2	SC-700B-WDR-084	12:40	09:49	pH Units	0.0570	2.00	8.16

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	962850-2	8.16	8.18	0.02	+ 0.100 Units	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Difference (Units)	Acceptance Limits	QC Within Control
LCS	7.07	7.00	0.07	+ 0.100 Units	Yes
LCS #1	7.08	7.00	0.08	+ 0.100 Units	Yes
LCS #2	7.08	7.00	0.08	+ 0.100 Units	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

010

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

Attention: Shawn Duffy

Sample: Two (2) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 962850

Date: February 6, 2007

Collected: January 31, 2007

Received: January 31, 2007

Prep/ Analyzed: February 1, 2007

Analytical Batch: 01EC07M

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>
962850-2	SC-700B-WDR-084	µmhos/cm	EPA 120.1	1.00	2.00	6850

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	962850-2	6850	6850	0.00%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
CQS	681	706	96.5%	90% - 110%	Yes
CVS#1	948	1000	94.8%	90% - 110%	Yes
LCS	682	706	96.6%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

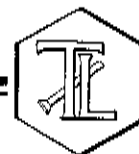

Mona Nassimi, Manager
Analytical Services

011

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www.truesdail.com

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

Attention: Shawn Duffy

Sample: Two (2) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 962850

Date: February 6, 2007

Collected: January 31, 2007

Received: January 31, 2007

Prep/ Analyzed: February 1, 2007

Analytical Batch: 02TDS07A

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>
962850-2	SC-700B-WDR-084	mg/L	EPA 160.1	250	4120

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance Limits	QC Within Control
Duplicate	962850-2	4210	4100	1.32%	≤ 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

012

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www.truesdail.com

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

Attention: Shawn Duffy

Sample: Two (2) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Prep. Batch: 02TOC07B

Laboratory No.: 962850

Date: February 8, 2007

Collected: January 31, 2007

Received: January 31, 2007

Prep/ Analyzed: February 6, 2007

Analytical Batch: 02TOC07B

Investigation:

Total Organic Carbon by EPA 415.2

Analytical Results Total Organic Carbon

<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>
962850-1	SC-100B-WDR-084	mg/L	EPA 415.2	15:41	1.00	0.300	0.485

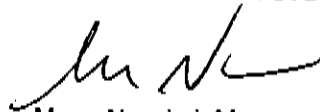
QA/QC Summary

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	10.3	10.0	103%	90% - 110%	Yes
MRCVS#1	10.1	10.0	101%	90% - 110%	Yes
LCS	21.4	20.0	107%	90% - 110%	Yes
LCSD	21.3	20.0	107%	90% - 110%	Yes

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

012A

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DEPARTMENT OF HEALTH SERVICES

TITLE 22

96-HOUR ACUTE AQUATIC TOXICITY SCREEN

FATHEAD MINNOW (*Pimephales promelas*)

Prepared For:

Truesdail Laboratories, Inc.

Prepared By:

MBC Applied Environmental Sciences
3000 Redhill Avenue
Costa Mesa, California 92626

January 2007

DEPARTMENT OF HEALTH SERVICES
TITLE 22
96-HOUR ACUTE AQUATIC TOXICITY SCREEN
FATHEAD MINNOW (*Pimephales promelas*)

Prepared For:

Truesdall Laboratories, Inc.

Prepared By:

MBC Applied Environmental Sciences
3000 Redhill Avenue
Costa Mesa, California 92626

January 2007

INDEX

	Section
CHAIN OF CUSTODY	1
COVER LETTER	2
SUMMARY OF TEST CONDITIONS	3
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CHAIN OF CUSTODY

TRUESDAIL LABORATORIES, INC.
14201 Franklin Avenue, Tustin, CA 92780-7006
(714) 730-6239 FAX: (714) 730-6462
www.truesdail.com



CHAIN OF CUSTODY RECORD

[Sludge Sample -16]

Frequency: 300

10 Days

TURNAROUND TIME

PAGE 1 OF 1

PAGE 1 OF 1

[illegible]

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 <u> </u>
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	<div style="border: 1px solid black; padding: 5px; text-align: center;"> ALERT!! </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> Level III QC </div>			
Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time				
Signature (Received)	Printed Name	Company/ Agency	Date/ Time				
Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time				



TRUESDAIL LABORATORIES, INC.
14201 FRANKLIN AVENUE, TUSTIN, CALIFORNIA 92780

ALERT!!

Level III QC

Laboratory Transmittal Form

Date: 01/04/07 Page: 1 of 1

Laboratory: MBC Applied Environmental Sciences

Attention: Sonia M. Beck

Address: 3000 Redhill Ave.

City: Costa Mesa State: CA Zip: 92626-4524

Please sign, date & return this form with the results, to:

TRUESDAIL LABORATORIES, INC.

Attn: Sean Condon

14201 Franklin Avenue, Tustin, California 92780

Please include *Truesdail Sample ID* on your invoice

Sample ID	Date	Time	Matrix	Tests/Methods Required										Container Qty.	Comments/Container Type
				Acute Aquatic Toxicity, 96 hr Acute											
962101	01/03/07	13:20	Sludge	X										2	Glass / Jar 4 oz Level 3
														2	Containers Total

Type of Service:

- ☒ Normal (5-10 day TAT) ☐ RUSH (5 day TAT)
☐ URGENT (24-48 hr. TAT) ☐ Results needed by: _____

Sample Conditions:

Received on Ice? Yes/No Sealed? Yes/No
Special Shipment/Handling or Storage Requirements:

Relinquished by: _____

Signature

Printed Name

TLI

Company

Date

Time

Received by: _____

Signature

Printed Name

MBC

Company

Date

Time

1-4-07 9:00

9:00



TRUESDAIL LABORATORIES, INC.

Sample Integrity & Analysis Discrepancy Form

Client: E2

Lab # 961823

Date Delivered: 12/16/06 Time: 20⁰⁰ By: ☐ Mail ☐ Field Service ☒ Client

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

16. Comments: _____

17. Sample Check-In completed by Truesdail Log-In/Receiving: L. Strubine

COVER LETTER

8 January 2007

Truesdail Laboratories, Inc.
14201 Franklin Avenue
Tustin, CA 92780

Attention: Sean Condon

Dear Mr. Condon,

The following are the results of the DOHS 96-hour Acute Aquatic Toxicity Screening test performed on the sample labeled 962101 submitted on 4 January 2007.

The sample **PASSED** the DOHS 96-hour Acute Aquatic Toxicity Screening test. Currently, California Code of Regulations (CCR), Title 22, Section 66261.24, Article 6 requires wastes to pass the 96-hour aquatic toxicity testing with greater than 50% survival at the 500 mg/l. In addition to this regulation, the DOHS protocol requires wastes to pass the 96-hour aquatic toxicity testing with greater than 50% survival at the 500 mg/l concentration and 60% survival at the 750 mg/l concentration for compliance of hazardous waste declassification.

MBC Sample Number 07-113 - Client Identification: 962101

PERCENT SURVIVAL

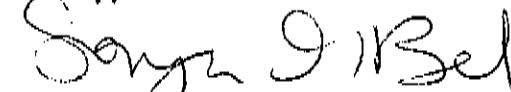
Control	100%
250 mg/l	100%
500 mg/l	100%
750 mg/l	100%

LC50 > 750 mg/l

If you have any questions or require further information, please contact me at your convenience.

Cordially,

MBC Applied Environmental Sciences



Sonja M. Beck
Bioassay Manager



SUMMARY OF TEST CONDITIONS

Summary of Test Conditions for Fathead Minnow, *Pimephales promelas*, DOHS 96-Hour Survival Acute Toxicity Test

Protocol:	Polisini 1988
Test Type:	Static non-renewal
Temperature (°C):	20±1°C. Temperature should not deviate by more than 3°C during the test.
Photoperiod:	16-hours light, 8-hours dark
Water Quality Analyzer:	Hach HQ40d multi-parameter
Test Solution Volume:	6-Liters
Renewal of Test Solutions:	None
Age of Test Organisms:	Less than 90 days old
Percent Organisms dead in acclimatization tank:	< 1%
No. of Organisms/Test Chamber:	10
No. of Replicate Test Chambers/Test Concentration:	2
No. of Organisms/Test Concentration:	20
Feeding Regime:	None
Cleaning:	None
Aeration:	None, unless DO concentrations falls below 4.0 mg/L: rate should not exceed 100 bubbles/min.
Dilution Water:	Synthetic Soft Water
Test Concentrations:	250 mg/l, 500 mg/l, and 750 mg/l
Test Duration:	96 Hours
Endpoints:	LC ₅₀

Client : Truesdail

Date (Initial Sample): 3 January 2007

Sample Identification : 962101

Project Manager : Sean Condon

SAMPLE ANALYSIS

SAMPLE ANALYSIS

CLIENT: Truesdail Laboratories, Inc.

SAMPLE IDENTIFICATION: 962101

MBC JOB #: 07413X

MBC SAMPLE #: 07-113

SAMPLE DATE/TIME: 01/03/2007 1320

DATE SAMPLE RECEIVED: 01/04/2007

ANALYSIS REQUIRED: Title 22 DOHS 96-hour Acute Aquatic Toxicity Test

ORGANISM REQUIRED: Fathead minnow (*Pimephales promelas*)

DATE/TIME INITIATED: 01/04/2007 1620

DATE/TIME TERMINATED: 01/08/2007 1500

AMOUNT OF SAMPLE: Appx. 240 grams

SAMPLE DESCRIPTION: Orange Sludge

SAMPLE PREPARATION: Dilute w/ appx. 250 mls dilution water, shake for 6 hours.

ADJUSTMENTS DURING ANALYSIS: Air added at 0 hours.

ANALYST(s): Chris Lim, Yi Young

Reviewed By: 83

**WATER QUALITY /
ORGANISM ENUMERATION DATA**

TITLE 22 DOHS 96-HOUR ACUTE AQUATIC TOXICITY TEST

CLIENT: Truesdall Laboratories, Inc.

SAMPLE IDENTIFICATION: 962101

SAMPLE DATE/TIME: 01/03/2007 1320

MBC Job #: 07413X

DATE/TIME INITIATED: 01/04/2007 1620

MBC Sample #: 07-113

DATE/TIME TERMINATED: 01/08/2007 1500

1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Control	7.7	8.5	19.3	10	7.6	7.7	21.3	10	7.6	7.6	21.0	10
2	250 mg/l	7.7	8.4	19.2	10	7.7	7.7	22.0	10	7.7	7.6	21.6	10
3	250 mg/l	7.8	8.4	19.0	10	7.7	7.7	21.8	10	7.7	7.6	21.7	10
4	500 mg/l	7.8	8.4	19.0	10	7.7	7.8	22.0	10	7.8	7.7	21.6	10
5	500 mg/l	7.8	8.4	19.0	10	7.5	7.0	21.9	10	7.6	7.3	21.6	10
6	750 mg/l	7.8	8.4	19.0	10	7.7	7.2	22.0	10	7.7	7.3	21.7	10
7	750 mg/l	7.8	8.4	19.0	10	7.8	7.5	21.9	10	7.8	7.4	21.7	10

1	2	3	4	5	6	7	8	9	10
1	Control	7.6	7.6	21.6	10	7.5	7.9	20.6	10
2	250 mg/l	7.7	7.6	21.7	10	7.7	7.9	20.9	10
3	250 mg/l	7.7	7.6	21.7	10	7.8	7.8	21.1	10
4	500 mg/l	7.9	7.7	21.5	10	7.7	7.8	21.4	10
5	500 mg/l	7.7	7.6	21.6	10	7.7	7.6	21.4	10
6	750 mg/l	7.7	7.5	21.7	10	7.7	7.4	21.4	10
7	750 mg/l	7.8	7.6	21.6	10	7.6	7.4	21.4	10

ORGANISM: Fathead minnow (*Pimephales promelas*)
 ACCLIMATIZATION (20°C): 6 Days
 ORGANISM BATCH #: 122906
 NOTES: Normal test conditions.

RESULTS:

Concentration	% Survival
Control	100%
250 mg/l	100%
500 mg/l	100%
750 mg/l	100%

LC50 > 750 mg/l

RANGE:

	Min.	Max.
pH Range:	7.5	7.9
DO Range:	7.0	8.5
Temp Range:	19.0	22.0

ALKALINITY:

	0 HOURS	96 HOURS
Control:	30	48
750 mg/l:	32	53

HARDNESS:

	0 HOURS	96 HOURS
Control:	39	53
750 mg/l:	41	58

Reviewed By: 83

ORGANISM LENGTH / WEIGHT DATA

ORGANISM LENGTH / WEIGHT DATA

CLIENT: Truesdail Laboratories, Inc.

SAMPLE IDENTIFICATION: 962101

MBC JOB #: 07413X

MBC SAMPLE #: 07-113

ORGANISM: Fathead minnow (*Pimephales promelas*)

1.	30	0.32	11.	31	0.36
2.	28	0.28	12.	28	0.32
3.	31	0.37	13.	29	0.31
4.	25	0.19	14.	27	0.25
5.	34	0.43	15.	28	0.30
6.	27	0.29	16.	29	0.33
7.	30	0.34	17.	30	0.34
8.	29	0.33	18.	30	0.32
9.	29	0.28	19.	31	0.31
10.	29	0.29	20.	30	0.30

	<u>Length (mm)</u>	<u>Weight (g)</u>
Average:	29	0.31
Maximum:	34	0.43
Minimum:	25	0.19

Technician: YY

Date: 01/08/2007

Reviewed By: SB

Table of Contents
TLI Laboratory Data Package
For Laboratory Number: 962101

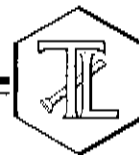
<u>ITEM</u>	<u>Section</u>
Case Narrative	1.0
Summary Table of Final Results	2.0
Final Report	3.0
Standard, Quality Control and Chain of Custody Records	4.0
Established Retention Time Window and Analytical Raw Data	5.0

Section 1.0

Case Narrative

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

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

January 15, 2007

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

Dear Mr. Duffy:

SUBJECT: CASE NARRATIVE PG&E TOPOCK PROJECT, SLUDGE SAMPLE-16,
TLI NO.: 962101

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock project, Sludge Sample-16. 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 January 3, 2007, 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

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.: 346129.IM.02.E2

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

Laboratory No.: 962101

Date: January 15, 2007

Collected: January 3, 2007

Received: January 3, 2007

ANALYST LIST

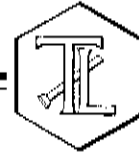
METHOD	PARAMETER	ANALYST
EPA 300.0	Fluoride	Giawad Ghenniwa

Section 2.0

Summary Table of Final Results

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

Project Name: PG&E Topock Project

Project No.: 346129.IM.02.E2

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

Laboratory No.: 962101

Date Received: January 3, 2007

Analytical Results Summary

<u>Lab I.D.</u>	<u>Sample I.D.</u>	<u>Time Sampled</u>	<u>EPA 300.0</u> <i>Fluoride</i> <i>mg/kg</i>
962101	SC-Sludge-WDR-080	13:20	16.6

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.

005

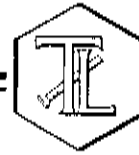
This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these laboratories, this report is submitted and accepted for the exclusive use 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.

Section 3.0

Final Report

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

Laboratory No.: 962101
Date: January 15, 2007
Collected: January 3, 2007
Received: January 3, 2007
Prep/ Analyzed: January 5, 2007
Analytical Batch: 01AN07E

Investigation: Fluoride by Ion Chromatography Using EPA 300.0

Analytical Results Fluoride

<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>
962101	SC-Sludge-WDR-080	mg/kg	EPA 300.0	10:42	20.0	4.00	16.6

QA/QC Summary

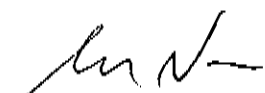
QC STD I.D.		Laboratory Number		Concentration		Duplicate Concentration		Relative Percent Difference		Acceptance limits		QC Within Control	
Duplicate		962092-6		0.856		0.866		1.16%		≤20%		Yes	
QC Std I.D.	Lab Number	Conc.of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits		QC Within Control		
MS	962092-6	0.856	1.00	4.00	4.00	4.84	4.86	99.6%	85-115%		Yes		

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	4.15	4.00	104%	90% - 110%	Yes
MRCVS#1	3.14	3.00	105%	90% - 110%	Yes
LCS	4.17	4.00	104%	90% - 110%	Yes
LCSD	4.17	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

007

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.



STL

STL Los Angeles

1721 South Grand Avenue
Santa Ana, CA 92705

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

January 18, 2007

STL LOT NUMBER: **E7A040269**

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

Dear Ms. Kumar,

This report contains the analytical results for the sample received under chain of custody by STL Los Angeles on January 4, 2007. This sample is associated with your PG&E TOPOCK GWM / E2 project.

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

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

Preliminary results were sent via facsimile on January 17, 2007.

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

This report contains **000165** pages.

CASE NARRATIVE

- 1) For method 7199, the soluble MS (Matrix Spike) was not diluted enough for the result to be less than the high calibration point of 50 ug/L. The sample was about 11% above, however the recovery for the soluble MS was 94% well within the recovery criteria. All other QC was in control. This will not impact the results as reported.
- 2) The RPD (Relative Percent Difference) for percent moisture in the sample duplicate for Prep Batch # 7004541 exceeded acceptance criteria of 10%. However, please note that the laboratory controls the percent solids and not the percent moisture in the duplicates. In this particular batch, the RPD of the percent solids is 0.3%.

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

Sincerely,



Marisol Tabirara
Project Manager

cc: Project File



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

CHAIN OF CUSTODY RECORD
[Sludge Sample-16]

COC Number _____
TURNAROUND TIME 10 Days
DATE 1/3/07 PAGE 1 OF 1

COMPANY	CH2M HILL /E2		
PROJECT NAME	PG&E Topock		
PHONE	530-229-3303	FAX	530-339-3303
ADDRESS	155 Grand Ave Site 1000 Oakland, CA 94612		
P.O. NUMBER	E2	TEAM	1
SAMPLERS (SIGNATURE)	<i>Wm. O'Neil</i>		
SAMPLE I.D.	DATE	TIME	DESCRIPTION
SC-Sludge-WDR-080	1/3/07	1320	Soil
Total Met (6010B) Title 22			
CR6 (7199)	X	X	X
Metals (7470A)	X	X	X
STLC Cr (7199) and (6010B)			
TCLP Cr (6010B)			
NUMBER OF CONTAINERS			
2			
TOTAL NUMBER OF CONTAINERS			
2			
COMMENTS			

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished)	<i>Wm. O'Neil</i>	Printed Name	C. Vail	Company/ Agency	OMI	Date/ Time	1-3-07 1500
Signature (Received)	<i>Jim Padilla</i>	Printed Name	V. Padilla	Company/ Agency	STC	Date/ Time	1/4/07 1210
Signature (Relinquished)	<i>Wm. O'Neil</i>	Printed Name	Wm. O'Neil	Company/ Agency	T-L-J	Date/ Time	01/04/07 1210
Signature (Received)	<i>Wm. O'Neil</i>	Printed Name	Wm. O'Neil	Company/ Agency		Date/ Time	
Signature (Relinquished)	<i>Wm. O'Neil</i>	Printed Name	V. Padilla	Company/ Agency	STC	Date/ Time	1/4/07 1237
Signature (Received)	<i>Wm. O'Neil</i>	Printed Name	C. Vail	Company/ Agency	STC	Date/ Time	1/4/07 1237

1237

STL LOS ANGELES - PROJECT RECEIPT CHECKLIST Date: 1/4/07

Single Cooler Only

LIMS Lot #: E7A040269

Quote #: 71993

Client Name: CH2M Hill / E2

Project: PGLE TOPOCK

Received by: CA

Date/Time Received: 1/4/07 1237

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

***** Initial / Date CA 1/4/07

Custody Seal Status Cooler: ☐ Intact ☐ Broken ☒ None

Custody Seal Status Samples: ☐ Intact ☐ Broken ☒ None

Custody Seal #(s): ☒ 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 6.2 °C -.2 CF = 6.0 °C Cooler #1 ID N/A

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

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

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

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

Anomalies: ☒ No ☐ Yes - complete CUR and Create NCM

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

Labeled by: CA

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 <u>CA 1/4/07</u>					
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

Analytical Report

ANALYTICAL REPORT

PG&E TOPOCK GWM / E2

Lot #: E7A040269

Priya Kumar / E2

CH2M Hill Inc

SEVERN TRENT LABORATORIES, INC.

Marisol Tabirara
Project Manager

January 17, 2007

EXECUTIVE SUMMARY - Detection Highlights

E7A040269

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SC-SLUDGE-WDR-080 01/03/07 13:20 001				
Mercury	1.6	0.47	mg/kg	SW846 7471A
Arsenic	40	4.7	mg/kg	SW846 6010B
Barium	100	9.4	mg/kg	SW846 6010B
Chromium	15000	4.7	mg/kg	SW846 6010B
Selenium	3.1	2.3	mg/kg	SW846 6010B
Copper	31	12	mg/kg	SW846 6010B
Nickel	20	19	mg/kg	SW846 6010B
Thallium	21	4.7	mg/kg	SW846 6010B
Vanadium	96	23	mg/kg	SW846 6010B
Zinc	9.7	9.4	mg/kg	SW846 6010B
Percent Moisture	79	0.10	%	MCAWW 160.3 MOD
Hexavalent Chromium	84	1.9	mg/kg	SW846 7199

METHODS SUMMARY

E7A040269

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
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

E7A040269

<u>ANALYTICAL METHOD</u>	<u>ANALYST</u>	<u>ANALYST ID</u>
MCAWW 160.3 MOD	FLORIAN ZIMMERMANN	000064
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

E7A040269

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
JME2W	001	SC-SLUDGE-WDR-080	01/03/07	13:20

NOTE(S) :

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

CH2M Hill Inc

Client Sample ID: SC-SLUDGE-WDR-080

TOTAL Metals

Lot-Sample #....: E7A040269-001

Matrix.....: SO

Date Sampled....: 01/03/07 13:20 Date Received...: 01/04/07 12:37

% Moisture.....: 79

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 7011245						
Arsenic	40	4.7	mg/kg	SW846 6010B	01/11/07	JME2W1AA
		Dilution Factor: 1		Analysis Time...: 19:27	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 7011126		
Antimony	ND	28	mg/kg	SW846 6010B	01/11/07	JME2W1AC
		Dilution Factor: 1		Analysis Time...: 19:27	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 7011126		
Barium	100	9.4	mg/kg	SW846 6010B	01/11/07	JME2W1AD
		Dilution Factor: 1		Analysis Time...: 19:27	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 7011126		
Cadmium	ND	2.3	mg/kg	SW846 6010B	01/11/07	JME2W1AE
		Dilution Factor: 1		Analysis Time...: 19:27	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 7011126		
Chromium	15000	4.7	mg/kg	SW846 6010B	01/11/07	JME2W1AF
		Dilution Factor: 1		Analysis Time...: 19:27	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 7011126		
Beryllium	ND	2.3	mg/kg	SW846 6010B	01/11/07	JME2W1AG
		Dilution Factor: 1		Analysis Time...: 19:27	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 7011126		
Lead	ND	2.3	mg/kg	SW846 6010B	01/11/07	JME2W1AH
		Dilution Factor: 1		Analysis Time...: 19:27	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 7011126		
Selenium	3.1	2.3	mg/kg	SW846 6010B	01/11/07	JME2W1AJ
		Dilution Factor: 1		Analysis Time...: 19:27	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 7011126		
Silver	ND	4.7	mg/kg	SW846 6010B	01/11/07	JME2W1AK
		Dilution Factor: 1		Analysis Time...: 19:27	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 7011126		

(Continued on next page)

CH2M Hill Inc

Client Sample ID: SC-SLUDGE-WDR-080

TOTAL Metals

Lot-Sample #....: E7A040269-001

Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Cobalt	ND	23	mg/kg	SW846 6010B	01/11/07	JME2W1AL
		Dilution Factor: 1		Analysis Time...: 19:27	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 7011126		
Copper	31	12	mg/kg	SW846 6010B	01/11/07	JME2W1AM
		Dilution Factor: 1		Analysis Time...: 19:27	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 7011126		
Molybdenum	ND	19	mg/kg	SW846 6010B	01/11/07	JME2W1AN
		Dilution Factor: 1		Analysis Time...: 19:27	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 7011126		
Nickel	20	19	mg/kg	SW846 6010B	01/11/07	JME2W1AP
		Dilution Factor: 1		Analysis Time...: 19:27	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 7011126		
Thallium	21	4.7	mg/kg	SW846 6010B	01/11/07	JME2W1AQ
		Dilution Factor: 1		Analysis Time...: 19:27	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 7011126		
Vanadium	96	23	mg/kg	SW846 6010B	01/11/07	JME2W1AR
		Dilution Factor: 1		Analysis Time...: 19:27	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 7011126		
Zinc	9.7	9.4	mg/kg	SW846 6010B	01/11/07	JME2W1AT
		Dilution Factor: 1		Analysis Time...: 19:27	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 7011126		
Prep Batch #....: 7011254						
Mercury	1.6	0.47	mg/kg	SW846 7471A	01/11-01/12/07	JME2W1AU
		Dilution Factor: 1		Analysis Time...: 14:04	Analyst ID.....: 000023	
		Instrument ID...: M04		MS Run #.....: 7011129		

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

CH2M Hill Inc

Client Sample ID: SC-SLUDGE-WDR-080

General Chemistry

Lot-Sample #....: E7A040269-001 Work Order #....: JME2W Matrix.....: SO
Date Sampled....: 01/03/07 13:20 Date Received...: 01/04/07 12:37
% Moisture.....: 79

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Hexavalent Chromium	84	1.9	mg/kg	SW846 7199	01/12/07	7005371
			Dilution Factor: 2	Analysis Time...: 12:12	Analyst ID.....: 000022	
			Instrument ID...: W18	MS Run #.....: 7005174		
Percent Moisture	79	0.10	%	MCAWW 160.3 MOD	01/04-01/05/07	7004541
			Dilution Factor: 1	Analysis Time...: 08:15	Analyst ID.....: 0000644	
			Instrument ID...: W15	MS Run #.....: 7005053		

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.