Pacific Gas and Electric Company

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September 14, 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
August 2007 Monitoring Report

Dear Mr. Perdue:

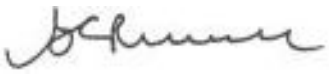
Enclosed is the August 2007 Monitoring Report for the Pacific Gas and Electric Company (PG&E) Topock Compressor Station, Interim Measure (IM) No. 3 Groundwater Treatment System.

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. The WDRs apply to IM No. 3 Treatment System discharge by subsurface injection.

The groundwater monitoring results for wells OW-1S/M/D, OW-2S/M/D, OW-5S/M/D, CW-1M/D, CW-2M/D, CW-3M/D, and CW-4M/D will be submitted under separate cover, as part of the Compliance Monitoring Program.

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

Sincerely,



Curt Russell
Topock Onsite Project Manager

Enclosures:
August 2007 Monitoring Report for the IM No. 3 Groundwater Treatment System.

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

August 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

September 14, 2007

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155 Grand Avenue, Suite 1000
Oakland, CA 94612

August 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

September 14, 2007

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

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

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Acronyms and Abbreviations

EPA	U.S. Environmental Protection Agency
gpm	gallons per minute
IM	Interim Measure
MRP	Monitoring and Reporting Program
PG&E	Pacific Gas and Electric Company
PST	Pacific Standard Time
TOC	total organic carbon
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 August 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.

2.0 Sampling Station Locations

Table 1 lists the locations of sampling stations. (All tables and figures 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 (successor to Order R7-2004-0103), 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 August 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). Extraction well TW-2D was also operated for short periods (less than 15 minutes) on August 7, 14, and 28, 2007 to support field operations.

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

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

4.0 Groundwater Treatment System Flow Rates

The August 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).

The IM No. 3 facility treated approximately 5,891,470 gallons of extracted groundwater during August 2007. The IM No. 3 facility also treated approximately 9,530 gallons of water generated from the groundwater monitoring program and 3,600 gallons of water from IM-3 injection well development. No containers of solids were transported offsite from the IM No. 3 facility during August 2007 for disposal.

Periods of planned and unplanned extraction system down time (that together resulted in 0.5 percent downtime during August 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.

- **August 12, 2007 (unplanned)**: The extraction well system was temporarily offline from 1:45 pm until 1:50 pm after a City of Needles power imbalance. Extraction system downtime was 5 minutes.
- **August 14, 2007 (unplanned)**: The extraction well system was temporarily offline from 4:50 am until 4:55 am after a City of Needles power imbalance. Extraction system downtime was 5 minutes.
- **August 15, 2007 (planned):** The extraction well system was temporarily offline from 9:00 am until 11:00 am to remove accumulated solids in a section of process pipe between the chrome reduction tank (T-300) and the first iron oxidation tank (T-301A). The extraction system downtime was 2 hours.
- **August 16, 2007 (unplanned):** The extraction well system was temporarily offline from 12:45 pm until 1:50 pm to repair two small leaks in the treated water pipeline between the IM-3 treatment plant and the injection wellfield. Both leaks occurred at the flanged ends between the pipe sections and were identified as part of daily pipeline inspections. Approximately 2 gallons of treated water leaked from one location and less than a gallon of treated water leaked from the second location. Both locations are on PG&E property. The wetted soil at each location was hand excavated and returned to the IM-3 facility where it was containerized for offsite disposal. The extraction system downtime was 1 hour and 5 minutes.

- **August 17, 2007 (unplanned)**: The extraction well system was temporarily offline from 10:45 am until 10:50 am after a City of Needles power imbalance. Extraction system downtime was 5 minutes.
- **August 20, 2007 (unplanned)**: The extraction well system was temporarily offline from 10:00 am until 10:15 am to switch to generator power after a City of Needles power outage. The extraction well system was again offline from 11:00 am until 11:15 am to return operations to the City of Needles power supply from generator power supply. Extraction system downtime was 30 minutes.
- **August 24, 2007 (unplanned)**: The extraction well system was temporarily offline from 1:09 pm until 1:14 pm to switch to generator power after a City of Needles power outage. The extraction well system was again offline at 7:04 pm until 7:10 pm to return operations to the City of Needles power supply from generator power supply. Extraction system downtime was 11 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). Sample containers were labeled and packaged according to standard sampling procedures.

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

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

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 on August 17, 2005. Quarterly groundwater monitoring analytical results for the injection area (wells OW-1S/M/D, OW-2S/M/D, OW-5S/M/D, CW-1M/D, CW-2M/D, CW-3M/D, and CW-4M/D) are reported in a separate document, in conjunction with groundwater level maps of the same monitoring wells.

6.0 Analytical Results

Laboratory reports for samples collected in August 2007 were prepared by certified analytical laboratories, and are presented in Appendix A. The August 2007 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; the sample date was August 1, 2007. Results are presented in Table 3.
- The effluent was sampled weekly; the sample dates were August 1, 8, 15, 22, and 29, 2007. Results are presented in Table 4.
- The reverse osmosis concentrate was sampled monthly; the sample date was August 1, 2007. Results are presented in Table 5.
- The sludge was sampled monthly; the sample date was August 1, 2007. In accordance with the WDRs, sludge is required to be sampled each time it is transported offsite (unless sludge is transported offsite more frequently than monthly, in which case the sampling frequency is monthly). Although no sludge was shipped offsite during August 2007, a sample was collected and analyzed. Results are presented in Table 6.
- The sludge is required to have an aquatic bioassay test quarterly; the 3rd Quarter 2007 aquatic bioassay test was performed on a sludge sample collected July 2, 2007. Results were presented in the July 2007 Monthly Report submitted August 15, 2007.

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, one influent sample (collected August 1, 2007) was analyzed for dissolved manganese, and four influent samples (collected August 1, 15, 22 and 29, 2007) were analyzed for total organic carbon (TOC). The additional analyses were completed for IM No. 3 facility treatment process evaluation and overall water chemistry

characterization. The concentrations are comparable to historic influent conditions and the laboratory reports are included in Appendix A.

7.0 Conclusions

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

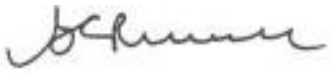
In addition, no incidents of non-compliance were identified during the reporting period, and no events that caused an immediate or potential threat to human health or the environment, or new releases of hazardous waste or hazardous waste constituents, or new solid waste management units, were identified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

8.0 Certification

On August 12, 2005, PG&E submitted a signature delegation letter to the Water Board, delegating PG&E signature authority to Mr. Curt Russell and Ms. Yvonne Meeks for correspondence regarding Board Order R7-2004-0103. Order R7-2006-0600 is the successor to Order R7-2004-0103; an additional signature authority delegation is not required, as confirmed in an email from Jose Cortez dated 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: September 14, 2007

Tables

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

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

Note:
= Sequential sample identification number at each sample station.
[a] The sample event number is included at the end of the sample ID (e.g., SC-100B-WDR-015).

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

Parameter	System Influent[a,b] (gpm)	System Effluent[b,c] (gpm)	Reverse Osmosis Concentrate[b] (gpm)
August 2007 Average Monthly Flowrate	132.0	125.8	7.0

Notes:
gpm: gallons per minute.
[a] Extraction wells TW-3D and PE-1 were operated during August 2007. Extraction Well TW-2D was operated for short periods (less than 15 minutes on August 7, 14, and 28, 2007 to support field operations.
[b] The difference between influent flow rate and the sum of the effluent and reverse osmosis concentrate flow rates during August 2007 was 0.6 percent, which is within the range of acceptable accuracy considering the margin of error for onsite instrumentation, the water contained within the sludge, 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 wells IW-02 and IW-03 during August 2007.

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

Required Sampling Frequency		Monthly																						
Analytes		TDS	Turbidity	Specific Conductance	pH [c]	Chromium	Hexavalent Chromium	Aluminium	Ammonia (as N)	Antimony	Arsenic	Barium	Boron	Copper	Fluoride	Lead	Manganese	Manganese Dissolved [d]	Molybdenum	Nickel	Nitrate (as N)	Nitrite (as N)	Sulfate	Iron	Zinc
Units [b]		mg/L	NTU	µmhos/cm	pHunits	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	µg/L	µg/L
MDL		64.0	0.0160	0.153	0.0700	0.39	1.8	4.4	0.0090	0.70	0.63	0.49	0.00087	0.90	0.0905	0.62	0.094	0.49	0.49	1.3	0.0840	0.0010	0.768	0.99	2.0
Sample ID	**Date**																							
SC-100B-WDR-110	**8/1/2007**	**4740**	**0.118**	**8250**	**7.30 J**	**1280**	**1340**	**76.5**	**ND (0.500)**	**5.1**	**9.8**	**ND (300)**	**1.14**	**68.9**	**2.79**	**8.6**	**ND (20.0)**	**ND (20.0)**	**22.2**	**ND (20.0)**	**3.13**	**ND (0.0050)**	**597**	**61.7**	**ND (20.0)**
RL		250	0.100	2.00	2.00	1.0	20.0	50.0	0.500	3.0	5.0	300	0.200	10.0	0.500	2.0	20.0	20.0	5.0	20.0	1.00	0.0050	12.5	20.0	20.0

NOTES:

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

a Sampling Location for all Influent Samples is tap on pipe from extraction wells into tank T-100 (see attached P&ID TP-PR-10-10-04)

b Units reported in this table are those units required in the WDRs

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

d Manganese was field filtered

TABLE 4
Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs)
Effluent Monitoring Results[a]
August 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**																
Analytes		TDS	Turbidity	Specific Conductance	pH [e]	Chromium	Hexavalent Chromium	Aluminium	Ammonia (as N)	Antimony	Arsenic	Barium	Boron	Copper	Fluoride	Lead	Manganese	Molybdenum	Nickel	Nitrate (as N)	Nitrite (as N)	Sulfate	Iron	Zinc
Units [c]		mg/L	NTU	µmhos/cm	pHunits	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	µg/L	µg/L
MDL[d]		64.0	0.0160	0.153	0.0700	0.38	0.018	4.4	0.0090	0.70	0.63	0.49	0.00087	0.90	0.0905	0.62	0.49	0.49	1.3	0.0840	0.0010	0.768	0.99	2.0
Sample ID	**Date**																							
SC-700B-WDR-110	**8/1/2007**	**4270**	**ND (0.100)**	**6850**	**8.01 J**	**ND (1.0)**	**ND (0.20)**	**ND (50.0)**	**ND (0.500)**	**ND (3.0)**	**ND (5.0)**	**ND (300)**	**1.20**	**66.8**	**2.25**	**6.9**	**27.0**	**17.5**	**ND (20.0)**	**6.06**	**ND (0.0050)**	**503**	**69.7**	**88.6**
RL		250	0.100	2.00	2.00	1.0	0.20	50.0	0.500	3.0	5.0	300	0.200	10.0	0.500	2.0	20.0	5.0	20.0	1.00	0.0050	12.5	20.0	20.0
SC-700B-WDR-111	**8/8/2007**	**4110**	**ND (0.100)**	**6880**	**8.12 J**	**ND (1.0)**	**ND (0.20)**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
RL		250	0.100	2.00	2.00	1.0	0.20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SC-700B-WDR-112	**8/14/2007**	**3820**	**ND (0.100)**	**7020**	**8.16 J**	**ND (1.0)**	**ND (0.20)**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
RL		250	0.100	2.00	2.00	1.0	0.20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SC-700B-WDR-113	**8/22/2007**	**3860**	**ND (0.100)**	**7070**	**8.14 J**	**ND (1.0)**	**ND (0.20)**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
RL		250	0.100	2.00	2.00	1.0	0.20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SC-700B-WDR-114	**8/29/2007**	**4110**	**ND (0.100)**	**6820**	**8.02 J**	**ND (1.0)**	**ND (0.20)**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
RL		250	0.100	2.00	2.00	1.0	0.20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

NOTES:

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

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

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

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

d MDL listed is the target MDL by analysis method; however, the MDL may change for each sample analysis due to the dilution required by the matrix to meet the method QC requirements. The target MDL for each method/analyte combination is calculated annually.

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

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

Required Sampling Frequency		Monthly																				
Analytes		TDS	Specific Conductance	pH [c]	Chromium	Hexavalent Chromium	Antimony	Arsenic	Barium	Beryllium	Cadmium	Cobalt	Copper	Fluoride	Lead	Molybdenum	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Units [b]		mg/L	µmhos/cm	pHunits	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MDL		160	0.153	0.0700	0.00039	0.000088	0.00070	0.00063	0.00049	0.00037	0.00062	0.00038	0.00090	0.0905	0.00062	0.00049	0.000049	0.0013	0.00063	0.0015	0.00049	0.00045	0.0020
Sample ID	**Date**																						
SC-701-WDR-110	**8/1/2007**	**21600**	**31400**	**7.86 J**	**0.0038**	**ND (0.0010)**	**0.0035**	**ND (0.0050)**	**ND (0.300)**	**ND (0.0010)**	**ND (0.0020)**	**ND (0.0050)**	**0.0592**	**12.4**	**0.0079**	**0.0783**	**ND (0.00020)**	**ND (0.0200)**	**0.0142**	**ND (0.0050)**	**ND (0.0010)**	**ND (0.0050)**	**ND (0.0200)**
RL		625	2.00	2.00	0.0010	0.0010	0.0030	0.0050	0.300	0.0010	0.0020	0.0050	0.0100	0.500	0.0020	0.0050	0.00020	0.0200	0.0050	0.0050	0.0010	0.0050	0.0200

NOTES:

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

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

b Units reported in this table are those units required in the WDRs

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

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

Required Sampling Frequency		Monthly [c]																	
Analytes		Chromium	Hexavalent Chromium	Antimony	Arsenic	Barium	Beryllium	Cadmium	Cobalt	Copper	Fluoride	Lead	Molybdenum	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Units [b]		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
MDL		0.743	0.0088	0.0332	0.0298	0.0236	0.347	0.268	0.422	0.0429	0.362	0.0295	0.0233	0.0050	0.0630	0.156	0.0714	0.0233	0.377	0.957
Sample ID	**Date**																			
SC-Sludge-WDR-110	**8/1/2007**	**13400**	**341 J**	**ND (0.876)**	**30.3**	**93.9**	**112**	**23.6**	**ND (17.5)**	**ND (27.0)**	**65.7**	**ND (4.60)**	**21.0**	**0.483**	**12.7**	**ND (0.876)**	**ND (1.18)**	**ND (0.876)**	**92.3**	**ND (48.3)**
RL		35.0	35.3	0.876	0.876	0.876	17.5	17.5	17.5	0.876	7.07	0.876	0.876	0.0707	0.876	0.876	0.876	0.876	17.5	17.5

NOTES:

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

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

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

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

TABLE 7
Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs)
Monitoring Information
August 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-110	David Chaney	8/1/2007	11:00:00 AM	TLI	EPA 120.1	SC	8/2/2007	Tina Acquiat
					TLI	EPA 180.1	TRB	8/2/2007	Gautam Savani
					TLI	EPA 200.7	ZN	8/16/2007	Daisy Duyan
					TLI	EPA 200.7	FE	8/8/2007	Daisy Duyan
					TLI	EPA 200.7	B	8/8/2007	Daisy Duyan
					TLI	EPA 200.8	NI	8/20/2007	Michel Mendoza
					TLI	EPA 200.8	PB	8/20/2007	Michel Mendoza
					TLI	EPA 200.8	MO	8/20/2007	Michel Mendoza
					TLI	EPA 200.8	MND	8/21/2007	Michel Mendoza
					TLI	EPA 200.8	MN	9/6/2007	Michel Mendoza
					TLI	EPA 200.8	CU	8/20/2007	Michel Mendoza
					TLI	EPA 200.8	CR	8/20/2007	Michel Mendoza
					TLI	EPA 200.8	BA	8/20/2007	Michel Mendoza
					TLI	EPA 200.8	AS	8/22/2007	Michel Mendoza
					TLI	EPA 200.8	AL	8/20/2007	Michel Mendoza
					TLI	EPA 200.8	SB	8/22/2007	Michel Mendoza
					TLI	EPA 218.6	CR6	8/2/2007	Jean-Paul Gleeson
					TLI	EPA 300.0	SO4	8/2/2007	Giawad Ghenniwa
					TLI	EPA 300.0	NO3N	8/2/2007	Giawad Ghenniwa
					TLI	EPA 300.0	FL	8/2/2007	Giawad Ghenniwa
					TLI	SM2540C	TDS	8/6/2007	Tina Acquiat
					TLI	SM4500-HB	PH	8/2/2007	Tina Acquiat
					TLI	SM4500NH3B	NH3N	8/6/2007	Iordan Stavrev
					TLI	SM4500NO2B	NO2N	8/3/2007	Tina Acquiat
SC-700B	SC-700B-WDR-110	David Chaney	8/1/2007	10:45:00 AM	TLI	EPA 120.1	SC	8/2/2007	Tina Acquiat
					TLI	EPA 180.1	TRB	8/2/2007	Gautam Savani
					TLI	EPA 200.7	FE	8/8/2007	Daisy Duyan
					TLI	EPA 200.7	B	8/8/2007	Daisy Duyan
					TLI	EPA 200.7	ZN	8/16/2007	Daisy Duyan
					TLI	EPA 200.8	SB	8/22/2007	Michel Mendoza
					TLI	EPA 200.8	CU	8/20/2007	Michel Mendoza
					TLI	EPA 200.8	MN	8/21/2007	Michel Mendoza
					TLI	EPA 200.8	AL	8/20/2007	Michel Mendoza
					TLI	EPA 200.8	AS	8/22/2007	Michel Mendoza
					TLI	EPA 200.8	PB	8/20/2007	Michel Mendoza
					TLI	EPA 200.8	MO	8/20/2007	Michel Mendoza
					TLI	EPA 200.8	CR	9/5/2007	Michel Mendoza
					TLI	EPA 200.8	BA	8/20/2007	Michel Mendoza

TABLE 7
Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs)
Monitoring Information
August 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-110	David Chaney	8/1/2007	10:45:00 AM	TLI	EPA 200.8	NI	8/20/2007	Michel Mendoza
					TLI	EPA 218.6	CR6	8/2/2007	Jean-Paul Gleeson
					TLI	EPA 300.0	SO4	8/2/2007	Giawad Ghenniwa
					TLI	EPA 300.0	NO3N	8/2/2007	Giawad Ghenniwa
					TLI	EPA 300.0	FL	8/2/2007	Giawad Ghenniwa
					TLI	SM2540C	TDS	8/6/2007	Tina Acquiat
					TLI	SM4500-HB	PH	8/2/2007	Tina Acquiat
					TLI	SM4500NH3B	NH3N	8/6/2007	Iordan Stavrev
					TLI	SM4500NO2B	NO2N	8/3/2007	Tina Acquiat
SC-700B	SC-700B-WDR-111	Dave C.	8/8/2007	2:30:00 PM	TLI	EPA 120.1	SC	8/9/2007	Tina Acquiat
					TLI	EPA 180.1	TRB	8/9/2007	Gautam Savani
					TLI	EPA 200.8	CR	8/27/2007	Michel Mendoza
					TLI	EPA 218.6	CR6	8/9/2007	Jean-Paul Gleeson
					TLI	SM2540C	TDS	8/9/2007	Tina Acquiat
					TLI	SM4500-HB	PH	8/9/2007	Tina Acquiat
SC-700B	SC-700B-WDR-112	Jason Holbert	8/14/2007	10:30:00 AM	TLI	EPA 120.1	SC	8/15/2007	Tina Acquiat
					TLI	EPA 180.1	TRB	8/15/2007	Gautam Savani
					TLI	EPA 200.8	CR	8/27/2007	Michel Mendoza
					TLI	EPA 218.6	CR6	8/14/2007	Jean-Paul Gleeson
					TLI	SM2540C	TDS	8/15/2007	Tina Acquiat
					TLI	SM4500-HB	PH	8/15/2007	Tina Acquiat
SC-700B	SC-700B-WDR-113	Joe Aide	8/22/2007	12:00:00 PM	TLI	EPA 120.1	SC	8/23/2007	Tina Acquiat
					TLI	EPA 180.1	TRB	8/23/2007	Gautam Savani
					TLI	EPA 200.8	CR	8/23/2007	Michel Mendoza
					TLI	EPA 218.6	CR6	8/22/2007	Jean-Paul Gleeson
					TLI	SM2540C	TDS	8/23/2007	Tina Acquiat
					TLI	SM4500-HB	PH	8/23/2007	Tina Acquiat
SC-700B	SC-700B-WDR-114	David Chaney	8/29/2007	2:45:00 PM	TLI	EPA 120.1	SC	8/30/2007	Tina Acquiat
					TLI	EPA 180.1	TRB	8/29/2007	Gautam Savani
					TLI	EPA 200.8	CR	9/6/2007	Michel Mendoza
					TLI	EPA 218.6	CR6	8/30/2007	Jean-Paul Gleeson
					TLI	SM2540C	TDS	8/30/2007	Tina Acquiat
					TLI	SM4500-HB	PH	8/30/2007	Tina Acquiat
SC-701	SC-701-WDR-110	David Chaney	8/1/2007	10:50:00 AM	TLI	EPA 120.1	SC	8/2/2007	Tina Acquiat
					TLI	EPA 200.7	ZN	8/16/2007	Daisy Duyan
					TLI	EPA 200.8	MO	8/22/2007	Michel Mendoza
					TLI	EPA 200.8	SE	9/6/2007	Michel Mendoza

TABLE 7
Board Order No. R7-2006-0060 Waste Discharge Requirements (WDRs)
Monitoring Information
August 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-110	David Chaney	8/1/2007	10:50:00 AM	TLI	EPA 200.8	CR	8/22/2007	Michel Mendoza
					TLI	EPA 200.8	AG	8/22/2007	Michel Mendoza
					TLI	EPA 200.8	TL	8/21/2007	Michel Mendoza
					TLI	EPA 200.8	SB	8/22/2007	Michel Mendoza
					TLI	EPA 200.8	PB	8/22/2007	Michel Mendoza
					TLI	EPA 200.8	NI	8/22/2007	Michel Mendoza
					TLI	EPA 200.8	CU	8/22/2007	Michel Mendoza
					TLI	EPA 200.8	CO	8/22/2007	Michel Mendoza
					TLI	EPA 200.8	CD	8/22/2007	Michel Mendoza
					TLI	EPA 200.8	BE	8/22/2007	Michel Mendoza
					TLI	EPA 200.8	BA	8/22/2007	Michel Mendoza
					TLI	EPA 200.8	AS	8/22/2007	Michel Mendoza
					TLI	EPA 200.8	V	8/22/2007	Michel Mendoza
					TLI	EPA 218.6	CR6	8/2/2007	Jean-Paul Gleeson
					TLI	EPA 245.1	HG	8/23/2007	Michel Mendoza
					TLI	EPA 300.0	FL	8/2/2007	Giawad Ghenniwa
					TLI	SM2540C	TDS	8/6/2007	Tina Acquiat
					TLI	SM4500-HB	PH	8/2/2007	Tina Acquiat
Phase Seperator	SC-Sludge-WDR-110	David Chaney	8/1/2007	12:15:00 PM	TLI	EPA 300.0	FL	8/2/2007	Giawad Ghenniwa
					TLI	EPA 6010B	V	9/11/2007	Daisy Duyan
					TLI	EPA 6010B	ZN	9/11/2007	Daisy Duyan
					TLI	EPA 6010B	BE	9/11/2007	Daisy Duyan
					TLI	EPA 6010B	CO	9/11/2007	Daisy Duyan
					TLI	EPA 6010B	CD	9/11/2007	Daisy Duyan
					TLI	EPA 7471A	HG	8/21/2007	Michel Mendoza
					TLI	SM2540B	MOIST	8/7/2007	Gautam Savani
					TLI	SW 6020A	CR	9/7/2007	Michel Mendoza
					TLI	SW 6020A	TL	9/7/2007	Michel Mendoza
					TLI	SW 6020A	SE	9/7/2007	Michel Mendoza
					TLI	SW 6020A	SB	9/11/2007	Michel Mendoza
					TLI	SW 6020A	PB	9/7/2007	Michel Mendoza
					TLI	SW 6020A	NI	9/11/2007	Michel Mendoza
					TLI	SW 6020A	CU	9/11/2007	Michel Mendoza
					TLI	SW 6020A	BA	9/7/2007	Michel Mendoza
					TLI	SW 6020A	AS	9/7/2007	Michel Mendoza
					TLI	SW 6020A	AG	9/7/2007	Michel Mendoza
					TLI	SW 6020A	MO	9/7/2007	Michel Mendoza
					TLI	SW 7199	CR6	8/13/2007	David Blackburn

NOTES:

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

SC-100B = Sampling Location for all Influent Samples is tap on pipe from extraction wells into tank T-100 (see attached P&ID TP-PR-10-10-04)

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

Prior to April 11, 2007 the analytical methods listed in the 40 CFR Part 136 for pH and TDS were E150.1 and E160.1, respectively. Per EPA and Department of Health Services guidelines, the analytical methods listed in the current 40 CFR Part 136 have changed to SM4500-H B and SM2540C as shown on the table.

TLI = Truesdail Laboratories, Inc.
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

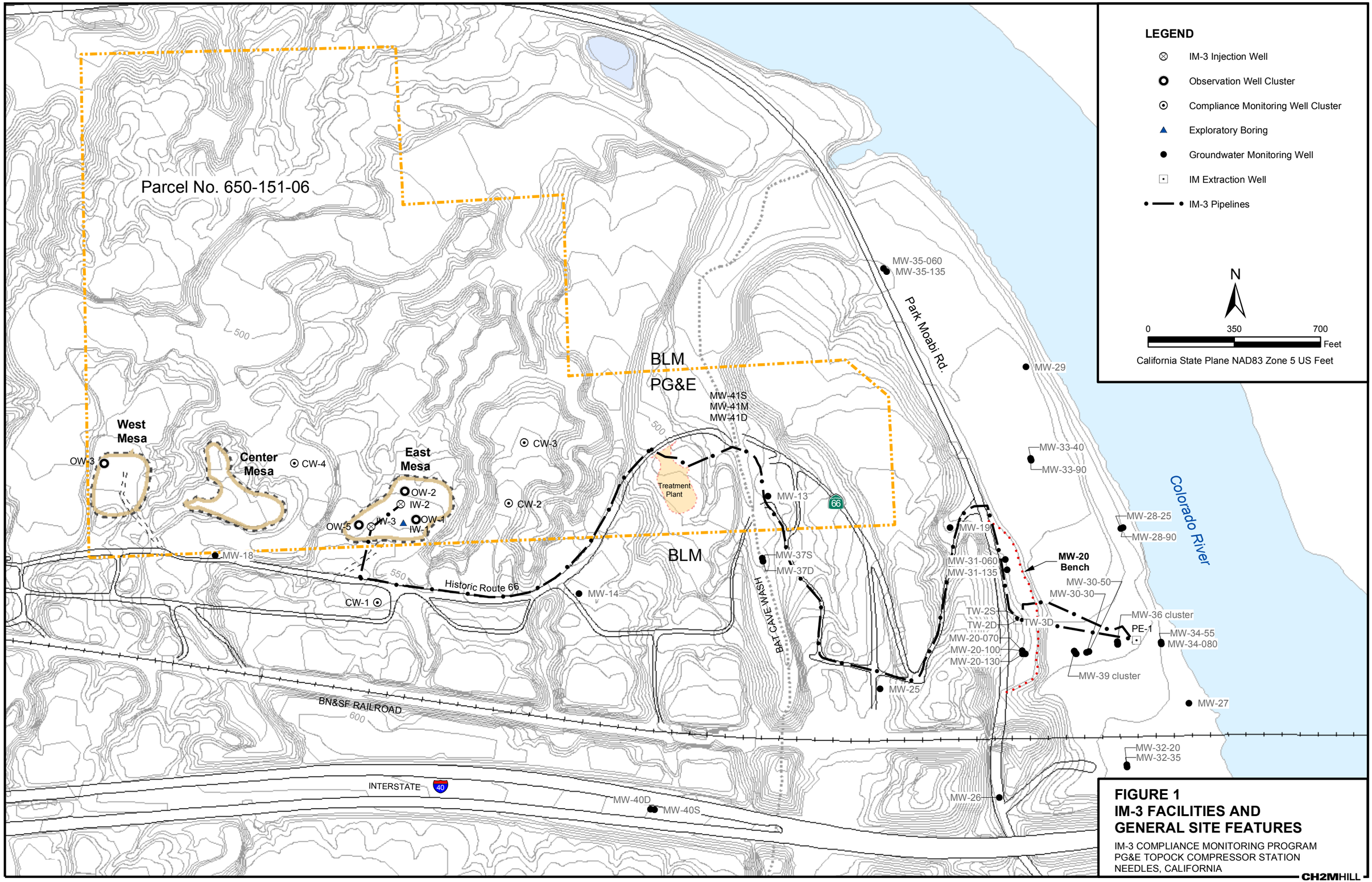


FIGURE 1
IM-3 FACILITIES AND GENERAL SITE FEATURES

IM-3 COMPLIANCE MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CH2MHILL

CONTROL PANEL LCP-100

WELL TW-3D CONTROL

WELL TW-2S CONTROL

WELL TW-2D CONTROL

WELL PE-1 CONTROL

LEAK DETECTION PANEL - 003

ALM

120V

LSH LVL RUN ON RM PRESS FLOW

LSHH

HOA

HS 102

HS 100

HS 101

HS 103

HOLD

LSH 002

LSHH 002

FUTURE

4"-RW-140-1HB

V-RW-140-01

VALVE VAULT No. 2

4"-RW-139-1HB

V-RW-139-01

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

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

NOTE 1

3"-RW-138-1HB

V-RW-138-01

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

4"-RW-105-1HB

V-RW-105-05

4" IN 8"-FUTURE

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

LSH 102A

NOTE 1

FI 102

LSH 001

LSHH 001

1" V-1390

4" x 3"

EJ-RW-105-01

4"-RW-105-1HB

Well TW-2S Flowmeter

Well TW-2D Flowmeter

Well PE-1 Flowmeter

FE 100

FIT 100

PIT 100

PE 100

LT 100

VENT

3"x2"

V-RW-105-02

MAG

3"-RW-105-1HB THROTTLING

V-RW-105-01

V-1390

VALVE VAULT No. 1

LT 101

FE 101

FIT 101

PIT 101

PE 101

V-RW-102-02

3"-RW-102-1HB THROTTLING

V-RW-102-01

LT 103

FE 103

FIT 103

PIT 103

PE 103

V-RW-108-02 THROTTLING

V-RW-108-1HB

V-RW-108-01

V-RW-130-02

V-RW-130-01

4"-RW-130-1HB

V-RW-105-06 THROTTLING

V-RW-105-03

V-RW-105-04

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

4" IN 8" RW-127-1KB

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

SPARE TO VALVE VAULT 4

NOTES 1 & 2

4" IN 8" RW-107-1KB

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

TO RAW WATER STORAGE

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

TO BAKER TANKS V-RW-131-01

V-RW-131-01

LSH 100A

LSH 101A

LSH 103A

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

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

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

NOTE 1

Well TW-3D Flowmeter

VENT

LT 102

PI 102

PIT 102

PRV 102

PE 102

FE 102

FIT 102

LSH 102

SET AT 120 PSI

V-1390

3"x2"

3"-RW-134-1HB

V-RW-134-01

MAG

4"x3"

V-RW-134-02

WELL VAULT No. 4

PI 100

LSH 100

3"-RW-103-1HB

V-RW-103-01

V-RW-103-02

WELL VAULT No. 2

PI 101

PRV 101

LSH 101

3"-RW-100-1HB

V-RW-100-01

V-RW-100-02

WELL VAULT No. 1

PI 103

PRV 103

LSH 103

4"x3"

3"-RW-132-1HB

V-RW-132-01

V-RW-132-02

WELL VAULT No. 3

LE 102

P-102

EXTRACTION WELL TW-3D

135 GPM x 248 FT. H20

LE 100

P-100

EXTRACTION WELL TW-2S

40 GPM x 180 FT. H20

LE 101

P-101

EXTRACTION WELL TW-2D

90 GPM x 245 FT. H20

LE 103

P-103

EXTRACTION WELL PE-1

40 GPM x 235 FT. H20

NOTES

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

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

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

PRINT DISTRIBUTION

DATE	
STATUS	
REV.	
CLIENT	
FIELD	
INTRA CO.	

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

SCALE NONE

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

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

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

PROJ NO. 315994

CH2MHILL

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

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

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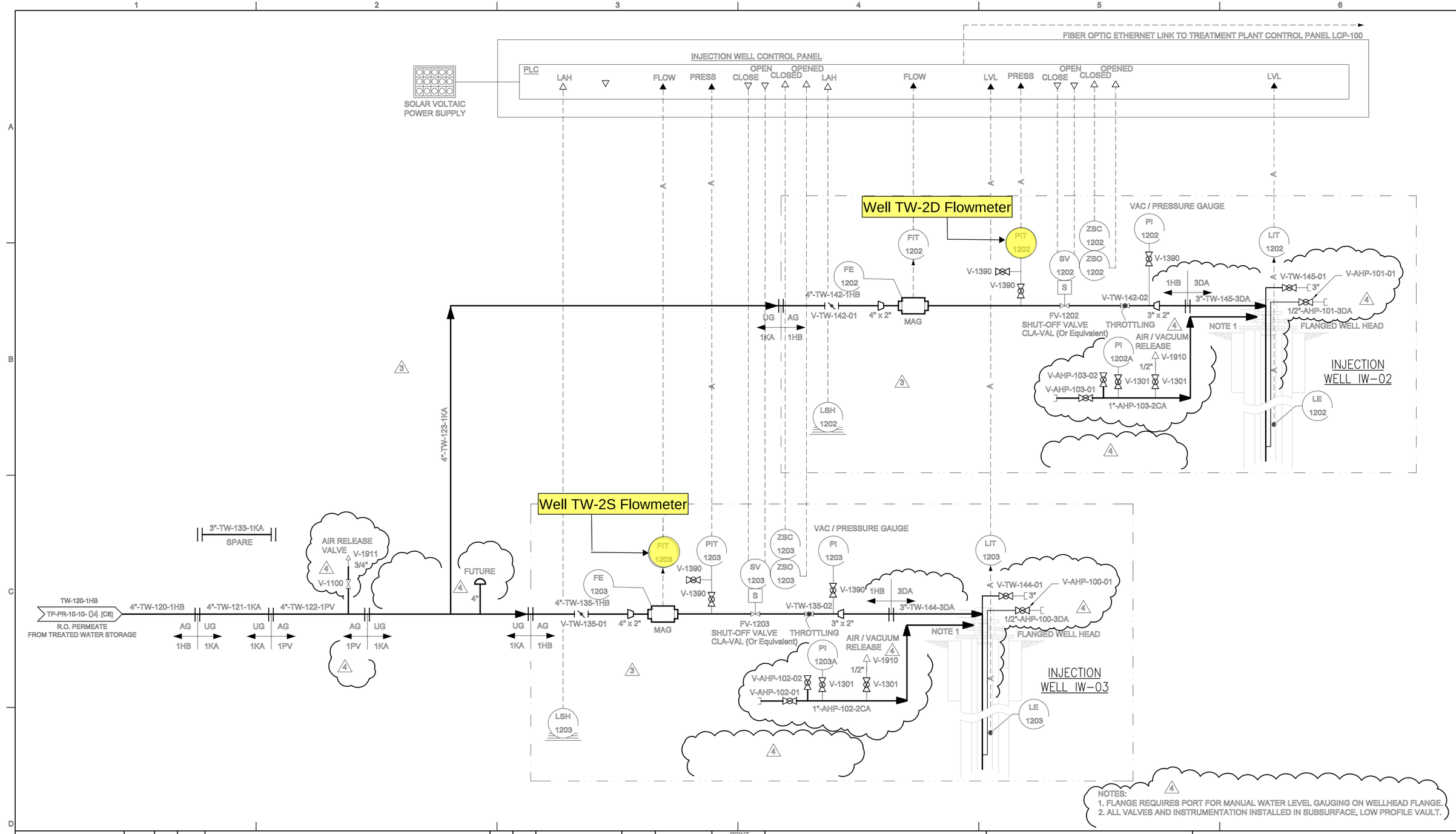


NO.	DATE	REVISION	BY	CHK
A	07/28/04	FOR INTERNAL REVIEW	EFC	AJ
0	09/03/04	APPROVED FOR CONSTRUCTION	EFC	AJ
1	10/13/04	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ
2	01/23/05	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ
3	02/14/05	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ
4	03/10/05	REMOVED HOLD AND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

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

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

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

SCALE NONE

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

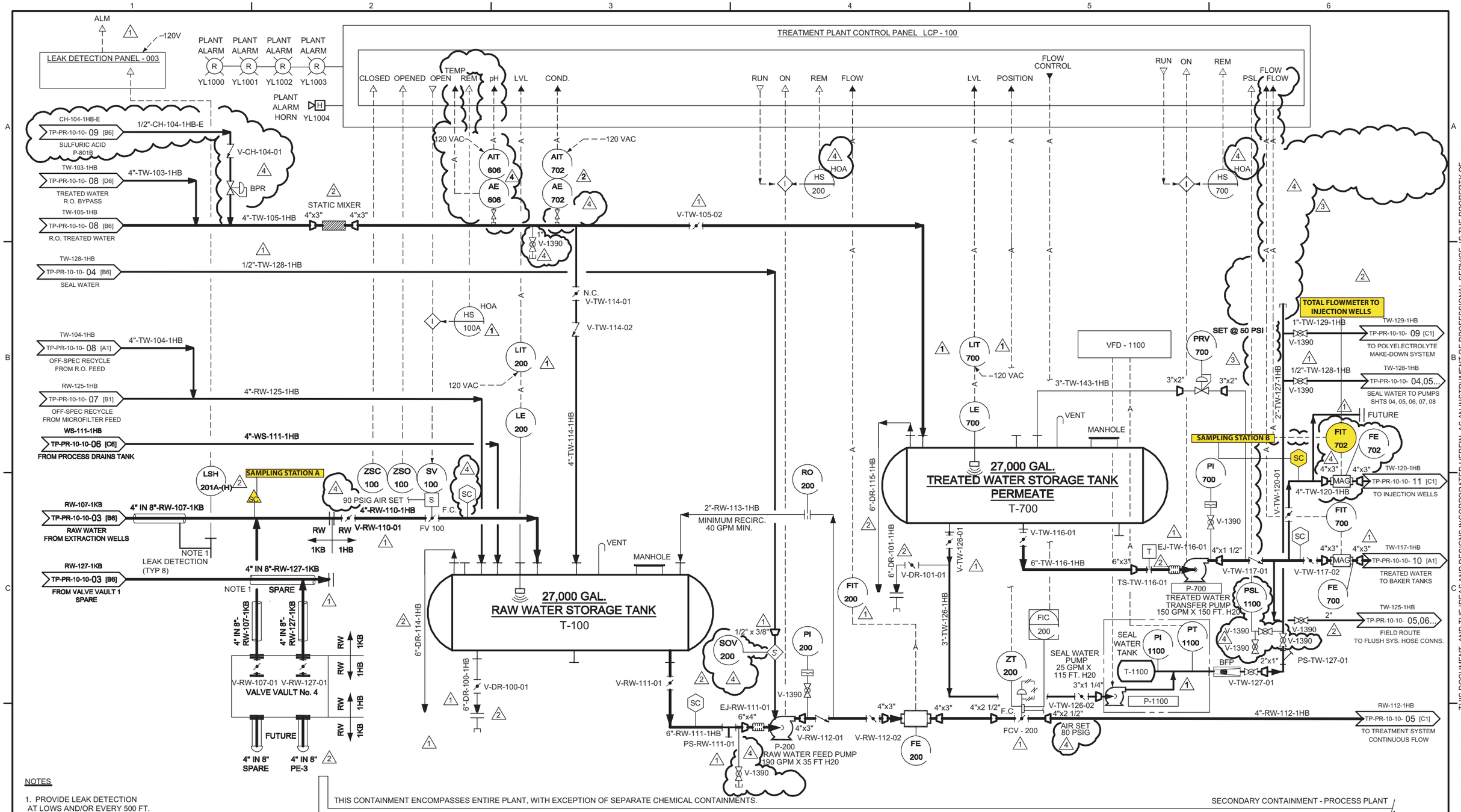
CH2MHILL

PROCESS AND INSTRUMENTATION DIAGRAM
SHEET 11
INJECTION WELLS

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

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

BAR IS ONE INCH ON ORIGINAL DRAWING. 0 1"



NOTES

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

NO.	DATE	REVISION	BY	CHK
0	07/28/04	FOR INTERNAL REVIEW	EFC	AJ
0	09/03/04	APPROVED FOR CONSTRUCTION	EFC	AJ
1	10/13/04	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ
2	01/23/05	REVISED AND APPROVED FOR CONSTRUCTION	EFC	AJ
3	02/14/05	ADDED RECIRC. LINE AND PRV VALVE TO T-700 – APPROVED FOR CONSTRUCTION	EFC	AJ
4	09/21/05	REVISED PER AS-BUILT CONDITIONS	EFC	AJ

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

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

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

SCALE NONE

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

PROJ NO. 315994

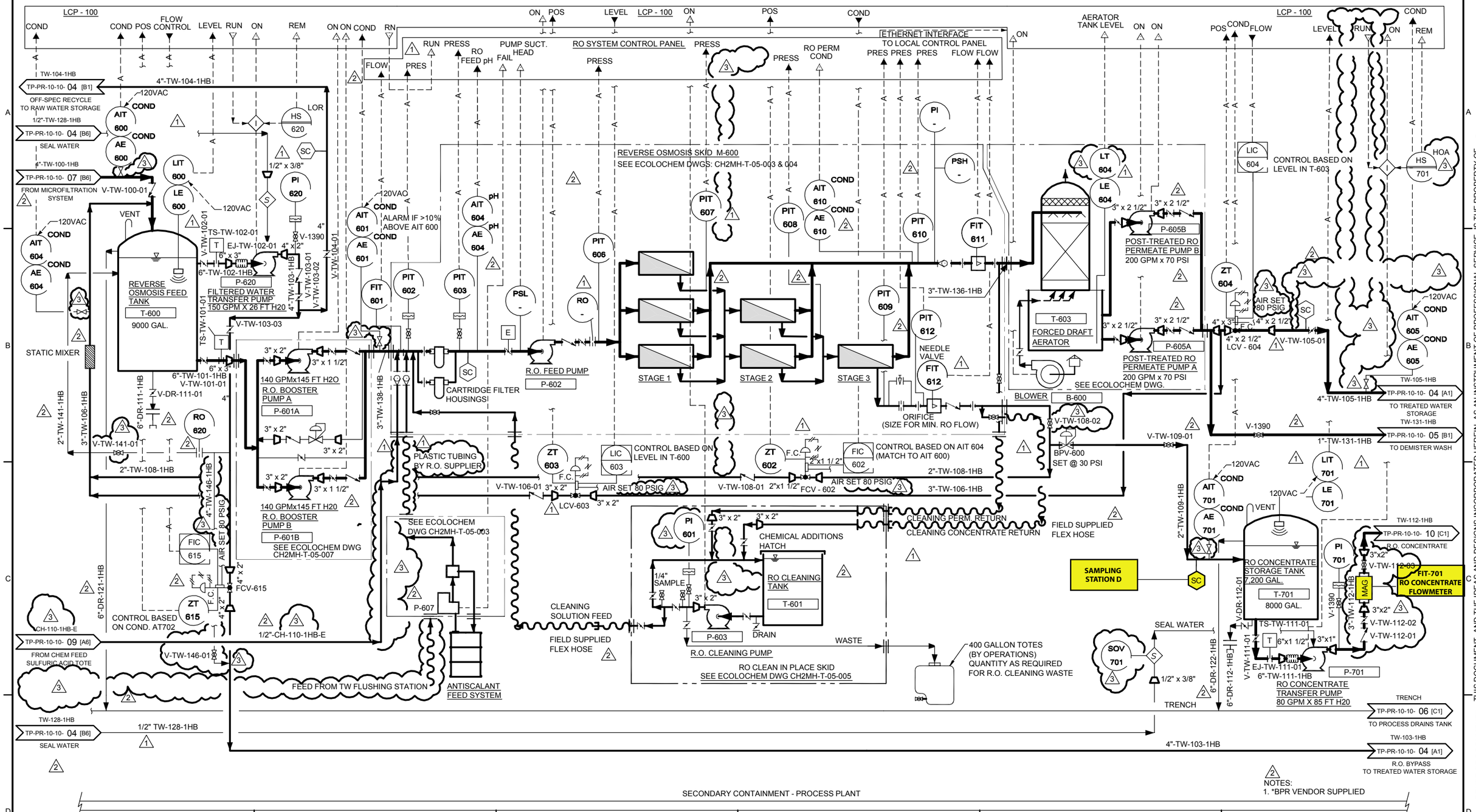
CH2MHILL

PROCESS AND INSTRUMENTATION DIAGRAM
SHEET 04
STORAGE AREA

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

BAR IS ONE INCH ON ORIGINAL DRAWING

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



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

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

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

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

SCALE NONE

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

CH2MHILL

PROCESS AND INSTRUMENTATION DIAGRAM
SHEET 08
REVERSE OSMOSIS SYSTEM

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

BAR IS ONE INCH ON ORIGINAL DRAWING

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

CONTROL PANEL

PLC

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

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

HS 400 HOA · HS 410 HOA · HS 900 LOR

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

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

TORQUE NSH 400

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

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

M-400-A · M-400-B · M-400-C

CL-400 CLARIFIER

6"-DR-107-1HB

SEE PARKSON DRAWING 10066701-01

120VAC AIT 400 TURB

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

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

120VAC LIT 402

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

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

AIR SET 120 PSIG · F. C.

FV - 400 · FV - 410

4"-WS-102-1HB · 4"-WS-100-1HB

120 PSIG AIR SET · 1/2"

PI 401 · PE 401 · LE 402 · M-402

HS 403 HOA · PI 404 · PE 404

4" x 1" · 2" x 1"

V-WS-103-01 · V-WS-103-02

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

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

2"-WS-109-1HB

V-WS-109-01

V-WS-104-01

2"-WS-101-1HB · V-WS-101-01 · 4" x 2"

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

SLUDGE HOLDING TANK
6000 GAL
T-402

VENT · DECANT

2" V-1790 (TYP 5)

4" (TYP 5) AIR/SIGHT GAP · 4"

PI 403 · PE 403

3% - 5% SOLIDS

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

2"-WS-107-1HB · V-WS-107-01

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

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

TRUCK FILL FOR OFF-SITE DISPOSAL

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

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

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

4"-WS-104-1HB

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

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

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

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

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

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

V-WS-113-01 · 2"-WS-113-1HB · 4" x 2"

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

LSH 405B · FH-WS-106-01 · LSH 405A

SAMPLING STATION E

UNIT 2 CAKE CAKE · UNIT 1 CAKE CAKE

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

LSHH 405

480 VAC · LCP - 405

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

PUMPOUT VAULT

PS-405
PHASE SEPARATORS ALTERNATING DURING OPERATION

PROCESS DRAIN TANK
5,000 GAL.
T-900

P-900
PROCESS DRAIN PUMP

V-DR-113-01 · 6"-DR-113-1HB

VERTICAL WET PIT
175 GPM x 37 FT. H2O

LSH 900

T-900A
PROCESS SUMP

NOTE 1

SECONDARY CONTAINMENT - PROCESS PLANT

NOTES:

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

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

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

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

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

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

SCALE NONE

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

CH2MHILL

PROCESS AND INSTRUMENTATION DIAGRAM
SHEET 06
CLARIFICATION AND SLUDGE REMOVAL

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

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

BAR IS ONE INCH ON ORIGINAL DRAWING. 0 1"

Appendix A
August 2007 Laboratory Analytical Reports

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

Established 1931

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

September 7, 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-110 PROJECT, GROUNDWATER MONITORING,

TLI NO.: 968320

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-110 project groundwater monitoring. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The samples were received and delivered with the chain of custody on August 1, 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.

Sample SC-Sludge-WDR-110 is being reported on a separate SDG per Mr. Shawn Duffy's request.

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

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

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon

fo- Mona Nassimi
Manager, Analytical Services

K. R. P. Iyer

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

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

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www.truesdail.com

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

Laboratory No.: 968320
Date: September 7, 2007
Collected: August 1, 2007
Received: August 1, 2007
Revision 1

ANALYST LIST

		ANALYST
EPA 120.1	Specific Conductivity	Tina Acquiat
SM 4500-H B	pH	Tina Acquiat
SM 2540C	Total Dissolved Solids	Tina Acquiat
EPA 180.1	Turbidity	Gautam Savani
EPA 300.0	Anions	Giawad Ghenniwa
SM 4500-NH3 B	Ammonia	Iordan Stavrev
SM 4500-NO2 B	Nitrite as N	Tina Acquiat
SM 5310 C	Total Organic Carbon	Hope Trinidad
EPA 200.7	Metals by ICP	Daisy Duyan
EPA 200.8	Metals by ICP/MS	Michel Mendoza
EPA 245.1	Mercury	Michel Mendoza
EPA 218.6	Hexavalent Chromium	Jean Paul Gleeson

TRUESDAIL LABORATORIES, INC.

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TUSTIN, CALIFORNIA 92780-7008
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www.truesdail.com

REPORT

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

Sample: Three (3) Groundwaters + 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.: 968320
Date: September 6, 2007
Collected: August 1, 2007
Received: August 1, 2007
Prep/ Analyzed: August 2, 2007
Analytical Batch: 08PH07C

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

Analytical Results pH

TLI I.D.	Field I.D.	Run Time	Units	MDL	RL	Results
968320-1	SC-100B-WDR-110	10:15	pH Units	0.0700	2.00	7.30
968320-2	SC-700B-WDR-110	10:20	pH Units	0.0700	2.00	8.01
968320-3	SC-701-WDR-110	10:25	pH Units	0.0700	2.00	7.86

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	968320-3	7.86	7.87	0.01	± 0.100 Units	Yes

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

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

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Oakland, CA 94612
Attention: Shawn Duffy

Laboratory No.: 968320

Sample: Three (3) Groundwaters + One (1) Soil Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2

Date: September 6, 2007
Collected: August 1, 2007
Received: August 1, 2007
Prep/ Analyzed: August 2, 2007
Analytical Batch: 08EC07C

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
968320-1	SC-100B-WDR-110	µmhos/cm	EPA 120.1	1.00	2.00	8250
968320-2	SC-700B-WDR-110	µmhos/cm	EPA 120.1	1.00	2.00	6850
968320-3	SC-701-WDR-110	µmhos/cm	EPA 120.1	1.00	2.00	31400

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	968320-3	31400	31500	0.32%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
CCS	697	706	98.7%	90% - 110%	Yes
CVS#1	987	999	98.8%	90% - 110%	Yes
CVS#2	985	999	98.6%	90% - 110%	Yes
LCS	696	706	98.6%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Three (3) Groundwaters + 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.: 968320
Date: September 6, 2007
Collected: August 1, 2007
Received: August 1, 2007
Prep/ Analyzed: August 6, 2007
Analytical Batch: 08TDS07B

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

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
968320-1	SC-100B-WDR-110	mg/L	SM 2540C	250	4740
968320-2	SC-700B-WDR-110	mg/L	SM 2540C	250	4270
968320-3	SC-701-WDR-110	mg/L	SM 2540C	625	21600

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	968320-3	21600	22000	0.92%	≤ 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS 1	495	500	99.0%	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.

Sean Condon
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

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

Sample: Three (3) Groundwaters + 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.: 968320
Date: September 6, 2007
Collected: August 1, 2007
Received: August 1, 2007
Prep/ Analyzed: August 2, 2007
Analytical Batch: 08TUC07B

Investigation: **Turbidity by Method EPA 180.1**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
968320-1	SC-100B-WDR-110	11:00	NTU	1.00	0.100	0.118
968320-2	SC-700B-WDR-110	10:45	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	968313-1	ND	ND	0.00%	< 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	7.80	8.00	97.5%	90% - 110%	Yes
LCS	7.95	8.00	99.4%	90% - 110%	Yes
LCS	8.00	8.00	100%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conlon

for - Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Three (3) Groundwaters + One (1) Soil Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 08CrH07B

Laboratory No.: 968320
Date: September 6, 2007
Collected: August 1, 2007
Received: August 1, 2007
Prep/ Analyzed: August 2, 2007
Analytical Batch: 08CrH07B

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
968320-1	SC-100B-WDR-110	11:00	06:05	mg/L	100	0.0200	1.34
968320-2	SC-700B-WDR-110	10:45	06:37	mg/L	1.05	0.00020	ND
968320-3	SC-701-WDR-110	10:50	07:33	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	968320-1	1.34	1.48	9.93%	≤ 20%	Yes

QC Std I.D.	Lab Number	Conc.of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	968320-1	1.34	100	0.0150	1.50	2.95	2.84	107%	90-110%	Yes
MS	968320-2	0.00	1.06	0.00100	0.00106	0.00114	0.00106	108%	90-110%	Yes
MS	968320-3	0.00	1.06	0.00100	0.00106	0.00	0.00106	0.00%	90-110%	No
MS	968320-3	0.00	5.00	0.00100	0.00500	0.00543	0.00500	109%	90-110%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00496	0.00500	99.2%	90% - 110%	Yes
MRCVS#1	0.0102	0.0100	102%	95% - 105%	Yes
LCS	0.00467	0.00500	93.4%	90% - 110%	Yes
LCSD	0.00477	0.00500	95.4%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon

fc – Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Three (3) Groundwaters + 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.: 968320
Date: September 6, 2007
Collected: August 1, 2007
Received: August 1, 2007
Prep/ Analyzed: August 6, 2007
Analytical Batch: 08NH3-E07A

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

Analytical Results Ammonia as N

TLI I.D.	Field I.D.	Sample Time	Method	Units	DF	RL	Results
968320-1	SC-100B-WDR-110	11:00	SM 4500-NH3 D	mg/L	1.00	0.500	ND
968320-2	SC-700B-WDR-110	10:45	SM 4500-NH3 D	mg/L	1.00	0.500	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	968367-1	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	968367-1	0.00	1.00	6.00	6.00	6.50	6.00	108%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	10.4	10.0	104%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

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

Laboratory No.: 968320
Date: September 7, 2007
Collected: August 1, 2007
Received: August 1, 2007
Prep/ Analyzed: August 2, 2007
Analytical Batch: 08AN07C
Revision 1

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
968320-1	SC-100B-WDR-110	11:00	13:00	mg/L	5.00	0.500	2.79
968320-2	SC-700B-WDR-110	10:45	13:11	mg/L	5.00	0.500	2.25
968320-3	SC-701-WDR-110	10:50	13:23	mg/L	5.00	0.500	12.4

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	968309-1	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	968309-1	0.00	1.00	2.00	2.00	2.07	2.00	104%	85-115%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	4.16	4.00	104%	90% - 110%	Yes
MRCVS#1	3.12	3.00	104%	90% - 110%	Yes
MRCVS#2	3.10	3.00	103%	90% - 110%	Yes
MRCVS#3	3.09	3.00	103%	90% - 110%	Yes
LCS	4.16	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.

Sean Condon
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

EXCELLENCE IN INDEPENDENT TESTING

Established 1931

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

REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Three (3) Groundwaters + 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.: 968320
Date: September 6, 2007
Collected: August 1, 2007
Received: August 1, 2007
Prep/ Analyzed: August 2, 2007
Analytical Batch: 08AN07C

Investigation: **Sulfate by Method EPA 300.0**

Analytical Results Sulfate

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
968320-1	SC-100B-WDR-110	11:00	15:40	mg/L	25.0	12.5	597
968320-2	SC-700B-WDR-110	10:45	15:51	mg/L	25.0	12.5	503

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	968309-1	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	968309-1	0.00	1.00	2.00	2.00	1.99	2.00	99.5%	85-115%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	19.9	20.0	99.5%	90% - 110%	Yes
MRCVS#1	15.0	15.0	100%	90% - 110%	Yes
MRCVS#2	15.0	15.0	100%	90% - 110%	Yes
MRCVS#3	14.9	15.0	99.3%	90% - 110%	Yes
LCS	19.9	20.0	99.5%	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.

Sean Condon

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Analytical Services

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Three (3) Groundwaters + 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.: 968320
Date: September 6, 2007
Collected: August 1, 2007
Received: August 1, 2007
Prep/ Analyzed: August 2, 2007
Analytical Batch: 08AN07C

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

Analytical Results Nitrate as N

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
968320-1	SC-100B-WDR-110	11:00	13:00	mg/L	5.00	1.00	3.13
968320-2	SC-700B-WDR-110	10:45	13:11	mg/L	5.00	1.00	6.06

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	968309-1	0.532	0.532	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	968309-1	0.532	1.00	2.00	2.00	2.50	2.53	98.4%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	4.03	4.00	101%	90% - 110%	Yes
MRCVS#1	3.00	3.00	100%	90% - 110%	Yes
MRCVS#2	2.98	3.00	99.3%	90% - 110%	Yes
MRCVS#3	2.97	3.00	99.0%	90% - 110%	Yes
LCS	4.02	4.00	101%	90% - 110%	Yes
LCSD	4.05	4.00	101%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Carlson
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Three (3) Groundwaters + 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.: 968320
Date: September 6, 2007
Collected: August 1, 2007
Received: August 1, 2007
Prep/ Analyzed: August 3, 2007
Analytical Batch: 08NO207C

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

Analytical Results for Nitrite as N

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
968320-1	SC-100B-WDR-110	11:00	09:06	mg/L	1.00	0.0050	ND
968320-2	SC-700B-WDR-110	10:45	09:07	mg/L	1.00	0.0050	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	968320-2	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	968320-2	0.00	1.00	0.0200	0.0200	0.0202	0.0200	101%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.0216	0.0210	103%	90% - 110%	Yes
MRCVS#1	0.0204	0.0200	102%	90% - 110%	Yes
LCS	0.0272	0.0270	101%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conlon

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Three (3) Groundwaters + 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.: 968320
Date: September 6, 2007
Collected: August 1, 2007
Received: August 1, 2007
Prep/ Analyzed: August 6, 2007
Analytical Batch: 08TOC07A

Investigation: **Total Organic Carbon by Method SM 5310 C**

Analytical Results Total Organic Carbon

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
968320-1	SC-100B-WDR-110	11:00	11:07	mg/L	1.00	0.300	0.370

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	968306	4.29	4.29	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	968306	4.29	1.00	10.0	10.0	12.9	14.3	86.1%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	9.97	10.0	99.7%	90% - 110%	Yes
MRCVS#1	9.10	10.0	91.0%	90% - 110%	Yes
LCS	18.9	20.0	94.5%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Carlon
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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www.truesdail.com

REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Three (3) Groundwaters + One (1) Soil Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 090607A

Laboratory No.: 968320
Date: September 6, 2007
Collected: August 1, 2007
Received: August 1, 2007
Prep/ Analyzed: September 6, 2007
Analytical Batch: 090607A

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

Analytical Results Total Dissolved Manganese

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
968320-1	SC-100B-WDR-110	11:00	16:22	mg/L	1.00	0.0200	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Sample Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	968320-1	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	968320-1	0.00	1.00	0.0500	0.0500	0.0471	0.0500	94.2%	70-130%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.0513	0.0500	103%	95% - 105%	Yes
MRCVS#1	0.0505	0.0500	101%	90% - 110%	Yes
ICS	0.0526	0.0500	105%	80% - 120%	Yes
LCS	0.0505	0.0500	101%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

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

Attention: Shawn Duffy

Laboratory No.: 968320

Reported: September 6, 2007
Collected: August 1, 2007
Received: August 1, 2007
Analyzed: August 8 - September 6 , 2007

Samples: Three (3) Groundwaters + One (1) Soil Sample
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

Analytical Results

SAMPLE ID: SC-100B-WDR-110 **Time Collected:** 11:00 **LAB ID:** 968320-1

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	0.0765	5.21	mg/L	0.0500	082007A	08/20/07	11:56
Antimony	EPA 200.8	0.0051	5.21	mg/L	0.0030	082207A	08/22/07	12:07
Arsenic	EPA 200.8	0.0098	5.21	mg/L	0.0050	082207A	08/22/07	12:07
Barium	EPA 200.8	ND	5.21	mg/L	0.300	082007A	08/20/07	11:56
Chromium	EPA 200.8	1.28	5.21	mg/L	0.0010	082007A	08/20/07	11:56
Copper	EPA 200.8	0.0689	5.21	mg/L	0.0100	082007A	08/20/07	11:56
Lead	EPA 200.8	0.0086	5.21	mg/L	0.0020	082007A	08/20/07	11:56
Manganese	EPA 200.8	ND	5.21	mg/L	0.0200	082107A	08/21/07	16:19
Molybdenum	EPA 200.8	0.0222	5.21	mg/L	0.0050	082007A	08/20/07	11:56
Nickel	EPA 200.8	ND	5.21	mg/L	0.0200	082007A	08/20/07	11:56
Zinc	EPA 200.7	ND	1.04	mg/L	0.0200	081607A	08/16/07	16:53
Boron	EPA 200.7	1.14	1.04	mg/L	0.200	080807A	08/08/07	15:00
Iron	EPA 200.7	0.0617	1.04	mg/L	0.0200	080807A	08/08/07	15:00

SAMPLE ID: SC-700B-WDR-110 **Time Collected:** 10:45 **LAB ID:** 968320-2

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	ND	5.21	mg/L	0.0500	082007A	08/20/07	12:02
Antimony	EPA 200.8	ND	5.21	mg/L	0.0030	082207A	08/22/07	12:49
Arsenic	EPA 200.8	ND	5.21	mg/L	0.0050	082207A	08/22/07	12:49
Barium	EPA 200.8	ND	5.21	mg/L	0.300	082007A	08/20/07	12:02
Chromium	EPA 200.8	ND	1.00	mg/L	0.0010	090507A	09/05/07	16:58
Copper	EPA 200.8	0.0668	5.21	mg/L	0.0100	082007A	08/20/07	12:02
Lead	EPA 200.8	0.0069	5.21	mg/L	0.0020	082007A	08/20/07	12:02
Manganese	EPA 200.8	0.0270	5.21	mg/L	0.0200	082107A	08/21/07	16:43
Molybdenum	EPA 200.8	0.0175	5.21	mg/L	0.0050	082007A	08/20/07	12:02
Nickel	EPA 200.8	ND	5.21	mg/L	0.0200	082007A	08/20/07	12:02
Zinc	EPA 200.7	0.0886	1.04	mg/L	0.0200	081607A	08/16/07	16:57
Boron	EPA 200.7	1.20	1.04	mg/L	0.200	080807A	08/08/07	15:04
Iron	EPA 200.7	0.0697	1.04	mg/L	0.0200	080807A	08/08/07	15:04

Revision 2

SAMPLE ID: SC-701-WDR-110 **Time Collected:** 10:50 **LAB ID:** 968320-3

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Antimony	EPA 200.8	0.0035	5.21	mg/L	0.0030	082207A	08/22/07	12:37
Arsenic	EPA 200.8	ND	5.21	mg/L	0.0050	082207A	08/22/07	12:37
Barium	EPA 200.8	ND	5.21	mg/L	0.300	082207A	08/22/07	12:37
Beryllium	EPA 200.8	ND	5.21	mg/L	0.0010	082207A	08/22/07	12:37
Cadmium	EPA 200.8	ND	5.21	mg/L	0.0020	082207A	08/22/07	12:37
Chromium	EPA 200.8	0.0038	5.21	mg/L	0.0010	082207A	08/22/07	12:37
Cobalt	EPA 200.8	ND	5.21	mg/L	0.0050	082207A	08/22/07	12:37
Copper	EPA 200.8	0.0592	5.21	mg/L	0.0100	082207A	08/22/07	12:37
Lead	EPA 200.8	0.0079	5.21	mg/L	0.0020	082207A	08/22/07	12:37
Mercury	EPA 245.1	ND	1.00	mg/L	0.00020	08HG07Aa	08/23/07	23:38
Molybdenum	EPA 200.8	0.0783	5.21	mg/L	0.0050	082207A	08/22/07	12:37
Nickel	EPA 200.8	ND	5.21	mg/L	0.0200	082207A	08/22/07	12:37
Selenium	EPA 200.8	0.0142	1.00	mg/L	0.0050	090607A	09/06/07	17:30
Silver	EPA 200.8	ND	5.21	mg/L	0.0050	082207A	08/22/07	12:37
Thallium	EPA 200.8	ND	5.21	mg/L	0.0010	082107A	08/21/07	16:49
Vanadium	EPA 200.8	ND	5.21	mg/L	0.0050	082207A	08/22/07	12:37
Zinc	EPA 200.7	ND	1.04	mg/L	0.0200	081607A	08/16/07	17:02

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon
for Mona Nassimi, Manager
Analytical Services

968320

TRUESDAIL LABORATORIES, INC.
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CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-110]

COC Number 968320

TURNAROUND TIME 10 Days

DATE 8-1-07 PAGE 1 OF 1

Rec'd 08/01/07 968320

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	David Chang

	SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Anions (300.0) Fl	Total Metals (200.7) Title 22 (Metals 6010B) Field	Total Metals (200.7) Title 22 Al,As,Ba,B,Cr,Cu,Pb,Mn,Mo,Ni,Sb,Fe,Zn	Specific Conductance (120.1)	pH (150.1)	TDS (160.1)	Anions (300) Fl	Anions (300) Fl. SO4, NO2, NO3	Ammonia (350.2)	Turbidity (180.1)	MN 200.7 Field Filtered	TOC	Metals (7471A) Mercury	NUMBER OF CONTAINERS	COMMENTS
-1	SC-100B-WDR-110	8-1-07	11:00	Groundwater	x			x	x	x	x		x	x	x	x	x		7	pH=2
-2	SC-700B-WDR-110	8-1-07	10:45	Groundwater	x			x	x	x	x		x	x	x				4	pH=2
-3	SC-701-WDR-110	8-1-07	10:50	Groundwater	x		x		x	x	x	x							3	pH=2
-4	SC-Sludge-WDR-110	8-1-07	12:15	Soil		x												x	5	
																			19	TOTAL NUMBER OF CONTAINERS

For Sample Conditions See Form Attached

ALERT!!
Level III QC

CHAIN OF CUSTODY SIGNATURE RECORD

	Signature	Printed Name	Company/ Agency	Date/ Time
1	(Relinquished)	David Chang	CH2MHill OMT	8-1-07 15:30
2	(Received)	David S	TLI	8/1/07 2150
3	(Relinquished)			
4	(Received)			
5	(Relinquished)			
6	(Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

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

September 12, 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-110 PROJECT, SLUDGE MONITORING,

TLI NO.: 969384

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-110 project sludge monitoring. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The samples were received and delivered with the chain of custody on August 1, 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.

Samples SC-100B-WDR-110, SC-700B-WDR-110, and SC-701-WDR-110 were reported, per Mr. Shawn Duffy's request, on a separate report (SDG 968320).

Sample SC-Sludge-WDR-110 is reported in all raw data as Truesdail I.D. 968320-4. This sample has been reported as Truesdail I.D. 969384 in all Analytical Results Summary pages and Final Report pages. This is a result of the chain of custody being split after most of the samples had been analyzed.

All final results and dilution factors are reported on a dry weight basis.

Results above the reporting limit were detected in the Sand Blank (Sand Control) for Arsenic, Barium, Copper, Lead, Molybdenum, Nickel, Silver, and Zinc by SW 6020. New sand with low levels of metals will be ordered to prevent this problem from occurring in the future.

The recoveries for the LCS and/or the LCSD for Barium, Copper, and Lead by SW 6020 exceed the acceptance limits due to the elevated levels of these metals found in the sand used for the Sand Blank (as described above), LCS, and LCSD. New sand with low levels of metals will be ordered to prevent this problem from occurring in the future.

The recoveries for the LCS and LCSD for Antimony by SW 6020 were outside the acceptance limits (87.4% and 83.9%, respectively).

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

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

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon

for Mona Nassimi
Manager, Analytical Services

K.R.P. Iyer

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

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

Established 1931

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

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

Laboratory No.: 969384
Date: September 11, 2007
Collected: August 1, 2007
Received: August 1, 2007

ANALYST LIST

[illegible]	[illegible]	[illegible]
EPA 300.0	Fluoride	Giawad Ghenniwa
SM 2540 B	Total Solids	Gautam Savani
SW 6010B	Metals by ICP	Daisy Duyan
SW 6020	Metals by ICP/MS	Michel Mendoza
SW 7471A	Mercury	Michel Mendoza
SW 7199	Hexavalent Chromium	David Blackburn

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: One (1) Soil Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 08CrH07K

Laboratory No.: 969384
Date: September 11, 2007
Collected: August 1, 2007
Received: August 1, 2007
Prep/ Analyzed: August 13, 2007
Analytical Batch: 08CrH07K

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

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
969384-1	SC-Sludge-WDR-110	12:15	12:15	mg/kg	500	35.3	341

QA/QC Summary

QC STD I.D.	Laboratory Number	Sample Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	968320-4	341	352	3.17%	< 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	968320-4	341	500	14.1	7050	7400	7391	100%	85-115%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00478	0.00500	95.6%	90% - 110%	Yes
MRCVS#1	0.00986	0.0100	98.6%	90% - 110%	Yes
LCS	0.0101	0.0100	101%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon
for Mona Nassimi, Manager
Analytical Services

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REPORT

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

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

Laboratory No.: 969384
Date: September 11, 2007
Collected: August 1, 2007
Received: August 1, 2007
Prep/ Analyzed: August 7, 2007
Analytical Batch: 08SOLID07B

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

Analytical Results Total Solids

TLI I.D.	Field I.D.	Sample Time	Units	Results
969384-1	SC-Sludge-WDR-110	12:15	% Moisture	71.7

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	968320-4	71.7	72.6	1.25%	≤ 20%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon
for Mona Nassimi, Manager
Analytical Services

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REPORT

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

Laboratory No.: 969384
Date: September 11, 2007
Collected: August 1, 2007
Received: August 1, 2007
Prep/ Analyzed: August 2, 2007
Analytical Batch: 08AN07C

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
969384-1	SC-Sludge-WDR-110	12:15	13:34	mg/kg	20.0	7.07	65.7

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	968309-1	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	968309-1	0.00	1.00	2.00	2.00	2.07	2.00	104%	85-115%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	4.16	4.00	104%	90% - 110%	Yes
MRCVS#1	3.12	3.00	104%	90% - 110%	Yes
MRCVS#2	3.10	3.00	103%	90% - 110%	Yes
MRCVS#3	3.09	3.00	103%	90% - 110%	Yes
LCS	4.16	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,
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for Mona Nassimi, Manager
Analytical Services

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REPORT

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

Attention: Shawn Duffy

Samples: One (1) Soil Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Investigation: Total Metal Analyses as Requested

Laboratory No.: 969384
Reported: September 11, 2007
Collected: August 1, 2007
Received: August 1, 2007
Analyzed: August 21 - September 11 , 2007

Analytical Results

SAMPLE ID: SC-Sludge-WDR-110 **Time Collected:** 12:15 **LAB ID:** 969384-1

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Antimony	SW 6020	ND	248	mg/kg	0.876	091107A	09/11/07	12:28
Arsenic	SW 6020	30.3	248	mg/kg	0.876	090707A	09/07/07	15:36
Barium	SW 6020	93.9	248	mg/kg	0.876	090707A	09/07/07	15:36
Beryllium	SW 6010B	112	496	mg/kg	17.5	091107A	09/11/07	14:43
Cadmium	SW 6010B	23.6	496	mg/kg	17.5	091107A	09/11/07	14:43
Chromium	SW 6020	13400	9910	mg/kg	35.0	090707A	09/07/07	15:24
Cobalt	SW 6010B	ND	496	mg/kg	17.5	091107A	09/11/07	14:43
Copper	SW 6020	27.0	248	mg/kg	0.876	091107A	09/11/07	12:28
Lead	SW 6020	4.60	248	mg/kg	0.876	090707A	09/07/07	15:36
Mercury	SW 7471A	0.483	100	mg/kg	0.0707	08HG07Ac	08/21/07	23:45
Molybdenum	SW 6020	21.0	248	mg/kg	0.876	090707A	09/07/07	15:36
Nickel	SW 6020	12.7	248	mg/kg	0.876	091107A	09/11/07	12:28
Selenium	SW 6020	ND	248	mg/kg	0.876	090707A	09/07/07	15:48
Silver	SW 6020	1.18	248	mg/kg	0.876	090707A	09/07/07	15:36
Thallium	SW 6020	ND	248	mg/kg	0.876	090707A	09/07/07	15:36
Vanadium	SW 6010B	92.3	496	mg/kg	17.5	091107A	09/11/07	14:43
Zinc	SW 6010B	48.3	496	mg/kg	17.5	091107A	09/11/07	14:43

NOTES:

Sample results and reporting limits reported on a dry weight basis.
ND: Not detected,or below limit of detection.
DF: Dilution factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon,
for Mona Nassimi, Manager
Analytical Services

969384. ~~96832~~

057

TRUESDAIL LABORATORIES, INC.
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CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-110]

COC Number

TURNAROUND TIME 10 Days

DATE 8-1-07 PAGE 1 OF 1

Rec'd 08/01/07

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	David Chang

SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Anions (300.0) Fl	Total Metals (200.7) Title 22 (Metals 6010B) Fm/Lab	Total Metals (200.7) Title 22 Al,As,Ba,B,Cr,Cu,Pb,Mn,Mo,Ni,Sb,Fe,Zn	Specific Conductance (120.1)	pH (150.1)	TDS (160.1)	Anions (300) Fl	Anions (300) Fl, SO4, NO2, NO3	Ammonia (350.2)	Turbidity (180.1)	MN 200.7 Field Fl Head.	TOC	Metals (7471) Mercury (7471A)	NUMBER OF CONTAINERS	COMMENTS
~~1 SC-100B-WDR-110~~	~~8-1-07~~	~~11:00~~	~~Groundwater~~	~~x~~			~~x~~	~~x~~	~~x~~	~~x~~		~~x~~	~~x~~	~~x~~	~~x~~	~~x~~		~~7~~	~~pH<2~~
~~2 SC-700B-WDR-110~~	~~8-1-07~~	~~10:45~~	~~Groundwater~~	~~x~~			~~x~~	~~x~~	~~x~~	~~x~~		~~x~~	~~x~~	~~x~~				~~4~~ 3	~~pH<2~~
~~3 SC-701-WDR-110~~	~~8-1-07~~	~~10:50~~	~~Groundwater~~	~~x~~		~~x~~		~~x~~	~~x~~	~~x~~	~~x~~							~~3~~ 2	~~pH<2~~
~~4~~ SC-Sludge-WDR-110	8-1-07	12:15	Soil		x											x		1	
																		19	TOTAL NUMBER OF CONTAINERS

For Sample Conditions See Form Attached

ALERT!!
Level III QC

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	David Chang	CH2MHill OMT	8-1-07 15:30
Signature (Received)	David S	TLI	8/1/07 2150
Signature (Relinquished)			
Signature (Received)			
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

TRUESDAIL LABORATORIES, INC.

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August 28, 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-111 PROJECT, GROUNDWATER MONITORING,

TLI NO.: 968551

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-111 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, pH, and Total Dissolved Solids. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The samples were received and delivered with the chain of custody on August 8, 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 the large number of samples in-house, the sample for Total Dissolved Chromium analysis was analyzed by method EPA 200.8, at a dilution of 5x, rather than EPA 200.7 as requested on the chain of custody.

Total Dissolved Chromium was re-analyzed due to the discrepancy between the Total Dissolved Chromium and Hexavalent Chromium results. The result from the re-analysis is reported.

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

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

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon

for Mona Nassimi
Manager, Analytical Services

K. R. P. Iyer

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

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www.truesdail.com

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

Laboratory No.: 968551
Date: August 28, 2007
Collected: August 8, 2007
Received: August 8, 2007

ANALYST LIST

METHOD		ANALYST
EPA 120.1	Specific Conductivity	Tina Acquiat
SM 4500-H B	pH	Tina Acquiat
SM 2540C	Total Dissolved Solids	Tina Acquiat
EPA 180.1	Turbidity	Gautam Savani
EPA 200.8	Total Chromium	Michel Mendoza
EPA 218.6	Hexavalent Chromium	Jean-Paul Gleeson

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REPORT

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

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 346129.IM.02.E2
P.O. No.: 346129.IM.02.E2
Prep. Batch: 082707A

Laboratory No.: 968551
Date: August 28, 2007
Collected: August 8, 2007
Received: August 8, 2007
Prep/ Analyzed: August 27, 2007
Analytical Batch: 082707A

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

Analytical Results Total Chromium

TLI I.D.	Field I.D.	Units	Method	Run Time	DF	RL	Results
968551	SC-700B-WDR-111	mg/L	EPA 200.8	15:02	1.00	0.0010	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	968550-4	0.0452	0.0456	0.88%	≤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	968550-4	0.0452	5.00	0.0500	0.250	0.300	0.295	102%	70-130%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.0489	0.0500	97.8%	90% - 110%	Yes
MRCVS#1	0.0540	0.0500	108%	90% - 110%	Yes
MRCVS#2	0.0520	0.0500	104%	90% - 110%	Yes
ICS	0.0526	0.0500	105%	80% - 120%	Yes
LCS	0.0531	0.0500	106%	90% - 110%	Yes

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon
for Mona Nassimi, Manager
Analytical Services

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REPORT

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

Laboratory No.: 968551

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

Date: August 28, 2007
Collected: August 8, 2007
Received: August 8, 2007
Prep/ Analyzed: August 9, 2007
Analytical Batch: 08CrH07F

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
968551	SC-700B-WDR-111	14:30	10:32	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	968551	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	968551	0.00	1.06	0.00100	0.00106	0.00110	0.00106	104%	90-110%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00510	0.00500	102%	90% - 110%	Yes
MRCVS#1	0.0103	0.0100	103%	95% - 105%	Yes
MRCVS#2	0.0104	0.0100	104%	95% - 105%	Yes
MRCVS#3	0.0103	0.0100	103%	95% - 105%	Yes
MRCVS#4	0.0103	0.0100	103%	95% - 105%	Yes
MRCVS#5	0.0102	0.0100	102%	95% - 105%	Yes
LCS	0.00510	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.

Sean Condon
fo / Mona Nassimi, Manager
Analytical Services

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REPORT

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

Laboratory No.: 968551
Date: August 28, 2007
Collected: August 8, 2007
Received: August 8, 2007
Prep/ Analyzed: August 9, 2007
Analytical Batch: 08TUC07K

Investigation: **Turbidity by Method EPA 180.1**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
968551	SC-700B-WDR-111	14:30	NTU	1.00	0.100	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	968522-24	ND	ND	0.00%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	7.63	8.00	95.4%	90% - 110%	Yes
LCS	7.62	8.00	95.3%	90% - 110%	Yes
LCS	7.87	8.00	98.4%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon
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Analytical Services

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REPORT

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

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

Laboratory No.: 968551
Date: August 28, 2007
Collected: August 8, 2007
Received: August 8, 2007
Prep/ Analyzed: August 9, 2007
Analytical Batch: 08PH07H

Investigation:

pH by SM 4500-H B

Analytical Results pH

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	MDL	RL	Results
968551	SC-700B-WDR-111	14:30	10:45	pH Units	0.0700	2.00	8.12

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	968547-5	8.50	8.51	0.01	± 0.100 Units	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Difference (Units)	Acceptance Limits	QC Within Control
LCS	7.05	7.00	0.05	± 0.100 Units	Yes
LCS #1	7.07	7.00	0.07	± 0.100 Units	Yes
LCS #2	7.04	7.00	0.04	± 0.100 Units	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

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

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

Laboratory No.: 968551
Date: August 28, 2007
Collected: August 8, 2007
Received: August 8, 2007
Prep/ Analyzed: August 9, 2007
Analytical Batch: 08EC07E

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
968551	SC-700B-WDR-111	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	968458-1	1560	1560	0.00%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
CCS	694	706	98.3%	90% - 110%	Yes
CVS#1	986	999	98.7%	90% - 110%	Yes
CVS#2	984	999	98.5%	90% - 110%	Yes
LCS	694	706	98.3%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

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

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

Laboratory No.: 968551
Date: August 28, 2007
Collected: August 8, 2007
Received: August 8, 2007
Prep/ Analyzed: August 9, 2007
Analytical Batch: 08TDS07D

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

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
968551	SC-700B-WDR-111	mg/L	SM 2540C	250	4110

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	968458-1	886	884	0.11%	≤ 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS 1	495	500	99.0%	90% - 110%	Yes
LCS 2	496	500	99.2%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conlon

for Mona Nassimi, Manager
Analytical Services

Rec'd 08/08/07
968551

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CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-111]

968551

COC Number

TURNAROUND TIME 10 Days

DATE _____ PAGE 1 OF 1

COMPANY	E2
PROJECT NAME	PG&E Topock
PHONE	(530) 229-3303 FAX (530) 339-3303
ADDRESS	155 Grand Ave Ste 1000 Oakland, CA 94612
P.O. NUMBER	346129.IM.02.00 TEAM 1
SAMPLERS (SIGNATURE	

SAMPLE I.D.	DATE	TIME	DESCRIPTION	CR6 (218.6) Lab Filtered	Total Metals (200.7) Total Chromium	Specific Conductance (120.1)	pH (150.1)	TDS (160.1)	Turbidity (180.1)	NUMBER OF CONTAINERS	COMMENTS
SC-700B-WDR-111	8-8-07	14:30	Groundwater	x	x	x	x	x	x		pH = 2
											TOTAL NUMBER OF CONTAINERS

ALERT!!
Level III QC

For Sample Cond...
See Form Attac...

CHAIN OF CUSTODY SIGNATURE RECORD

	Signature	Printed Name	Company/ Agency	Date/ Time
Relinquished				
Received	Rafael Davila	Rafael	T.J.I	8-8-07 21:16
Relinquished				
Received				
Relinquished				
Received				

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

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August 28, 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-112 PROJECT, GROUNDWATER MONITORING,

TLI NO.: 968719

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-112 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 August 14, 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 the large number of samples in-house, the sample for Total Dissolved Chromium analysis was analyzed by method EPA 200.8, at a dilution of 5x, rather than EPA 200.7 as requested on the chain of custody.

Total Dissolved Chromium was re-analyzed due to the discrepancy between the Total Dissolved Chromium and Hexavalent Chromium results. The result from the re-analysis is reported.

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

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

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon

for Mona Nassimi
Manager, Analytical Services

K. R. P. Iyer

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

TRUESDAIL LABORATORIES, INC.

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

Laboratory No.: 968719
Date: August 28, 2007
Collected: August 14, 2007
Received: August 14, 2007

ANALYST LIST

EPA 120.1	Specific Conductivity	Tina Acquiat
SM 4500-H B	pH	Tina Acquiat
SM 2540C	Total Dissolved Solids	Tina Acquiat
EPA 180.1	Turbidity	Gautam Savani
SM 5310C	Total Organic Carbon	Hope Trinidad
EPA 200.8	Total Chromium	Michel Mendoza
EPA 218.6	Hexavalent Chromium	Jean-Paul Gleeson

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REPORT

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

Laboratory No.: 968719

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: 082707A

Date: August 28, 2007
Collected: August 14, 2007
Received: August 14, 2007
Prep/ Analyzed: August 27, 2007
Analytical Batch: 082707A

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

Analytical Results Total Chromium

TLI I.D.	Field I.D.	Units	Method	Run Time	DF	RL	Results
968719-1	SC-700B-WDR-112	mg/L	EPA 200.8	15:56	1.00	0.0010	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	968550-4	0.0452	0.0456	0.88%	≤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	968550-4	0.0452	5.00	0.0500	0.250	0.300	0.295	102%	70-130%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.0489	0.0500	97.8%	90% - 110%	Yes
MRCVS#1	0.0540	0.0500	108%	90% - 110%	Yes
MRCVS#2	0.0520	0.0500	104%	90% - 110%	Yes
ICS	0.0526	0.0500	105%	80% - 120%	Yes
LCS	0.0531	0.0500	106%	90% - 110%	Yes

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

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

Laboratory No.: 968719

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: August 28, 2007
Collected: August 14, 2007
Received: August 14, 2007
Prep/ Analyzed: August 14, 2007
Analytical Batch: 08CrH07L

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
968719-1	SC-700B-WDR-112	10:30	22:31	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	968680-2	0.00059	0.00059	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	968719-1	0.00	1.06	0.00100	0.00106	0.00103	0.00106	97.2%	90-110%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00478	0.00500	95.6%	90% - 110%	Yes
MRCVS#1	0.0101	0.0100	101%	95% - 105%	Yes
MRCVS#2	0.0100	0.0100	100%	95% - 105%	Yes
MRCVS#3	0.0101	0.0100	101%	95% - 105%	Yes
MRCVS#4	0.0101	0.0100	101%	95% - 105%	Yes
LCS	0.00478	0.00500	95.6%	90% - 110%	Yes
LCSD	0.00478	0.00500	95.6%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon

for Mona Nassimi, Manager
Analytical Services

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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

Laboratory No.: 968719
Date: August 28, 2007
Collected: August 14, 2007
Received: August 14, 2007
Prep/ Analyzed: August 15, 2007
Analytical Batch: 08TUC07R

Investigation: **Turbidity by Method EPA 180.1**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
968719-1	SC-700B-WDR-112	10:30	NTU	1.00	0.100	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	968693-13	ND	ND	0.00%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	8.20	8.00	103%	90% - 110%	Yes
LCS	7.85	8.00	98.1%	90% - 110%	Yes
LCS	7.82	8.00	97.8%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

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

Sample: 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.: 968719
Date: August 28, 2007
Collected: August 14, 2007
Received: August 14, 2007
Prep/ Analyzed: August 15, 2007
Analytical Batch: 08PH07O

Investigation: pH by SM 4500-H B

Analytical Results pH

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	MDL	RL	Results
968719-1	SC-700B-WDR-112	10:30	08:18	pH Units	0.0700	2.00	8.16

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	968719-1	8.16	8.17	0.01	± 0.100 Units	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Difference (Units)	Acceptance Limits	QC Within Control
LCS	7.04	7.00	0.04	± 0.100 Units	Yes
LCS #1	7.03	7.00	0.03	± 0.100 Units	Yes
LCS #2	7.01	7.00	0.01	± 0.100 Units	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sean Condon
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

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

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

Laboratory No.: 968719
Date: August 28, 2007
Collected: August 14, 2007
Received: August 14, 2007
Prep/ Analyzed: August 15, 2007
Analytical Batch: 08EC07J

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
968719-1	SC-700B-WDR-112	µmhos/cm	EPA 120.1	1.00	2.00	7020

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	968719-1	7020	7030	0.14%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
CCS	698	706	98.9%	90% - 110%	Yes
CVS#1	988	999	98.9%	90% - 110%	Yes
LCS	697	706	98.7%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon

For Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

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

Sample: 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.: 968719
Date: August 28, 2007
Collected: August 14, 2007
Received: August 14, 2007
Prep/ Analyzed: August 15, 2007
Analytical Batch: 08TDS07F

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

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
968719-1	SC-700B-WDR-112	mg/L	SM 2540C	250	3820

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	968645-6	1370	1350	0.74%	≤ 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS 1	497	500	99.4%	90% - 110%	Yes
LCS 2	495	500	99.0%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

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

Sample: 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: 08TOC07D

Laboratory No.: 968719

Date: August 28, 2007
Collected: August 14, 2007
Received: August 14, 2007
Prep/ Analyzed: August 17, 2007
Analytical Batch: 08TOC07D

Investigation: **Total Organic Carbon by SM 5310C**

Analytical Results Total Organic Carbon

TLI I.D.	Field I.D.	Units	Method	Run Time	DF	RL	Results
968719-2	SC-100B-WDR-112	mg/L	SM 5310C	17:47	1.00	0.300	0.488

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	968753	4.34	4.30	0.93%	≤20%	Yes

QC Std I.D.	Lab Number	Conc.of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	968753	4.34	1.00	10.0	10.0	13.3	14.3	89.6%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	9.45	10.0	94.5%	90% - 110%	No
MRCVS#1	9.25	10.0	92.5%	90% - 110%	Yes
MRCVS#2	9.42	10.0	94.2%	90% - 110%	Yes
LCS	19.5	20.0	97.5%	90% - 110%	Yes
LCSD	19.3	20.0	96.5%	90% - 110%	Yes

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Cawlon

for Mona Nassimi, Manager
Analytical Services

968719

TRUESDAIL LABORATORIES, INC.
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(714)730-6239 FAX: (714) 730-6462
www.truesdail.com

CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-112]

COC Number

TURNAROUND TIME 10 Days

DATE 8-14-07 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	Jason Holbert

Rec'd 08/14/07
Lab.# 968719

SAMPLE I.D.	DATE	TIME	DESCRIPTION	CR6 (218.6) Lab Filtered	Total Metals (200.7) Total Chromium	Specific Conductance (120.1)	pH (150.1)	TDS (160.1)	Turbidity (180.1)	TCC	NUMBER OF CONTAINERS	COMMENTS
-1 SC-700B-WDR-112	8-14-07	1030	Groundwater	x	x	x	x	x	x		3	pH=2
-2 SC-700B-WDR-112	8-14-07	10:33								X	2	TOTAL NUMBER OF CONTAINERS

For Sample Conditions See Form Attached

ALERT!!
Level III QC

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Jason Holbert	OMF	8/14-07 1600
Signature (Received)	David S	TLI	8/14/07 2215
Signature (Relinquished)			
Signature (Received)			
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

TRUESDAIL LABORATORIES, INC.

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www.truesdail.com

September 4, 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-113 PROJECT, GROUNDWATER MONITORING,

TLI NO.: 968955

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-113 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 August 22, 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 the large number of samples in-house, the sample for Total Dissolved Chromium analysis was analyzed by method EPA 200.8, at a dilution of 5x, rather than EPA 200.7 as requested on the chain of custody.

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

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

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon
for Mona Nassimi
Manager, Analytical Services

K. R. P. Iyer

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

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

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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

Laboratory No.: 968955
Date: September 4, 2007
Collected: August 22, 2007
Received: August 22, 2007

ANALYST LIST

METHOD	PARAMETER	ANALYST
EPA 120.1	Specific Conductivity	Tina Acquiat
SM 4500-H B	pH	Tina Acquiat
SM 2540C	Total Dissolved Solids	Tina Acquiat
EPA 180.1	Turbidity	Gautam Savani
SM 5310C	Total Organic Carbon	Hope Trinidad
EPA 200.8	Total Chromium	Michel Mendoza
EPA 218.6	Hexavalent Chromium	Jean-Paul Gleeson

TRUESDAIL LABORATORIES, INC.

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REPORT

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

Sample: 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: 082307B

Laboratory No.: 968955

Date: September 4, 2007
Collected: August 22, 2007
Received: August 22, 2007
Prep/ Analyzed: August 23, 2007
Analytical Batch: 082307B

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

Analytical Results Total Chromium

TLI I.D.	Field I.D.	Units	Method	Run Time	DF	RL	Results
968955-1	SC-700B-WDR-113	mg/L	EPA 200.8	17:14	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	968798-1	0.0212	0.0211	0.47%	≤20%	Yes

QC Std I.D.	Lab Number	Conc.of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	968798-1	0.0212	5.00	0.0500	0.250	0.221	0.271	79.9%	70-130%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.0477	0.0500	95.4%	90% - 110%	Yes
MRCVS#1	0.0479	0.0500	95.8%	90% - 110%	Yes
MRCVS#2	0.0474	0.0500	94.8%	90% - 110%	Yes
ICS	0.0489	0.0500	97.8%	80% - 120%	Yes
LCS	0.0490	0.0500	98.0%	90% - 110%	Yes

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

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

Sample: 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.: 968955

Date: September 4, 2007
Collected: August 22, 2007
Received: August 22, 2007
Prep/ Analyzed: August 22, 2007
Analytical Batch: 08CrH07V

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
968955-1	SC-700B-WDR-113	12:00	21:07	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	968955-1	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	968955-1	0.00	1.06	0.00100	0.00106	0.00100	0.00106	94.3%	90-110%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00501	0.00500	100%	90% - 110%	Yes
MRCVS#1	0.0102	0.0100	102%	95% - 105%	Yes
MRCVS#2	0.0102	0.0100	102%	95% - 105%	Yes
LCS	0.00503	0.00500	101%	90% - 110%	Yes
LCSD	0.00503	0.00500	101%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon

for Mona Nassimi, Manager
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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
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.: 968955
Date: September 4, 2007
Collected: August 22, 2007
Received: August 22, 2007
Prep/ Analyzed: August 23, 2007
Analytical Batch: 08TUC07X

Investigation: **Turbidity by Method EPA 180.1**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
968955-1	SC-700B-WDR-113	12:00	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	968934-1	ND	ND	0.00%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	8.59	8.00	107%	90% - 110%	Yes
LCS	8.30	8.00	104%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon
for - Mona Nassimi, Manager
Analytical Services

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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

Investigation:

Laboratory No.: 968955
Date: September 4, 2007
Collected: August 22, 2007
Received: August 22, 2007
Prep/ Analyzed: August 23, 2007
Analytical Batch: 08PH07W

pH by SM 4500-H B

Analytical Results pH

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	MDL	RL	Results
968955-1	SC-700B-WDR-113	12:00	08:40	pH Units	0.0700	2.00	8.14

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	968955-1	8.14	8.14	0.00	± 0.100 Units	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon

for Mona Nassimi, Manager
Analytical Services

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REPORT

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

Sample: 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.: 968955
Date: September 4, 2007
Collected: August 22, 2007
Received: August 22, 2007
Prep/ Analyzed: August 23, 2007
Analytical Batch: 08EC07N

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
968955-1	SC-700B-WDR-113	µmhos/cm	EPA 120.1	1.00	2.00	7070

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	968955-1	7070	7070	0.00%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
CCS	694	706	98.3%	90% - 110%	Yes
CVS#1	984	999	98.5%	90% - 110%	Yes
LCS	693	706	98.2%	90% - 110%	Yes

Respectfully submitted,
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Sean Condon
for Mona Nassimi, Manager
Analytical Services

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REPORT

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

Sample: 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.: 968955
Date: September 4, 2007
Collected: August 22, 2007
Received: August 22, 2007
Prep/ Analyzed: August 23, 2007
Analytical Batch: 08TDS07J

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

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
968955-1	SC-700B-WDR-113	mg/L	SM 2540C	250	3860

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	968955-1	3860	3910	0.64%	≤ 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS 1	497	500	99.4%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

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

Sample: 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: 08TOC07E

Laboratory No.: 968955

Date: September 4, 2007
Collected: August 22, 2007
Received: August 22, 2007
Prep/ Analyzed: August 24, 2007
Analytical Batch: 08TOC07E

Investigation: **Total Organic Carbon by SM 5310C**

Analytical Results Total Organic Carbon

TLI I.D.	Field I.D.	Units	Method	Run Time	DF	RL	Results
968955-2	SC-100B-WDR-113	mg/L	SM 5310C	15:11	1.00	0.300	0.613

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	968941	3.59	3.75	4.36%	≤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	968941	3.59	1.00	10.0	10.0	13.1	13.6	95.1%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	9.22	10.0	92.2%	90% - 110%	No
MRCVS#1	9.10	10.0	91.0%	90% - 110%	Yes
LCS	19.5	20.0	97.5%	90% - 110%	Yes

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.
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CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-113]

968955

COC Number

TURNAROUND TIME 10 Days

DATE _____ PAGE 1 OF 1

Rec'd 08/22/07
Lab.# 968955

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 I.D.	DATE	TIME	DESCRIPTION	CR6 (218.6) Lab Filtered	Total Metals (200.7) Total Chromium	Specific Conductance (120.1)	pH (150.1)	TDS (160.1)	Turbidity (180.1)	70 C								NUMBER OF CONTAINERS	COMMENTS
-1	SC-700B-WDR-113	8-22-07	1200	Groundwater	x	x	x	x	x	x									3 2	pH-2
-2	SC-100B-WDR-113	8-22-07	1200								X								5	TOTAL NUMBER OF CONTAINERS

ALERT !! Level III QC

For Sample Conditions See Form Attached

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Joe Andis	OMI	8-22-07 1300
Signature (Received)	Rafael Davila	T.H.I	8-22-07 2:35
Signature (Relinquished)	Rafael Davila	T.H.I	8-22-07 19:30
Signature (Received)			
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

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September 6, 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-114 PROJECT, GROUNDWATER MONITORING,

TLI NO.: 969136

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-114 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 August 29, 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.

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

Due to the large number of samples in-house, the sample for Total Dissolved Chromium analysis was analyzed by method EPA 200.8, rather than EPA 200.7 as requested on the chain of custody.

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

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

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon

for 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

Laboratory No.: 969136
Date: September 6, 2007
Collected: August 29, 2007
Received: August 29, 2007

ANALYST LIST

EPA 120.1	Specific Conductivity	Tina Acquiat
SM 4500-H B	pH	Tina Acquiat
SM 2540C	Total Dissolved Solids	Tina Acquiat
EPA 180.1	Turbidity	Gautam Savani
SM 5310C	Total Organic Carbon	Hope Trinidad
EPA 200.8	Total Chromium	Michel Mendoza
EPA 218.6	Hexavalent Chromium	Jean-Paul Gleeson

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REPORT

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

Sample: 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: 090607A

Laboratory No.: 969136

Date: September 6, 2007
Collected: August 29, 2007
Received: August 29, 2007
Prep/ Analyzed: September 6, 2007
Analytical Batch: 090607A

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

Analytical Results Total Chromium

TLI I.D.	Field I.D.	Units	Method	Run Time	DF	RL	Results
969136-1	SC-700B-WDR-114	mg/L	EPA 200.8	16:16	1.00	0.0010	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	969136	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	969136	0.00	1.00	0.0500	0.0500	0.0433	0.0500	86.6%	70-130%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.0513	0.0500	103%	90% - 110%	Yes
MRCVS#1	0.0514	0.0500	103%	90% - 110%	Yes
ICS	0.0526	0.0500	105%	80% - 120%	Yes
LCS	0.0505	0.0500	101%	90% - 110%	Yes

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conder

fo - Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

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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.: 969136

Date: September 6, 2007
Collected: August 29, 2007
Received: August 29, 2007
Prep/ Analyzed: August 30, 2007
Analytical Batch: 08CrH07Y

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
969136-1	SC-700B-WDR-114	14:45	06:36	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	969136-1	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	969136-1	0.000064	1.06	0.00100	0.00106	0.00115	0.00112	102%	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	0.0101	0.0100	101%	95% - 105%	Yes
LCS	0.00485	0.00500	97.0%	90% - 110%	Yes
LCSD	0.00483	0.00500	96.6%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon

for - Mona Nassimi, Manager
Analytical Services

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REPORT

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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.: 969136
Date: September 6, 2007
Collected: August 29, 2007
Received: August 29, 2007
Prep/ Analyzed: August 29, 2007
Analytical Batch: 08TUC07AA

Investigation: **Turbidity by Method EPA 180.1**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
969136-1	SC-700B-WDR-114	14:45	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	969082-4	ND	ND	0.00%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	7.48	8.00	93.5%	90% - 110%	Yes
LCS	8.05	8.00	101%	90% - 110%	Yes
LCS	7.79	8.00	97.4%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conlon,
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

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

Sample: 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.: 969136
Date: September 6, 2007
Collected: August 29, 2007
Received: August 29, 2007
Prep/ Analyzed: August 30, 2007
Analytical Batch: 08PH07CC

Investigation:

pH by SM 4500-H B

Analytical Results pH

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	MDL	RL	Results
969136-1	SC-700B-WDR-114	14:45	09:40	pH Units	0.0700	2.00	8.02

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	969136-1	8.02	8.04	0.02	± 0.100 Units	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Difference (Units)	Acceptance Limits	QC Within Control
LCS	7.02	7.00	0.02	± 0.100 Units	Yes
LCS #1	7.07	7.00	0.07	± 0.100 Units	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conlon
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

EXCELLENCE IN INDEPENDENT TESTING

Established 1931

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

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

Laboratory No.: 969136
Date: September 6, 2007
Collected: August 29, 2007
Received: August 29, 2007
Prep/ Analyzed: August 30, 2007
Analytical Batch: 08EC07S

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	DF	RL	Results
969136-1	SC-700B-WDR-114	µmhos/cm	EPA 120.1	1.00	2.00	6820

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	969136-1	6820	6820	0.00%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
CCS	690	706	97.7%	90% - 110%	Yes
CVS#1	980	999	98.1%	90% - 110%	Yes
LCS	689	706	97.6%	90% - 110%	Yes

Respectfully submitted,
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REPORT

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

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

Laboratory No.: 969136
Date: September 6, 2007
Collected: August 29, 2007
Received: August 29, 2007
Prep/ Analyzed: August 30, 2007
Analytical Batch: 08TDS07M

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

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
969136-1	SC-700B-WDR-114	mg/L	SM 2540C	250	4110

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	969136-1	4110	4150	0.48%	≤ 5%	Yes

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

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

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

Sample: 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: 09TOC07A

Laboratory No.: 969136

Date: September 6, 2007
Collected: August 29, 2007
Received: August 29, 2007
Prep/ Analyzed: September 6, 2007
Analytical Batch: 09TOC07A

Investigation: **Total Organic Carbon by SM 5310C**

Analytical Results Total Organic Carbon

TLI I.D.	Field I.D.	Units	Method	Run Time	DF	RL	Results
969136-2	SC-100B-WDR-114	mg/L	SM 5310C	10:30	1.00	0.300	0.401

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	969123	5.06	5.12	1.18%	≤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	969123	5.06	1.00	10.0	10.0	14.4	15.1	93.4%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	9.61	10.0	96.1%	90% - 110%	Yes
MRCVS#1	9.42	10.0	94.2%	90% - 110%	Yes
LCS	18.6	20.0	93.0%	90% - 110%	Yes

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conlon

for Mona Nassimi, Manager
Analytical Services

969136

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

[IM3Plant-WDR-114]

COC Number

TURNAROUND TIME 5 Days

DATE _____ PAGE 1 OF 1

COMPANY E2

PROJECT NAME PG&E Topock

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

ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612

P.O. NUMBER 346129.IM.02.00 TEAM 1

SAMPLERS (SIGNATURE) [signature]

Rec'd 08/29/07
969136

SAMPLE I.D.	DATE	TIME	DESCRIPTION	CR6 (218.6) Lab Filtered	Total Metals (200.7) Total Chromium	Specific Conductance (120.1)	pH (150.1)	TDS (160.1)	Turbidity (180.1)	TOC	NUMBER OF CONTAINERS	COMMENTS
-1 SC-700B-WDR-114	8-29-07	1145	Groundwater	x	x	x	x	x	x	x	3 2	pH=2
-2 SC-100B WDR-114	8-29-07	1145	GROUNDWATER								5	TOTAL NUMBER OF CONTAINERS

ALERT !!
Level III QC

For Sample Conditions See Form Attached

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished) [signature]	DAVE CHANEY	OMI	8/29/07 1500
Signature (Received) [signature]	[illegible]	T.L.I.	8/29/07 3:00
Signature (Relinquished) [signature]	David S	T.L.I	8/29/07 2010
Signature (Received)			
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS: