



**Pacific Gas and
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March 15, 2006

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

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

Dear Mr. Perdue:

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

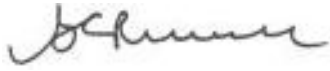
WDRs under Board Order R7-2004-0103 apply to IM No. 3 Treatment System discharge by subsurface injection wells only. In addition, the Water Board issued WDRs for IM No. 3 Treatment System discharge to the Colorado River (Board Order R7-2004-0100) and IM No. 3 Treatment System discharge to the PG&E Compressor Station (Board Order R7-2004-0080).

To date, there has been no IM No. 3 Treatment System discharge to the Colorado River or the PG&E Compressor Station. PG&E has no plans to discharge IM No. 3 Treatment System effluent to the Colorado River or the PG&E Compressor Station at this time. Reporting of Board Order R7-2004-0080 and Board Order R7-2004-0100 activities are submitted under separate covers.

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March 15, 2006

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

Sincerely,

A handwritten signature in dark ink, appearing to read "Curt Russell", written in a cursive style.

Curt Russell
Topock Onsite Project Manager

Enclosures:

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

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

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

**Waste Discharge Requirements
Board Order No. R7-2004-0103
PG&E Topock Compressor Station
Needles, California**

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

on behalf of
Pacific Gas and Electric Company

March 15, 2006


CH2MHILL
155 Grand Avenue, Suite 1000
Oakland, CA 94612

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

Prepared for
Pacific Gas and Electric Company

March 15, 2006

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



Dennis Fink, PE No. 68986
Project Engineer



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Acronyms and Abbreviations

| | |
|-------------|--|
| gpm | gallons per minute |
| IM | Interim Measure |
| MBC | MBC Applied Environmental Sciences Laboratories |
| MRP | Monitoring and Reporting Program |
| PG&E | Pacific Gas and Electric Company |
| STL | Severn Trent Laboratories, Inc. |
| Truesdail | Truesdail Laboratories, Inc. |
| Water Board | California Regional Water Quality Control Board, Colorado River Basin Region |
| WDR | Waste Discharge Requirements |

1.0 Introduction

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

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

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

In addition to Board Order No. R7-2004-0103, the Water Board issued Waste Discharge Requirements (WDRs) for IM No. 3 treatment system discharge to the Colorado River (Board Order R7-2004-0100) and IM No. 3 treatment system discharge to the PG&E Compressor Station (Board Order R7-2004-0080). To date, there has been no IM No. 3 treatment system discharge to the Colorado River or the PG&E Compressor Station. PG&E has no plans to discharge IM No. 3 treatment system effluent to the Colorado River or the PG&E Compressor Station at this time. Reporting of Board Order R7-2004-0080 and Board Order R7-2004-0100 activities will be submitted under separate cover.

2.0 Sampling Station Locations

Table 1 lists the locations of sampling stations. The locations of the sampling stations are provided in the process and instrumentation diagrams: Figures TP-PR-10-10-04, TP-PR-10-10-08, and TP-PR-10-10-06.

3.0 Description of Activities

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

During February 2006, groundwater was pumped from extraction wells TW-3D and PE-1. The target groundwater extraction system pump rate was 135 gallons per minute (gpm) during February 2006 (excluding planned and unplanned downtime, which is described in Section 4.0).

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

- **Treated Effluent:** Treated water that is discharged to the injection well(s).
- **Reverse Osmosis Concentrate:** Treatment by-product that is transported and disposed offsite.
- **Sludge:** Treatment by-product that is transported offsite for disposal 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 February 2006 treatment system monthly average flow rates are presented in Table 2. System influent flow rate was measured by flow meters at groundwater extraction wells TW-2S, TW-2D, TW-3D, and PE-1 (Figure TP-RP-10-10-03). The treatment system effluent flow rate was measured by flow meters in the piping into injection well IW-2 and IW-3 (Figure TP-RP-10-10-11). The reverse osmosis concentrate flow rate was measured by a flow meter at the piping carrying water from reverse osmosis concentrate tank T-701 to the truck load-out station (Figure TP-RP-10-10-08).

No planned extraction system downtime occurred during February 2006. Periods of unplanned extraction system downtime are summarized below.

- **February 8, 14, 17, 24, and 26:** Extraction well PE-1 was automatically shut down for short-periods due to low water level above the well pump. This alarm condition protects the submersible well pump from damage due to overheating. The well pump was re-started after groundwater levels had sufficiently recovered in the well. Periods of PE-1 downtime occurred on February 8 (50 minutes), February 14 (10 minutes), February 17 (145 minutes), February 24 (250 minutes over two periods), and February 26 (10 minutes). Extraction well TW-3D continued to operate during these periods of PE-1 downtime.
- **February 25:** The IM-3 extraction well system was shut down at 2:53 pm on February 25 when switching microfilter membrane modules took longer than planned. Extraction wells TW-3D and PE-1 were re-started at 3:55 pm. TW-3D was shut down again from 4:51 pm until 5:40 pm until normal operations resumed. Extraction system downtime (i.e. no extraction wells operating) was 63 minutes.

5.0 Sampling and Analytical Procedures

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

The samples were stored in a cooler at 4° Celsius and transported to Truesdail or STL via courier service under chain-of-custody documentation. Truesdail transported a portion of the sludge sample to MBC Applied Environmental Sciences Laboratories (MBC) for the aquatic bioassay analysis.

Truesdail is certified by the California Department of Health Services (Certification #1237) under the State of California's Environmental Laboratory Accreditation Program. STL is certified by the California Department of Health Services (Certification #1118) under the Environmental Laboratory Accreditation Program. MBC is certified by the California Department of Health Services (Certification # 1788) under the State of California's Environmental Laboratory Accreditation Program.

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

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

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

Groundwater quality is being monitored in observation and compliance wells according to procedures and schedules approved in the *Groundwater Compliance Monitoring Plan for Interim Measures No. 3 Injection Area* (CH2M HILL 2005). Quarterly groundwater monitoring analytical results will be reported in a separate document, in conjunction with groundwater level maps of the same monitoring wells.

6.0 Analytical Results

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

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

- The influent was sampled monthly; sample date February 1, 2006.
- The effluent was sampled weekly; sample dates February 1, 8, 15, and 22, 2006.
- The reverse osmosis concentrate was sampled monthly; sample date February 1, 2006.
- The sludge was sampled monthly; sample date February 15, 2006. WDR requirements state that sludge is to be sampled each time sludge is transported offsite unless sludge is transported offsite more frequently than monthly, in which case the sampling frequency shall be monthly. The sludge is required to have an aquatic bioassay test quarterly; an aquatic bioassay test was conducted with a sludge sample from the February 15, 2006 sampling event.

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

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

7.0 Conclusions

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

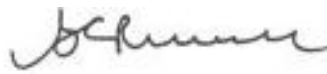
In addition, no incidents of non-compliance were identified during the reporting period, and no events that caused an immediate or potential threat to human health or the environment, or new releases of hazardous waste or hazardous waste constituents, or new solid waste management units were identified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

8.0 Certification

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

Certification Statement:

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

Signature:  _____

Name: Curt Russell

Company: Pacific Gas and Electric Company

Title: Topock Onsite Project Manager

Date: March 14, 2006

TABLE 1
Sampling Station Descriptions
February 2006 Report for IM No. 3 Groundwater Treatment System

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

Note:

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

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

| Parameter | System Influent ^{a,d} | System Effluent ^{b,d} | Reverse Osmosis Concentrate ^{c,d} |
|--------------------------------|--------------------------------|--------------------------------|--|
| Average Monthly Flowrate (gpm) | 134.1 | 121.4 | 11.8 |

gpm: gallons per minute.

^a Extraction wells TW-3D and PE-1 were operated during February 2006.

^b All effluent was discharged into injection wells IW-2 and IW-3 during February 2006.

^c Reverse Osmosis flow meter reading from FIT-701.

^d The difference between influent flow rate and the sum of the effluent and reverse osmosis concentrate flow rates is approximately 0.6 percent, which is within the range of acceptable accuracy considering the margin of error for onsite instrumentation, the water contained within the sludge, and differences in the inventory of water in the treatment system between the beginning and end of the reporting period.

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

| Required Sampling Frequency | | Monthly | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|-----------------------------|---------|-----------|----------------------|---------|----------|---------------------|-----------|----------------|----------|----------|----------|-------|---------|----------|----------|-----------|------------|---------|----------------|----------------|---------|----------|---------|
| <div>Sample ID</div> <div>Date</div> | Analytes Units ^b | TDS | Turbidity | Specific Conductance | pH | Chromium | Hexavalent Chromium | Aluminium | Ammonia (as N) | Antimony | Arsenic | Barium | Boron | Copper | Fluoride | Lead | Manganese | Molybdenum | Nickel | Nitrate (as N) | Nitrite (as N) | Sulfate | Iron | Zinc |
| | | mg/L | NTU | µmhos/cm | pHunits | µg/L | µg/L | µg/L | mg/L | µg/L | µg/L | µg/L | mg/L | µg/L | mg/L | µg/L | µg/L | µg/L | µg/L | µg/L | mg/L | mg/L | mg/L | µg/L |
| SC-100B-WDR-032 | 2/1/2006 | 6040 | ND (0.1) | 11000 | 7.42 | 2280 | 2410 | ND (52) | 1.09 | ND (3.0) | ND (5.0) | ND (300) | 1.38 | ND (10) | 2.79 | ND (2.0) | ND (500) | 10.2 | ND (20) | 3.49 | 0.007 | 742 | ND (300) | ND (20) |

NOTES:

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

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

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

TABLE 4
Board Order No. R7-2004-0103 Waste Discharge Requirements (WDRs)
Effluent Monitoring Results^a
February 2006 Monthly Report for Interim Measures No.3 Groundwater Treatment System

| WDRs Effluent Limits ^b | Ave. Monthly | NA | NA | NA | 6.5-8.4 | 25 | 8 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
|--|--------------|--------|-----------|----------------------|---------|----------|---------------------|-----------|----------------|----------|----------|----------|-------|---------|----------|----------|-----------|------------|---------|----------------|----------------|---------|----------|------|------|
| | Max Daily | NA | NA | NA | 6.5-8.4 | 50 | 16 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Required Sampling Frequency | | Weekly | | | | | | Monthly | | | | | | | | | | | | | | | | | |
| <div><div></div><div>Analytes Units ^c</div></div> | Date | TDS | Turbidity | Specific Conductance | pH | Chromium | Hexavalent Chromium | Aluminium | Ammonia (as N) | Antimony | Arsenic | Barium | Boron | Copper | Fluoride | Lead | Manganese | Molybdenum | Nickel | Nitrate (as N) | Nitrite (as N) | Sulfate | Iron | Zinc | |
| | | mg/L | NTU | µmhos/cm | pHunits | µg/L | µg/L | µg/L | mg/L | µg/L | µg/L | µg/L | µg/L | mg/L | µg/L | mg/L | µg/L | µg/L | µg/L | µg/L | mg/L | mg/L | mg/L | µg/L | µg/L |
| SC-700B-WDR-032 | 2/1/2006 | 4440 | ND (0.1) | 7450 | 8.13 | ND (1.0) | ND (1.0) | ND (52) | 0.70 | ND (3.0) | ND (5.0) | ND (300) | 1.45 | ND (10) | 1.92 | ND (2.0) | ND (500) | 6.20 | ND (20) | 2.81 | ND (0.005) | 528 | ND (300) | 20.8 | |
| SC-700B-WDR-033 | 2/8/2006 | 4230 | ND (0.1) | 7650 | 8.14 | ND (1.0) | ND (1.0) | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |
| SC-700B-WDR-034 | 2/15/2006 | 4140 | ND (0.1) | 7750 | 8.07 | ND (1.0) | ND (1.0) | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |
| SC-700B-WDR-035 | 2/22/2006 | 4190 | ND (0.1) | 7600 | 7.76 | ND (1.0) | ND (1.0) | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |

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

^a Sampling location for all Effluent Samples is tap on pipe downstream from tank T-700 to injection well IW-2 (see attached P&ID TP-PR-10-10-04)
^b In addition to the listed effluent limits, the WDRs state that the effluent shall not contain heavy metals, chemicals, pesticides or other constituents in concentrations toxic to human health.
^c Units reported in this table are those units required in the WDRs

TABLE 5
Board Order No. R7-2004-0103 Waste Discharge Requirements (WDRs)
Reverse Osmosis Concentrate Results ^a
February 2006 Monthly Report for Interim Measures No.3 Groundwater Treatment System

| Required Sampling Frequency | | Monthly | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---------|----------------------|---------|------------|---------------------|-----------|-----------|----------|-------------|-------------|-----------|-----------|----------|-------------|------------|-------------|-----------|------------|-----------|-------------|----------|--------|--|
| <div><div></div><div>Sample ID</div></div> | <div><div>Analytes</div><div>Units ^b</div></div> | TDS | Specific Conductance | pH | Chromium | Hexavalent Chromium | Antimony | Arsenic | Barium | Beryllium | Cadmium | Cobalt | Copper | Fluoride | Lead | Molybdenum | Mercury | Nickel | Selenium | Silver | Thallium | Vanadium | Zinc | |
| | <div>Date</div> | mg/L | µmhos/cm | pHUnits | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | |
| SC-701-WDR-032 | 2/1/2006 | 24000 | 40100 | 8.07 | ND (0.001) | ND (0.002) | ND (0.01) | ND (0.01) | ND (0.3) | ND (0.0052) | ND (0.0052) | ND (0.01) | ND (0.01) | 10.8 | ND (0.0052) | 0.0471 | ND (0.0002) | ND (0.02) | ND (0.021) | ND (0.01) | ND (0.0052) | 0.0332 | 0.0429 | |

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

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

TABLE 6
Board Order No. R7-2004-0103 Waste Discharge Requirements (WDRs)
Sludge Monitoring Results^a
February 2006 Monthly Report for Interim Measures No.3 Groundwater Treatment System

| Required Sampling Frequency | | | Monthly ^c | | | | | | | | | | | | | | | | | | Quaterly ^d | | | |
|-----------------------------|-----------|--------------------------------|----------------------|---------------------------------|-------------------|------------------|-----------------|--------------------|------------------|-----------------|-----------------|-------------------|---------------|---------------------|------------------|-----------------|-------------------|-----------------|-------------------|-------------------|-----------------------|--|--|--|
| Sample ID | Date | Analytes Units ^b | Chromium mg/kg | Hexavalent Chromium mg/kg | Antimony mg/kg | Arsenic mg/kg | Barium mg/kg | Beryllium mg/kg | Cadmium mg/kg | Cobalt mg/kg | Copper mg/kg | Fluoride mg/kg | Lead mg/kg | Molybdenum mg/kg | Mercury mg/kg | Nickel mg/kg | Selenium mg/kg | Silver mg/kg | Thallium mg/kg | Vanadium mg/kg | Zinc mg/kg | Bioassay % Survival at 750 mg/L ^e | Bioassay % Survival at 500 mg/L ^e | Bioassay % Survival at 250 mg/L ^e |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| SC-Sludge-WDR-034 | 2/15/2006 | | 26000 | 140 | ND (45) | 13.0 | 130 | ND (3.8) | ND (3.8) | ND (38) | 140 | 9.81 | ND (3.8) | 59.0 | 2.10 | 57.0 | ND (3.8) | ND (7.5) | 21.0 | 110 | 300 | 100 | 100 | 100 |

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

^a Sampling Location for all Sludge Samples is the Sludge Collection Tanks (see attached P&ID TP-PR-10-10-06)
^b Units reported in this table are those units required in the WDR
^c Sludge shall be tested for the listed constituents each time sludge is transported offsite, unless transport is more frequent than monthly, in which case the sampling frequency shall be monthly.
^d Sludge shall have an aquatic bioassay test performed each time sludge is transported offsite, unless transport is more frequent than quaterly, in which case the sampling frequency shall be quaterly.
^e Concentration of sludge per 1 liter of water.

TABLE 7

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

Monitoring Information

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

| Location | Sample ID | Sampler Name | Sample Date | Sample Time | Lab | Analysis Method | Parameter | Analysis Date | Lab Technician |
|----------|-----------------|--------------|-------------|-------------|-----|-----------------|-----------|---------------|----------------|
| SC-100B | SC-100B-WDR-032 | Brian Dobbs | 2/1/2006 | 2:00:00 PM | TLI | EPA 120.1 | SC | 2/2/2006 | Alex Hernandez |
| | | | | | TLI | EPA 150.1 | PH | 2/2/2006 | Alex Hernandez |
| | | | | | TLI | EPA 160.1 | TDS | 2/2/2006 | Emilia Haley |
| | | | | | TLI | EPA 180.1 | TRB | 2/2/2006 | Gautam Savani |
| | | | | | TLI | EPA 300.0 | FL | 2/2/2006 | Iordan Stavrev |
| | | | | | TLI | EPA 300.0 | NO3N | 2/2/2006 | Iordan Stavrev |
| | | | | | TLI | EPA 300.0 | SO4 | 2/2/2006 | Iordan Stavrev |
| | | | | | TLI | EPA 350.2 | NH3N | 2/3/2006 | Alex Hernandez |
| | | | | | TLI | EPA 354.1 | NO2N | 2/2/2006 | Hope Trinidad |
| | | | | | TLI | EPA 6010B | NI | 2/2/2006 | Riddhi Patel |
| | | | | | TLI | EPA 6010B | ZN | 2/2/2006 | Riddhi Patel |
| | | | | | TLI | EPA 6010B | MN | 2/2/2006 | Riddhi Patel |
| | | | | | TLI | EPA 6010B | FE | 2/2/2006 | Riddhi Patel |
| | | | | | TLI | EPA 6010B | BA | 2/2/2006 | Riddhi Patel |
| | | | | | TLI | EPA 6010B | B | 2/2/2006 | Riddhi Patel |
| | | | | | TLI | EPA 6010B | CRT | 2/2/2006 | Riddhi Patel |
| | | | | | TLI | EPA 6010B | AL | 2/2/2006 | Riddhi Patel |
| | | | | | TLI | SW 6020A | MO | 2/16/2006 | Victoria Than |
| | | | | | TLI | SW 6020A | CU | 2/16/2006 | Victoria Than |
| | | | | | TLI | SW 6020A | SB | 2/16/2006 | Victoria Than |
| | | | | | TLI | SW 6020A | PB | 2/16/2006 | Victoria Than |
| | | | | | TLI | SW 6020A | AS | 2/16/2006 | Victoria Than |
| | | | | | TLI | SW 7199 | CR6 | 2/2/2006 | Jorge Arriaga |
| SC-700B | SC-700B-WDR-032 | Brian Dobbs | 2/1/2006 | 2:05:00 PM | TLI | EPA 120.1 | SC | 2/2/2006 | Alex Hernandez |
| | | | | | TLI | EPA 150.1 | PH | 2/2/2006 | Alex Hernandez |
| | | | | | TLI | EPA 160.1 | TDS | 2/2/2006 | Emilia Haley |
| | | | | | TLI | EPA 180.1 | TRB | 2/2/2006 | Gautam Savani |
| | | | | | TLI | EPA 300.0 | SO4 | 2/2/2006 | Iordan Stavrev |
| | | | | | TLI | EPA 300.0 | NO3N | 2/2/2006 | Iordan Stavrev |
| | | | | | TLI | EPA 300.0 | FL | 2/2/2006 | Iordan Stavrev |
| | | | | | TLI | EPA 350.2 | NH3N | 2/3/2006 | Alex Hernandez |
| | | | | | TLI | EPA 354.1 | NO2N | 2/2/2006 | Hope Trinidad |
| | | | | | TLI | EPA 6010B | MN | 2/2/2006 | Riddhi Patel |
| | | | | | TLI | EPA 6010B | AL | 2/2/2006 | Riddhi Patel |
| | | | | | TLI | EPA 6010B | B | 2/2/2006 | Riddhi Patel |

TABLE 7

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

Monitoring Information

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

| Location | Sample ID | Sampler Name | Sample Date | Sample Time | Lab | Analysis Method | Parameter | Analysis Date | Lab Technician |
|----------|-----------------|--------------|-------------|-------------|-----|-----------------|-----------|---------------|----------------|
| SC-700B | SC-700B-WDR-032 | Brian Dobbs | 2/1/2006 | 2:05:00 PM | TLI | EPA 6010B | BA | 2/2/2006 | Riddhi Patel |
| | | | | | TLI | EPA 6010B | CRT | 2/9/2006 | Riddhi Patel |
| | | | | | TLI | EPA 6010B | FE | 2/2/2006 | Riddhi Patel |
| | | | | | TLI | EPA 6010B | NI | 2/2/2006 | Riddhi Patel |
| | | | | | TLI | EPA 6010B | ZN | 2/2/2006 | Riddhi Patel |
| | | | | | TLI | SW 6020A | CU | 2/16/2006 | Victoria Than |
| | | | | | TLI | SW 6020A | SB | 2/16/2006 | Victoria Than |
| | | | | | TLI | SW 6020A | MO | 2/16/2006 | Victoria Than |
| | | | | | TLI | SW 6020A | AS | 2/16/2006 | Victoria Than |
| | | | | | TLI | SW 6020A | PB | 2/16/2006 | Victoria Than |
| | | | | | TLI | SW 7199 | CR6 | 2/2/2006 | Jorge Arriaga |
| SC-700B | SC-700B-WDR-033 | Gary Sibble | 2/8/2006 | 12:08:00 PM | TLI | EPA 120.1 | SC | 2/10/2006 | Alex Hernandez |
| | | | | | TLI | EPA 150.1 | PH | 2/9/2006 | Alex Hernandez |
| | | | | | TLI | EPA 160.1 | TDS | 2/9/2006 | Emilia Haley |
| | | | | | TLI | EPA 180.1 | TRB | 2/9/2006 | Gautam Savani |
| | | | | | TLI | EPA 6010B | CRT | 2/13/2006 | Riddhi Patel |
| | | | | | TLI | SW 7199 | CR6 | 2/9/2006 | Jorge Arriaga |
| SC-700B | SC-700B-WDR-034 | David Chaney | 2/15/2006 | 1:25:00 PM | TLI | EPA 120.1 | SC | 2/16/2006 | Alex Hernandez |
| | | | | | TLI | EPA 150.1 | PH | 2/16/2006 | Alex Hernandez |
| | | | | | TLI | EPA 160.1 | TDS | 2/16/2006 | Hope Trinidad |
| | | | | | TLI | EPA 180.1 | TRB | 2/16/2006 | Gautam Savani |
| | | | | | TLI | EPA 6010B | CRT | 2/16/2006 | Riddhi Patel |
| | | | | | TLI | SW 7199 | CR6 | 2/16/2006 | Jorge Arriaga |
| SC-700B | SC-700B-WDR-035 | David Chaney | 2/22/2006 | 12:50:00 PM | TLI | EPA 120.1 | SC | 2/24/2006 | Alex Hernandez |
| | | | | | TLI | EPA 150.1 | PH | 2/23/2006 | Alex Hernandez |
| | | | | | TLI | EPA 160.1 | TDS | 2/23/2006 | Emilia Haley |
| | | | | | TLI | EPA 180.1 | TRB | 2/23/2006 | Gautam Savani |
| | | | | | TLI | EPA 6010B | CRT | 2/27/2006 | Riddhi Patel |
| | | | | | TLI | SW 7199 | CR6 | 2/23/2006 | Jorge Arriaga |
| SC-701 | SC-701-WDR-032 | Brian Dobbs | 2/1/2006 | 2:10:00 PM | TLI | EPA 120.1 | SC | 2/2/2006 | Alex Hernandez |
| | | | | | TLI | EPA 150.1 | PH | 2/2/2006 | Alex Hernandez |
| | | | | | TLI | EPA 160.1 | TDS | 2/2/2006 | Emilia Haley |
| | | | | | TLI | EPA 300.0 | FL | 2/2/2006 | Iordan Stavrev |
| | | | | | TLI | EPA 6010B | ZN | 2/2/2006 | Riddhi Patel |

TABLE 7

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

Monitoring Information

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

| Location | Sample ID | Sampler Name | Sample Date | Sample Time | Lab | Analysis Method | Parameter | Analysis Date | Lab Technician |
|-----------|-------------------|--------------|-------------|-------------|-----|-----------------|-----------|---------------|--------------------|
| SC-701 | SC-701-WDR-032 | Brian Dobbs | 2/1/2006 | 2:10:00 PM | TLI | EPA 6010B | NI | 2/2/2006 | Riddhi Patel |
| | | | | | TLI | EPA 6010B | CRT | 2/9/2006 | Riddhi Patel |
| | | | | | TLI | EPA 6010B | BA | 2/2/2006 | Riddhi Patel |
| | | | | | TLI | EPA 7470A | HG | 2/13/2006 | Riddhi Patel |
| | | | | | TLI | SW 6020A | SB | 2/16/2006 | Victoria Than |
| | | | | | TLI | SW 6020A | V | 2/16/2006 | Victoria Than |
| | | | | | TLI | SW 6020A | SE | 2/16/2006 | Victoria Than |
| | | | | | TLI | SW 6020A | PB | 2/16/2006 | Victoria Than |
| | | | | | TLI | SW 6020A | MO | 2/16/2006 | Victoria Than |
| | | | | | TLI | SW 6020A | AG | 2/16/2006 | Victoria Than |
| | | | | | TLI | SW 6020A | CO | 2/16/2006 | Victoria Than |
| | | | | | TLI | SW 6020A | CD | 2/16/2006 | Victoria Than |
| | | | | | TLI | SW 6020A | TL | 2/16/2006 | Victoria Than |
| | | | | | TLI | SW 6020A | BE | 2/16/2006 | Victoria Than |
| | | | | | TLI | SW 6020A | AS | 2/16/2006 | Victoria Than |
| | | | | | TLI | SW 6020A | CU | 2/16/2006 | Victoria Than |
| | | | | | TLI | SW 7199 | CR6 | 2/2/2006 | Jorge Arriaga |
| SC-Sludge | SC-Sludge-WDR-034 | David Chaney | 2/15/2006 | 1:40:00 PM | STL | EPA 160.3 | MOIST | 2/21/2006 | Florian Zimmermann |
| | | | | | TLI | EPA 300.0 | FL | 2/17/2006 | Vanna Kho |
| | | | | | STL | EPA 6010B | NI | 2/21/2006 | Josephine Asuncion |
| | | | | | STL | EPA 6010B | V | 2/21/2006 | Josephine Asuncion |
| | | | | | STL | EPA 6010B | TL | 2/21/2006 | Josephine Asuncion |
| | | | | | STL | EPA 6010B | SE | 2/21/2006 | Josephine Asuncion |
| | | | | | STL | EPA 6010B | SB | 2/21/2006 | Josephine Asuncion |
| | | | | | STL | EPA 6010B | PB | 2/21/2006 | Josephine Asuncion |
| | | | | | STL | EPA 6010B | ZN | 2/21/2006 | Josephine Asuncion |
| | | | | | STL | EPA 6010B | MO | 2/21/2006 | Josephine Asuncion |
| | | | | | STL | EPA 6010B | CU | 2/21/2006 | Josephine Asuncion |
| | | | | | STL | EPA 6010B | CRT | 2/21/2006 | Josephine Asuncion |
| | | | | | STL | EPA 6010B | CO | 2/21/2006 | Josephine Asuncion |
| | | | | | STL | EPA 6010B | CD | 2/21/2006 | Josephine Asuncion |
| | | | | | STL | EPA 6010B | BE | 2/21/2006 | Josephine Asuncion |
| | | | | | STL | EPA 6010B | BA | 2/21/2006 | Josephine Asuncion |
| | | | | | STL | EPA 6010B | AG | 2/21/2006 | Josephine Asuncion |
| | | | | | STL | EPA 6010B | AS | 2/21/2006 | Josephine Asuncion |

TABLE 7

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

Monitoring Information

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

| Location | Sample ID | Sampler Name | Sample Date | Sample Time | Lab | Analysis Method | Parameter | Analysis Date | Lab Technician |
|-----------|-------------------|--------------|-------------|--------------|-----|---|-----------|-------------------------|-----------------|
| SC-Sludge | SC-Sludge-WDR-034 | David Chaney | 2/15/2006 | 1:40:00 PM | STL | EPA 7471A | HG | 2/21/2006 | Hao Ton |
| | | | | | STL | SW 7199 | CR6 | 2/20/2006 | Yuriy Zakhrafov |
| SC-Sludge | SC-Sludge-WDR-034 | David Chaney | 02/15/2006 | 01:40:00 P.M | MBC | 96-Hour Acute Aquatic Toxicity Screening Test | BIO | 02/17/2006 - 02/21/2006 | Sonia Beck |

NOTES:

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

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

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

TLI = Truesdail Laboratories, Inc.

STL = Severn Trent Laboratories, Inc.

MBC = MBC Applied Environmental Sciences

| | |
|------------------------------|-----------------------|
| SC = specific conductance | MO = molybdenum |
| PH = pH | NI = nickel |
| TDS = total dissolved solids | PB = lead |
| TRB = turbidity | HG = mercury |
| CRT = chromium | SE = selenium |
| CR6 = hexavalent chromium | TL = thallium |
| FL = fluoride | CO = cobalt |
| AL = aluminum | CD = cadmium |
| B = boron | BE = beryllium |
| FE = iron | AG = silver |
| MN = manganese | V = vanadium |
| ZN = zinc | NO3N = nitrate (as N) |
| SB = antimony | NH3N = ammonia (as N) |
| AS = arsenic | NO2N = nitrite (as N) |
| BA = barium | SO4 = sulfate |
| CU = copper | |

Figures

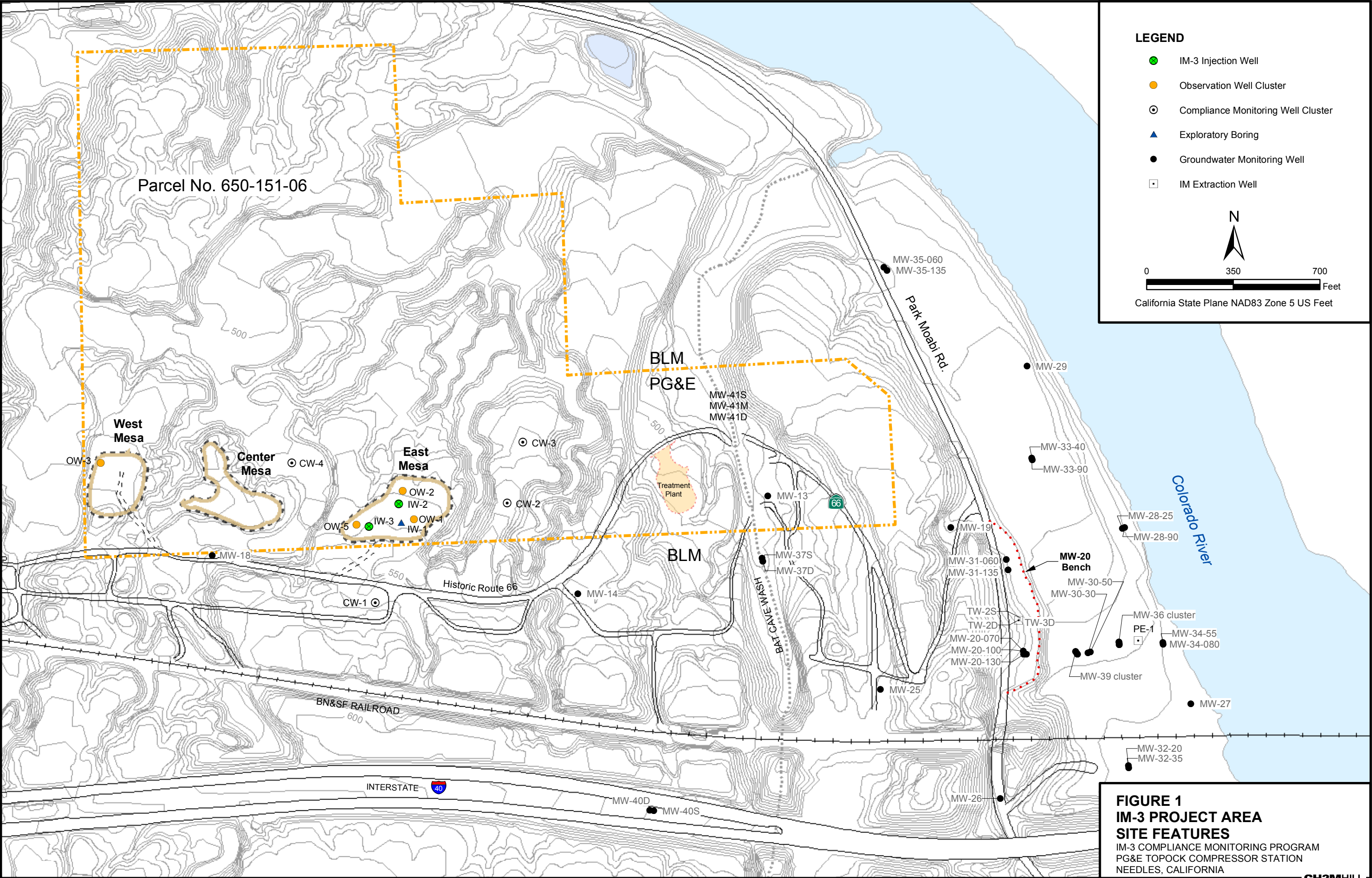
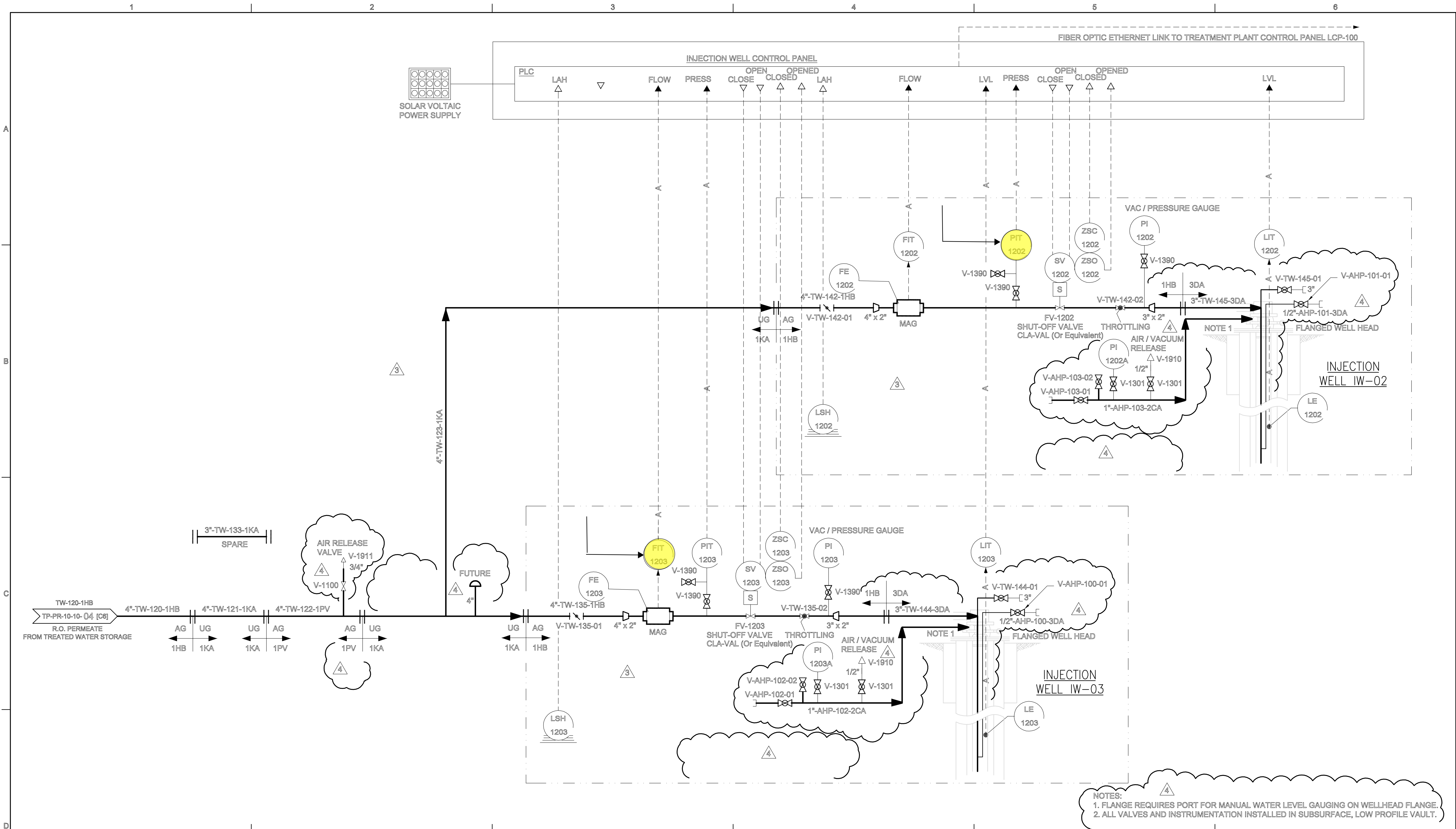
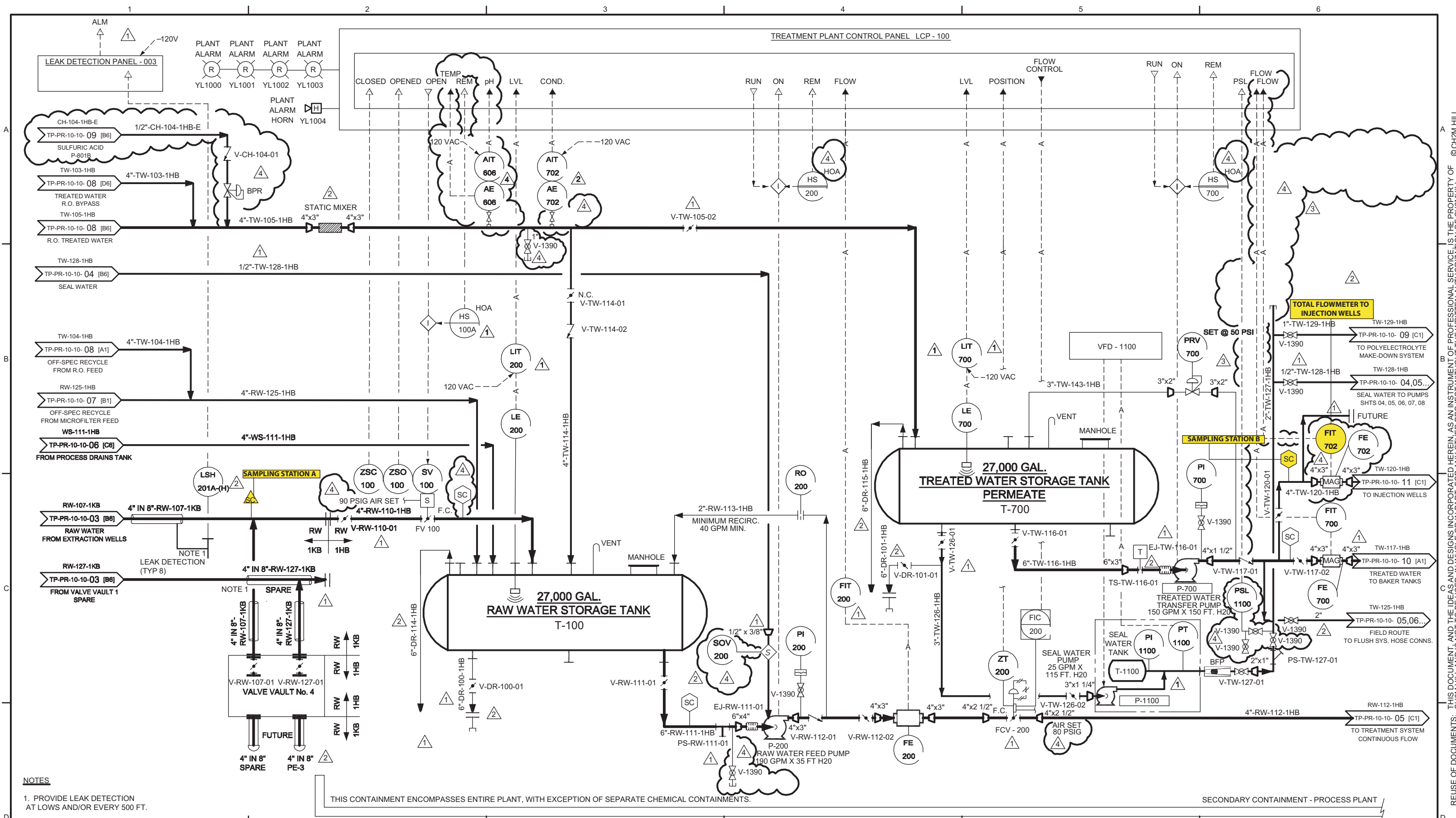


FIGURE 1
IM-3 PROJECT AREA
SITE FEATURES
IM-3 COMPLIANCE MONITORING PROGRAM
PG&E TOPECO COMPRESSOR STATION
NEEDLES, CALIFORNIA



NOTES:
1. FLANGE REQUIRES PORT FOR MANUAL WATER LEVEL GAUGING ON WELLHEAD FLANGE.
2. ALL VALVES AND INSTRUMENTATION INSTALLED IN SUBSURFACE, LOW PROFILE VAULT.

| | | | | | | | | | | | | | | | | | | | | | |
|--|-----|----------|--|-----|-----|-------------------|----------|----------------|---------------|--------------------|------------|--|----------|------|-----|----------|--|-------------------------|--|--------|--|
| RESPONSIBLE ENGINEER: Kenneth L. Martins PE# CH44876 Exp 6-30-06 | NO. | DATE | REVISION | BY | CHK | REVISION APPROVAL | | REV 4 | DATE 03/10/05 | PRINT DISTRIBUTION | | STATUS | | | | | PACIFIC GAS & ELECTRIC CO. TOPOCK COMPRESSOR STATION INTERIM MEASURE 3 EXPANDED GROUNDWATER EXTRACTION AND TREATMENT SYSTEM PROJ NO. 315994 | | PROCESS AND INSTRUMENTATION DIAGRAM SHEET 11 INJECTION WELLS | | |
| | A | 07/28/04 | FOR INTERNAL REVIEW | EFC | AJ | DISCIPLINE | REVIEWED | DISCIPLINE | REVIEWED | DATE | | ISSUED | REV | DATE | SDE | PEM | | | | | |
| | 0 | 09/03/04 | APPROVED FOR CONSTRUCTION | EFC | AJ | CIVIL | | ELECTRICAL | | STATUS | | PRELIMINARY | | | | | | | | | |
| | 1 | 10/13/04 | REVISED AND APPROVED FOR CONSTRUCTION | EFC | AJ | STRUCTURAL | | INST & CONTROL | | REV. | | A | 07/28/04 | | | | | | | | |
| | 2 | 01/23/05 | REVISED AND APPROVED FOR CONSTRUCTION | EFC | AJ | MECHANICAL | | ARCHITECTURAL | | CLIENT | | 0 | 09/03/04 | KLM | TP | | | | | | |
| | 3 | 02/14/05 | REVISED AND APPROVED FOR CONSTRUCTION | EFC | AJ | PROCESS | | ENVIRONMENTAL | | FIELD | | REVISED & APPROVED FOR CONSTRUCTION | 4 | / / | | | | | | | |
| | 4 | 03/10/05 | REMOVED HOLD AND APPROVED FOR CONSTRUCTION | EFC | AJ | PIPING | | GEN. ARRANG. | | INTRA CO. | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | SCALE NONE | | | | | CH2MHILL | | DWG. NO. TP-PR-10-10-11 | | REV. 4 | |

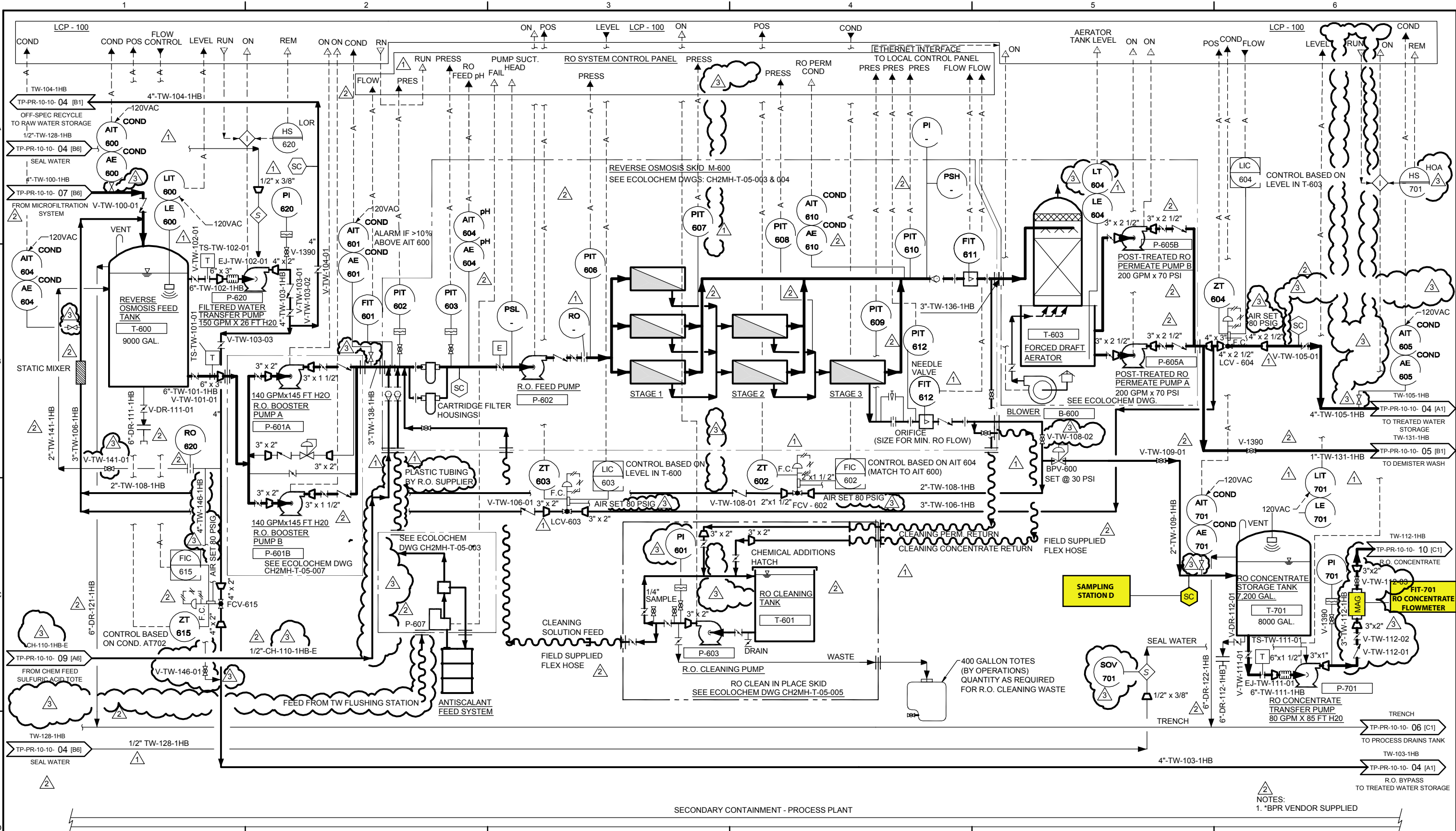


NOTES
1. PROVIDE LEAK DETECTION AT LOWS AND/OR EVERY 500 FT.

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

SECONDARY CONTAINMENT - PROCESS PLANT

| | | | | | | | | | | | | | | | | | | | |
|---|-----|----------|---|-----|-----|-------------------|----------|----------------|--------------------|------------|--|-------------------------------------|-----|----------|--|---|--------|-----|-----|
| RESPONSIBLE ENGINEER: Kenneth L. Martins CH4876 PE # | NO. | DATE | REVISION | BY | CHK | REVISION APPROVAL | REV 4 | DATE 09/21/05 | PRINT DISTRIBUTION | STATUS | | | | | PACIFIC GAS & ELECTRIC CO. TOPOCK COMPRESSOR STATION INTERIM MEASURE 3 EXPANDED GROUNDWATER EXTRACTION AND TREATMENT SYSTEM PROJ NO. 315994 | PROCESS AND INSTRUMENTATION DIAGRAM SHEET 04 STORAGE AREA | | | |
| | 0 | 07/28/04 | FOR INTERNAL REVIEW | EFC | AJ | DISCIPLINE | REVIEWED | DISCIPLINE | REVIEWED | DATE | | ISSUED | REV | DATE | | | | SDE | PEM |
| | 0 | 09/03/04 | APPROVED FOR CONSTRUCTION | EFC | AJ | CIVIL | | ELECTRICAL | | STATUS | | PRELIMINARY | | | | | | | |
| | 1 | 10/13/04 | REVISED AND APPROVED FOR CONSTRUCTION | EFC | AJ | STRUCTURAL | | INST & CONTROL | | REV. | | FOR REVIEW AND APPROVAL | D | 07/28/04 | | | | | |
| | 2 | 01/23/05 | REVISED AND APPROVED FOR CONSTRUCTION | EFC | AJ | MECHANICAL | | ARCHITECTURAL | | CLIENT | | APPROVED FOR CONSTRUCTION | 0 | 09/03/04 | | | | KLM | TP |
| | 3 | 02/14/05 | ADDED RECIRC. LINE AND PRV VALVE TO T-700 - APPROVED FOR CONSTRUCTION | EFC | AJ | PROCESS | | ENVIRONMENTAL | | FIELD | | REVISED & APPROVED FOR CONSTRUCTION | 4 | / / | | | | | |
| | 4 | 09/21/05 | REVISED PER AS-BUILT CONDITIONS | EFC | AJ | PIPING | | GEN. ARRANG. | | INTRA CO. | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | SCALE NONE | | | | | CH2MHILL | DWG. NO. TP-PR-10-10-04 | REV. 4 | | |



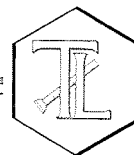
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|--|-----|----------|---------------------------------------|-----|-----|-------------------|----------|----------------|--------------------|------------|--------|-----|----------|-----|--|---|-------------------------|--------|
| RESPONSIBLE ENGINEER: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

Appendix A

Laboratory Analytical Reports

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

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

RECEIVED
FEB 22 2006
CH2M HILL
REDDING

CH2M HILL PG&E Topock Project

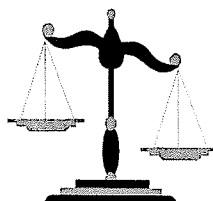
Laboratory Number: 951370

Received: February 1, 2006

IM3Plant-WDR-032

Project No.: 334168.IM.04.00

P.O. No.: 911248



Prepared for:

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

Prepared by:

**TRUESDAIL LABORATORIES, INC.
TUSTIN, CALIFORNIA**

Table of Contents
TLI Laboratory Data Package
For Laboratory Number: 951370

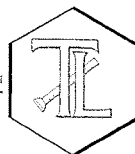
| <u>ITEM</u> | <u>Section</u> |
|---|----------------|
| Case Narrative | 1.0 |
| Summary Table of Final Results | 2.0 |
| Final Reports | 3.0 |
| Wet Chem Analysis/ Raw Data, Standard, Quality Control and Chain of Custody Records | 4.0 |
| Established Retention Time Window and Analytical Raw Data |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

Section 1.0

Case Narrative

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

February 21, 2006

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

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

Dear Mr. Duffy:

SUBJECT: CASE NARRATIVE PG&E TOPOCK IM3PLANT-WDR-032 PROJECT, GROUNDWATER
MONITORING,
TLI NO.: 951370

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-024 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, pH, Anions, Ammonia, Total Dissolved Solids, and Title 22 Metals. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The samples were received and delivered with the chain of custody on February 1, 2006, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

No violations or nonconformance actions occurred for this data package.

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

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi
Manager, Analytical Services

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

Attention: Shawn Duffy

Sample: Three (3) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 334168.IM.04.00

Laboratory No.: 951370

Date: February 17, 2006

Collected: February 1, 2006

Received: February 1, 2006

ANALYST LIST

| METHOD | PARAMETER | ANALYST |
|-----------|------------------------|----------------|
| EPA 120.1 | Specific Conductivity | Alex Hernandez |
| EPA 150.1 | pH | Alex Hernandez |
| EPA 160.1 | Total Dissolved Solids | Emilia Haley |
| EPA 180.1 | Turbidity | Gautam Savani |
| EPA 300.0 | Anions | Iordan Stavrev |
| EPA 350.2 | Ammonia | Alex Hernandez |
| EPA 354.1 | Nitrite as N | Hope Trinidad |
| SW 6010B | Metals by ICP | Riddhi Patel |
| SW 6020 | Metals by ICP/MS | Victoria Than |
| SW 7470A | Mercury | Riddhi Patel |
| SW 7199 | Hexavalent Chromium | Jorge Arriaga |

Section 2.0

Summary Table of Final Results



Client: CH2M HILL

155 Grand Ave. Suite 1000
Oakland, CA 94612

Attention: Shawn Duffy

Project Name: PG&E Topock Project

Project No.: 334168.IM.04.00

P.O. No.: 911248

Laboratory No.: 951370

Date Received: February 1, 2006

Analytical Results Summary

METALS ANALYSIS: Total Metal Analyses as Requested

| Lab I.D. | Sample ID | Time Coll. | Aluminum EPA 6010B | Antimony EPA 6020 | Arsenic EPA 6020 | Barium EPA 6010B | Beryllium EPA 6020 | Cadmium EPA 6020 | Chromium EPA 6010B | Cobalt EPA 6020 | Copper EPA 6020 | Lead EPA 6020 |
|----------|-----------------|------------|-----------------------|----------------------|---------------------|---------------------|-----------------------|---------------------|-----------------------|--------------------|--------------------|------------------|
| 951370-1 | SC-100B-WDR-032 | 14:00 | ND | ND | ND | ND | --- | --- | 2.28 | --- | ND | ND |
| 951370-2 | SC-700B-WDR-032 | 14:05 | ND | ND | ND | ND | --- | --- | ND | --- | ND | ND |
| 951370-3 | SC-701-WDR-032 | 14:10 | --- | ND | ND | ND | ND | ND | ND | ND | ND | ND |

| Lab I.D. | Sample ID | Time Coll. | Magnesium EPA 6010B | Manganese EPA 6010B | Mercury EPA 7470A | Molybdenum EPA 6020 | Nickel EPA 6010B | Selenium EPA 6020 | Silver EPA 6020 | Thallium EPA 6020 | Vanadium EPA 6020 | Zinc EPA 6010B |
|----------|-----------------|------------|------------------------|------------------------|----------------------|------------------------|---------------------|----------------------|--------------------|----------------------|----------------------|-------------------|
| 951370-1 | SC-100B-WDR-032 | 14:00 | --- | ND | --- | 0.0102 | ND | --- | --- | --- | --- | ND |
| 951370-2 | SC-700B-WDR-032 | 14:05 | --- | ND | --- | 0.0062 | ND | --- | --- | --- | --- | 0.0208 |
| 951370-3 | SC-701-WDR-032 | 14:10 | --- | --- | ND | 0.0471 | ND | ND | ND | ND | 0.0332 | 0.0429 |

| Lab I.D. | Sample ID | Time Coll. | Boron EPA 6010B | Calcium EPA 6010B | Iron EPA 6010B | Potassium EPA 6010B | Sodium EPA 6010B |
|----------|-----------------|------------|--------------------|----------------------|-------------------|------------------------|---------------------|
| 951370-1 | SC-100B-WDR-032 | 14:00 | 1.38 | --- | ND | --- | --- |
| 951370-2 | SC-700B-WDR-032 | 14:05 | 1.45 | --- | ND | --- | --- |
| 951370-3 | SC-701-WDR-032 | 14:10 | --- | --- | --- | --- | --- |

NOTES:

ND: Not detected, or below limit of detection

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Client: CH2M HILL

155 Grand Ave. Suite 1000
Oakland, CA 94612

Attention: Shawn Duffy

Project Name: PG&E Topock Project

Project No.: 334168.IM.04.00

P.O. No.: 911248

Laboratory No.: 951370

Date Received: February 1, 2006

Analytical Results Summary

| <u>Lab I.D.</u> | <u>Sample I.D.</u> | <u>Sample Time</u> | <u>EPA 150.1</u> pH | <u>EPA 120.1</u> EC | <u>EPA 160.1</u> TDS | <u>EPA 180.1</u> Turbidity | <u>SW 7199</u> Hexavalent Chromium | <u>EPA 350.2</u> Ammonia |
|-----------------|--------------------|--------------------|------------------------|------------------------|-------------------------|-------------------------------|--|-----------------------------|
| | | | <i>Units</i> | <i>µmhos/cm</i> | <i>mg/L</i> | <i>NTU</i> | <i>mg/L</i> | <i>mg/L</i> |
| 951370-1 | SC-100B-WDR-032 | 14:00 | 7.42 | 11000 | 6040 | ND | 2.41 | 1.09 |
| 951370-2 | SC-700B-WDR-032 | 14:05 | 8.13 | 7450 | 4440 | ND | ND | 0.700 |
| 951370-3 | SC-701-WDR-032 | 14:10 | 8.07 | 40100 | 24000 | --- | ND | --- |

| <u>Lab I.D.</u> | <u>Sample I.D.</u> | <u>Sample Time</u> | <u>EPA 300.0</u> Fluoride | <u>EPA 300.0</u> Sulfate | <u>EPA 300.0</u> Nitrate as N | <u>EPA 354.1</u> Nitrite as N |
|-----------------|--------------------|--------------------|------------------------------|-----------------------------|----------------------------------|----------------------------------|
| | | | <i>mg/L</i> | <i>mg/L</i> | <i>mg/L</i> | <i>mg/L</i> |
| 951370-1 | SC-100B-WDR-032 | 14:00 | 2.79 | 742 | 3.49 | 0.0070 |
| 951370-2 | SC-700B-WDR-032 | 14:05 | 1.92 | 528 | 2.81 | ND |
| 951370-3 | SC-701-WDR-032 | 14:10 | 10.8 | --- | --- | --- |

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

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

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

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

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

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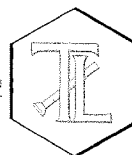
Section 3.0

Final Reports

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

Established 1931



REPORT

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

Attention: Shawn Duffy

Sample: Three (3) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 334168.IM.04.00

P.O. No.: 911248

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

Laboratory No.: 951370

Date: February 17, 2006

Collected: February 1, 2006

Received: February 1, 2006

Prep/ Analyzed: February 2, 2006

Analytical Batch: 02PH06B

Investigation:

pH by EPA 150.1

Analytical Results pH

| <u>TLI I.D.</u> | <u>Field I.D.</u> | <u>Run Time</u> | <u>Units</u> | <u>MDL</u> | <u>RL</u> | <u>Results</u> |
|-----------------|-------------------|-----------------|--------------|------------|-----------|----------------|
| 951370-1 | SC-100B-WDR-032 | 07:00 | pH Units | 0.0570 | 2.00 | 7.42 |
| 951370-2 | SC-700B-WDR-032 | 07:05 | pH Units | 0.0570 | 2.00 | 8.13 |
| 951370-3 | SC-701-WDR-032 | 07:10 | pH Units | 0.0570 | 2.00 | 8.07 |

QA/QC Summary

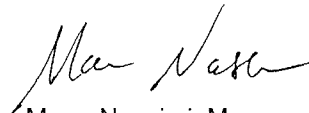
| QC STD I.D. | Laboratory Number | Concentration | Duplicate Concentration | Difference (Units) | Acceptance limits | QC Within Control |
|-------------|-------------------|---------------|-------------------------|--------------------|-------------------|-------------------|
| Duplicate | 951370-1 | 7.42 | 7.43 | 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.


Mona Nassimi, Manager
Analytical Services

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INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

Established 1931



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

REPORT

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

Attention: Shawn Duffy

Laboratory No.: 951370

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

Date: February 17, 2006
Collected: February 1, 2006
Received: February 1, 2006
Prep/ Analyzed: February 2, 2006
Analytical Batch: 02EC06A

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity


| <u>TLI I.D.</u> | <u>Field I.D.</u> | <u>Units</u> | <u>Method</u> | <u>DF</u> | <u>RL</u> | <u>Results</u> |
|-----------------|-------------------|--------------|---------------|-----------|-----------|----------------|
| 951370-1 | SC-100B-WDR-032 | µmhos/cm | EPA 120.1 | 10.0 | 20.0 | 11000 |
| 951370-2 | SC-700B-WDR-032 | µmhos/cm | EPA 120.1 | 10.0 | 20.0 | 7450 |
| 951370-3 | SC-701-WDR-032 | µmhos/cm | EPA 120.1 | 10.0 | 20.0 | 40100 |

QA/QC Summary

| QC STD I.D. | Laboratory Number | Concentration | Duplicate Concentration | Relative Percent Difference | Acceptance limits | QC Within Control |
|-------------|-------------------|---------------|-------------------------|-----------------------------|-------------------|-------------------|
| Duplicate | 951391-3 | 180 | 179 | 0.56% | ≤ 10% | Yes |

| QC Std I.D. | Measured Concentration | Theoretical Concentration | Percent Recovery | Acceptance Limits | QC Within Control |
|-------------|------------------------|---------------------------|------------------|-------------------|-------------------|
| CCS | 671 | 706 | 95.0% | 90% - 110% | Yes |
| CVS#1 | 924 | 998 | 92.6% | 90% - 110% | Yes |
| LCS | 671 | 706 | 95.0% | 90% - 110% | Yes |
| LCSD | 672 | 706 | 95.2% | 90% - 110% | Yes |

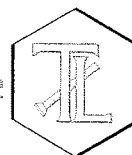
Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

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REPORT

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

Attention: Shawn Duffy

Sample: Three (3) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 334168.IM.04.00

P.O. No.: 911248

14201 FRANKLIN AVENUE
TUSTIN, CALIFORNIA 92780-7008
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Laboratory No.: 951370

Date: February 17, 2006

Collected: February 1, 2006

Received: February 1, 2006

Prep/ Analyzed: February 2, 2006

Analytical Batch: 02TDS06A

Investigation:

Total Dissolved Solids by EPA 160.1

Analytical Results Total Dissolved Solids

| <u>TLI I.D.</u> | <u>Field I.D.</u> | <u>Units</u> | <u>Method</u> | <u>RL</u> | <u>Results</u> |
|-----------------|-------------------|--------------|---------------|-----------|----------------|
| 951370-1 | SC-100B-WDR-032 | mg/L | EPA 160.1 | 312 | 6040 |
| 951370-2 | SC-700B-WDR-032 | mg/L | EPA 160.1 | 250 | 4440 |
| 951370-3 | SC-701-WDR-032 | mg/L | EPA 160.1 | 1250 | 24000 |

QA/QC Summary

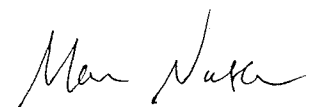
| QC STD I.D. | Laboratory Number | Concentration | Duplicate Concentration | Percent Difference | Acceptance limits | QC Within Control |
|-------------|-------------------|---------------|-------------------------|--------------------|-------------------|-------------------|
| Duplicate | 951370-2 | 4440 | 4440 | 0.00% | ≤ 5% | Yes |

| QC Std I.D. | Measured Concentration | Theoretical Concentration | Percent Recovery | Acceptance Limits | QC Within Control |
|-------------|------------------------|---------------------------|------------------|-------------------|-------------------|
| LCS 1 | 492 | 500 | 98.4% | 90% - 110% | Yes |
| LCS 2 | 497 | 500 | 99.4% | 90% - 110% | Yes |

ND: Below the reporting limit (Not Detected).

RL: Reporting Limit.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

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

REPORT

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

Attention: Shawn Duffy

Laboratory No.: 951370

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

Date: February 17, 2006
Collected: February 1, 2006
Received: February 1, 2006
Prep/ Analyzed: February 2, 2006
Analytical Batch: 02TUC06B

Investigation:

Turbidity by Method EPA 180.1

Analytical Results Turbidity

| <u>TLI I.D.</u> | <u>Field I.D.</u> | <u>Sample Time</u> | <u>Units</u> | <u>DF</u> | <u>RL</u> | <u>Results</u> |
|-----------------|-------------------|--------------------|--------------|-----------|-----------|----------------|
| 951370-1 | SC-100B-WDR-032 | 14:00 | NTU | 1.00 | 0.100 | ND |
| 951370-2 | SC-700B-WDR-005 | 14:05 | NTU | 1.00 | 0.100 | ND |


QA/QC Summary

| QC STD I.D. | Laboratory Number | Concentration | Duplicate Concentration | Relative Percent Difference | Acceptance limits | QC Within Control |
|-------------|-------------------|---------------|-------------------------|-----------------------------|-------------------|-------------------|
| Duplicate | 951363-88 | 0.177 | 0.180 | 1.68% | ≤ 20% | Yes |

| QC Std I.D. | Measured Concentration | Theoretical Concentration | Percent Recovery | Acceptance Limits | QC Within Control |
|-------------|------------------------|---------------------------|------------------|-------------------|-------------------|
| LCS | 8.10 | 8.00 | 101% | 90% - 110% | Yes |
| LCS | 8.00 | 8.00 | 100% | 90% - 110% | Yes |
| LCS | 8.12 | 8.00 | 102% | 90% - 110% | Yes |

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

REPORT

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

Client: CH2M HILL

155 Grand Ave. Suite 1000
Oakland, CA 94612

Attention: Shawn Duffy

Sample: Three (3) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 334168.IM.04.00

P.O. No.: 911248

Prep. Batch: 02CrH06B

Laboratory No.: 951370

Date: February 17, 2006

Collected: February 1, 2006

Received: February 1, 2006

Prep/ Analyzed: February 2, 2006

Analytical Batch: 02CrH06B

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 |
|----------|-----------------|-------------|----------|-------|------|--------|---------|
| 951370-1 | SC-100B-WDR-032 | 14:00 | 07:16 | mg/L | 200 | 0.0400 | 2.41 |
| 951370-2 | SC-700B-WDR-032 | 14:05 | 09:39 | mg/L | 5.00 | 0.0010 | ND |
| 951370-3 | SC-701-WDR-032 | 14:10 | 10:16 | mg/L | 10.0 | 0.0020 | ND |

QA/QC Summary

| QC STD I.D. | Laboratory Number | Sample Concentration | Duplicate Concentration | Relative Percent Difference | Acceptance limits | QC Within Control |
|-------------|-------------------|----------------------|-------------------------|-----------------------------|-------------------|-------------------|
| Duplicate | 951370-1 | 2.41 | 2.47 | 2.46% | < 20% | Yes |

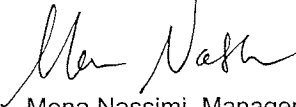
| QC Std I.D. | Lab Number | Conc. of unspiked sample | Dilution Factor | Added Spike Conc. | MS Amount | Measured Conc. of spiked sample | Theoretical Conc. of spiked sample | MS% Recovery | Acceptance limits | QC Within Control |
|-------------|------------|--------------------------|-----------------|-------------------|-----------|---------------------------------|------------------------------------|--------------|-------------------|-------------------|
| MS | 951370-1 | 2.41 | 200 | 0.0200 | 4.00 | 6.46 | 6.41 | 101% | 75-125% | Yes |
| MS | 951370-2 | 0.00 | 5.00 | 0.00100 | 0.00500 | 0.00524 | 0.00500 | 105% | 75-125% | Yes |
| MS | 951370-3 | 0.00 | 10.0 | 0.00100 | 0.0100 | 0.0113 | 0.0100 | 113% | 75-125% | Yes |

| QC Std I.D. | Measured Concentration | Theoretical Concentration | Percent Recovery | Acceptance Limits | QC Within Control |
|-------------|------------------------|---------------------------|------------------|-------------------|-------------------|
| MRCCS | 0.00484 | 0.00500 | 96.8% | 90% - 110% | Yes |
| MRCVS#1 | 0.0101 | 0.0100 | 101% | 90% - 110% | Yes |
| MRCVS#2 | 0.0101 | 0.0100 | 101% | 90% - 110% | Yes |
| LCS | 0.00504 | 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.


Mona Nassimi, Manager
Analytical Services

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TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

REPORT

Client: CH2M HILL

155 Grand Ave. Suite 1000
Oakland, CA 94612

Attention: Shawn Duffy

Sample: Three (3) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 334168.IM.04.00

P.O. No.: 911248

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

Laboratory No.: 951370

Date: February 17, 2006

Collected: February 1, 2006

Received: February 1, 2006

Prep/ Analyzed: February 3, 2006

Analytical Batch: 02NH306A

Investigation:

Ammonia as N by Method EPA 350.2

Analytical Results Ammonia as N

| TLI I.D. | Field I.D. | Sample Time | Method | Units | DF | RL | Results |
|----------|-----------------|-------------|-----------|-------|------|-------|---------|
| 951370-1 | SC-100B-WDR-032 | 14:00 | EPA 350.2 | mg/L | 1.00 | 0.500 | 1.09 |
| 951370-2 | SC-700B-WDR-032 | 14:05 | EPA 350.2 | mg/L | 1.00 | 0.500 | 0.700 |

QA/QC Summary

| QC STD I.D. | | Laboratory Number | Concentration | Duplicate Concentration | | Relative Percent Difference | Acceptance limits | QC Within Control | |
|-------------|--|-------------------|---------------|-------------------------|--|-----------------------------|-------------------|-------------------|--|
| Duplicate | | 951370-1 | 1.09 | 1.15 | | 5.4% | ≤ 20% | Yes | |

| QC Std I.D. | Lab Number | Conc.of unspiked sample | Dilution Factor | Added Spike Conc. | MS Amount | Measured Conc. of spiked sample | Theoretical Conc. of spiked sample | MS% Recovery | Acceptance limits | QC Within Control |
|-------------|------------|-------------------------|-----------------|-------------------|-----------|---------------------------------|------------------------------------|--------------|-------------------|-------------------|
| MS | 951370-2 | 0.70 | 1.00 | 10.0 | 10.0 | 9.08 | 10.7 | 83.8% | 75-125% | Yes |

| QC Std I.D. | Measured Concentration | Theoretical Concentration | Percent Recovery | Acceptance Limits | QC Within Control |
|-------------|------------------------|---------------------------|------------------|-------------------|-------------------|
| LCS | 9.58 | 10.0 | 95.8% | 90% - 110% | Yes |

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

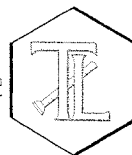

Mona Nassimi, Manager
Analytical Services

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INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

Established 1931



REPORT

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

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

Attention: Shawn Duffy

Sample: Three (3) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 334168.IM.04.00

P.O. No.: 911248

Laboratory No.: 951370

Date: February 17, 2006

Collected: February 1, 2006

Received: February 1, 2006

Prep/ Analyzed: February 2, 2006

Analytical Batch: 02AN06B

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 |
|----------|-----------------|-------------|----------|-------|------|-------|---------|
| 951370-1 | SC-100B-WDR-032 | 14:00 | 11:43 | mg/L | 1.00 | 0.200 | 2.79 |
| 951370-2 | SC-700B-WDR-032 | 14:05 | 11:23 | mg/L | 1.00 | 0.200 | 1.92 |
| 951370-3 | SC-701-WDR-032 | 14:10 | 14:19 | mg/L | 5.00 | 1.00 | 10.8 |

QA/QC Summary

| QC STD I.D. | Laboratory Number | Concentration | Duplicate Concentration | Relative Percent Difference | Acceptance limits | QC Within Control |
|-------------|-------------------|---------------|-------------------------|-----------------------------|-------------------|-------------------|
| Duplicate | 951370-2 | 1.92 | 1.88 | 2.11% | ≤ 20% | Yes |


| QC Std I.D. | Lab Number | Conc. of unspiked sample | Dilution Factor | Added Spike Conc. | MS Amount | Measured Conc. of spiked sample | Theoretical Conc. of spiked sample | MS% Recovery | Acceptance limits | QC Within Control |
|-------------|------------|--------------------------|-----------------|-------------------|-----------|---------------------------------|------------------------------------|--------------|-------------------|-------------------|
| MS | 951370-2 | 1.92 | 1.00 | 2.00 | 2.00 | 3.85 | 3.92 | 96.5% | 75-125% | Yes |

| QC Std I.D. | Measured Concentration | Theoretical Concentration | Percent Recovery | Acceptance Limits | QC Within Control |
|-------------|------------------------|---------------------------|------------------|-------------------|-------------------|
| MRCCS | 4.09 | 4.00 | 102% | 90% - 110% | Yes |
| MRCVS#1 | 3.08 | 3.00 | 103% | 90% - 110% | Yes |
| MRCVS#2 | 3.12 | 3.00 | 104% | 90% - 110% | Yes |
| MRCVS#3 | 3.12 | 3.00 | 104% | 90% - 110% | Yes |
| LCS | 4.08 | 4.00 | 102% | 90% - 110% | Yes |
| LCSD | 4.10 | 4.00 | 103% | 90% - 110% | Yes |

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

REPORT

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www.truesdail.com

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

Attention: Shawn Duffy

Sample: Three (3) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 334168.IM.04.00

P.O. No.: 911248

Laboratory No.: 951370

Date: February 17, 2006

Collected: February 1, 2006

Received: February 1, 2006

Prep/ Analyzed: February 2, 2006

Analytical Batch: 02AN06B

Investigation:

Sulfate by Method EPA 300.0

Analytical Results Sulfate

| TLI I.D. | Field I.D. | Sample Time | Run Time | Units | DF | RL | Results |
|----------|-----------------|-------------|----------|-------|------|------|---------|
| 951370-1 | SC-100B-WDR-032 | 14:00 | 13:59 | mg/L | 50.0 | 25.0 | 742 |
| 951370-2 | SC-700B-WDR-032 | 14:05 | 14:09 | mg/L | 50.0 | 25.0 | 528 |

QA/QC Summary

| QC STD I.D. | Laboratory Number | Concentration | Duplicate Concentration | Relative Percent Difference | Acceptance limits | QC Within Control |
|-------------|-------------------|---------------|-------------------------|-----------------------------|-------------------|-------------------|
| Duplicate | 951370-2 | 528 | 540 | 2.25% | ≤ 20% | Yes |

| QC Std I.D. | Lab Number | Conc. of unspiked sample | Dilution Factor | Added Spike Conc. | MS Amount | Measured Conc. of spiked sample | Theoretical Conc. of spiked sample | MS% Recovery | Acceptance limits | QC Within Control |
|-------------|------------|--------------------------|-----------------|-------------------|-----------|---------------------------------|------------------------------------|--------------|-------------------|-------------------|
| MS | 951370-2 | 528 | 50.0 | 10.0 | 500 | 1060 | 1028 | 106% | 75-125% | Yes |

| QC Std I.D. | Measured Concentration | Theoretical Concentration | Percent Recovery | Acceptance Limits | QC Within Control |
|-------------|------------------------|---------------------------|------------------|-------------------|-------------------|
| MRCSS | 20.2 | 20.0 | 101% | 90% - 110% | Yes |
| MRCVS#1 | 15.3 | 15.0 | 102% | 90% - 110% | Yes |
| MRCVS#2 | 15.3 | 15.0 | 102% | 90% - 110% | Yes |
| MRCVS#3 | 15.3 | 15.0 | 102% | 90% - 110% | Yes |
| LCS | 20.3 | 20.0 | 102% | 90% - 110% | Yes |
| LCSD | 20.3 | 20.0 | 102% | 90% - 110% | Yes |

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

Established 1931



REPORT

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

Attention: Shawn Duffy

Sample: Three (3) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 334168.IM.04.00

P.O. No.: 911248

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

Laboratory No.: 951370

Date: February 17, 2006

Collected: February 1, 2006

Received: February 1, 2006

Prep/ Analyzed: February 2, 2006

Analytical Batch: 02AN06B

Investigation: Nitrate as N by Ion Chromatography using EPA 300.0

Analytical Results Nitrate as N

| <u>TL I.D.</u> | <u>Field I.D.</u> | <u>Sample Time</u> | <u>Run Time</u> | <u>Units</u> | <u>DF</u> | <u>RL</u> | <u>Results</u> |
|----------------|-------------------|--------------------|-----------------|--------------|-----------|-----------|----------------|
| 951370-1 | SC-100B-WDR-032 | 14:00 | 11:43 | mg/L | 1.00 | 0.200 | 3.49 |
| 951370-2 | SC-700B-WDR-032 | 14:05 | 11:23 | mg/L | 1.00 | 0.200 | 2.81 |

QA/QC Summary

| QC STD I.D. | Laboratory Number | Concentration | Duplicate Concentration | Relative Percent Difference | Acceptance limits | QC Within Control |
|-------------|-------------------|---------------|-------------------------|-----------------------------|-------------------|-------------------|
| Duplicate | 951370-2 | 2.81 | 2.88 | 2.46% | ≤ 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 | 951370-2 | 2.81 | 1.00 | 3.00 | 3.00 | 5.73 | 5.81 | 97.3% | 75-125% | Yes |

| QC Std I.D. | Measured Concentration | Theoretical Concentration | Percent Recovery | Acceptance Limits | QC Within Control |
|-------------|------------------------|---------------------------|------------------|-------------------|-------------------|
| MRCSS | 3.96 | 4.00 | 99.0% | 90% - 110% | Yes |
| MRCVS#1 | 2.97 | 3.00 | 99.0% | 90% - 110% | Yes |
| MRCVS#2 | 2.97 | 3.00 | 99.0% | 90% - 110% | Yes |
| MRCVS#3 | 2.97 | 3.00 | 99.0% | 90% - 110% | Yes |
| LCS | 3.97 | 4.00 | 99.3% | 90% - 110% | Yes |
| LCSD | 3.97 | 4.00 | 99.3% | 90% - 110% | Yes |

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

REPORT

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

Attention: Shawn Duffy

Sample: Three (3) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 334168.IM.04.00

P.O. No.: 911248

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

Laboratory No.: 951370

Date: February 17, 2006

Collected: February 1, 2006

Received: February 1, 2006

Prep/ Analyzed: February 2, 2006

Analytical Batch: 02NO206A

Investigation:

Nitrite as N by Method EPA 354.1

Analytical Results for Nitrite as N

| <u>TLI I.D.</u> | <u>Field I.D.</u> | <u>Sample Time</u> | <u>Run Time</u> | <u>Units</u> | <u>DF</u> | <u>RL</u> | <u>Results</u> |
|-----------------|-------------------|--------------------|-----------------|--------------|-----------|-----------|----------------|
| 951370-1 | SC-100B-WDR-032 | 14:00 | 13:52 | mg/L | 1.00 | 0.0050 | 0.0070 |
| 951370-2 | SC-700B-WDR-032 | 14:05 | 13:54 | 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 | | 951370-1 | | 0.0070 | | 0.0076 | | 8.2% | ≤ 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 | 951370-2 | 0.00 | 1.00 | 0.100 | 0.100 | 0.104 | 0.100 | 104% | 75-125% | Yes |

| QC Std I.D. | Measured Concentration | Theoretical Concentration | Percent Recovery | Acceptance Limits | QC Within Control |
|-------------|------------------------|---------------------------|------------------|-------------------|-------------------|
| MRCCS | 0.100 | 0.100 | 100% | 90% - 110% | Yes |
| MRCVS#1 | 0.100 | 0.100 | 100% | 90% - 110% | Yes |
| LCS | 0.197 | 0.200 | 98.5% | 90% - 110% | Yes |

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

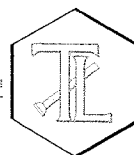
Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

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

REPORT

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

Laboratory No.: 951370

Attention: Shawn Duffy

Reported: February 17, 2006

Collected: February 1, 2006

Received: February 1, 2006

Analyzed: February 16, 2006

Samples: Three (3) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 334168.IM.04.00

P.O. No.: 911248

Investigation: Total Metal Analyses as Requested

Analytical Results

| SAMPLE ID: SC-100B-WDR-032 | | Time Collected: 14:00 | | LAB ID: 951370-1 | | | | |
|----------------------------|-----------|-----------------------|------|------------------|--------|---------|----------|----------|
| Parameter | Method | Reported | | Units | RL | Batch | Date | Time |
| | | Value | DF | | | | Analyzed | Analyzed |
| Aluminum | EPA 6010B | ND | 1.04 | mg/L | 0.0520 | 020206A | 02/02/06 | 15:50 |
| Antimony | EPA 6020 | ND | 2.08 | mg/L | 0.0030 | 021606A | 02/16/06 | 13:15 |
| Arsenic | EPA 6020 | ND | 2.08 | mg/L | 0.0050 | 021606A | 02/16/06 | 13:15 |
| Barium | EPA 6010B | ND | 1.04 | mg/L | 0.300 | 020206A | 02/02/06 | 15:50 |
| Chromium | EPA 6010B | 2.28 | 1.04 | mg/L | 0.0104 | 020206A | 02/02/06 | 15:50 |
| Copper | EPA 6020 | ND | 2.08 | mg/L | 0.0100 | 021606A | 02/16/06 | 13:15 |
| Lead | EPA 6020 | ND | 2.08 | mg/L | 0.0020 | 021606A | 02/16/06 | 13:15 |
| Manganese | EPA 6010B | ND | 1.04 | mg/L | 0.500 | 020206A | 02/02/06 | 15:50 |
| Molybdenum | EPA 6020 | 0.0102 | 2.08 | mg/L | 0.0050 | 021606A | 02/16/06 | 13:15 |
| Nickel | EPA 6010B | ND | 1.04 | mg/L | 0.0200 | 020206A | 02/02/06 | 15:50 |
| Zinc | EPA 6010B | ND | 1.04 | mg/L | 0.0200 | 020206A | 02/02/06 | 15:50 |
| Boron | EPA 6010B | 1.38 | 1.04 | mg/L | 0.200 | 020206A | 02/02/06 | 15:50 |
| Iron | EPA 6010B | ND | 1.04 | mg/L | 0.300 | 020206A | 02/02/06 | 15:50 |

| SAMPLE ID: SC-700B-WDR-032 | | Time Collected: 14:05 | | LAB ID: 951370-2 | | | | |
|----------------------------|-----------|-----------------------|------|------------------|--------|---------|----------|----------|
| Parameter | Method | Reported | | | | Batch | Date | Time |
| | | Value | DF | Units | RL | | Analyzed | Analyzed |
| Aluminum | EPA 6010B | ND | 1.04 | mg/L | 0.0520 | 020206A | 02/02/06 | 16:06 |
| Antimony | EPA 6020 | ND | 2.08 | mg/L | 0.0030 | 021606A | 02/16/06 | 13:21 |
| Arsenic | EPA 6020 | ND | 2.08 | mg/L | 0.0050 | 021606A | 02/16/06 | 13:21 |
| Barium | EPA 6010B | ND | 1.04 | mg/L | 0.300 | 020206A | 02/02/06 | 16:06 |
| Chromium | EPA 6010B | ND | 1.04 | mg/L | 0.0010 | 020906A | 02/09/06 | 11:05 |
| Copper | EPA 6020 | ND | 2.08 | mg/L | 0.0100 | 021606A | 02/16/06 | 13:21 |
| Lead | EPA 6020 | ND | 2.08 | mg/L | 0.0020 | 021606A | 02/16/06 | 13:21 |
| Manganese | EPA 6010B | ND | 1.04 | mg/L | 0.500 | 020206A | 02/02/06 | 16:06 |
| Molybdenum | EPA 6020 | 0.0062 | 2.08 | mg/L | 0.0050 | 021606A | 02/16/06 | 13:21 |
| Nickel | EPA 6010B | ND | 1.04 | mg/L | 0.0200 | 020206A | 02/02/06 | 16:06 |
| Zinc | EPA 6010B | 0.0208 | 1.04 | mg/L | 0.0200 | 020206A | 02/02/06 | 16:06 |
| Boron | EPA 6010B | 1.45 | 1.04 | mg/L | 0.200 | 020206A | 02/02/06 | 16:06 |
| Iron | EPA 6010B | ND | 1.04 | mg/L | 0.300 | 020206A | 02/02/06 | 16:06 |

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TRUESDAIL LABORATORIES, INC.


Report Continued

| SAMPLE ID: SC-701-WDR-032 | | Time Collected: 14:10 | | LAB ID: 951370-3 | | | | |
|---------------------------|-----------|-----------------------|------|------------------|---------|---------|---------------|---------------|
| Parameter | Method | Reported Value | DF | Units | RL | Batch | Date Analyzed | Time Analyzed |
| Antimony | EPA 6020 | ND | 10.4 | mg/L | 0.0104 | 021606A | 02/16/06 | 13:26 |
| Arsenic | EPA 6020 | ND | 10.4 | mg/L | 0.0104 | 021606A | 02/16/06 | 13:26 |
| Barium | EPA 6010B | ND | 1.04 | mg/L | 0.300 | 020206A | 02/02/06 | 16:10 |
| Beryllium | EPA 6020 | ND | 10.4 | mg/L | 0.0052 | 021606A | 02/16/06 | 13:26 |
| Cadmium | EPA 6020 | ND | 10.4 | mg/L | 0.0052 | 021606A | 02/16/06 | 13:26 |
| Chromium | EPA 6010B | ND | 1.04 | mg/L | 0.0010 | 020906A | 02/09/06 | 11:09 |
| Cobalt | EPA 6020 | ND | 10.4 | mg/L | 0.0104 | 021606A | 02/16/06 | 13:26 |
| Copper | EPA 6020 | ND | 10.4 | mg/L | 0.0104 | 021606A | 02/16/06 | 13:26 |
| Lead | EPA 6020 | ND | 10.4 | mg/L | 0.0052 | 021606A | 02/16/06 | 13:26 |
| Mercury | EPA 7470A | ND | 1.00 | mg/L | 0.00020 | 021306A | 02/13/06 | NA |
| Molybdenum | EPA 6020 | 0.0471 | 10.4 | mg/L | 0.0104 | 021606A | 02/16/06 | 13:26 |
| Nickel | EPA 6010B | ND | 1.04 | mg/L | 0.0200 | 020206A | 02/02/06 | 16:10 |
| Selenium | EPA 6020 | ND | 10.4 | mg/L | 0.0208 | 021606A | 02/16/06 | 13:26 |
| Silver | EPA 6020 | ND | 10.4 | mg/L | 0.0104 | 021606A | 02/16/06 | 13:26 |
| Thallium | EPA 6020 | ND | 10.4 | mg/L | 0.0052 | 021606A | 02/16/06 | 13:26 |
| Vanadium | EPA 6020 | 0.0332 | 10.4 | mg/L | 0.0104 | 021606A | 02/16/06 | 13:26 |
| Zinc | EPA 6010B | 0.0429 | 1.04 | mg/L | 0.0200 | 020206A | 02/02/06 | 16:10 |

ND: Not detected, or below limit of detection.

DF: Dilution factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services



Client: CH2M HILL

155 Grand Ave. Suite 1000
Oakland, CA 94612

Attention: Shawn Duffy

Samples: Three (3) Groundwater Samples

Project Name: PG&E Topock Project

Project No.: 334168.IM.04.00

P.O. No.: 911248

Laboratory No.: 951370

Reported: February 17, 2006

Collected: February 1, 2006

Received: February 1, 2006

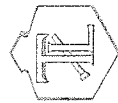
Investigation: Total Metal Analyses as Requested

Quality Control/Quality Assurance Report

| BLANK | | | | MRCCS | | | | MRCVS | | | | | |
|-----------|-----------|---------|-------|-------|--------|----------------|------------|-------|----------------|----------------|------------|-------|------------------|
| Parameter | Method | Batch | Units | Blank | RL | Observed Value | TRUE Value | % Rec | Control Limits | Observed Value | TRUE Value | % Rec | Control Limits % |
| Chromium | EPA 6010B | 020206A | mg/L | ND | 0.0100 | 4.81 | 5.00 | 96.2% | 90-110% | 4.94 | 5.00 | 98.8% | 90-110% |

| LABORATORY CONTROL SAMPLES | | | | | | SAMPLE DUPLICATES | | | | | |
|----------------------------|-----------|-------|----------|-----------|--------|-------------------|-----------|---------------|------------|-------|--------------------------|
| Parameter | Method | Units | LCS Obs. | LCS Theo. | % Rec. | Control Limits | Sample ID | Sample Result | DUP Result | % RPD | Precision Control Limits |
| Chromium | EPA 6010B | mg/L | 4.95 | 5.00 | 99.0% | 90-110% | 951370-1 | 2.28 | 2.29 | 0.44% | ≤20 |

| MATRIX SPIKE | | | | | | Accuracy | | | | | |
|--------------|-----------|-----------|-------|---------------|------|-------------|---------------------|-------------|---------|--------|----------------|
| Sample ID | Parameter | Method | Units | Sample Result | DF | Spike Level | Total Amt. of Spike | Theo. Value | MS Obs. | % Rec. | Control Limits |
| 951370-1 | Chromium | EPA 6010B | mg/L | 2.28 | 1.04 | 2.50 | 2.60 | 4.88 | 5.02 | 105% | 75-125% |

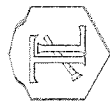


TRUESDAIL LABORATORIES, INC.

Report Continued

| Parameter | Method | Batch | Units | BLANK | | | MRCCS | | | MRCVS | | | |
|------------|-----------|---------|-------|-------|---------|----------------|------------|-------|----------------|----------------|------------|-------|----------------|
| | | | | Blank | RL | Observed Value | TRUE Value | % Rec | Control Limits | Observed Value | TRUE Value | % Rec | Control Limits |
| Aluminum | EPA 6010B | 020206A | mg/L | ND | 0.0500 | 4.87 | 5.00 | 97.4% | 90-110% | 4.92 | 5.00 | 98.4% | 90-110% |
| Antimony | EPA 6020 | 021606A | mg/L | ND | 0.0030 | 0.0491 | 0.0500 | 98.2% | 90-110% | 0.0473 | 0.0500 | 94.6% | 90-110% |
| Arsenic | EPA 6020 | 021606A | mg/L | ND | 0.0050 | 0.0509 | 0.0500 | 102% | 90-110% | 0.0469 | 0.0500 | 93.8% | 90-110% |
| Barium | EPA 6010B | 020206A | mg/L | ND | 0.300 | 4.87 | 5.00 | 97.4% | 90-110% | 4.92 | 5.00 | 98.4% | 90-110% |
| Beryllium | EPA 6020 | 021606A | mg/L | ND | 0.0010 | 0.0495 | 0.0500 | 99.0% | 90-110% | 0.0525 | 0.0500 | 105% | 90-110% |
| Cadmium | EPA 6020 | 021606A | mg/L | ND | 0.0020 | 0.0477 | 0.0500 | 95.4% | 90-110% | 0.0465 | 0.0500 | 93.0% | 90-110% |
| Chromium | EPA 6010B | 020906A | mg/L | ND | 0.0010 | 0.0102 | 0.0100 | 102% | 90-110% | 0.00973 | 0.0100 | 97.3% | 90-110% |
| Cobalt | EPA 6020 | 021606A | mg/L | ND | 0.0050 | 0.0496 | 0.0500 | 99.2% | 90-110% | 0.0460 | 0.0500 | 92.0% | 90-110% |
| Copper | EPA 6020 | 021606A | mg/L | ND | 0.0100 | 0.0501 | 0.0500 | 100% | 90-110% | 0.0457 | 0.0500 | 91.4% | 90-110% |
| Lead | EPA 6020 | 021606A | mg/L | ND | 0.0020 | 0.0496 | 0.0500 | 99.2% | 90-110% | 0.0476 | 0.0500 | 95.2% | 90-110% |
| Manganese | EPA 6010B | 020206A | mg/L | ND | 0.500 | 4.93 | 5.00 | 98.6% | 90-110% | 4.96 | 5.00 | 99.2% | 90-110% |
| Mercury | EPA 7470A | 021306A | mg/L | ND | 0.00020 | 0.00096 | 0.00100 | 96.0% | 90-110% | 0.00091 | 0.00100 | 91.0% | 80-120% |
| Molybdenum | EPA 6020 | 021606A | mg/L | ND | 0.0050 | 0.0486 | 0.0500 | 97.2% | 90-110% | 0.0462 | 0.0500 | 92.4% | 90-110% |
| Nickel | EPA 6010B | 020206A | mg/L | ND | 0.0200 | 4.93 | 5.00 | 98.6% | 90-110% | 5.02 | 5.00 | 100% | 90-110% |
| Selenium | EPA 6020 | 021606A | mg/L | ND | 0.0050 | 0.0495 | 0.0500 | 99.0% | 90-110% | 0.0468 | 0.0500 | 93.6% | 90-110% |
| Silver | EPA 6020 | 021606A | mg/L | ND | 0.0050 | 0.0480 | 0.0500 | 96.0% | 90-110% | 0.0466 | 0.0500 | 93.2% | 90-110% |
| Thallium | EPA 6020 | 021606A | mg/L | ND | 0.0010 | 0.0499 | 0.0500 | 99.8% | 90-110% | 0.0479 | 0.0500 | 95.8% | 90-110% |
| Vanadium | EPA 6020 | 021606A | mg/L | ND | 0.0050 | 0.0499 | 0.0500 | 99.8% | 90-110% | 0.0464 | 0.0500 | 92.8% | 90-110% |
| Zinc | EPA 6010B | 020206A | mg/L | ND | 0.0200 | 4.96 | 5.00 | 99.2% | 90-110% | 5.14 | 5.00 | 103% | 90-110% |
| Boron | EPA 6010B | 020206A | mg/L | ND | 0.200 | 4.82 | 5.00 | 96.4% | 90-110% | 4.91 | 5.00 | 98.2% | 90-110% |
| Iron | EPA 6010B | 020206A | mg/L | ND | 0.300 | 4.74 | 5.00 | 94.8% | 90-110% | 4.86 | 5.00 | 97.2% | 90-110% |

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TRUESDAIL LABORATORIES, INC.

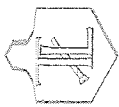
Report Continued

LABORATORY CONTROL SAMPLES

SAMPLE DUPLICATES

| Parameter | Method | Units | LABORATORY CONTROL SAMPLES | | | | SAMPLE DUPLICATES | | | | Precision Control Limits % |
|------------|-----------|-------|----------------------------|-----------|--------|----------------|-------------------|---------------|------------|-------|----------------------------|
| | | | LCS Obs. | LCS Theo. | % Rec. | Control Limits | SAMPLE ID | SAMPLE RESULT | DUP RESULT | % RPD | |
| Aluminum | EPA 6010B | mg/L | 4.91 | 5.00 | 98.2% | 90-110% | 951370-1 | ND | ND | 0.00% | ≤20 |
| Antimony | EPA 6020 | mg/L | 0.0496 | 0.0500 | 99.2% | 90-110% | 951370-3 | ND | ND | 0.00% | ≤20 |
| Arsenic | EPA 6020 | mg/L | 0.0502 | 0.0500 | 100% | 90-110% | 951370-3 | ND | ND | 0.00% | ≤20 |
| Barium | EPA 6010B | mg/L | 4.98 | 5.00 | 99.6% | 90-110% | 951370-1 | ND | ND | 0.00% | ≤20 |
| Beryllium | EPA 6020 | mg/L | 0.0504 | 0.0500 | 101% | 90-110% | 951370-3 | ND | ND | 0.00% | ≤20 |
| Cadmium | EPA 6020 | mg/L | 0.0481 | 0.0500 | 96.2% | 90-110% | 951370-3 | ND | ND | 0.00% | ≤20 |
| Chromium | EPA 6010B | mg/L | 0.0104 | 0.0100 | 104% | 90-110% | 951563-2 | 0.0064 | 0.0059 | 8.13% | ≤20 |
| Cobalt | EPA 6020 | mg/L | 0.0489 | 0.0500 | 97.8% | 90-110% | 951370-3 | ND | ND | 0.00% | ≤20 |
| Copper | EPA 6020 | mg/L | 0.0493 | 0.0500 | 98.6% | 90-110% | 951370-3 | ND | ND | 0.00% | ≤20 |
| Lead | EPA 6020 | mg/L | 0.0500 | 0.0500 | 100% | 90-110% | 951370-3 | ND | ND | 0.00% | ≤20 |
| Manganese | EPA 6010B | mg/L | 5.02 | 5.00 | 100% | 90-110% | 951370-1 | ND | ND | 0.00% | ≤20 |
| Mercury | EPA 7470A | mg/L | 0.00092 | 0.00100 | 92.0% | 80-120% | 951370-3 | ND | ND | 0.00% | ≤20 |
| Molybdenum | EPA 6020 | mg/L | 0.0489 | 0.0500 | 97.8% | 90-110% | 951370-3 | 0.0471 | 0.0444 | 5.90% | ≤20 |
| Nickel | EPA 6010B | mg/L | 5.04 | 5.00 | 101% | 90-110% | 951370-1 | ND | ND | 0.00% | ≤20 |
| Selenium | EPA 6020 | mg/L | 0.0472 | 0.0500 | 94.4% | 90-110% | 951370-3 | ND | ND | 0.0% | ≤20 |
| Silver | EPA 6020 | mg/L | 0.0492 | 0.0500 | 98.4% | 90-110% | 951370-3 | ND | ND | 0.00% | ≤20 |
| Thallium | EPA 6020 | mg/L | 0.0499 | 0.0500 | 99.8% | 90-110% | 951370-3 | ND | ND | 0.00% | ≤20 |
| Vanadium | EPA 6020 | mg/L | 0.0488 | 0.0500 | 97.6% | 90-110% | 951370-3 | 0.0332 | 0.0294 | 12.1% | ≤20 |
| Zinc | EPA 6010B | mg/L | 5.38 | 5.00 | 108% | 90-110% | 951370-1 | ND | ND | 0.00% | ≤20 |
| Boron | EPA 6010B | mg/L | 4.97 | 5.00 | 99.4% | 90-110% | 951370-1 | 1.38 | 1.41 | 2.15% | ≤20 |
| Iron | EPA 6010B | mg/L | 4.79 | 5.00 | 95.8% | 90-110% | 951370-1 | ND | ND | 0.00% | ≤20 |

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MATRIX SPIKE

| Sample ID | Parameter | Method | Units | Sample Result | DF | Spike Level | Total Amt. of Spike | Theo. Value | MS Obs. | % Rec. | Accuracy Control Limits % |
|-----------|------------|-----------|-------|---------------|------|-------------|---------------------|-------------|---------|--------|---------------------------|
| 951370-1 | Aluminum | EPA 6010B | mg/L | 0.00 | 1.04 | 2.50 | 2.60 | 2.60 | 2.75 | 106% | 75-125% |
| 951370-3 | Antimony | EPA 6020 | mg/L | 0.00 | 10.4 | 0.0500 | 0.520 | 0.520 | 0.562 | 108% | 75-125% |
| 951370-3 | Arsenic | EPA 6020 | mg/L | 0.00 | 10.4 | 0.0500 | 0.520 | 0.520 | 0.544 | 105% | 75-125% |
| 951370-1 | Barium | EPA 6010B | mg/L | 0.00 | 1.04 | 2.50 | 2.60 | 2.60 | 2.67 | 103% | 75-125% |
| 951370-3 | Beryllium | EPA 6020 | mg/L | 0.00 | 10.4 | 0.0500 | 0.520 | 0.520 | 0.427 | 82.1% | 75-125% |
| 951370-3 | Cadmium | EPA 6020 | mg/L | 0.00 | 10.4 | 0.0500 | 0.520 | 0.520 | 0.537 | 103% | 75-125% |
| 951563-2 | Chromium | EPA 6010B | mg/L | 0.0064 | 1.04 | 0.0100 | 0.0104 | 0.0168 | 0.0156 | 88.5% | 75-125% |
| 951370-3 | Cobalt | EPA 6020 | mg/L | 0.00 | 10.4 | 0.0500 | 0.520 | 0.520 | 0.451 | 86.7% | 75-125% |
| 951370-3 | Copper | EPA 6020 | mg/L | 0.00 | 10.4 | 0.0500 | 0.520 | 0.520 | 0.464 | 89.2% | 75-125% |
| 951370-3 | Lead | EPA 6020 | mg/L | 0.00 | 10.4 | 0.0500 | 0.520 | 0.520 | 0.458 | 88.1% | 75-125% |
| 951370-1 | Manganese | EPA 6010B | mg/L | 0.00 | 1.04 | 2.50 | 2.60 | 2.60 | 2.63 | 101% | 75-125% |
| 951370-3 | Mercury | EPA 7470A | mg/L | 0.00 | 1.00 | 0.00100 | 0.00100 | 0.00100 | 0.00083 | 83.0% | 75-125% |
| 951370-3 | Molybdenum | EPA 6020 | mg/L | 0.0471 | 10.4 | 0.0500 | 0.520 | 0.567 | 0.568 | 100% | 75-125% |
| 951370-1 | Nickel | EPA 6010B | mg/L | 0.00 | 1.04 | 2.50 | 2.60 | 2.60 | 2.54 | 97.7% | 75-125% |
| 951370-3 | Selenium | EPA 6020 | mg/L | 0.00 | 10.4 | 0.0500 | 0.520 | 0.520 | 0.597 | 115% | 75-125% |
| 951370-3 | Silver | EPA 6020 | mg/L | 0.00 | 10.4 | 0.0500 | 0.520 | 0.520 | 0.487 | 93.7% | 75-125% |
| 951370-3 | Thallium | EPA 6020 | mg/L | 0.00 | 10.4 | 0.0500 | 0.520 | 0.520 | 0.466 | 89.6% | 75-125% |
| 951370-3 | Vanadium | EPA 6020 | mg/L | 0.0332 | 10.4 | 0.0500 | 0.520 | 0.553 | 0.479 | 85.7% | 75-125% |
| 951370-1 | Zinc | EPA 6010B | mg/L | 0.00 | 1.04 | 2.50 | 2.60 | 2.60 | 2.81 | 108% | 75-125% |
| 951370-1 | Boron | EPA 6010B | mg/L | 1.38 | 1.04 | 2.50 | 2.60 | 3.98 | 4.21 | 109% | 75-125% |
| 951370-1 | Iron | EPA 6010B | mg/L | 0.00 | 1.04 | 2.50 | 2.60 | 2.60 | 2.61 | 100% | 75-125% |

ND: Not detected, or below limit of detection.

DF: Dilution Factor

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



TRUESDAIL LABORATORIES, INC.
14201 Franklin Avenue, Tustin, CA 92780-7008
(714) 730-6239 FAX: (714) 730-6462
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CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-032] **951370**


COC Number

5 Days

TURNAROUND TIME

DATE PAGE 1 OF 1

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

| | | | | NUMBER OF CONTAINERS | | | | | | | | | | | | COMMENTS | | | | | | | |
|----------------------------|--------------|----------------|---|----------------------|---|-----------------|--------|-------|-------------|-------------------------|---------------------------|---|----------------|------------------------------|------------|----------|-------------|-----------------|--------------------------------|-----------------|-------------------|---|-------------------------------------|
| COMPANY | PROJECT NAME | PHONE | ADDRESS | P.O. NUMBER | SAMPLERS (SIGNATURE) | SAMPLE I.D. | DATE | TIME | DESCRIPTION | CR6 (7199) Lab Filtered | Total Met (6010B) Tide 22 | Total Met (6010B) Total Al, Ba, B, Cr, Cu, Pb, Mn, Mo, Ni, Fe, Zn, Sb | Metals (7470A) | Specific Conductance (120.1) | PH (150.1) | | TDS (160.1) | Anions (300) FI | Anions (300) FI, SO4, NO2, NO3 | Ammonia (350.2) | Turbidity (180.1) | | |
| CH2M HILL | PG&E Topock | (510) 251-2888 | 155 Grand Ave Ste 1000 Oakland, CA 94612 | 334168.IM.04.00 |  | SC-100B-WDR-032 | 2-1-06 | 14:00 | Groundwater | x | x | x | x | x | x | x | x | x | x | x | x | 5 | Rec'd 02/01/06 951370 PH=2 |
| | | | | | | SC-700B-WDR-032 | 2-1-06 | 14:05 | Groundwater | x | x | x | x | x | x | x | x | x | x | x | x | 4 | |
| | | | | | | SC-701-WDR-032 | 2-1-06 | 14:10 | Groundwater | x | x | x | x | x | x | x | x | x | x | x | x | 4 | |
| TOTAL NUMBER OF CONTAINERS | | | | | | | | | | 12 | | | | | | | | | | | | | |

Rec'd 02/01/06
951370

PH = 2

ALERT!!
Level III QC

For Sample Conditions
See Form Attached

RUSH

CHAIN OF CUSTODY SIGNATURE RECORD

| | | | |
|--------------------------|--------------|----------------|-----------|
| Signature (Relinquished) | Printed Name | Company/Agency | Date/Time |
| Signature (Received) | Printed Name | Company/Agency | Date/Time |
| Signature (Relinquished) | Printed Name | Company/Agency | Date/Time |
| Signature (Received) | Printed Name | Company/Agency | Date/Time |
| Signature (Relinquished) | Printed Name | Company/Agency | Date/Time |
| Signature (Received) | Printed Name | Company/Agency | Date/Time |
| Signature (Relinquished) | Printed Name | Company/Agency | Date/Time |
| Signature (Received) | Printed Name | Company/Agency | Date/Time |

SAMPLE CONDITIONS

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

SPECIAL REQUIREMENTS:

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

February 14, 2006

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

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

Dear Mr. Duffy:

SUBJECT: CASE NARRATIVE PG&E TOPOCK IM3PLANT-WDR-033 PROJECT GROUNDWATER
MONITORING,
TLI NO.: 951608

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-033 project groundwater monitoring for Hexavalent and Total Chromium, Turbidity, Specific Conductivity, pH, and Total Dissolved Solids. A summary table for this sample delivery group is included in Section 2. Complete laboratory reports, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The sample was received and delivered with the chain of custody on February 8, 2006, intact and in chilled condition. The sample will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

Upon receipt, the Total Chromium SC-700B-WDR-033 sample was preserved with Nitric Acid since its pH was measured at 8 pH units.

No violations or nonconformance actions occurred for this data package.

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

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi
Manager, Analytical Services

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

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

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

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 334168.IM.04.00

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

Laboratory No.: 951608

Date: February 15, 2006

Collected: February 8, 2006

Received: February 8, 2006

ANALYST LIST

| | | |
|-----------|------------------------|----------------|
| EPA 120.1 | Specific Conductivity | Alex Hernandez |
| EPA 150.1 | pH | Alex Hernandez |
| EPA 160.1 | Total Dissolved Solids | Emilia Haley |
| EPA 180.1 | Turbidity | Gautam Savani |
| SW 6010B | Total Chromium | Riddhi Patel |
| SW 7199 | Hexavalent Chromium | Jorge Arriaga |

Section 2.0

Summary Table of Final Results

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



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Client: CH2M HILL

155 Grand Ave. Suite 1000
Oakland, CA 94612

Attention: Shawn Duffy

Project Name: PG&E Topock Project

Project No.: 334168.IM.04.00

P.O. No.: 911248

Laboratory No.: 951608

Date Received: February 8, 2006

Analytical Results Summary

| <u>Lab I.D.</u> | <u>Sample I.D.</u> | <u>Sample Time</u> | <u>SW 6010B</u> Chromium Total mg/L | <u>SW 7199</u> Chromium Hexavalent mg/L | <u>EPA 180.1</u> Turbidity NTU | <u>EPA 150.1</u> pH Unit | <u>EPA 120.1</u> EC μ mhos/cm | <u>EPA 160.1</u> TDS mg/L |
|-----------------|--------------------|--------------------|--|--|--------------------------------------|--------------------------------|---|---------------------------------|
| 951608 | SC-700B-WDR-033 | 12:08 | ND | ND | ND | 8.14 | 7650 | 4230 |

ND: Non Detected (below reporting limit)

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

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

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

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

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Section 3.0

Final Reports

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

REPORT

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

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

Attention: Shawn Duffy

Laboratory No.: 951608

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

Date: February 15, 2006
Collected: February 8, 2006
Received: February 8, 2006
Prep/ Analyzed: February 9, 2006
Analytical Batch: 02CrH06F

Investigation:

Hexavalent Chromium by SW 7199

Analytical Results Hexavalent Chromium

| <u>TLI I.D.</u> | <u>Field I.D.</u> | <u>Sample Time</u> | <u>Run Time</u> | <u>Units</u> | <u>DF</u> | <u>RL</u> | <u>Results</u> |
|-----------------|-------------------|--------------------|-----------------|--------------|-----------|-----------|----------------|
| 951608 | SC-700B-WDR-033 | 12:08 | 07:21 | mg/L | 5.00 | 0.0010 | ND |

QA/QC Summary

| QC STD I.D. | Laboratory Number | Concentration | Duplicate Concentration | Relative Percent Difference | Acceptance Limits | QC Within Control |
|-------------|-------------------|---------------|-------------------------|-----------------------------|-------------------|-------------------|
| Duplicate | 951609-3 | 0.785 | 0.796 | 1.39% | ≤ 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 | 951608 | 0.000293 | 1.06 | 0.00100 | 0.00106 | 0.00136 | 0.00135 | 101% | 75-125% | Yes |
| MS | 951608 | 0.00 | 5.00 | 0.00100 | 0.00500 | 0.00564 | 0.00500 | 113% | 75-125% | Yes |

| QC Std I.D. | Measured Concentration | Theoretical Concentration | Percent Recovery | Acceptance Limits | QC Within Control |
|-------------|------------------------|---------------------------|------------------|-------------------|-------------------|
| MRCCS | 0.00494 | 0.00500 | 98.8% | 90% - 110% | Yes |
| MRCVS#1 | 0.0101 | 0.0100 | 101% | 90% - 110% | Yes |
| MRCVS#2 | 0.00994 | 0.0100 | 99.4% | 90% - 110% | Yes |
| MRCVS#3 | 0.00982 | 0.0100 | 98.2% | 90% - 110% | Yes |
| LCS | 0.00502 | 0.00500 | 100% | 90% - 110% | Yes |
| LCSD | 0.00504 | 0.00500 | 101% | 90% - 110% | Yes |

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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Established 1931

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REPORT

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

Attention: Shawn Duffy

Laboratory No.: 951608

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248
Prep. Batch: 021306A

Date: February 15, 2006
Collected: February 8, 2006
Received: February 8, 2006
Prep/ Analyzed: February 13, 2006
Analytical Batch: 021306A

Investigation:

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

Analytical Results Total Chromium

| <u>TLI I.D.</u> | <u>Field I.D.</u> | <u>Units</u> | <u>Method</u> | <u>Run Time</u> | <u>DF</u> | <u>RL</u> | <u>Results</u> |
|-----------------|-------------------|--------------|---------------|-----------------|-----------|-----------|----------------|
| 951608 | SC-700B-WDR-033 | mg/L | SW 6010B | 13:47 | 1.04 | 0.0010 | ND |

QA/QC Summary

| QC STD I.D. | Laboratory Number | Concentration | Duplicate Concentration | Relative Percent Difference | Acceptance limits | QC Within Control |
|-------------|-------------------|---------------|-------------------------|-----------------------------|-------------------|-------------------|
| Duplicate | 951609-8 | 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 | 951609-8 | 0.00 | 1.04 | 0.0100 | 0.0104 | 0.00928 | 0.0104 | 89.2% | 75-125% | Yes |

| QC Std I.D. | Measured Concentration | Theoretical Concentration | Percent Recovery | Acceptance Limits | QC Within Control |
|-------------|------------------------|---------------------------|------------------|-------------------|-------------------|
| MROCS | 0.00999 | 0.0100 | 99.9% | 90% - 110% | Yes |
| MRCVS#1 | 0.00972 | 0.0100 | 97.2% | 90% - 110% | Yes |
| MRCVS#2 | 0.00969 | 0.0100 | 96.9% | 90% - 110% | Yes |
| ICS | 0.00983 | 0.0100 | 99.3% | 80% - 120% | Yes |
| LCS | 0.00990 | 0.0100 | 99.0% | 90% - 110% | Yes |

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

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REPORT

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

Attention: Shawn Duffy

Laboratory No.: 951608

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

Date: February 15, 2006
Collected: February 8, 2006
Received: February 8, 2006
Prep/ Analyzed: February 10, 2006
Analytical Batch: 02EC06B

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

| <u>TLI I.D.</u> | <u>Field I.D.</u> | <u>Units</u> | <u>Method</u> | <u>DF</u> | <u>RL</u> | <u>Results</u> |
|-----------------|-------------------|--------------|---------------|-----------|-----------|----------------|
| 951608 | SC-700B-WDR-033 | µmhos/cm | EPA 120.1 | 10.0 | 20.0 | 7650 |

QA/QC Summary

| QC STD I.D. | Laboratory Number | Concentration | Duplicate Concentration | Relative Percent Difference | Acceptance limits | QC Within Control |
|-------------|-------------------|---------------|-------------------------|-----------------------------|-------------------|-------------------|
| Duplicate | 951631 | 341 | 342 | 0.29% | ≤ 10% | Yes |

| QC Std I.D. | Measured Concentration | Theoretical Concentration | Percent Recovery | Acceptance Limits | QC Within Control |
|-------------|------------------------|---------------------------|------------------|-------------------|-------------------|
| CCS | 672 | 706 | 95.2% | 90% - 110% | Yes |
| CVS#1 | 921 | 998 | 92.3% | 90% - 110% | Yes |
| CVS#2 | 922 | 998 | 92.4% | 90% - 110% | Yes |
| LCS | 673 | 706 | 95.3% | 90% - 110% | Yes |
| LCSD | 675 | 706 | 95.6% | 90% - 110% | Yes |

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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REPORT

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

Attention: Shawn Duffy

Laboratory No.: 951608

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

Date: February 15, 2006
Collected: February 8, 2006
Received: February 8, 2006
Prep/ Analyzed: February 9, 2006
Analytical Batch: 02PH06F

Investigation:

pH by EPA 150.1

Analytical Results pH

| <u>TLI I.D.</u> | <u>Field I.D.</u> | <u>Sample Time</u> | <u>Run Time</u> | <u>Units</u> | <u>MDL</u> | <u>RL</u> | <u>Results</u> |
|-----------------|-------------------|--------------------|-----------------|--------------|------------|-----------|----------------|
| 951608 | SC-700B-WDR-033 | 12:08 | 07:15 | pH Units | 0.0570 | 2.00 | 8.14 |

QA/QC Summary

| QC STD I.D. | Laboratory Number | Concentration | Duplicate Concentration | Difference (Units) | Acceptance Limits | QC Within Control |
|-------------|-------------------|---------------|-------------------------|--------------------|-------------------|-------------------|
| Duplicate | 951607-1 | 7.57 | 7.58 | 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 | 7.01 | 7.00 | 0.01 | + 0.100 Units | Yes |

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

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

REPORT

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

Attention: Shawn Duffy

Laboratory No.: 951608

Sample: One (1) Groundwater Sample

Date: February 15, 2006

Project Name: PG&E Topock Project

Collected: February 8, 2006

Project No.: 334168.IM.04.00

Received: February 8, 2006

P.O. No.: 911248

Prep/ Analyzed: February 9, 2006

Analytical Batch: 02TDS06D

Investigation:

Total Dissolved Solids by EPA 160.1

Analytical Results Total Dissolved Solids

| <u>TLI I.D.</u> | <u>Field I.D.</u> | <u>Units</u> | <u>Method</u> | <u>RL</u> | <u>Results</u> |
|-----------------|-------------------|--------------|---------------|-----------|----------------|
| 951608 | SC-700B-WDR-033 | mg/L | EPA 160.1 | 250 | 4230 |

QA/QC Summary

| QC STD I.D. | Laboratory Number | Concentration | Duplicate Concentration | Percent Difference | Acceptance limits | QC Within Control |
|-------------|-------------------|---------------|-------------------------|--------------------|-------------------|-------------------|
| Duplicate | 951608 | 4230 | 4230 | 0.00% | ≤ 5% | Yes |

| QC Std I.D. | Measured Concentration | Theoretical Concentration | Percent Recovery | Acceptance Limits | QC Within Control |
|-------------|------------------------|---------------------------|------------------|-------------------|-------------------|
| LCS 1 | 496 | 500 | 99.2% | 90% - 110% | Yes |
| LCS 2 | 497 | 500 | 99.4% | 90% - 110% | Yes |

ND: Below the reporting limit (Not Detected).

RL: Reporting Limit.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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REPORT

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

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 334168.IM.04.00

P.O. No.: 911248

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

Laboratory No.: 951608

Date: February 15, 2006

Collected: February 8, 2006

Received: February 8, 2006

Prep/ Analyzed: February 9, 2006

Analytical Batch: 02TUC06J

Investigation:

Turbidity by Method EPA 180.1

Analytical Results Turbidity

| <u>TLI I.D.</u> | <u>Field I.D.</u> | <u>Sample Time</u> | <u>Units</u> | <u>DF</u> | <u>RL</u> | <u>Results</u> |
|-----------------|-------------------|--------------------|--------------|-----------|-----------|----------------|
| 951608 | SC-700B-WDR-033 | 12:08 | 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 | 951600-79 | ND | ND | 0.00% | ≤ 20% | Yes |

| QC Std I.D. | Measured Concentration | Theoretical Concentration | Percent Recovery | Acceptance Limits | QC Within Control |
|-------------|------------------------|---------------------------|------------------|-------------------|-------------------|
| LCS | 7.75 | 8.00 | 96.9% | 90% - 110% | Yes |
| LCS | 7.60 | 8.00 | 95.0% | 90% - 110% | Yes |
| LCS | 7.72 | 8.00 | 96.5% | 90% - 110% | Yes |

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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CHAIN OF CUSTODY RECORD


[[IM3Plant-WDR-033]]

COC Number

5 Days

TURNAROUND TIME

DATE 02-08-06 PAGE 1 OF 1

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

SAMPLE I.D. SC-700B-WDR-033 DATE 02-08-06 12:08 DESCRIPTION Groundwater

CR6 (7199) Lab Filtered
Total Mer (6010B) Total Chromium
Specific Conductance (120.1)
PH (150.1)
TDS (160.1)
Turbidity (180.1)

Rec'd 02/08/06
751608

COMMENTS

NUMBER OF CONTAINERS



3
3
TOTAL NUMBER OF CONTAINERS

RUSH

For Sample Conditions
See Form Attached

ALERT!!
Level III QC

CHAIN OF CUSTODY SIGNATURE RECORD

| | | | | | | | |
|--------------------------|---|--------------|------------|-----------------|-----------|------------|----------------|
| Signature (Relinquished) |  | Printed Name | J. Brown | Company/ Agency | ENVISIA | Date/ Time | 02-08-06 12:15 |
| Signature (Received) |  | Printed Name | J. Brown | Company/ Agency | TLI | Date/ Time | 02-08-06 20:00 |
| Signature (Relinquished) | M.L. | Printed Name | M. Lagunas | Company/ Agency | EXECUTIVE | Date/ Time | 02-08-06 20:00 |
| Signature (Received) | M.L. | Printed Name | M. Lagunas | Company/ Agency | | Date/ Time | |
| Signature (Relinquished) | | Printed Name | | Company/ Agency | | Date/ Time | |
| Signature (Received) | | Printed Name | | Company/ Agency | | Date/ Time | |

SAMPLE CONDITIONS

RECEIVED COOL ☒ WARM ☐ °F
CUSTODY SEALED YES ☒ NO ☐

SPECIAL REQUIREMENTS:

ALERT!!
Level III QC

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



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February 28, 2006

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

14201 FRANKLIN AVENUE
TUSTIN, CALIFORNIA 92780-7008
(714) 730-6239 · FAX (714) 730-6462
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Dear Mr. Duffy:

SUBJECT: CASE NARRATIVE PG&E TOPOCK IM3PLANT-WDR-034 PROJECT, GROUNDWATER
MONITORING,
TLI NO.: 951860

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-034 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.

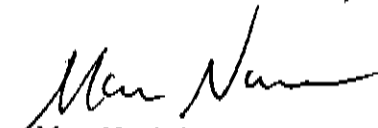
The samples were received and delivered with the chain of custody on February 15, 2006, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

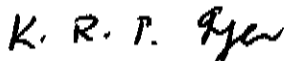
Upon receipt, the Total Chromium SC-700B-WDR-034 sample was preserved with Nitric Acid since its pH was measured at 7 pH units.

No violations or nonconformance actions occurred for this data package.

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

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi
Manager, Analytical Services



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

TRUESDAIL LABORATORIES, INC.

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www.truesdail.com

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 334168.IM.04.00

Laboratory No.: 951860

Date: February 22, 2006

Collected: February 15, 2006

Received: February 15, 2006

ANALYST LIST

| EPA 120.1 | Specific Conductivity | Alex Hernandez |
|-----------|------------------------|----------------|
| EPA 150.1 | pH | Alex Hernandez |
| EPA 160.1 | Total Dissolved Solids | Hope Trinidad |
| EPA 180.1 | Turbidity | Gautam Savani |
| SW 6010B | Total Chromium | Riddhi Patel |
| SW 7199 | Hexavalent Chromium | Jorge Arriaga |

Section 2.0

Summary Table of Final Results

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Client: CH2M HILL

155 Grand Ave. Suite 1000
Oakland, CA 94612

Attention: Shawn Duffy

Project Name: PG&E Topock Project

Project No.: 334168.IM.04.00

P.O. No.: 911248

Laboratory No.: 951860

Date Received: February 15, 2006

Analytical Results Summary

| <u>Lab I.D.</u> | <u>Sample I.D.</u> | <u>Sample Time</u> | <u>SW 6010B</u> Chromium Total mg/L | <u>SW 7199</u> Chromium Hexavalent mg/L | <u>EPA 180.1</u> Turbidity NTU | <u>EPA 150.1</u> pH | <u>EPA 120.1</u> EC | <u>EPA 160.1</u> TDS |
|-----------------|--------------------|--------------------|--|--|--------------------------------------|------------------------|------------------------|-------------------------|
| 951860 | SC-700B-WDR-034 | 13:25 | ND | ND | ND | 8.07 | 7750 | 4140 |

ND: Non Detected (below reporting limit)

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

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

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

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

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Section 3.0

Final Reports

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

REPORT

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

Attention: Shawn Duffy

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

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TUSTIN, CALIFORNIA 92780-7008
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Laboratory No.: 951860

Date: February 22, 2006
Collected: February 15, 2006
Received: February 15, 2006
Prep/ Analyzed: February 16, 2006
Analytical Batch: 02CrH060

Investigation:

Hexavalent Chromium by SW 7199

Analytical Results Hexavalent Chromium

| <u>TLI I.D.</u> | <u>Field I.D.</u> | <u>Sample Time</u> | <u>Run Time</u> | <u>Units</u> | <u>DF</u> | <u>RL</u> | <u>Results</u> |
|-----------------|-------------------|--------------------|-----------------|--------------|-----------|-----------|----------------|
| 951860 | SC-700B-WDR-034 | 13:25 | 09:32 | mg/L | 5.00 | 0.0010 | ND |

QA/QC Summary

| QC STD I.D. | Laboratory Number | Concentration | Duplicate Concentration | Relative Percent Difference | Acceptance Limits | QC Within Control |
|-------------|-------------------|---------------|-------------------------|-----------------------------|-------------------|-------------------|
| Duplicate | 951858-28 | 0.0155 | 0.0155 | 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 | 951860 | 0.00 | 5.00 | 0.00100 | 0.00500 | 0.00512 | 0.00500 | 102% | 75-125% | Yes |

| QC Std I.D. | Measured Concentration | Theoretical Concentration | Percent Recovery | Acceptance Limits | QC Within Control |
|-------------|------------------------|---------------------------|------------------|-------------------|-------------------|
| MRCSS | 0.00504 | 0.00500 | 101% | 90% - 110% | Yes |
| MRCVS#1 | 0.00993 | 0.0100 | 99.3% | 90% - 110% | Yes |
| MRCVS#2 | 0.00982 | 0.0100 | 98.2% | 90% - 110% | Yes |
| MRCVS#3 | 0.00983 | 0.0100 | 98.3% | 90% - 110% | Yes |
| MRCVS#4 | 0.00981 | 0.0100 | 98.1% | 90% - 110% | Yes |
| LCS | 0.00505 | 0.00500 | 101% | 90% - 110% | Yes |
| LCSD | 0.00508 | 0.00500 | 102% | 90% - 110% | Yes |

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi
Mona Nassimi, Manager
Analytical Services

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REPORT

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www.truesdail.com

Attention: Shawn Duffy

Laboratory No.: 951860

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248
Prep. Batch: 021606A

Date: February 22, 2006
Collected: February 15, 2006
Received: February 15, 2006
Prep/ Analyzed: February 16, 2006
Analytical Batch: 021606A

Investigation:

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

Analytical Results Total Chromium

| <u>TLI I.D.</u> | <u>Field I.D.</u> | <u>Units</u> | <u>Method</u> | <u>Run Time</u> | <u>DF</u> | <u>RL</u> | <u>Results</u> |
|-----------------|-------------------|--------------|---------------|-----------------|-----------|-----------|----------------|
| 951860 | SC-700B-WDR-034 | mg/L | SW 6010B | 13:26 | 1.04 | 0.0010 | ND |

QA/QC Summary

| QC STD I.D. | Laboratory Number | Concentration | Duplicate Concentration | Relative Percent Difference | Acceptance Limits | QC Within Control |
|-------------|-------------------|---------------|-------------------------|-----------------------------|-------------------|-------------------|
| Duplicate | 951691-1 | 0.0346 | 0.0358 | 3.41% | ≤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 | 951691-3 | 0.0486 | 5.21 | 0.0100 | 0.0521 | 0.105 | 0.101 | 108% | 75-125% | Yes |

| QC Std I.D. | Measured Concentration | Theoretical Concentration | Percent Recovery | Acceptance Limits | QC Within Control |
|-------------|------------------------|---------------------------|------------------|-------------------|-------------------|
| MRCCS | 0.00970 | 0.0100 | 97.0% | 90% - 110% | Yes |
| MRCVS#1 | 0.0104 | 0.0100 | 104% | 90% - 110% | Yes |
| ICS | 0.00995 | 0.0100 | 99.5% | 80% - 120% | Yes |
| LCS | 0.0101 | 0.0100 | 101% | 90% - 110% | Yes |

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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REPORT

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

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 334168.IM.04.00

P.O. No.: 911248

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www.truesdail.com

Laboratory No.: 951860

Date: February 22, 2006

Collected: February 15, 2006

Received: February 15, 2006

Prep/ Analyzed: February 16, 2006

Analytical Batch: 02TUC060

Investigation:

Turbidity by Method EPA 180.1

Analytical Results Turbidity

| <u>TLI I.D.</u> | <u>Field I.D.</u> | <u>Sample Time</u> | <u>Units</u> | <u>DF</u> | <u>RL</u> | <u>Results</u> |
|-----------------|-------------------|--------------------|--------------|-----------|-----------|----------------|
| 951860 | SC-700B-WDR-034 | 13:25 | 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 | 951794-5 | ND | ND | 0.00% | ≤ 20% | Yes |

| QC Std I.D. | Measured Concentration | Theoretical Concentration | Percent Recovery | Acceptance Limits | QC Within Control |
|-------------|------------------------|---------------------------|------------------|-------------------|-------------------|
| LCS | 7.96 | 8.00 | 99.5% | 90% - 110% | Yes |
| LCS | 7.95 | 8.00 | 99.4% | 90% - 110% | Yes |
| LCS | 7.90 | 8.00 | 98.8% | 90% - 110% | Yes |

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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

Attention: Shawn Duffy

Laboratory No.: 951860

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

Date: February 22, 2006
Collected: February 15, 2006
Received: February 15, 2006
Prep/ Analyzed: February 16, 2006
Analytical Batch: 02EC06D

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

| <u>TLI I.D.</u> | <u>Field I.D.</u> | <u>Units</u> | <u>Method</u> | <u>DF</u> | <u>RL</u> | <u>Results</u> |
|-----------------|-------------------|--------------|---------------|-----------|-----------|----------------|
| 951860 | SC-700B-WDR-034 | µmhos/cm | EPA 120.1 | 10.0 | 20.0 | 7750 |

QA/QC Summary

| QC STD I.D. | Laboratory Number | Concentration | Duplicate Concentration | Relative Percent Difference | Acceptance Limits | QC Within Control |
|-------------|-------------------|---------------|-------------------------|-----------------------------|-------------------|-------------------|
| Duplicate | 951777-1 | 1200 | 1200 | 0.00% | ≤ 10% | Yes |

| QC Std I.D. | Measured Concentration | Theoretical Concentration | Percent Recovery | Acceptance Limits | QC Within Control |
|-------------|------------------------|---------------------------|------------------|-------------------|-------------------|
| CCS | 677 | 706 | 95.9% | 90% - 110% | Yes |
| CVS#1 | 921 | 998 | 92.3% | 90% - 110% | Yes |
| LCS | 671 | 706 | 95.0% | 90% - 110% | Yes |
| LCSD | 672 | 706 | 95.2% | 90% - 110% | Yes |

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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Attention: Shawn Duffy

Laboratory No.: 951860

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

Date: February 22, 2006
Collected: February 15, 2006
Received: February 15, 2006
Prep/ Analyzed: February 16, 2006
Analytical Batch: 02PH06K

Investigation:

pH by EPA 150.1

Analytical Results pH

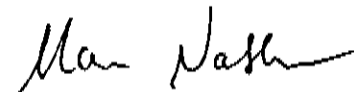
| <u>TLI I.D.</u> | <u>Field I.D.</u> | <u>Sample Time</u> | <u>Run Time</u> | <u>Units</u> | <u>MDL</u> | <u>RL</u> | <u>Results</u> |
|-----------------|-------------------|--------------------|-----------------|--------------|------------|-----------|----------------|
| 951860 | SC-700B-WDR-034 | 13:25 | 07:10 | pH Units | 0.0570 | 2.00 | 8.07 |

QA/QC Summary

| QC STD I.D. | Laboratory Number | Concentration | Duplicate Concentration | Difference (Units) | Acceptance Limits | QC Within Control |
|-------------|-------------------|---------------|-------------------------|--------------------|-------------------|-------------------|
| Duplicate | 951860 | 8.07 | 8.08 | 0.01 | + 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 | 7.02 | 7.00 | 0.02 | + 0.100 Units | Yes |

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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REPORT

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

Attention: Shawn Duffy

Laboratory No.: 951860

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

Date: February 22, 2006
Collected: February 15, 2006
Received: February 15, 2006
Prep/ Analyzed: February 16, 2006
Analytical Batch: 02TDS06G

Investigation:

Total Dissolved Solids by EPA 160.1

Analytical Results Total Dissolved Solids

| <u>TLI I.D.</u> | <u>Field I.D.</u> | <u>Units</u> | <u>Method</u> | <u>RL</u> | <u>Results</u> |
|-----------------|-------------------|--------------|---------------|-----------|----------------|
| 951860 | SC-700B-WDR-034 | mg/L | EPA 160.1 | 250 | 4140 |

QA/QC Summary

| QC STD I.D. | Laboratory Number | Concentration | Duplicate Concentration | Percent Difference | Acceptance Limits | QC Within Control |
|-------------|-------------------|---------------|-------------------------|--------------------|-------------------|-------------------|
| Duplicate | 951860 | 4140 | 4180 | 0.48% | ≤ 5% | Yes |

| QC Std I.D. | Measured Concentration | Theoretical Concentration | Percent Recovery | Acceptance Limits | QC Within Control |
|-------------|------------------------|---------------------------|------------------|-------------------|-------------------|
| LCS 1 | 518 | 500 | 104% | 90% - 110% | Yes |
| LCS 2 | 499 | 500 | 99.8% | 90% - 110% | Yes |

ND: Below the reporting limit (Not Detected).

RL: Reporting Limit.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

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TRUESDAIL LABORATORIES, INC.
14201 Franklin Avenue, Tustin, CA 92780-7008
(714) 730-6239 FAX: (714) 730-6462
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CHAIN OF CUSTODY RECORD

[IM3Plant-WDR-034]

COC Number

5 Days

TURNAROUND TIME

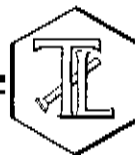
DATE 2-15-06 PAGE 1 OF 1

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

| NUMBER OF CONTAINERS | | | | | | | | | | COMMENTS | | | | | | | | | |
|----------------------|--|--|--|--|--|--|--|--|--|---------------------------------|--|--|--|--|--|--|--|--|--|
| 3 | | | | | | | | | | TOTAL NUMBER OF CONTAINERS | | | | | | | | | |
| 3 | | | | | | | | | | F=nd | | | | | | | | | |
| x | | | | | | | | | | CR6 (7199) Lab Filled | | | | | | | | | |
| x | | | | | | | | | | Total Me (60108) Total Chromium | | | | | | | | | |
| x | | | | | | | | | | Specific Conductance (120.1) | | | | | | | | | |
| x | | | | | | | | | | pH (150.1) | | | | | | | | | |
| x | | | | | | | | | | TDS (160.1) | | | | | | | | | |
| x | | | | | | | | | | Turbidity (180.1) | | | | | | | | | |
| x | | | | | | | | | | Rec'd 02/15/06 951860 | | | | | | | | | |

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

March 1, 2006

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

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

Dear Mr. Duffy:

SUBJECT: CASE NARRATIVE PG&E TOPOCK IM3PLANT-WDR-035 PROJECT, GROUNDWATER
MONITORING,
TLI No.: 952058

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-035 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 February 22, 2006, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

Upon receipt, the Total Chromium SC-700B-WDR-035 sample was preserved with Nitric Acid since its pH was measured at 7 pH units.

No violations or nonconformance actions occurred for this data package.

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

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi
Manager, Analytical Services

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

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



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REPORT

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www.truesdail.com

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

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 334168.IM.04.00

Laboratory No.: 952058

Date: March 1, 2006

Collected: February 22, 2006

Received: February 22, 2006

ANALYST LIST

| EPA 120.1 | Specific Conductivity | Alex Hernandez |
|-----------|------------------------|----------------|
| EPA 150.1 | pH | Alex Hernandez |
| EPA 160.1 | Total Dissolved Solids | Emilia Haley |
| EPA 180.1 | Turbidity | Gautam Savani |
| SW 6010B | Total Chromium | Riddhi Patel |
| SW 7199 | Hexavalent Chromium | Jorge Arriaga |

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Section 2.0

Summary Table of Final Results

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Client: CH2M HILL

155 Grand Ave. Suite 1000
Oakland, CA 94612

Attention: Shawn Duffy

Project Name: PG&E Topock Project

Project No.: 334168.IM.04.00

P.O. No.: 911248

Laboratory No.: 952058

Date Received: February 22, 2006

Analytical Results Summary

| <u>Lab I.D.</u> | <u>Sample I.D.</u> | <u>Sample Time</u> | <u>SW 6010B</u> Chromium Total mg/L | <u>SW 7199</u> Chromium Hexavalent mg/L | <u>EPA 180.1</u> Turbidity NTU | <u>EPA 150.1</u> pH Unit | <u>EPA 120.1</u> EC µmhos/cm | <u>EPA 160.1</u> TDS mg/L |
|-----------------|--------------------|--------------------|--|--|--------------------------------------|--------------------------------|------------------------------------|---------------------------------|
| 952058 | SC-700B-WDR-035 | 12:50 | ND | ND | ND | 7.76 | 7600 | 4190 |

ND: Non Detected (below reporting limit)

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

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

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

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

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Section 3.0

Final Reports

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

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

REPORT

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

Attention: Shawn Duffy

Laboratory No.: 952058

Sample: One (1) Groundwater Sample
Project Name: PG&E Topock Project
Project No.: 334168.IM.04.00
P.O. No.: 911248
Prep. Batch: 022706A

Date: March 1, 2006
Collected: February 22, 2006
Received: February 22, 2006
Prep/ Analyzed: February 27, 2006
Analytical Batch: 022706A

Investigation:

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

Analytical Results Total Chromium

| <u>TLI I.D.</u> | <u>Field I.D.</u> | <u>Units</u> | <u>Method</u> | <u>Run Time</u> | <u>DF</u> | <u>RL</u> | <u>Results</u> |
|-----------------|-------------------|--------------|---------------|-----------------|-----------|-----------|----------------|
| 952058 | SC-700B-WDR-035 | mg/L | SW 6010B | 14:23 | 1.04 | 0.0010 | ND |

QA/QC Summary

| QC STD I.D. | Laboratory Number | Concentration | Duplicate Concentration | Relative Percent Difference | Acceptance Limits | QC Within Control |
|-------------|-------------------|---------------|-------------------------|-----------------------------|-------------------|-------------------|
| Duplicate | 952058 | 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 | 952058 | 0.00 | 1.04 | 0.0100 | 0.0104 | 0.0101 | 0.0104 | 97.1% | 75-125% | Yes |

| QC Std I.D. | Measured Concentration | Theoretical Concentration | Percent Recovery | Acceptance Limits | QC Within Control |
|-------------|------------------------|---------------------------|------------------|-------------------|-------------------|
| MRCCS | 0.0102 | 0.0100 | 102% | 90% - 110% | Yes |
| MRCVS#1 | 0.00998 | 0.0100 | 99.8% | 90% - 110% | Yes |
| ICS | 0.0103 | 0.0100 | 103% | 80% - 120% | Yes |
| LCS | 0.0100 | 0.0100 | 100% | 90% - 110% | Yes |

ND: Not detected at reporting limit

DF: Dilution Factor

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

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REPORT

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

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

Attention: Shawn Duffy

Laboratory No.: 952058

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

Date: March 1, 2006
Collected: February 22, 2006
Received: February 22, 2006
Prep/ Analyzed: February 23, 2006
Analytical Batch: 02CrH06Y

Investigation:

Hexavalent Chromium by SW 7199

Analytical Results Hexavalent Chromium

| <u>TLI I.D.</u> | <u>Field I.D.</u> | <u>Sample Time</u> | <u>Run Time</u> | <u>Units</u> | <u>DF</u> | <u>RL</u> | <u>Results</u> |
|-----------------|-------------------|--------------------|-----------------|--------------|-----------|-----------|----------------|
| 952058 | SC-700B-WDR-035 | 12:50 | 07:09 | mg/L | 5.00 | 0.0010 | ND |

QA/QC Summary

| QC STD I.D. | Laboratory Number | Concentration | Duplicate Concentration | Relative Percent Difference | Acceptance limits | QC Within Control |
|-------------|-------------------|---------------|-------------------------|-----------------------------|-------------------|-------------------|
| Duplicate | 952059-1 | 0.0084 | 0.0084 | 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 | 952058 | 0.00022 | 1.06 | 0.00100 | 0.00106 | 0.00133 | 0.00128 | 105% | 85-115% | Yes |
| MS | 952058 | 0.00 | 5.00 | 0.00100 | 0.00500 | 0.00534 | 0.00500 | 107% | 85-115% | Yes |

| QC Std I.D. | Measured Concentration | Theoretical Concentration | Percent Recovery | Acceptance Limits | QC Within Control |
|-------------|------------------------|---------------------------|------------------|-------------------|-------------------|
| MRCSS | 0.00513 | 0.00500 | 103% | 90% - 110% | Yes |
| MRCVS#1 | 0.0102 | 0.0100 | 102% | 90% - 110% | Yes |
| MRCVS#2 | 0.0102 | 0.0100 | 102% | 90% - 110% | Yes |
| MRCVS#3 | 0.0101 | 0.0100 | 101% | 90% - 110% | Yes |
| MRCVS#4 | 0.0100 | 0.0100 | 100% | 90% - 110% | Yes |
| LCS | 0.00508 | 0.00500 | 102% | 90% - 110% | Yes |
| LCSD | 0.00510 | 0.00500 | 102% | 90% - 110% | Yes |

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

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

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

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 334168.IM.04.00

P.O. No.: 911248

Laboratory No.: 952058

Date: March 1, 2006

Collected: February 22, 2006

Received: February 22, 2006

Prep/ Analyzed: February 23, 2006

Analytical Batch: 02TUC06T

Investigation:

Turbidity by Method EPA 180.1

Analytical Results Turbidity

| <u>TLI I.D.</u> | <u>Field I.D.</u> | <u>Sample Time</u> | <u>Units</u> | <u>DF</u> | <u>RL</u> | <u>Results</u> |
|-----------------|-------------------|--------------------|--------------|-----------|-----------|----------------|
| 952058 | SC-700B-WDR-035 | 12:50 | NTU | 1.00 | 0.100 | ND |

QA/QC Summary

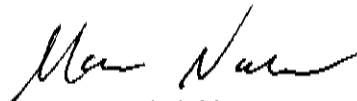
| QC STD I.D. | Laboratory Number | Concentration | Duplicate Concentration | Relative Percent Difference | Acceptance limits | QC Within Control |
|-------------|-------------------|---------------|-------------------------|-----------------------------|-------------------|-------------------|
| Duplicate | 951968-4 | 0.105 | 0.103 | 1.92% | ≤ 20% | Yes |

| QC Std I.D. | Measured Concentration | Theoretical Concentration | Percent Recovery | Acceptance Limits | QC Within Control |
|-------------|------------------------|---------------------------|------------------|-------------------|-------------------|
| LCS | 7.97 | 8.00 | 99.6% | 90% - 110% | Yes |
| LCS | 7.95 | 8.00 | 99.4% | 90% - 110% | Yes |
| LCS | 7.92 | 8.00 | 99.0% | 90% - 110% | Yes |

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

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REPORT

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

Attention: Shawn Duffy

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

14201 FRANKLIN AVENUE
TUSTIN, CALIFORNIA 92780-7008
(714) 730-6239 · FAX (714) 730-6462
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Laboratory No.: 952058

Date: March 1, 2006

Collected: February 22, 2006

Received: February 22, 2006

Prep/ Analyzed: February 23, 2006

Analytical Batch: 02PH06N

Investigation:

pH by EPA 150.1

Analytical Results pH

| <u>TLI I.D.</u> | <u>Field I.D.</u> | <u>Sample Time</u> | <u>Run Time</u> | <u>Units</u> | <u>MDL</u> | <u>RL</u> | <u>Results</u> |
|-----------------|-------------------|--------------------|-----------------|--------------|------------|-----------|----------------|
| 952058 | SC-700B-WDR-035 | 12:50 | 07:05 | pH Units | 0.0570 | 2.00 | 7.76 |

QA/QC Summary

| QC STD I.D. | Laboratory Number | Concentration | Duplicate Concentration | Difference (Units) | Acceptance limits | QC Within Control |
|-------------|-------------------|---------------|-------------------------|--------------------|-------------------|-------------------|
| Duplicate | 952058 | 7.76 | 7.77 | 0.01 | + 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 | 7.02 | 7.00 | 0.02 | + 0.100 Units | Yes |

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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

REPORT

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

Attention: Shawn Duffy

Laboratory No.: 952058

Date: March 1, 2006

Collected: February 22, 2006

Received: February 22, 2006

Prep/ Analyzed: February 24, 2006

Analytical Batch: 02EC06F

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 334168.IM.04.00

P.O. No.: 911248

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

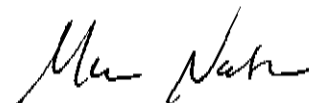
| <u>TLI I.D.</u> | <u>Field I.D.</u> | <u>Units</u> | <u>Method</u> | <u>DF</u> | <u>RL</u> | <u>Results</u> |
|-----------------|-------------------|--------------|---------------|-----------|-----------|----------------|
| 952058 | SC-700B-WDR-035 | µmhos/cm | EPA 120.1 | 10.0 | 20.0 | 7600 |

QA/QC Summary

| QC STD I.D. | Laboratory Number | Concentration | Duplicate Concentration | Relative Percent Difference | Acceptance Limits | QC Within Control |
|-------------|-------------------|---------------|-------------------------|-----------------------------|-------------------|-------------------|
| Duplicate | 951965 | 149 | 151 | 1.33% | ≤ 10% | Yes |

| QC Std I.D. | Measured Concentration | Theoretical Concentration | Percent Recovery | Acceptance Limits | QC Within Control |
|-------------|------------------------|---------------------------|------------------|-------------------|-------------------|
| CCS | 675 | 706 | 95.6% | 90% - 110% | Yes |
| CVS#1 | 924 | 998 | 92.6% | 90% - 110% | Yes |
| CVS#2 | 925 | 998 | 92.7% | 90% - 110% | Yes |
| LCS | 673 | 706 | 95.3% | 90% - 110% | Yes |
| LCSD | 675 | 706 | 95.6% | 90% - 110% | Yes |

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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

Attention: Shawn Duffy

Sample: One (1) Groundwater Sample

Project Name: PG&E Topock Project

Project No.: 334168.IM.04.00

P.O. No.: 911248

Laboratory No.: 952058

Date: March 1, 2006

Collected: February 22, 2006

Received: February 22, 2006

Prep/ Analyzed: February 23, 2006

Analytical Batch: 02TDS06I

Investigation:

Total Dissolved Solids by EPA 160.1

Analytical Results Total Dissolved Solids

| <u>TLI I.D.</u> | <u>Field I.D.</u> | <u>Units</u> | <u>Method</u> | <u>RL</u> | <u>Results</u> |
|-----------------|-------------------|--------------|---------------|-----------|----------------|
| 952058 | SC-700B-WDR-035 | mg/L | EPA 160.1 | 250 | 4190 |

QA/QC Summary

| QC STD I.D. | Laboratory Number | Concentration | Duplicate Concentration | Percent Difference | Acceptance limits | QC Within Control |
|-------------|-------------------|---------------|-------------------------|--------------------|-------------------|-------------------|
| Duplicate | 951984-4 | 970 | 954 | 0.83% | ≤ 5% | Yes |

| QC Std I.D. | Measured Concentration | Theoretical Concentration | Percent Recovery | Acceptance Limits | QC Within Control |
|-------------|------------------------|---------------------------|------------------|-------------------|-------------------|
| LCS 1 | 520 | 500 | 104% | 90% - 110% | Yes |

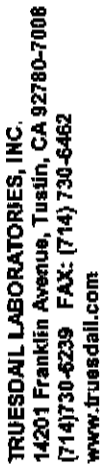
ND: Below the reporting limit (Not Detected).

RL: Reporting Limit.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi, Manager
Analytical Services

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[IM3Plant-WDR-035]

COC Number

5 Days

TURNAROUND TIME

DATE 2-22-06 PAGE 1 OF 1

[illegible]

RUSH

ALERT!!

Level III OC

**For Sample Conditions
See Form Attached**

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



STL

STL Los Angeles

1721 South Grand Avenue
Santa Ana, CA 92705

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

March 2, 2006

STL LOT NUMBER: **E6B170405**
PO/CONTRACT: 334168.IM.04.00

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

Dear Mr. Duffy,

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

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

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

Preliminary results were sent via facsimile on February 23, 2006.

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

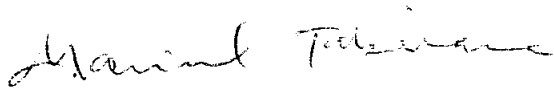
This report contains **000204** _____ pages.

CASE NARRATIVE

The RPD (Relative Percent Difference) for percent moisture in the sample duplicate for Prep Batch # 6051301 exceeded acceptance criteria of 10%. However, please note that the laboratory controls the percent solids and not the percent moisture in the duplicates. In this particular batch, the RPD of the percent solids is 0.1%.

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

Sincerely,



Marisol Tabirara
Project Manager

cc: Project File

| CHAIN OF CUSTODY SIGNATURE RECORD | | | | SAMPLE CONDITIONS | | |
|-----------------------------------|-----------------|--------------------|---------------|---|---|--|
| Signature (Relinquished) | Printed Name | Company/ Agency | Date/ Time | RECEIVED | COOL <input type="checkbox"/> | WARM <input checked="" type="checkbox"/> |
| Signature (Received) | Printed Name | Company/ Agency | Date/ Time | CUSTODY SEALED | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> |
| SPECIAL REQUIREMENTS: | | | | | | |
| Signature (Relinquished) | Printed Name | Company/ Agency | Date/ Time | Temp - 5.5 - 0.5 = 5.0 2/17/06 15:00 | | |
| Signature (Received) | Printed Name | Company/ Agency | Date/ Time | | | |
| Signature (Relinquished) | Printed Name | Company/ Agency | Date/ Time | | | |
| Signature (Received) | Printed Name | Company/ Agency | Date/ Time | | | |
| Signature (Relinquished) | Printed Name | Company/ Agency | Date/ Time | | | |

STL LOS ANGELES - PROJECT RECEIPT CHECKLIST Date: 2/17/06

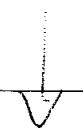
Single Cooler Only

LIMS Lot #: E6B170405 Quote #: 58027
 Client Name: CH2M Hill Project: Plate Topack GWM
 Received by: SL Date/Time Received: 2/17/06 15:00
 Delivered by: ☐ Client ☒ STL ☐ DHL ☐ Fed Ex ☐ UPS ☐ Other _____

***** Initial / Date SL 2/17/06
 Custody Seal Status Cooler: ☐ Intact ☐ Broken ☒ None
 Custody Seal Status Samples: ☐ Intact ☐ Broken ☒ None
 Custody Seal #(s): N/A ☒ No Seal #.....
 Sampler Signature on COC ☐ Yes ☐ No ☒ N/A.....
 IR Gun # A Correction Factor -.5 °C IR passed daily verification ☒ Yes ☐ No
 Temperature - BLANK 55 °C -.5 CF = 5.0 °C Cooler #1 ID N/A
 Temperature - COOLER (_____ °C _____ °C _____ °C _____ °C) = _____ avg °C -.5 CF = _____ °C.....
 Samples outside temperature criteria but received within 6 hours of final sampling ☐ Yes ☒ N/A...

Sample Container(s): ☐ STL-LA ☒ Client
 pH measured: ☐ Yes ☐ Anomaly (if checked, notify lab and file NCM) ☒ N/A..
 Anomalies: ☒ No ☐ Yes - complete CUR and Create NCM

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

Labeled by: SL 

Turn Around Time: ☐ RUSH-24HR ☐ RUSH-48HR ☐ RUSH-72HR ☒ NORMAL..... SL 2/17/06

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

| Headspace Anomaly | | | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A <u>SL 2/17/06</u> | | |
|-------------------|----------------|--------------------------------|--|----------------|--------------------------------|
| Lab ID | Container(s) # | Headspace | Lab ID | Container(s) # | Headspace |
| | | <input type="checkbox"/> > 6mm | | | <input type="checkbox"/> > 6mm |
| | | <input type="checkbox"/> > 6mm | | | <input type="checkbox"/> > 6mm |
| | | <input type="checkbox"/> > 6mm | | | <input type="checkbox"/> > 6mm |
| | | <input type="checkbox"/> > 6mm | | | <input type="checkbox"/> > 6mm |
| | | <input type="checkbox"/> > 6mm | | | <input type="checkbox"/> > 6mm |
| | | <input type="checkbox"/> > 6mm | | | <input type="checkbox"/> > 6mm |
| | | <input type="checkbox"/> > 6mm | | | <input type="checkbox"/> > 6mm |

[illegible]

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

| Condition Upon Receipt Anomaly Form | | Anomalies <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A <i>2/2/17</i> | |
|---|--|---|--|
| COOLERS <input type="checkbox"/> Not Received (received COC only) <input type="checkbox"/> Leaking <input type="checkbox"/> Other: | CUSTODY SEALS (COOLER(S)) <input type="checkbox"/> None <input type="checkbox"/> Not Intact <input type="checkbox"/> Other | CONTAINER(S) <input type="checkbox"/> None <input type="checkbox"/> Not Intact <input type="checkbox"/> Other | |
| TEMPERATURE (SPECS $4 \pm 2^{\circ}\text{C}$) <input type="checkbox"/> Cooler Temp(s) <input type="checkbox"/> Temperature Blank(s) | CHAIN OF CUSTODY (COC) <input type="checkbox"/> Not relinquished by Client; No date/time relinquished <input type="checkbox"/> Incomplete information provided <input type="checkbox"/> Other <input type="checkbox"/> COC not received – notify PM | | |
| CONTAINERS <input type="checkbox"/> Leaking <input type="checkbox"/> Voa Vials with Bubbles > 6mm <input type="checkbox"/> Broken <input type="checkbox"/> Extra <input type="checkbox"/> Without Labels <input type="checkbox"/> Other: | LABELS <input type="checkbox"/> Not the same ID/info as in COC <input type="checkbox"/> Incomplete Information <input type="checkbox"/> Markings/Info illegible <input type="checkbox"/> Torn | | |
| SAMPLES <input type="checkbox"/> Samples NOT RECEIVED but listed on COC <input type="checkbox"/> Samples received but NOT LISTED on COC <input type="checkbox"/> Logged based on Label Information <input type="checkbox"/> Logged based on info from other samples on COC <input type="checkbox"/> Logged according to Work Plan <input type="checkbox"/> Logged on HOLD UNTIL FURTHER NOTICE | <input type="checkbox"/> Will be noted on COC--Client to send samples with new COC <input type="checkbox"/> Mislabeled as to tests, preservatives, etc. <input type="checkbox"/> Holding time expired – list sample ID and test <input type="checkbox"/> Improper container used <input type="checkbox"/> Not preserved/Improper preservative used <input type="checkbox"/> Improper pH _____ Lab to preserve sample and document <input type="checkbox"/> Insufficient quantities for analysis <input type="checkbox"/> Other | | |
| Comments: | | | |
| <input type="checkbox"/> Corrective Action Implemented: <input type="checkbox"/> Client Informed: verbally on _____ By: _____ <input type="checkbox"/> In writing on _____ By: _____ <input type="checkbox"/> Sample(s) on hold until: _____ <input type="checkbox"/> Sample(s) processed "as is." | | | |
| Logged by/Date: <i>Albert Chang 2-17-06</i> <input type="checkbox"/> Logged in by other STL | | PM Review/Date: <i>MT 2/17/06</i> | |

Analytical Report

ANALYTICAL REPORT

PG&E TOPOCK GWM

Lot #: E6B170405

Shawn Duffy

CH2M Hill Inc

SEVERN TRENT LABORATORIES, INC.

Marisol Tabirara
Project Manager

February 28, 2006

EXECUTIVE SUMMARY - Detection Highlights

E6B170405

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | ANALYTICAL METHOD |
|-----------------------------|--------|--------------------|-------|----------------------|
| SC-SLUDGE-WDR- 02/17/06 001 | | | | |
| Mercury | 2.1 | 0.75 | mg/kg | SW846 7471A |
| Arsenic | 13 | 7.5 | mg/kg | SW846 6010B |
| Barium | 130 | 15 | mg/kg | SW846 6010B |
| Chromium | 26000 | 7.5 | mg/kg | SW846 6010B |
| Copper | 140 | 19 | mg/kg | SW846 6010B |
| Molybdenum | 59 | 30 | mg/kg | SW846 6010B |
| Nickel | 57 | 30 | mg/kg | SW846 6010B |
| Thallium | 21 | 7.5 | mg/kg | SW846 6010B |
| Vanadium | 110 | 38 | mg/kg | SW846 6010B |
| Zinc | 300 | 15 | mg/kg | SW846 6010B |
| Percent Moisture | 87 | 0.10 | % | MCAWW 160.3 MOD |
| Hexavalent Chromium | 140 | 3.0 | mg/kg | SW846 7199 |

METHODS SUMMARY

E6B170405

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

References:

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

METHOD / ANALYST SUMMARY

E6B170405

| <u>ANALYTICAL METHOD</u> | <u>ANALYST</u> | <u>ANALYST ID</u> |
|------------------------------|--------------------|-----------------------|
| MCAWW 160.3 MOD | FLORIAN ZIMMERMANN | 000064 |
| SW846 6010B | Josephine Asuncion | 021088 |
| SW846 7199 | Yuriy Zakhrabov | 000022 |
| SW846 7471A | Hao Ton | 000023 |

References:

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

SAMPLE SUMMARY

E6B170405

| WO # | SAMPLE# | CLIENT SAMPLE ID | SAMPLED DATE | SAMP TIME |
|-------|---------|------------------|-----------------|--------------|
| HXPR0 | 001 | SC-SLUDGE-WDR- | 02/17/06 | |

NOTE (S) :

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

CH2M Hill Inc

Client Sample ID: SC-SLUDGE-WDR-

TOTAL Metals

Lot-Sample #...: E6B170405-001

Matrix.....: SO

Date Sampled...: 02/17/06

Date Received...: 02/17/06 15:00

% Moisture.....: 87

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD | PREPARATION- ANALYSIS DATE | WORK ORDER # |
|---------------------------------|--------------|-----------------------|--------------|-------------------------|-------------------------------|-----------------|
| Prep Batch #...: 6051246 | | | | | | |
| Arsenic | 13 | 7.5 | mg/kg | SW846 6010B | 02/20-02/21/06 | HXPR01AD |
| | | Dilution Factor: 1 | | Analysis Time...: 13:02 | Analyst ID.....: 021088 | |
| | | Instrument ID...: M01 | | MS Run #.....: 6051166 | | |
| Antimony | ND | 45 | mg/kg | SW846 6010B | 02/20-02/21/06 | HXPR01AE |
| | | Dilution Factor: 1 | | Analysis Time...: 13:02 | Analyst ID.....: 021088 | |
| | | Instrument ID...: M01 | | MS Run #.....: 6051166 | | |
| Barium | 130 | 15 | mg/kg | SW846 6010B | 02/20-02/21/06 | HXPR01AF |
| | | Dilution Factor: 1 | | Analysis Time...: 13:02 | Analyst ID.....: 021088 | |
| | | Instrument ID...: M01 | | MS Run #.....: 6051166 | | |
| Cadmium | ND | 3.8 | mg/kg | SW846 6010B | 02/20-02/21/06 | HXPR01AG |
| | | Dilution Factor: 1 | | Analysis Time...: 13:02 | Analyst ID.....: 021088 | |
| | | Instrument ID...: M01 | | MS Run #.....: 6051166 | | |
| Chromium | 26000 | 7.5 | mg/kg | SW846 6010B | 02/20-02/21/06 | HXPR01AH |
| | | Dilution Factor: 1 | | Analysis Time...: 13:02 | Analyst ID.....: 021088 | |
| | | Instrument ID...: M01 | | MS Run #.....: 6051166 | | |
| Beryllium | ND | 3.8 | mg/kg | SW846 6010B | 02/20-02/21/06 | HXPR01AJ |
| | | Dilution Factor: 1 | | Analysis Time...: 13:02 | Analyst ID.....: 021088 | |
| | | Instrument ID...: M01 | | MS Run #.....: 6051166 | | |
| Lead | ND | 3.8 | mg/kg | SW846 6010B | 02/20-02/21/06 | HXPR01AK |
| | | Dilution Factor: 1 | | Analysis Time...: 13:02 | Analyst ID.....: 021088 | |
| | | Instrument ID...: M01 | | MS Run #.....: 6051166 | | |
| Selenium | ND | 3.8 | mg/kg | SW846 6010B | 02/20-02/21/06 | HXPR01AL |
| | | Dilution Factor: 1 | | Analysis Time...: 13:02 | Analyst ID.....: 021088 | |
| | | Instrument ID...: M01 | | MS Run #.....: 6051166 | | |
| Silver | ND | 7.5 | mg/kg | SW846 6010B | 02/20-02/21/06 | HXPR01AM |
| | | Dilution Factor: 1 | | Analysis Time...: 13:02 | Analyst ID.....: 021088 | |
| | | Instrument ID...: M01 | | MS Run #.....: 6051166 | | |

(Continued on next page)

CH2M Hill Inc

Client Sample ID: SC-SLUDGE-WDR-

TOTAL Metals

Lot-Sample #...: E6B170405-001

Matrix.....: SO

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD | PREPARATION- ANALYSIS DATE | WORK ORDER # |
|-----------------|---------|-----------------------|-------|-------------------------|-------------------------------|-----------------|
| Cobalt | ND | 38 | mg/kg | SW846 6010B | 02/20-02/21/06 | HXPR01AN |
| | | Dilution Factor: 1 | | Analysis Time...: 13:02 | Analyst ID.....: 021088 | |
| | | Instrument ID...: M01 | | MS Run #.....: 6051166 | | |
| Copper | 140 | 19 | mg/kg | SW846 6010B | 02/20-02/21/06 | HXPR01AP |
| | | Dilution Factor: 1 | | Analysis Time...: 13:02 | Analyst ID.....: 021088 | |
| | | Instrument ID...: M01 | | MS Run #.....: 6051166 | | |
| Molybdenum | 59 | 30 | mg/kg | SW846 6010B | 02/20-02/21/06 | HXPR01AQ |
| | | Dilution Factor: 1 | | Analysis Time...: 13:02 | Analyst ID.....: 021088 | |
| | | Instrument ID...: M01 | | MS Run #.....: 6051166 | | |
| Nickel | 57 | 30 | mg/kg | SW846 6010B | 02/20-02/21/06 | HXPR01AR |
| | | Dilution Factor: 1 | | Analysis Time...: 13:02 | Analyst ID.....: 021088 | |
| | | Instrument ID...: M01 | | MS Run #.....: 6051166 | | |
| Thallium | 21 | 7.5 | mg/kg | SW846 6010B | 02/20-02/21/06 | HXPR01AT |
| | | Dilution Factor: 1 | | Analysis Time...: 13:02 | Analyst ID.....: 021088 | |
| | | Instrument ID...: M01 | | MS Run #.....: 6051166 | | |
| Vanadium | 110 | 38 | mg/kg | SW846 6010B | 02/20-02/21/06 | HXPR01AU |
| | | Dilution Factor: 1 | | Analysis Time...: 13:02 | Analyst ID.....: 021088 | |
| | | Instrument ID...: M01 | | MS Run #.....: 6051166 | | |
| Zinc | 300 | 15 | mg/kg | SW846 6010B | 02/20-02/21/06 | HXPR01AV |
| | | Dilution Factor: 1 | | Analysis Time...: 13:02 | Analyst ID.....: 021088 | |
| | | Instrument ID...: M01 | | MS Run #.....: 6051166 | | |
| Prep Batch #... | 6051371 | | | | | |
| Mercury | 2.1 | 0.75 | mg/kg | SW846 7471A | 02/21/06 | HXPR01AW |
| | | Dilution Factor: 1 | | Analysis Time...: 14:45 | Analyst ID.....: 000023 | |
| | | Instrument ID...: M04 | | MS Run #.....: 6052198 | | |

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

CH2M Hill Inc

Client Sample ID: SC-SLUDGE-WDR-

General Chemistry

Lot-Sample #...: E6B170405-001 Work Order #...: HXPR0 Matrix.....: SO
 Date Sampled...: 02/17/06 Date Received...: 02/17/06 15:00
 % Moisture.....: 87

| PARAMETER | RESULT | RL | UNITS | METHOD | PREPARATION- ANALYSIS DATE | PREP BATCH # |
|---------------------|--------|-----|-------|------------|-------------------------------|-----------------|
| Hexavalent Chromium | 140 | 3.0 | mg/kg | SW846 7199 | 02/20/06 | 6049115 |

Dilution Factor: 1 Analysis Time...: 11:53 Analyst ID.....: 000022
 Instrument ID...: W18 MS Run #.....: 6049062

| | | | | | | |
|------------------|----|------|---|-----------------|----------------|---------|
| Percent Moisture | 87 | 0.10 | % | MCAWW 160.3 MOD | 02/20-02/21/06 | 6051301 |
|------------------|----|------|---|-----------------|----------------|---------|

Dilution Factor: 1 Analysis Time...: 12:15 Analyst ID.....: 0000642
 Instrument ID...: W15 MS Run #.....: 6051184

NOTE(S) :

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

February 23, 2006

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

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

Dear Mr. Duffy:

SUBJECT: CASE NARRATIVE PG&E TOPOCK IM3PLANT-WDR-034 PROJECT, SLUDGE SAMPLE-6,
TLI NO.: 951861

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock IM3Plant-WDR-034 project, Sludge Sample-6. A summary table for this sample delivery group is included in Section 2. Complete laboratory report, quality control data and chain of custody forms for sampling period are included in Sections 3 and 4. Analytical raw data have been included under Section 5.

The sample was received and delivered with the chain of custody on February 15, 2006, intact and in chilled condition. The sample will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

No violations or nonconformance actions occurred for this data package.

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

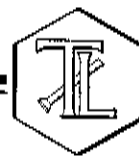
Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.

Mona Nassimi
Manager, Analytical Services

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

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

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

Attention: Shawn Duffy

Sample: One (1) Soil Sample

Project Name: PG&E Topock Project

Project No.: 334168.IM.04.00

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

Laboratory No.: 951861

Date: February 23, 2006

Collected: February 15, 2006

Received: February 15, 2006

ANALYST LIST

| | | |
|-----------|----------|-----------|
| | | |
| EPA 300.0 | Fluoride | Vanna Kho |

Section 2.0

Summary Table of Final Results

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

REPORT

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

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

Attention: Shawn Duffy

Project Name: PG&E Topock Project

Project No.: 334168.IM.04.00

P.O. No.: 911248

Laboratory No.: 951861

Date Received: February 15, 2006

Analytical Results Summary

| <u>Lab I.D.</u> | <u>Sample I.D.</u> | <u>Time Sampled</u> | <u>EPA 300.0</u> <u>Fluoride</u> <u>mg/kg</u> |
|-----------------|--------------------|---------------------|---|
| 951861 | SC-Sludge-WDR-034 | 13:40 | 9.81 |

ND: Non Detected (below reporting limit)

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

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

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

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

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

Section 3.0

Final Report

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES



Established 1931

REPORT

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

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

Attention: Shawn Duffy

Sample: One (1) Soil Sample

Project Name: PG&E Topock Project

Project No.: 334168.IM.04.00

P.O. No.: 911248

Laboratory No.: 951861

Date: February 23, 2006

Collected: February 15, 2006

Received: February 15, 2006

Prep/ Analyzed: February 17, 2006

Analytical Batch: 02AN06R

Investigation:

Fluoride by Ion Chromatography Using EPA 300.0

Analytical Results Fluoride

| TLI I.D. | Field I.D. | Units | Method | Run Time | DF | RL | Results |
|----------|-------------------|-------|-----------|----------|------|------|---------|
| 951861 | SC-Sludge-WDR-034 | mg/kg | EPA 300.0 | 07:11 | 19.1 | 3.82 | 9.81 |

QA/QC Summary

QC Summary

| QC STD I.D. | | Laboratory Number | Concentration | Duplicate Concentration | Relative Percent Difference | Acceptance limits | QC Within Control |
|-------------|--|-------------------|---------------|-------------------------|-----------------------------|-------------------|-------------------|
| Duplicate | | 951861 | 9.81 | 10.0 | 1.92% | ≤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 | 951861 | 9.81 | 19.1 | 2.00 | 38.2 | 50.1 | 48.0 | 105% | 75-125% | Yes |

| QC Std I.D. | Measured Concentration | Theoretical Concentration | Percent Recovery | Acceptance Limits | QC Within Control |
|-------------|------------------------|---------------------------|------------------|-------------------|-------------------|
| MRCCS | 4.08 | 4.00 | 102% | 90% - 110% | Yes |
| MRCVS#1 | 3.09 | 3.00 | 103% | 90% - 110% | Yes |
| MRCVS#2 | 3.11 | 3.00 | 104% | 90% - 110% | Yes |
| MRCVS#3 | 3.08 | 3.00 | 103% | 90% - 110% | Yes |
| LCS | 4.09 | 4.00 | 102% | 90% - 110% | Yes |
| LCSD | 4.10 | 4.00 | 103% | 90% - 110% | Yes |

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.


Mona Nassimi, Manager
Analytical Services

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



TRUESDAIL LABORATORIES, INC.
14201 Franklin Avenue, Tustin, CA 92780-7008
(714) 730-8239 FAX: (714) 730-6462
www.truesdail.com

CHAIN OF CUSTODY RECORD

[Sludge Sample-6]

951861

COC Number

TURNAROUND TIME 5 Days

DATE 2-15-06

PAGE 1 OF 1

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

Rec'd 02/15/06
951861

334168.IM.04.00
Anions (300) FI
Blossay, 96hr Active

COMMENTS

NUMBER OF CONTAINERS

SAMPLE I.D. DATE TIME DESCRIPTION

SC-Sludge-WDR-034 2-15-06 1340 Soil

TOTAL NUMBER OF CONTAINERS

RUSH
ALERT!!
Level III QC

For Sample Conditions
See Form Attached

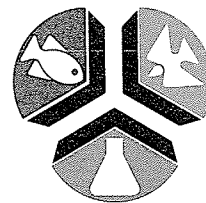
CHAIN OF CUSTODY SIGNATURE RECORD

| | | | | | | | |
|--------------------------|--------------------|--------------|-----------------|----------------|-----|-----------|---------------|
| Signature (Relinquished) | <i>[Signature]</i> | Printed Name | David C. Chaves | Company/Agency | OWA | Date/Time | 2/15/06 13:50 |
| Signature (Received) | | Printed Name | | Company/Agency | | Date/Time | |
| Signature (Relinquished) | <i>[Signature]</i> | Printed Name | DAVID CHAVES | Company/Agency | EVE | Date/Time | 2/15/06 17:30 |
| Signature (Received) | <i>[Signature]</i> | Printed Name | David C. Chaves | Company/Agency | OWA | Date/Time | 2/15/06 19:30 |
| Signature (Relinquished) | | Printed Name | | Company/Agency | | Date/Time | |
| Signature (Received) | | Printed Name | | Company/Agency | | Date/Time | |

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☒ °F
CUSTODY SEALED YES ☒ NO ☐

SPECIAL REQUIREMENTS:



MBC

21 February 2006

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

Attention: Leda Semerjiev

Dear Leda,

The following are the results of the DOHS 96-hour Acute Aquatic Toxicity Screening test performed on the sample labeled 951861 submitted on 16 February 2006.

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

MBC Sample Number 06-164 - Client Identification: 951861

PERCENT SURVIVAL

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

LC50 > 750 mg/l

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

Cordially,

MBC Applied Environmental Sciences

Sonja M. Beck
Bioassay Manager



**DEPARTMENT OF HEALTH SERVICES
TITLE 22
96-HOUR ACUTE AQUATIC
TOXICITY SCREEN TESTING**

Prepared For:

Truesdail Laboratories, Inc.

Prepared By:

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

February 2006

**DEPARTMENT OF HEALTH SERVICES
TITLE 22
96-HOUR ACUTE AQUATIC
TOXICITY SCREEN TESTING**

Prepared For:

Truesdail Laboratories, Inc.

Prepared By:

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

February 2006

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INTRODUCTION

Title 22, Article 3, Section 66261.24 (6) of the California Code of Regulations (CCR) establishes the criteria for the identification of hazardous and extremely hazardous waste. The Department of Health Services (DOHS) compiles and evaluates analytical data for compliance with the toxicity criteria for potentially hazardous waste.

These analytical data have been derived from water and environmental samples submitted to laboratories certified by the DOHS for analysis. The California DOHS 96-Hour Acute Aquatic Toxicity testing assures CCR compliance and minimizes risk to the environment or threat to public health.

Laboratory certification by the DOHS standardized the toxicity testing program by requiring certification of testing laboratories and by utilizing the procedures set forth by Dr. James Polisini, Department of Fish and Game, Water Pollution Control Laboratory (Polisini 1988). Following this methodology, a waste can be evaluated for potential hazardous waste declassification.

Currently, CCR, Title 22, Section 66261.24, Article 6 requires wastes to pass the 96-hour aquatic toxicity screen testing with greater than 50% survival at the 500 mg/l concentration. In addition to this regulation, the DOHS protocol requires wastes to pass the 96-hour aquatic toxicity screen testing with greater than 50% survival at the 500 mg/l concentration and a minimum of 60% survival at the 750 mg/l concentration for compliance. When these screening criteria are not achieved, the DOHS test protocol requires additional definitive serial dilution toxicity testing with a minimum of five test concentrations prior to making a hazardous waste compliance determination.

Toxicity testing conducted by MBC for this report is a static non-renewal acute toxicity screen test following Standard Methods and the procedures of Dr. James Polisini. Death is the effect measured and toxicity is reported as percent survivorship at 250 mg/l, 500 mg/l and 750 mg/l concentrations and a LC_{50} calculated from these data. Original data worksheets will remain on file at MBC.

MATERIALS AND METHODS

Facilities

The toxicity tests are conducted in a laboratory located away from disturbances of non-laboratory personnel or other laboratory or heavy equipment. The laboratory, measuring approximately 20 x 20 ft, is insulated to protect it from rapid temperature changes. Shelves and water tables are provided which allow a capacity of 200 or more 5-gallon aquaria, as well as bench space for laboratory equipment and instruments.

Lighting is provided by five evenly spaced two lamp 4-foot cool white fluorescent fixtures that are regulated by a 24-hour timer. The lighting remains on for 16 hours and is off for 8 hours.

The temperature of the toxicity testing laboratory is maintained by a commercial climate controlled unit controlled by wall-mounted thermostat which provide accuracy to $\pm 2^{\circ}\text{C}$.

A Rustrak Model 2066 continuous recording thermograph monitored the laboratory's temperature 24 hours per day. The Rustrak is calibrated annually by the manufacturer to insure accuracy. Maximum-minimum thermometers are maintained within the laboratory to provide "back-up" temperature variation information.

Low pressure air is supplied to the laboratory for the purpose of slowly bubbling air into the exposure tanks to maintain an acceptable dissolved oxygen concentration. Filtered air is supplied via a Sutor-bilt oil-less blower that provides up to 340 l/min at 0.35 kg/cm². The blower is equipped with a pressure equalizing expansion chamber and an adjustable pressure relief valve to maintain a constant delivery pressure and volume. Air is delivered to the laboratory through PVC piping with numerous individual flow valves. Individual aquaria receive air through commercial plastic aquarium air tubing and a 3 mm inside diameter by 30 cm long soft glass tube which reaches the bottom of the test container. Air is bubbled into the aquaria at a rate of approximately 30 ml /min following the guidelines of Kopperdahl (1976) and Peltier and Weber (1985).

Test Containers

The toxicity tests are conducted in 5-gallon glass aquaria, approximately 26 cm high, 21 cm wide, and 41 cm long. For the definitive test, the aquaria contain a total of 10 liters of waste material and/or dilution softwater which provides a water depth within the test aquaria of approximately 14 cm.

Test containers are cleaned thoroughly with Liqui-Nox brand commercial glassware detergent and warm tap water, rinsed five times with warm tap water, rinsed with reagent grade acetone, rinsed five times with deionized water, rinsed with 5% HCl, and then rinsed three times with deionized water.

Determination of Water Quality Parameters

Water quality measurements are taken and recorded for pH, dissolved oxygen and temperature after dosage of the appropriate concentration of waste sample to the test aquaria, and at 24, 48, 72, and 96 hours subsequent to initiation of the toxicity test exposures. The following instrumentation and methods are utilized to determine water quality parameters for each of the test and control aquaria. Total alkalinity and hardness, both expressed as mg/l CaCO₃, are determined from sub-samples of dilution water and the 750 mg/l concentration obtained immediately prior to initiation and at the completion of toxicity testing.

A Horiba U-10 Water Quality Checker is utilized for determining the pH of the exposure solutions. After stabilization of the reading, the pH is recorded on the static toxicity test worksheet to the nearest 0.1 pH unit.

Dissolved oxygen concentrations (mg/l) are determined by gently swirling the Horiba U-10 Water Quality Checker in the aquarium to be monitored. Dissolved oxygen concentrations are recorded on the static toxicity test worksheet to the nearest 0.1 mg/l, only after stabilization of the reading.

Exposure temperature is determined by the Horiba U-10 Water Quality Checker calibrated by a mercury bulb thermometer graduated to 0.1°C with calibration traceable to the National Institute of Standards and Technology (NIST).

Alkalinity values are calculated by potentiometric titration to a pre-selected pH of 4.6 utilizing Method 2320B, *Standard Methods* (18th Edition).

Hardness values are calculated by EDTA titration utilizing Method 2340C, *Standard Methods* (18th Edition).

TOXICITY TEST PREPARATION

Receiving and Acclimating Fish

The fathead minnows, *Pimephales promelas*, are received from the supplier at least 10 days prior to initiation of toxicity testing. Shipment of the test fish in insulated containers with hard freshwater and an atmosphere of bottled oxygen from Aquatic Biosystems located in Fort Collins, Colorado is via Federal Express overnight to MBC. Upon receipt of the test fish, the plastic bags containing the fathead minnows are floated on the surface of an appropriately sized aquarium containing aged local (hard) drinking water in the temperature controlled toxicity test laboratory. When the temperature of the water in the shipping water is within 0.5°C of the holding tank, each plastic bag is opened and the fish are gently eased into the initial acclimation water containing penicillin. This antibiotic is effective against both gram-negative and gram-positive bacteria as well as fungus. The antibiotic is maintained in the acclimation water for 24 hours while the hardness is slowly decreased to that of the reconstituted moderately hardwater utilizing a reservoir and siphons to slowly change over the water following guidelines in *Standard Methods* (18th Edition). The test fish are subsequently gently transferred using a fine mesh dip net to the maintenance tank for further acclimation until initiation of the toxicity testing.

During the acclimation period, up until 48 hours prior to initiation of the toxicity testing, the fathead minnows are maintained on a diet of Tetramin brand flake food and San Francisco Bay Brand frozen brine shrimp. Tetramin flake food is fed in the morning and brine shrimp in the evening, while observing the behavior and monitoring the quality of the acclimating fish. The quantity of food delivered at each feeding is based upon the quantity that the tank population would completely consume within approximately five minutes of feeding. During these observations, any sick or dead fish are removed and the numbers of each, as well as any observations, are noted in the acclimation tank log book.

Dilution Water Preparation

Dilution water for the toxicity tests is prepared following the formulation of Kopperdahl (1976) and Horning and Weber (1985) for artificially reconstituted softwater. Table I indicates the quantities of reagent grade chemicals utilized in preparing the synthetic freshwater. Reconstituted softwater is prepared in 208 liter linear polyethylene barrels by addition of the salts to deionized (resin exchange column) water followed by thorough mechanical mixing at least 48 hours prior to initiation of the toxicity testing. The reconstituted softwater is maintained in a isolated area of the same temperature-controlled laboratory in which the test fish are acclimated and the toxicity tests are performed to ensure against any significant difference between acclimation and test water temperature that might induce additional stress in the test fish.

Table I. Quantities of reagent grade chemicals required to prepare reconstituted softwater and expected water qualities.

| | |
|--------------------------------------|------------------------------|
| NaHCO ₃ : | 48.0 mg/l |
| CaSO ₄ 2H ₂ O: | 30.0 mg/l |
| MgSO ₄ : | 30.0 mg/l |
| KCl: | 2.0 mg/l |
| pH: | 7.2-7.8 |
| Total Hardness: | 40-48 mg/l CaCO ₃ |
| Total Alkalinity: | 30-35 mg/l CaCO ₃ |

Handling and Storage of the Waste Samples

Upon arrival at MBC, the samples are listed in the Toxicity Test Sample Log Book located in the toxicity testing laboratory by the Toxicity Laboratory Coordinator. The samples are stored at 4°C in a designated area of the cold storage locker labeled "SAMPLES FOR HAZARDOUS WASTE TESTING", until the initiation of toxicity testing. The remaining portion of each sample is returned to the cold storage locker.

WASTE SAMPLE PREPARATION

Dry Waste Material

Each sample is identified as a Type i, Type ii or Type iii material. The samples are weighed into pre-tared Erlenmeyer flasks to yield final replicate sample concentrations of 250 mg/l, 500 mg/l, and 750 mg/l. Approximately 200 ml of dilution water is added to each flask. The flasks are capped with parafilm, a neoprene stopper and aluminum foil and are mechanically shaken for six hours.

Liquid Waste of Low Viscosity

To determine the volume of a low viscosity liquid sample needed to dose the toxicity test, the specific gravity is measured.

The waste sample to be used in the toxicity test is first mechanically shaken or homogenized so as to evenly distribute any particulate matter in the sample. A known amount of sample, usually 20 ml, is drawn up through a volumetric pipette and dispensed into a 100 ml beaker that has previously been weighed on a Mettler balance to four decimal places. The beaker containing the known volume of sample is then re-weighed on the Mettler balance. The difference in weight of the beaker with the sample and the weight of the beaker when it is empty is divided by the known volume of the sample (in milliliters) to determine the specific gravity. This process is repeated in triplicate and the mean specific gravity is used in subsequent dosage determinations.

The sample is measured by pipette into pre-tared Erlenmeyer flasks to yield final replicate sample concentrations of 250 mg/l, 500 mg/l, and 750 mg/l. Approximately 200 ml of dilution water is added to each flask. The flasks are capped with parafilm, a neoprene stopper and aluminum foil and mechanically shaken for six hours.

TOXICITY TESTING

Dosing Test Aquaria

After shaking, the samples are dosed into the appropriately marked aquaria containing approximately 9 liters of dilution water. Dilution water is then added to the 10 liter mark to yield a final volume of 10 liters for all test conditions.

Reconstituted softwater (dilution water only) controls are established as a quality assurance measure. All test conditions and controls are run concurrently.

Initial Water Quality Measurements

Prior to the addition of the test fish, preliminary water quality measurements are taken for dissolved oxygen and pH to determine if adjustment is necessary (Polisini 1988).

An initial hardness and alkalinity test analysis is performed on the control and the 750 mg/l concentrations.

Addition of Test Fish

The test fish (fathead minnows) are gently corralled and dip netted in small groups from the plexiglass maintenance tank into smaller aquaria to confirm species identity and the healthy condition of each individual fish to be utilized in the test. Fish exhibiting any abnormalities, disease, wounds, or unusual behavior or color patterns are removed and destroyed. Those fish that passed the individual screening inspection are randomly allocated to test aquaria and controls.

Ten fathead minnows are gently released into each of the test aquaria replicate and the control, taking care not to allow the dip nets to contact the exposure media.

Observations

Water quality parameters, enumeration of live organisms and any ancillary observations pertinent to the conduct of the toxicity tests are taken and recorded on the toxicity test worksheets at initiation and subsequently at 24, 48, 72, and 96 hours after initiation of the toxicity test exposures. Daily water quality parameters, live organism enumeration, and ancillary observations are recorded on individual toxicity testing worksheets. The worksheets are presented in Appendix A.

Alkalinity and Hardness Analysis

Total alkalinity and hardness, both expressed as mg/l CaCO_3 , are determined by replicate samples utilizing the procedures in Method 2320B and 2340C, *Standard Methods* (18th Edition). Sub-samples of the dilution water control and the 750 mg/l concentration are obtained immediately prior to initiation and at the completion of toxicity testing and the results are presented on the toxicity test worksheets.

Determination of Test Fish Lengths and Weights

At the conclusion of testing, 20 of the surviving fish are wet weighed to the nearest 0.1 gram on an analytical balance and measured to the nearest millimeter. The data are recorded on a Fish Weight/Length Measurements form and presented in Appendix B. All surviving fish are then destroyed following the procedures in *Standard Methods* (18th Edition).

RESULTS

Standard DOHS Toxicity Screen Testing

Toxicity testing conducted by MBC for this report is a static non-renewal acute toxicity screen test following Standard Methods and the procedures of Dr. James Polisini. Death is the effect measured and toxicity is reported as percent survivorship at 250 mg/l, 500 mg/l and 750 mg/l concentrations and a LC_{50} calculated from these data. Original data worksheets will remain on file at MBC.

REFERENCES

- American Public Health Association (APHA), American Water Works Association (AWWA) and Water Pollution Control Federation (WPCF). 1992. 18th Edition. Standard methods for examination of water and wastewater.
- American Society for Testing and Materials (ASTM). 1982. Parts 23 and 24.
- Environmental Protection Agency. 1979b. Methods for chemical analysis of water and wastes. EPA-600/4-79-020.
- Horning II, W. B., and C. I. Weber. 1985. Short-term methods for estimating the chronic toxicity of effluents and receiving waters to freshwater organisms. EPA/600/4-85/014. 162 pp.
- Kopperdahl, F. R. 1976. Guidelines for performing static acute toxicity fish bioassays in municipal and industrial wastewaters. Report to California State Water Resources Control Board by Department of Fish and Game. 65 pp.
- Peltier, W. H., and C. I. Weber. 1985. Methods for measuring the acute toxicity of effluents to freshwater and marine organisms (Third Edition), EPA/600/4-85/013. 216 pp.
- Plumb, R. H., Jr. 1981. Procedure for handling and chemical analysis of sediment and water samples. Technical report EPA/CE-81-1 prepared by Great Lakes Laboratory, State University College at Buffalo, Buffalo, New York for the U.S. Environmental Protection Agency/Corps of Engineers Technical Committee on Criteria for Dredged and Fill Material. Published by the U.S. Army Engineer Waterways Experiment Station, CE, Vicksburg, Mississippi.
- Polisini, J. M. 1988. Static acute bioassay procedures for hazardous waste samples. California Fish and Game, Water Pollution Control Laboratory.
- Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW - 846, 2nd edition, U.S. Environmental Protection Agency, 1982.

APPENDIX A
DAILY WATER QUALITY PARAMETERS AND LIVE ORGANISM
ENUMERATION DATA

DEPARTMENT OF HEALTH SERVICES ACUTE AQUATIC SCREENING TOXICITY TEST

MBC Job # 06415X
 Date/Time Sampled: 02/15/06, 13:40

MBC Sample # 06-164
 Date/Time Started: 02/17/06, 16:26

Sample Identification: 951861
 Date/Time Terminated: 02/21/06, 14:45

Client: Truesdail Laboratories

| Aqur. # | Test | 0 Hours | | | 24 Hours | | | 48 Hours | | | 72 Hours | | | 96 Hours | | |
|---------|----------|---------|-----|------|----------|-----|-----|----------|------|-----|----------|------|------|----------|-----|------|
| | | pH | DO | Temp | Live | pH | DO | Temp | Live | pH | DO | Temp | Live | pH | DO | Temp |
| 1 | Control | 7.3 | 6.7 | 18.0 | 10 | 7.2 | 7.0 | 20.1 | 10 | 7.4 | 7.2 | 20.4 | 10 | 7.1 | 6.7 | 19.8 |
| 2 | 250 mg/l | 7.5 | 8.0 | 18.0 | 10 | 7.2 | 6.4 | 19.7 | 10 | 7.2 | 6.5 | 20.0 | 10 | 7.2 | 7.5 | 19.6 |
| 3 | 250 mg/l | 7.7 | 7.8 | 18.1 | 10 | 7.3 | 7.3 | 19.2 | 10 | 7.4 | 8.0 | 19.5 | 10 | 7.3 | 7.6 | 19.3 |
| 4 | 500 mg/l | 7.7 | 8.0 | 18.1 | 10 | 7.4 | 7.5 | 19.2 | 10 | 7.4 | 7.6 | 19.5 | 10 | 7.4 | 7.7 | 19.2 |
| 5 | 500 mg/l | 7.8 | 7.9 | 18.2 | 10 | 7.4 | 7.6 | 18.9 | 10 | 7.5 | 8.2 | 19.1 | 10 | 7.5 | 7.9 | 19.0 |
| 6 | 750 mg/l | 7.8 | 7.9 | 18.2 | 10 | 7.4 | 7.7 | 18.8 | 10 | 7.6 | 7.8 | 19.0 | 10 | 7.5 | 8.4 | 19.0 |
| 7 | 750 mg/l | 7.8 | 7.9 | 18.2 | 10 | 7.3 | 6.1 | 18.9 | 10 | 7.5 | 7.3 | 19.1 | 10 | 7.5 | 7.6 | 19.0 |

Species: Fathead Minnow (*Pimephales promelas*)

Percent dead in acclimatization tank: <1%
 Type Aeration: as per Polisini (1988)

Number of fish/replicate concentration: 10
 Volume of test solution: 10L
 Acclimatization: 29 days at 20°C


Dilution Water Source: Reconstituted softwater

RANGE MIN. MAX.
 pH Range: 7.1 7.9
 DO Range: 6.1 8.4
 Temp Range: 18.0 20.4

Results: Concentration % Survival
 Control 100%
 250 mg/l 100%
 500 mg/l 100%
 750 mg/l 100%
 LC50 > 750 mg/l

| | ALKALINITY (A) | | HARDNESS (H) | |
|----------|----------------|----|--------------|----|
| | 0 Hours | | 96 Hours | |
| | A | H | A | H |
| Control | 30 | 48 | 36 | 55 |
| 750 mg/l | 34 | 70 | 45 | 69 |

NOTES: Normal.

Reviewed By: 

APPENDIX B
FISH LENGTH AND WEIGHT MEASUREMENTS

Bioassay Fish Length/Weight Measurements

MBC JOB #: 06415X

CLIENT: Truesdail Laboratories

MBC SAMPLE #: 06-164

DATE OF TEST: 02/17/06

SPECIES: Fathead minnow
(*Pimephales promelas*)

SAMPLE IDENTIFICATION: 951861

| | Standard Length mm | Weight g | | Standard Length mm | Weight g |
|-----|--------------------------|-------------|-----|--------------------------|-------------|
| 1. | 32 | 0.26 | 11. | 31 | 0.34 |
| 2. | 29 | 0.23 | 12. | 32 | 0.38 |
| 3. | 28 | 0.28 | 13. | 32 | 0.43 |
| 4. | 30 | 0.26 | 14. | 35 | 0.68 |
| 5. | 32 | 0.38 | 15. | 30 | 0.29 |
| 6. | 28 | 0.21 | 16. | 34 | 0.42 |
| 7. | 31 | 0.37 | 17. | 30 | 0.24 |
| 8. | 34 | 0.41 | 18. | 31 | 0.29 |
| 9. | 30 | 0.39 | 19. | 31 | 0.34 |
| 10. | 30 | 0.28 | 20. | 29 | 0.29 |

| | | |
|----------|--------------------|-------------------|
| | <u>Length (mm)</u> | <u>Weight (g)</u> |
| Average: | 31 | 0.34 |
| Maximum: | 35 | 0.68 |
| Minimum: | 28 | 0.21 |

Technician: SMB

Date: 02/21/06

Reviewed By: 

APPENDIX C
SAMPLE ANALYSIS INFORMATION

SAMPLE ANALYSIS INFORMATION

CLIENT: Truesdail Laboratories

SAMPLE IDENTIFICATION: 951861

MBC JOB NUMBER: 06415X

MBC SAMPLE NUMBER: 06-164

SAMPLE DATE/TIME: 02/15/06, 13:40

DATE SAMPLE RECEIVED BY MBC: 02/16/06

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

DATE/TIME ANALYSIS INITIATED: 02/17/06, 16:26

DATE/TIME ANALYSIS TERMINATED: 02/21/06, 14:45

AMOUNT OF SAMPLE: 250 ml

QUALITATIVE DESCRIPTION OF SAMPLE: A soil sludge matrix. Red/brown in color,
with no odor.

SPECIAL SAMPLE PREPARATION: Shake for 6 hours.

SAMPLE ADJUSTMENTS DURING ANALYSIS: Air added at 0 hours.

RESULTS:

| <u>Concentration</u> | <u>% Survival</u> |
|-----------------------------|-------------------|
| Control | 100% |
| 250mg/l | 100% |
| 500 mg/l | 100% |
| 750 mg/l | 100% |
| LC ₅₀ > 750 mg/l | |

NOTES: Normal.

Reviewed By: 