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January 15, 2009

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Executive Officer
California Regional Water Quality Control Board
Colorado River Basin Region
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Palm Desert, CA 92260

Subject: Board Order R7-2006-0060, WDID No. 7B 36 2033 001 - Interim Measures Compliance Monitoring Program Semiannual Groundwater Monitoring Report, Second Half 2008, PG&E Topock Compressor Station, Needles, California

Dear Mr. Yue and Mr. Perdue:

Enclosed is the *Semiannual Groundwater Monitoring Report, Second Half 2008* for the Interim Measure Compliance Monitoring Program (CMP) at the Pacific Gas and Electric Company (PG&E) Topock Compressor Station. This monitoring report presents the results of the third and fourth quarter 2008 CMP groundwater monitoring events, and has been prepared in conformance with California Regional Water Quality Board (Water Board) Order No. R7-2006-0060, as well as with the Department of Toxic Substances Control (DTSC)'s July 15, 2005 letter approving the Compliance Monitoring Plan and June 9, 2006 letter modifying the reporting requirements.

On August 8, 2006, PG&E submitted a revised contingency plan flowchart for groundwater quality changes associated with the injection system. The contingency plan specifies the concentrations and values for hexavalent chromium (Cr[VI]), total chromium (Cr[T]), total dissolved solids (TDS), and pH to be used to determine if contingency plan actions were necessary based on sample results. The concentrations used to trigger the contingency plan are as follows: Cr(VI) greater than 32.6 micrograms per liter (µg/L), Cr(T) greater than 28.0 µg/L, TDS greater than 10,800 milligrams per liter, and pH outside of the range of 7.6 to 8.89.

Data collected during third quarter 2008 and associated contingency plan actions were discussed in the *Compliance Monitoring Program Groundwater Monitoring Report, Third*

Quarter 2008, submitted October 15, 2008. The following paragraph discusses fourth quarter 2008 data and associated contingency plan actions.

During the fourth quarter 2008 monitoring event, a sample from the well OW-2S (29.3 µg/L) exceeded the Cr(T) action level. A review of the water quality parameters indicative of treated groundwater injection (Cr(VI), TDS, sulfate, nitrate/nitrite, and fluoride) confirm that injected water has not yet reached OW-2S and that the concentration of Cr(T) is not related to injected water (which has significantly lower chromium concentrations), but instead is related to the natural variability within the shallower portions of the aquifer.

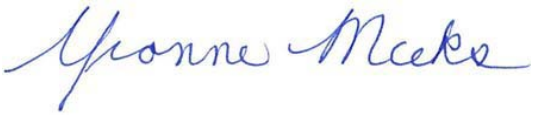
In a letter dated January 5, 2007, DTSC stated that it was not necessary to follow contingency plan requirements for Cr(VI) and Cr(T) with respect to OW-2S and OW-5S. The Colorado River Basin Water Board concurred with this decision in a letter dated March 2, 2007. As such, the contingency plan was not triggered due to the Cr(T) concentration detected in OW-2S during the fourth quarter 2008.

On August 22, 2008, the Water Board approved modifications to the contingency plan field pH range and the MRP. On December 12, 2008, the modifications to the field pH range were also approved by the DTSC.

No other samples exceeded the action levels for Cr(VI), Cr(T), pH, or TDS during fourth 2008 sampling. The next CMP sampling event is scheduled to occur in January 2009.

Please contact me at (805) 546-5243 if you have any questions on the CMP.

Sincerely,



Yvonne Meeks
Topock Remediation Project Manager

Cc: Cliff Raley, Water Board
Abdi Haile, Water Board
Christopher Guerre, DTSC

Enclosure

Final Report

Compliance Monitoring Program Semiannual Groundwater Monitoring Report, Second Half 2008

Interim Measure No. 3
PG&E Topock Compressor Station
Needles, California
Board Order R7-2006-0060
WDID No. 7B 36 2033 001

Prepared for

California Department of Toxic Substances Control and the California Regional Water Quality Control Board, Colorado River Basin Region

On behalf of

Pacific Gas and Electric Company

January 15, 2009

CH2MHILL

155 Grand Avenue, Suite 1000
Oakland, CA 94612

Compliance Monitoring Program
Semiannual Groundwater Monitoring Report
Second Half 2008

PG&E Topock Compressor Station
Needles, California
Board Order R7-2006-0060, WDID No. 7B 36 2033 001

Prepared for

California Department of Toxic Substance Control and the California Regional Water Quality Control Board Colorado River Basin Region

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Pacific Gas and Electric Company

January 15, 2009

This report was prepared under the supervision of a California Professional Geologist

Serena Lee
Professional Geologist, P.G. #8259

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Acronyms and Abbreviations

µg/L	micrograms per liter
CMP	Compliance Monitoring Program
Cr(T)	total chromium
Cr(VI)	hexavalent chromium
CW	compliance well
DTSC	California Department of Toxic Substances Control
IM	Interim Measure
IM No. 3	Interim Measure No. 3
IW	injection well
mg/L	milligrams per liter
MRP	Monitoring and Reporting Program
PG&E	Pacific Gas and Electric Company
OW	observation well
QAPP	Quality Assurance Project Plan
TDS	total dissolved solids
Water Board	California Regional Water Quality Control Board, Colorado River Basin Region
WDR	Waste Discharge Requirements
WQO	water quality objective

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 in the Colorado River floodplain and management of extracted groundwater. The groundwater extraction, treatment, and injection systems are collectively referred to as Interim Measure No. 3 (IM No. 3). Currently, the IM No. 3 facilities include a groundwater extraction system, conveyance piping, a groundwater treatment plant, and an injection well field for the discharge of the treated groundwater. Figure 1 shows the location of the IM No. 3 extraction, conveyance, treatment, and injection facilities. (All figures are provided at the end of this report.)

On October 13, 2004, the California Regional Water Quality Control Board, Colorado River Basin Region (Water Board) adopted Waste Discharge Requirements (WDR) Order No. R7-2004-0103. This WDR authorized PG&E to inject treated groundwater into wells located in the East Mesa area of the Topock site. This WDR was superseded on September 20, 2006 by WDR No. R7-2006-0060. Work described in this report was performed in accordance with the WDR No. R7-2006-0060.

The WDR specifies effluent limitations, prohibitions, specifications, and provisions for subsurface injection. Monitoring and Reporting Program (MRP) No. R7-2004-0103 specified the requirements for the Compliance Monitoring Program (CMP) to monitor the aquifer in the injection well area to ensure that the injection of treated groundwater is not causing an adverse effect on the aquifer water quality. As with the WDR, MRP No. R7-2004-0103 was superseded on September 20, 2006 by MRP No. R7-2006-0060. This report adheres to requirements established in MRP No. R7-2006-0060. The *Groundwater Compliance Monitoring Plan for Interim Measures No. 3 Injection Area* (CH2M HILL, 2005a) was submitted to the Water Board and the California Department of Toxic Substances Control (DTSC) on June 17, 2005 (herein referred to as the Compliance Monitoring Plan). The Compliance Monitoring Plan and its addendum provide the objectives, proposed monitoring program, data evaluation methods, and reporting requirements for the CMP. In a letter dated June 9, 2006, DTSC modified the reporting requirements of the Compliance Monitoring Plan (DTSC, 2006). This report incorporates the additional requirements.

The injection system consists of two injection wells (IWs): IW-2 and IW-3. Operation of the treatment system was conditionally approved on July 15, 2005 (DTSC, 2005), and injection into IW-2 began on July 31, 2005. Table 1 summarizes the history of injection for IM No. 3. (All tables are provided at the end of this report.)

Figure 2 shows the locations of the injection wells and the groundwater monitoring wells (observation wells and compliance wells) in the CMP. Table 2 summarizes information on well construction and sampling methods for all wells in the CMP.

On January 22, 2007 (DTSC, 2007), DTSC approved a reduction of constituents analyzed during quarterly sampling of the CMP observation wells (details are provided in

CH2M HILL, 2006). The Water Board concurred in a letter dated January 23, 2007 (Water Board, 2007a). Observation wells (OWs) are sampled for a limited suite of constituents during quarterly monitoring events. Semiannual CMP events still retain the original constituent suite for the OWs and compliance wells (CWs).

Under the CMP, as of November 2008, samples are collected from OWs and CWs (Figure 2) according to the following schedule:

- Nine observation wells located near the IM No. 3 injection well field are sampled quarterly for a limited suite of constituents.
- Eight compliance monitoring wells and nine observation wells located around the IM No. 3 injection well field are sampled semiannually for a full suite of constituents.

On October 16, 2007, the Water Board approved collecting pH measurements in the field rather than through laboratory analysis due to the new 15-minute holding time for laboratory measurements with United States Environmental Protection Agency Method 150.1 (Water Board, 2007b). DTSC provided concurrence for the field pH change in an email dated January 22, 2008 (DTSC, 2008). This change became effective with the first quarter 2008 sampling event.

On November 13, 2007, the Water Board approved the modification to hexavalent chromium (Cr[VI]) analytical methods, which extended the holding time from 24 hours to 28 days (Water Board, 2007c). DTSC provided concurrence for the 28-day holding time for Cr(VI) analyses in an e-mail dated January 22, 2008 (DTSC, 2008). The first quarter 2008 sampling event was the first event to adhere to the new 28-day holding time for analyzing Cr(VI).

Modifications to the CMP, including the sampling and reporting frequency and the field pH trigger range for the CMP contingency plan, were proposed to the Water Board and the DTSC by PG&E on July 3, 2008. On August 22, 2008, the Water Board approved these modifications to the MRP. As of December 12, 2008, the modification of the CMP contingency plan pH range to a field pH range of 6.2 to 9.2 was also approved by the DTSC.

For both quarterly and semiannual sampling events, laboratory analyses include dissolved total chromium (Cr[T]), Cr(VI), metals, specific conductance, total dissolved solids (TDS), turbidity, and major inorganic cations and anions. For quarterly events, the metals, cations, and anions list is reduced. Groundwater elevation data and field water quality data—including specific conductance, temperature, pH, oxidation-reduction potential, dissolved oxygen, turbidity and salinity—are also measured during each monitoring event (CH2M HILL, 2005a).

This report presents the results of the second half 2008 (third and fourth quarter) CMP groundwater monitoring events.

2.0 Second Half 2008 Activities

This section provides a summary of the monitoring and sampling activities completed during the third and fourth quarter 2008. The third quarter 2008 monitoring event was conducted on August 4 and 5, 2008 and consisted of:

- Nine observation monitoring wells were sampled for water quality analyses.
- Groundwater elevations and field water quality data were collected prior to sampling.
- One duplicate sample was collected at well OW-1S to assess field sampling and analytical quality control.

The fourth quarter 2008 event was conducted from November 3-5, 2008 and consisted of:

- Nine observation monitoring wells were sampled for water quality analyses.
- Eight compliance monitoring wells were sampled for water quality analyses.
- Groundwater elevations and field water quality data were collected prior to sampling.
- Two duplicate samples were collected at wells CW-1M and OW-1S to assess field sampling and analytical quality control.

Continuous groundwater elevation data were collected using pressure transducers/data loggers at each of the 17 CMP wells and were downloaded monthly during the reporting period.

The sampling methods, procedures, field documentation of the CMP sampling, water level measurements, and field water quality monitoring were performed in accordance with the *Sampling, Analysis, and Field Procedures Manual* (CH2M HILL, 2005b).

CMP groundwater samples were analyzed by Truesdail Laboratories, Inc. in Tustin, California and EMAX Laboratories, Inc. in Torrance, California, both California-certified analytical laboratories. Analytical methods, sample volumes and containers, sample preservation, and quality control sample requirements were in accordance with the *Sampling, Analysis, and Field Procedures Manual* (CH2M HILL, 2005b). Data validation and management were conducted in accordance with the *Quality Assurance Project Plan* (QAPP) provided as Appendix D of the *Sampling, Analysis, and Field Procedures Manual*.

3.0 Second Half 2008 Results

This section summarizes the results of the CMP groundwater sampling conducted during the second half 2008. Figure 2 presents the locations of the CMP groundwater wells.

The data presented include results for Cr(VI), Cr(T), specific conductance, metals, TDS, turbidity, and major inorganic cations and anions. Laboratory data quality review, water level measurements, and water quality field parameter data are also presented in this section. The laboratory reports for the fourth quarter 2008 monitoring are presented in Appendix A. Laboratory reports for the third quarter 2008 were previously reported in the prior monitoring report (CH2M HILL, 2008a).

3.1 Analytical Results

Nine observation wells were sampled during the third quarter 2008 sampling event and seventeen compliance and observation wells were sampled during the fourth quarter 2008 sampling event. Analytical results for Cr(VI) and Cr(T), other metals, and general chemistry parameters are presented in Tables 3, 4, and 5 and are discussed below. Interim action levels/water quality objectives (WQOs) were updated in the *Addendum to the Compliance Monitoring Plan*, which was submitted to DTSC and the Water Board on December 13, 2005 (CH2M HILL, 2005c). On August 8, 2006, PG&E submitted a revised contingency plan flowchart for groundwater quality changes associated with the injection system. The contingency plan specifies the concentrations and values for Cr(VI), Cr(T), TDS, and pH to be used to determine if contingency plan actions were necessary based on sample results.

3.1.1 Hexavalent and Total Chromium

Table 3 presents the Cr(VI) and Cr(T) results for groundwater in the shallow, middle, and deep wells for the second half 2008 CMP sampling events. For shallow wells, the maximum detected Cr(VI) concentration was 31.8 micrograms per liter (µg/L) in well OW-2S on November 3, 2008. For the middle wells, the maximum detected Cr(VI) concentration was 18.4 µg/L in well CW-4M on November 5, 2008. For the deep wells, the maximum detected Cr(VI) concentration was 2.54 µg/L in well CW-4D on November 5, 2008.

During the second half 2008, none of the samples collected from shallow, middle, and deep wells exceeded the WQO of 32.6 µg/L for Cr(VI).

For shallow wells, the maximum detected Cr(T) concentration was 30.8 µg/L in well OW-2S on August 5, 2008. For the middle wells, the maximum detected Cr(T) concentration was 17.8 µg/L in well CW-4M on November 5, 2008. For the deep wells, the maximum detected Cr(T) concentration was 2.94 µg/L in well CW-4D on November 5, 2008.

During the second half 2008, samples from one well exceeded the WQO of 28 µg/L for Cr(T). The August 5, 2008 and November 3, 2008 samples from well OW-2S had concentrations of 30.8 µg/L and 29.3 µg/L, respectively. For these exceedances, the results are not considered to be the result of injection of treated groundwater as the average effluent concentration of

Cr(T) from the IM No. 3 treatment plant is normally non-detect with a reporting limit of 0.2 µg/L (CH2M HILL, 2008b). Cr(T) and Cr(VI) concentrations at OW-2S have been consistently above the WQOs since November 2005. This exceedance of Cr(T) is thus considered reflective of the natural variance in background water quality.

3.1.2 Other Metals and General Chemistry

Table 4 presents the other metals and general chemistry results for the CMP groundwater wells sampled during the second half 2008. Since the first quarter 2007, the observation wells have been sampled for a limited suite of constituents during quarterly monitoring events. Metals and ions detected in the second half 2008 sampling included arsenic, barium, boron, calcium, copper, magnesium, molybdenum, potassium, silver, sodium, total iron, and vanadium. In general, concentrations of metals and ions detected during the second half 2008 sampling event are similar to those detected in previous sampling events.

Table 5 presents other inorganic analyte results from the CMP wells. During the second half 2008, the sampling results from all wells were within the WQOs for TDS (10,800 milligrams per liter [mg/L]) and pH (7.6 to 8.89). Sampling results for TDS varied from 934 mg/L in well OW-5S to 6,110 mg/L in well CW-4D and for pH varied from 7.61 in wells OW-1M, OW-2M, and OW-2D to 8.08 in well OW-3D.

3.2 Analytical Data Quality Review

The laboratory analytical data generated from the fourth quarter 2008 CMP monitoring event were independently reviewed by project chemists to assess data quality and identify deviations from analytical requirements. The quality assurance and quality control requirements are outlined in the QAPP for the PG&E Topock Program, which is Appendix D of the *Sampling, Analysis, and Field Procedures Manual, Revision 1* (CH2M HILL, 2005b). A detailed discussion of data quality for CMP sampling data is presented in the data validation reports, which are kept in the project file and are available upon request.

3.2.1 Matrix Interference

For the third quarter 2008, matrix interference was encountered in three groundwater samples that affected the sensitivity for Cr(VI) when using Method E218.6. The Cr(VI) sample results from OW-1M, OW-2D, and OW-2M reflected an adjusted reporting limit of 1 µg/L as a result of the serial dilution that was required to overcome the matrix interference and provide an acceptable matrix spike recovery. No qualifier flags were applied.

For the fourth quarter 2008, matrix interference was encountered in three groundwater samples that affected the sensitivity for Cr(VI) when using Method E218.6. The Cr(VI) sample results from CW-02D, CW-03D, and OW-02D reflected an adjusted reporting limit of 1 µg/L as a result of the serial dilution that was required to overcome the matrix interference and provide an acceptable matrix spike recovery. No qualifier flags were applied.

3.2.2 Matrix Spike Samples

For the third and fourth quarter 2008 sampling events, all matrix spike acceptance criteria were met.

3.2.3 Quantitation and Sensitivity

For the third and fourth quarter 2008 sampling events, with the exception of the matrix interference issues discussed in Section 3.2.1, all method and analyte combinations met the project reporting limit objectives.

3.2.4 Holding Time Data Qualification

For the third quarter 2008 sampling event, all method holding time requirements were met with the following exception:

- Three turbidity (SM2130B) samples were analyzed outside the recommended holding time by one day. The detected sample result was qualified as estimated and flagged "J." The non-detect sample results were qualified as estimated and flagged "J."

For the fourth quarter 2008 sampling event, all method holding time requirements were met.

3.2.5 Field Duplicates

For the third quarter 2008 sampling event, all field duplicate acceptance criteria were met.

For the fourth quarter 2008 sampling event, two field duplicate pairs had relative percent differences greater than the upper confidence limits. One field duplicate pair's (CW-01M) detected results for dissolved arsenic, dissolved calcium (E200.8), and chloride (E300.0) were qualified as estimated and "J" flagged. The other field duplicate pair's (OW-01S) detected results for dissolved potassium (E200.7), dissolved copper (E200.8), and turbidity (MS2130B) were qualified as estimated and "J" flagged; the non-detect result for copper was qualified as estimated and flagged "J." Both field duplicate pairs had relative percent differences greater than the upper confidence limit for the iron (E200.7). However, because the detected result for each of the samples was less than twice the reporting limit no flags were applied. All other field duplicate acceptance criteria were met.

3.2.6 Method Blanks

For the third and fourth quarter 2008 sampling event, method blank acceptance criteria were met.

3.2.7 Equipment Blanks

For the third and fourth quarter 2008 sampling event, equipment blank acceptance criteria were met.

3.2.8 Laboratory Duplicates

For the third and fourth quarter 2008 sampling event, laboratory duplicate acceptance criteria for the methods were met.

3.2.9 Calibration

For the third quarter 2008 sampling event, initial and continuing calibrations were performed as required by the methods. All calibration criteria were met with the following exception:

- One fluoride (E300.0) sample was analyzed outside the method performance check protocol of 10 samples analyzed between continuing calibration standards. The detected sample result was qualified as estimated and flagged "J."

For the fourth quarter 2008 sampling event, initial and continuing calibrations were performed as required by the methods. All calibration criteria were met with the following exception.

- One hexavalent chromium (E218.6) sample was analyzed outside the method performance check protocol of 10 samples analyzed between continuing calibration standards. The detected sample result was qualified as estimated and flagged "J."

3.2.10 Conclusion

For the third and fourth quarter 2008 sampling event, the completeness objectives were met for all method and analyte combinations. The analyses and data quality met the QAPP and laboratory method quality control criteria except as noted above. Overall, the analytical data are considered acceptable for the purpose of the CMP.

3.3 Influence of Treated Water

3.3.1 Post-injection Versus Pre-injection

Injection of treated water began on July 31, 2005. Under WDR No. R7-2006-0060 for the IM No. 3 groundwater treatment system, PG&E is required to submit WDR monitoring reports on the operation of the system. These reports contain the analytical results of treated water effluent sampling and, as such, the reports are useful in determining the baseline water quality of the treated water being injected into the IM No. 3 injection well field. Table 6 provides selected analytical results from three of the monthly reports: August 29, 2005, March 18, 2006, and October 1, 2008. While there are differences among some parameters in these samples, a number of parameters show relatively consistent concentrations in the effluent over time. Analytes that are relatively consistent over the injection time period include Cr(VI), Cr(T), fluoride, molybdenum, nitrate as nitrogen, sulfate, and TDS. These seven constituents provide a characterization of the effluent that does not appear to vary greatly over time and can serve as a basis for determining if a groundwater monitoring well is being affected by injection. In general terms, treated water has the following characteristics (based on review of August 2005 through October 2008 effluent characteristics):

- Cr(VI): typically non-detect (1.0) µg/L
- Cr(T): typically non-detect (1.0) µg/L
- Fluoride: approximately 2 mg/L
- Molybdenum: approximately 8 µg/L
- Nitrate/nitrite as nitrogen: approximately 3.0 mg/L

- Sulfate: approximately 470 mg/L
- TDS: approximately 3,950 mg/L

These treated water quality characteristics are meant to serve as a general guideline and not as a statistically representative sampling of the treated water quality over time.

Table 6 also lists the results of baseline sampling for the observation wells and compliance wells. A full set of nine OW groundwater samples were collected on July 27 and 28, 2005, and a full set of eight CW groundwater samples were collected on September 15, 2005. These samples are considered representative of conditions unaffected by injection and serve to characterize the pre-injection water quality. In comparing these sampling results to the treated injection water sampling results, there are some similarities in the constituent concentrations. For example, most of the pre-injection OW or CW deep well samples (OW-1D, OW-2D, OW-5D, CW-3D, and CW-4D) contain no detectable Cr(VI) or Cr(T), which is similar to the treated injection water. Most of the well samples show concentrations similar to the treated water for two or three constituents but observable differences in concentration from the treated water for the remaining four or five. By considering the entire suite of seven analytes and focusing on those parameters that show differences, it is relatively easy to distinguish between the pre-injection water quality at the monitoring wells and the treated water effluent quality.

Table 7 presents a comparison between the treated water quality and the results from the most recent sampling events (the third and fourth quarter 2008 sampling events). These samples were collected after approximately 39 months of injection. While the pre-injection OW and CW sample results were significantly different from the treated water quality, a number of the third and fourth quarter 2008 sample results now show a marked similarity to the treated water results. The following wells display the general characteristics of treated water: OW-1M, OW-1D, OW-2M, OW-2D, OW-5M, OW-5D, CW-1M, CW-1D, CW-2D, CW-3D, and CW-4D. These locations are locations and depths where the treated water injection front has largely replaced the local pre-injection groundwater. To date, all shallow observations wells (wells OW-1S, OW-2S, and OW-5S) and the remaining compliance wells (CW-2M, CW-3M, and CW-4M) show no water quality effects due to injection of treated water, indicating that injected water has not yet reached these depths and locations.

3.3.2 Water Quality Hydrographs

Trend data can be used to determine when a rapid change has occurred between sampling events, such as the arrival of the injection front. It can also be used to look at more gradual changes that occur over several sampling events, such as seasonal effects or the interaction of treated water with local groundwater and host aquifer material. Eleven analytes were selected for time-series analysis; these analytes are considered to be most representative of the IM No. 3 injection well field area and have sufficient detections to make time series analysis useful. The analytes include chloride, Cr(T), fluoride, Cr(VI), molybdenum, nitrate/nitrite as nitrogen, pH, sodium, sulfate, TDS, and vanadium. Water quality hydrographs (time-series plots) of these 11 analytes in each observation well during the quarter within the IM No. 3 injection well field are presented in Figures 3A through 3E.

Observation well water quality hydrographs are presented in Figures 3A through 3C. These hydrographs show the same overall patterns: wells that are identified as affected by treated

water injection show a shift in water quality for characteristic parameters, while those identified as being unaffected by injection show no net trends. The water quality change brought on by the arrival of the treated water injection front can be either gradual (OW-5M) or step-wise (OW-2M), with most affected wells showing a pattern of change somewhere between the two. Based on the variability in response, it is inferred that the movement of treated water is non-uniform laterally between wells. This variability in lateral movement can be inferred from differences in the water quality hydrographs in both the mid-depth and deep wells. The OW shallow-depth wells (OW-1S, OW-2S, and OW-5S) show little water quality variation over time and generally have no net trends over time. TDS, sodium, chloride, vanadium, molybdenum, and sulfate are particularly consistent with baseline pre-injection concentrations and show that the local groundwater quality at shallow depths is not being affected by injection of treated water or outside water sources.

Compliance well water quality hydrographs are presented in Figures 3D and 3E. Wells CW-1D, CW-2D, and CW-3D show a decreasing trend in TDS and chloride. Similarly, well CW-1M shows decreasing trends in Cr(VI) and Cr(T). These changes are attributed to the arrival of treated injection water

3.4 Water Level Measurements

Table 8 presents the manual water level measurements and groundwater elevations for the second half 2008 monitoring events.

As a requirement of the conditional approval by DTSC (DTSC, 2005), water level measurements were used to produce hydrographs for each well cluster. Figures 4A through 4G present hydrographs that illustrate groundwater elevation trends and vertical hydraulic gradients observed over the second half 2008 reporting period at the observation and compliance monitoring wells.

Average groundwater elevation maps for shallow, middle, and deep wells are also provided as Figures 5A through 5C. Water levels used to produce the monthly average groundwater elevation contour plots were taken from a select number of days in which the levels remained reasonably constant. These dates are noted on each figure.

3.4.1 Groundwater Flow Characteristics

The injection well field is located in the East Mesa area of the Topock site (Figure 2). Overall sitewide water level contour maps for shallow wells are prepared annually, with flow consistently being shown to move to the east, northeast across the uplands portions of the site (CH2M HILL, 2008b).

The effects of injection in the IM No. 3 injection well field are superimposed on the more regional Topock site flow system and, as expected, a groundwater mound can be seen around the injection wells. This mound is centered around the active injection wells IW-3 and IW-2. The potentiometric surfaces in prior CMP reports mapped the growth of the groundwater mound over time and show that, after 39 months of injection, the mound has increased and then stabilized at an elevation only several tenths of a foot above the surrounding water level elevations. Figures 5B and 5C present groundwater elevation contours for the average groundwater elevation of the mound within the middle and deep

wells using October 1 through October 31, 2008 averages. As expected with a mound, the potentiometric surface of the deep wells is broader, while the potentiometric surface of the middle wells is more localized to the vicinity of the injection wells. The mound is elliptical in shape, with the major axis running in a southwest to northeast direction from the injection area towards CW-3D. The lower gradients (broader contours) in the direction of the major axis are an indication that the aquifer permeabilities are greater in this direction, indicating that there may be a preferred direction to flow in this area.

The vertical gradient in the IM No. 3 injection well field area is directed upward at all of the CW and OW well clusters and also upward between each of the depth intervals in those same well clusters. Table 9 presents the vertical gradient data calculated using the October 1 through October 31, 2008 average groundwater levels. The magnitude of the vertical gradients is similar between clusters and between the depth intervals, indicating that the vertical gradient is of the same order of magnitude throughout the injection area. A component of the vertical gradients calculated in the vicinity of the IM No. 3 injection well field is undoubtedly related to the injection of treated water in the lower portions of the aquifer. The observed groundwater gradients in the IM No. 3 injection well field are consistent with expected regional groundwater flow within the southern Mohave Valley.

3.5 Field Parameter Data

A field water quality instrument and flow-through cell were used to measure water quality parameters during well purging and groundwater sampling. The measured field parameters included specific conductance, temperature, pH, oxidation-reduction potential, dissolved oxygen, turbidity, and salinity. Table 10 summarizes the field water quality data measured during the third and fourth quarter 2008 monitoring events. Field data sheets for the fourth quarter 2008 event are presented in Appendix B.

3.6 WDR Monitoring Requirements

Table 11 identifies the laboratory that performed each analysis and lists the following information as required by the WDR for the third and fourth quarter of 2008 monitoring events:

- Sample location
- Sample identification number
- Sampler name
- Sample date
- Sample time
- Laboratory performing analysis
- Analysis method
- Parameter
- Analysis date
- Laboratory technician
- Result unit
- Sample result
- Reporting limit

- Minimum detection limit

4.0 Status of Monitoring Activities

4.1 Quarterly Monitoring

The next quarterly monitoring event will occur in January during the first quarter of 2009. This event will include the sampling and analysis scope that was presented in the Compliance Monitoring Plan (CH2M HILL, 2005a, c) and subsequent approved scope revisions (DTSC, 2007, 2008; Water Board, 2007a-c). The groundwater monitoring report for this quarterly CMP monitoring event will be submitted by April 15, 2009.

4.2 Semiannual Monitoring

The next semiannual monitoring event will occur in April during the second quarter of 2009. This CMP monitoring event, which encompasses both the OW and CW wells, will include the sampling and analysis scope presented in the Compliance Monitoring Plan (CH2M HILL, 2005a, c) and subsequent approved scope revisions (DTSC, 2007, 2008; Water Board, 2007a-b). The groundwater monitoring report for this semiannual CMP monitoring event will be submitted by July 15, 2009.

5.0 References

California Department of Toxic Substances Control (DTSC). 2005. Letter to PG&E. "Conditional Approval for the Start Up and Operation of the Interim Measures No. 3 Treatment System and Injection Wells, Pacific Gas & Electric Company, Topock Compressor Station." July 15.

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6.0 Certification

PG&E submitted a signature delegation letter to the Water Board on September 20, 2006. The letter delegated PG&E signature authority to Mr. Curt Russell and Ms. Yvonne Meeks for correspondence regarding Board Order R7-2006-0060.

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: Yvonne J. Meeks

Company: Pacific Gas and Electric Company

Title: Topock Project Manager

Date: January 15, 2009

Tables

TABLE 1
Operational Status of Interim Measures No. 3 Injection Wells Through Fourth Quarter 2008
PG&E Topock Compliance Monitoring Program

Time Period	Injection Status
July 31, 2005 to Fourth Quarter 2005	Injection occurred at IW-2.
First Quarter 2006	Injection occurred primarily at IW-2 except during periods of operational testing, when injection was divided equally between IW-2 and IW-3.
Second Quarter 2006	Injection occurred at IW-2.
Third Quarter 2006	In August 2006, IW-2 went offline for routine maintenance, and injection commenced at IW-3.
Fourth Quarter 2006	Injection occurred at IW-3, except during routine maintenance.
First Quarter 2007	Injection occurred at IW-3 and transitioned over to IW-2 on March 8.
Second Quarter 2007	Injection occurred at IW-3 from April 3 through June 20. Injection switched to IW-2 on June 20 and continued through July 20, 2007.
Third Quarter 2007	Injection occurred at IW-3 after July 20. Injection occurred at IW-2 on August 30 for an injection test and then returned to IW-3 after August 31.
Fourth Quarter 2007	Injection occurred at IW-3 and then switched to IW-2 on September 25 for routine maintenance. Injection returned to IW-3 after October 9.
First Quarter 2008	Injection occurred at IW-3 only. From February 5 through February 13, well maintenance activities were conducted at IW-2.
Second Quarter 2008	Injection occurred at IW-3 only. IM-3 system offline from April 21 through April 28 due to routine maintenance. Backwashing occurred at IW-3 on April 9, May 7, May 15, May 22, June 3, and June 4, 2008.
Third Quarter 2008	Injection occurred primarily at IW-3. Injection also occurred at IW-2 for short period on July 25 and from August 12 – August 31, 2008. Backwashing events occurred at IW-3 on June 17, June 27, July 9, July 15, July 17, July 18, August 12, August 13, September 2, and September 3, 2008. Backwashing events occurred at IW-2 on September 9 - September 11, 2008.
Fourth Quarter 2008	Injection occurred at IW-3 and then switched to IW-2 on September 23. Injection returned to IW-3 on October 7 and switched back to IW-2 on October 21. Injection primarily occurred at IW-2 until November 11 when it switched back to IW-3.

TABLE 2

Well Construction and Sampling Summary for Groundwater Samples, Fourth Quarter 2008

PG&E Topock Compliance Monitoring Program

Well ID	Site Area	Measuring Point Elevation (ft AMSL)	Screen Interval (ft bgs)	Well Casing (inches)	Well Depth (ft btoc)	Depth to Water (ft btoc)	Sampling System	Typical Purge Rate (gpm)	Typical Purge Volume (gallons)	Pump Depth (ft bgs)	Transducer Status	Remarks
IM Compliance Wells												
CW-01M	East Mesa	566.16	140 - 190	2 (PVC)	190.0	109.4	Temp Redi-Flo AR	3	42	124	Active	
CW-01D	East Mesa	566.57	250 - 300	2 (PVC)	300.2	109.5	Temp Redi-Flo AR	3	100	125	Active	
CW-02M	East Mesa	549.37	152 - 202	2 (PVC)	202.0	93.3	Temp Redi-Flo AR	2	56	108	Active	
CW-02D	East Mesa	549.64	285 - 335	2 (PVC)	355.0	92.8	Temp Redi-Flo AR	3	135	108	Active	
CW-03M	East Mesa	534.21	172 - 222	2 (PVC)	222.0	78.1	Temp Redi-Flo AR	2	75	93	Active	
CW-03D	East Mesa	534.27	270 - 320	2 (PVC)	340.0	77.4	Temp Redi-Flo AR	3	135	93	Active	
CW-04M	East Mesa	518.66	119.5 - 169.8	2 (PVC)	169.8	62.1	Temp Redi-Flo AR	2	56	77	Active	
CW-04D	East Mesa	518.68	233 - 283	2 (PVC)	303.0	62.0	Temp Redi-Flo AR	3	126	77	Active	
IM Observation Wells												
OW-01S	East Mesa	550.21	83.5 - 113.5	2 (PVC)	113.5	93.9	Temp Redi-Flo AR	0.5	12	109	Active	
OW-01M	East Mesa	550.45	165 - 185	2 (PVC)	185.8	93.5	Temp Redi-Flo AR	2	48	109	Active	
OW-01D	East Mesa	550.48	257 - 277	2 (PVC)	277.0	93.1	Temp Redi-Flo AR	3	105	108	Active	
OW-02S	East Mesa	548.88	71 - 101	2 (PVC)	121.0	92.5	Temp Redi-Flo AR	2	16	108	Active	
OW-02M	East Mesa	548.59	190 - 210	2 (PVC)	210.3	91.5	Temp Redi-Flo AR	3	61	107	Active	
OW-02D	East Mesa	549.15	310 - 330	2 (PVC)	340.0	91.4	Temp Redi-Flo AR	3	127	107	Active	
OW-05S	East Mesa	551.83	70 - 110	2 (PVC)	110.3	95.4	Temp Redi-Flo AR	1	8	110	Active	
OW-05M	East Mesa	551.81	210 - 250	2 (PVC)	250.3	94.7	Temp Redi-Flo AR	3	81	110	Active	
OW-05D	East Mesa	552.33	300 - 320	2 (PVC)	350.0	95.3	Temp Redi-Flo AR	3	132	110	Active	

Notes:

AMSL	above mean sea level
BGS	below ground surface
BTOC	below top of polyvinyl chloride (PVC) casing
Redi-Flo AR	adjustable-rate electric submersible pump
Temp	temporary
gpm	gallons per minute

Depth to water shown is the most recently measured depth to water.
All wells were purged and sampled using well-volume method.

TABLE 3
Chromium Results for Groundwater Samples, Third and Fourth Quarter 2008
PG&E Topock Compliance Monitoring Program

		Method:	E218.6	E200.8
Location ID	**Sample Date**		**Hexavalent Chromium (µg/L)**	**Dissolved Chromium (µg/L)**
CW-01M	11/4/2008		1.33	1.37
CW-01M	11/4/2008	(FD)	1.32	1.42
CW-01D	11/4/2008		0.40	ND (1.0)
CW-02M	11/5/2008		9.61	9.48
CW-02D	11/5/2008		ND (1.0)	ND (1.0)
CW-03M	11/5/2008		11.5	11.6
CW-03D	11/5/2008		ND (1.0)	1.02
CW-04M	11/5/2008		18.4	17.8
CW-04D	11/5/2008		2.54	2.94
OW-01S	8/5/2008		17.3	18.0
OW-01S	8/5/2008	(FD)	19.2	18.6
OW-01S	11/4/2008		21.0	18.1
OW-01S	11/4/2008	(FD)	21.5	18.3
OW-01M	8/5/2008		ND (1.0)	ND (1.0)
OW-01M	11/4/2008		0.89	1.00
OW-01D	8/5/2008		0.51	ND (1.0)
OW-01D	11/4/2008		0.49 J	ND (1.0)
OW-02S	8/5/2008		28.9	30.8
OW-02S	11/3/2008		31.8	29.3
OW-02M	8/5/2008		ND (1.0)	ND (1.0)
OW-02M	11/3/2008		1.02	1.27
OW-02D	8/5/2008		ND (1.0)	ND (1.0)
OW-02D	11/3/2008		ND (1.0)	ND (1.0)
OW-05S	8/4/2008		22.6	21.6
OW-05S	11/4/2008		25.6	22.9
OW-05M	8/4/2008		0.83	1.52
OW-05M	11/4/2008		0.85	ND (1.0)
OW-05D	8/4/2008		0.38	ND (1.0)
OW-05D	11/4/2008		0.48	ND (1.0)

Notes:

FD field duplicate
ND parameter not detected at the listed reporting limit
µg/L micrograms per liter

Hexavalent Chromium is lab filtered and Dissolved Chromium is field filtered.

TABLE 4
Metal and Cation Results for Groundwater Samples, Third and Fourth Quarter 2008
PG&E Topock Compliance Monitoring Program

Location ID	Sample Date	Method:	Dissolved E200.7, E200.8 and E245.1 (Mercury)																						
			Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Cobalt	Copper	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Boron	Calcium	Iron [1]	Iron [2]	Potassium	Magnesium	Sodium
			µg/L																		mg/L						
CW-01M	11/4/2008		ND (50)	ND (10)	0.95 J	90.2	ND (1.0)	ND (3.0)	ND (5.0)	6.94	ND (10)	ND (10)	ND (0.2)	ND (10)	ND (10)	ND (10)	ND (5.0)	ND (1.0)	ND (5.0)	ND (10)	1.23	174 J	0.0245	ND (0.02)	13.9	8.86	1020
CW-01M	11/4/2008	FD	ND (50)	ND (10)	1.35 J	89.4	ND (1.0)	ND (3.0)	ND (5.0)	7.07	ND (10)	ND (10)	ND (0.2)	ND (10)	ND (10)	ND (10)	ND (5.0)	ND (1.0)	ND (5.0)	ND (10)	1.03	123 J	0.0384	ND (0.02)	14.4	9.72	1060
CW-01D	11/4/2008		ND (50)	ND (10)	1.28	22.1	ND (1.0)	ND (3.0)	ND (5.0)	ND (5.0)	ND (10)	ND (10)	ND (0.2)	ND (10)	ND (10)	ND (10)	ND (5.0)	ND (1.0)	ND (5.0)	ND (10)	1.18	96.0	0.0243	ND (0.02)	13.1	8.50	1040
CW-02M	11/5/2008		ND (50)	ND (10)	1.68	67.0	ND (1.0)	ND (3.0)	ND (5.0)	6.20	ND (10)	ND (10)	ND (0.2)	18.8	ND (10)	ND (10)	ND (5.0)	ND (1.0)	ND (5.0)	ND (10)	0.873	108	ND (0.02)	ND (0.02)	12.6	8.80	997
CW-02D	11/5/2008		ND (50)	ND (10)	3.57	12.1	ND (1.0)	ND (3.0)	ND (5.0)	ND (5.0)	ND (10)	ND (10)	ND (0.2)	25.0	ND (10)	ND (10)	ND (5.0)	ND (1.0)	5.59	ND (10)	1.27	75.0	0.026	ND (0.02)	11.4	3.26	1080
CW-03M	11/5/2008		ND (50)	ND (10)	0.69	51.5	ND (1.0)	ND (3.0)	ND (5.0)	ND (5.0)	ND (10)	ND (10)	ND (0.2)	15.8	ND (10)	ND (10)	ND (5.0)	ND (1.0)	ND (5.0)	ND (10)	0.89	204	0.0229	ND (0.02)	16.7	16.1	1280
CW-03D	11/5/2008		ND (50)	ND (10)	1.39	10.3	ND (1.0)	ND (3.0)	ND (5.0)	ND (5.0)	ND (10)	ND (10)	ND (0.2)	69.3	ND (10)	ND (10)	ND (5.0)	ND (1.0)	ND (5.0)	ND (10)	1.34	75.8	0.0203	ND (0.02)	11.2	4.01	1040
CW-04M	11/5/2008		ND (50)	ND (10)	1.87	78.7	ND (1.0)	ND (3.0)	ND (5.0)	6.95	ND (10)	ND (10)	ND (0.2)	ND (10)	ND (10)	ND (10)	ND (5.0)	ND (1.0)	ND (5.0)	ND (10)	0.648	127	0.0213	ND (0.02)	11.8	10.1	769
CW-04D	11/5/2008		ND (50)	ND (10)	2.89	28.1	ND (1.0)	ND (3.0)	ND (5.0)	ND (5.0)	ND (10)	ND (10)	ND (0.2)	26.8	ND (10)	ND (10)	ND (5.0)	ND (1.0)	ND (5.0)	ND (10)	1.30	162	0.0248	ND (0.02)	15.9	9.19	1510
OW-01S	8/5/2008		---	---	---	---	---	---	---	---	---	---	---	ND (10)	---	---	---	---	---	---	0.466	---	---	---	---	---	386
OW-01S	8/5/2008	FD	---	---	---	---	---	---	---	---	---	---	---	ND (10)	---	---	---	---	---	---	0.418	---	---	---	---	---	391
OW-01S	11/4/2008		ND (50)	ND (10)	0.83	106	ND (1.0)	ND (3.0)	ND (5.0)	12.2 J	ND (10)	ND (10)	ND (0.2)	ND (10)	ND (10)	ND (10)	ND (5.0)	ND (1.0)	ND (5.0)	ND (10)	0.315	94.3	0.0372	ND (0.02)	9.09 J	19.4	320
OW-01S	11/4/2008	FD	ND (50)	ND (10)	0.73	108	ND (1.0)	ND (3.0)	ND (5.0)	ND (5.0)J	ND (10)	ND (10)	ND (0.2)	ND (10)	ND (10)	ND (10)	ND (5.0)	ND (1.0)	ND (5.0)	ND (10)	0.263	91.9	0.0571	ND (0.02)	19.3 J	20.6	314
OW-01M	8/5/2008		---	---	---	---	---	---	---	---	---	---	---	ND (10)	---	---	---	---	---	---	ND (0.02)	---	---	---	---	---	1260
OW-01M	11/4/2008		ND (50)	ND (10)	0.80	90.1	ND (1.0)	ND (3.0)	ND (5.0)	7.79	ND (10)	ND (10)	ND (0.2)	ND (10)	ND (10)	ND (10)	ND (5.0)	ND (1.0)	ND (5.0)	ND (10)	1.25	166	0.0238	ND (0.02)	16.5	15.2	900
OW-01D	8/5/2008		---	---	---	---	---	---	---	---	---	---	---	ND (10)	---	---	---	---	---	---	0.952	---	---	---	---	---	1310
OW-01D	11/4/2008		ND (50)	ND (10)	1.25	34.8	ND (1.0)	ND (3.0)	ND (5.0)	7.08	ND (10)	ND (10)	ND (0.2)	ND (10)	ND (10)	ND (10)	ND (5.0)	ND (1.0)	ND (5.0)	ND (10)	1.20	128	0.0778	ND (0.02)	14.8	10.0	978
OW-02S	8/5/2008		---	---	---	---	---	---	---	---	---	---	---	37.5	---	---	---	---	---	---	ND (0.02)	---	---	---	---	---	285
OW-02S	11/3/2008		ND (50)	ND (10)	1.61	57.4	ND (1.0)	ND (3.0)	ND (5.0)	ND (5.0)	ND (10)	ND (10)	ND (0.2)	26.6	ND (10)	ND (10)	ND (5.0)	ND (1.0)	5.70	ND (10)	0.566	31.3	0.227	ND (0.02)	9.34	4.57	289
OW-02M	8/5/2008		---	---	---	---	---	---	---	---	---	---	---	ND (10)	---	---	---	---	---	---	0.939	---	---	---	---	---	1290
OW-02M	11/3/2008		ND (50)	ND (10)	0.52	61.6	ND (1.0)	ND (3.0)	ND (5.0)	10.7	ND (10)	ND (10)	ND (0.2)	ND (10)	ND (10)	ND (10)	ND (5.0)	ND (1.0)	ND (5.0)	ND (10)	1.21	148	ND (0.02)	ND (0.02)	17.4	17.0	1280
OW-02D	8/5/2008		---	---	---	---	---	---	---	---	---	---	---	11.3	---	---	---	---	---	---	1.21	---	---	---	---	---	1360
OW-02D	11/3/2008		ND (50)	ND (10)	1.45	21.2	ND (1.0)	ND (3.0)	ND (5.0)	7.50	ND (10)	ND (10)	ND (0.2)	ND (10)	ND (10)	ND (10)	ND (5.0)	ND (1.0)	ND (5.0)	ND (10)	0.999	156	0.0258	ND (0.02)	14.4	21.1	1230
OW-05S	8/4/2008		---	---	---	---	---	---	---	---	---	---	---	12.8	---	---	---	---	---	---	ND (0.02)	---	---	---	---	---	275
OW-05S	11/4/2008		ND (50)	ND (10)	0.91	61.6	ND (1.0)	ND (3.0)	ND (5.0)	ND (5.0)	ND (10)	ND (10)	ND (0.2)	16.9	ND (10)	ND (10)	5.12	ND (1.0)	ND (5.0)	ND (10)	0.384	53.3	0.0982	ND (0.02)	11.7	8.48	218
OW-05M	8/4/2008		---	---	---	---	---	---	---	---	---	---	---	11.4	---	---	---	---	---	---	1.31	---	---	---	---	---	1230
OW-05M	11/4/2008		ND (50)	ND (10)	0.30	46.4	ND (1.0)	ND (3.0)	ND (5.0)	ND (5.0)	ND (10)	ND (10)	ND (0.2)	ND (10)	ND (10)	ND (10)	ND (5.0)	ND (1.0)	ND (5.0)	ND (10)	1.14	170	0.0235	ND (0.02)	16.1	14.0	919
OW-05D	8/4/2008		---	---	---	---	---	---	---	---	---	---	---	ND (10)	---	---	---	---	---	---	1.25	---	---	---	---	---	1330
OW-05D	11/4/2008		ND (50)	ND (10)	1.05	25.9	ND (1.0)	ND (3.0)	ND (5.0)	5.18	ND (10)	ND (10)	ND (0.2)	ND (10)	ND (10)	ND (10)	ND (5.0)	ND (1.0)	ND (5.0)	ND (10)	1.07	170	0.024	ND (0.02)	17.8	21.2	881

NOTES:
FD field duplicate
ND parameter not detected at the listed reporting limit
mg/L milligrams per liter
µg/L micrograms per liter
J concentration or RL (reporting limit) estimated by laboratory or data validation
--- data not collected or available

[1] Total Iron

[2] Dissolved Iron

TABLE 5
Other Inorganics Results for Groundwater Samples, Third and Fourth Quarter 2008
PG&E Topock Compliance Monitoring Program

	Method:	E120.1		SM2540C	E180.1/SM2130B	E300.0	E300.0	E300.0	SM4500NO3-E	SM2320B	SM4500NH3F
Location ID	**Sample Date**	**Specific Conductance (µmhos/cm)**	**Field pH (pH units)**	**Total Dissolved Solids (mg/L)**	**Turbidity (NTU)**	**Chloride (mg/L)**	**Fluoride (mg/L)**	**Sulfate (mg/L)**	**Nitrate/Nitrite as Nitrogen (mg/L)**	**Alkalinity, total as CaCo3 (mg/L)**	**Ammonia as Nitrogen (mg/L)**
CW-01M	11/4/2008	6500	7.83	4250	0.141	2720 J	2.77	488	2.61	67.0	ND (0.5)
CW-01M	11/4/2008 (FD)	6440	FD	4150	0.178	2080 J	2.38	494	2.75	75.0	ND (0.5)
CW-01D	11/4/2008	6340	7.83	4180	0.154	2060	2.20	488	2.71	74.6	ND (0.5)
CW-02M	11/5/2008	6610	7.90	4190	0.149	2120	2.92	401	1.68	50.0	ND (0.5)
CW-02D	11/5/2008	6710	8.07	4030	0.232	2030	6.18	486	2.55	58.0	ND (0.5)
CW-03M	11/5/2008	8290	7.69	5250	0.275	2660	2.74	407	0.785	56.0	ND (0.5)
CW-03D	11/5/2008	6760	8.08	4070	0.142	2020	6.74	486	2.63	56.0	ND (0.5)
CW-04M	11/5/2008	5840	7.78	3720	0.10	1800	1.93	297	1.40	55.0	ND (0.5)
CW-04D	11/5/2008	9040	7.90	6110	0.103	2950	4.54	544	1.79	50.0	ND (0.5)
OW-01S	8/5/2008	2680	7.72	1720	0.29	753	2.24 J	146	2.78	---	---
OW-01S	8/5/2008 (FD)	2720	FD	1710	0.272	773	2.16	163	2.79	---	---
OW-01S	11/4/2008	2430	7.73	1460	0.73 J	676	2.41	146	2.97	72.0	ND (0.5)
OW-01S	11/4/2008 (FD)	2430	FD	1470	0.563 J	707	2.33	145	3.01	70.0	ND (0.5)
OW-01M	8/5/2008	6950	7.66	3950	0.499	2250	1.78	480	2.72	---	---
OW-01M	11/4/2008	6160	7.61	4240	ND (0.1)	2000	1.76	487	2.81	75.0	ND (0.5)
OW-01D	8/5/2008	6680	7.68	4120	0.35	2140	2.08	479	2.63	---	---
OW-01D	11/4/2008	6240	7.76	4190	1.23	2240	1.68	479	2.75	71.0	ND (0.5)
OW-02S	8/5/2008	1740	7.89	1010	1.18	411	4.61	119	3.80	---	---
OW-02S	11/3/2008	1640	7.93	952	4.05	412	5.22	105	3.89	101	ND (0.5)
OW-02M	8/5/2008	6880	7.72	4120	0.176	2090	1.77	481	2.80	---	---
OW-02M	11/3/2008	6190	7.61	4180	0.103	2200	1.98	475	3.69	71.0	ND (0.5)
OW-02D	8/5/2008	7090	7.88	4470	ND (0.1)	2130	1.94	498	2.83	---	---
OW-02D	11/3/2008	6240	7.61	4160	0.15	2060	2.08	473	3.01	79.0	ND (0.5)
OW-05S	8/4/2008	1880	7.71	1110	1.96 J	470	2.47	112	3.53	---	---
OW-05S	11/4/2008	1560	7.87	934	3.96	399	2.47	120	3.98	90.0	ND (0.5)
OW-05M	8/4/2008	7120	7.64	4630	ND (0.1)J	2140	2.09	490	2.71	---	---
OW-05M	11/4/2008	6310	7.65	4130	0.145	2230	2.19	481	3.06	76.0	ND (0.5)
OW-05D	8/4/2008	6920	7.64	4270	ND (0.1)J	2090	2.34	483	2.76	---	---
OW-05D	11/4/2008	6290	7.68	3930	ND (0.1)	1950	2.40	476	2.74	73.0	ND (0.5)

NOTES:

ND	parameter not detected at the listed reporting limit
FD	field duplicate
µmhos/cm	micro-mhos per centimeter
NTU	Nephelometric Turbidity Unit
mg/L	milligrams per liter
---	data not collected, available
J	concentration for RL (reporting limit) estimated by laboratory or data validation

Nitrate/Nitrite as nitrogen was calculated as the sum of nitrate as nitrogen and nitrite as nitrogen. For nondetect results, the reporting limit was used.

TABLE 6
Treated Water Quality Compared to OW and CW Pre-injection Water Quality
PG&E Topock Compliance Monitoring Program

Location ID	Sample Date	Hexavalent Chromium (µg/L)	Total Chromium (µg/L)	Fluoride (mg/L)	Dissolved Molybdenum (µg/L)	Nitrate/ Nitrite as Nitrogen (mg/L)	Sulfate (mg/L)	TDS (mg/L)
Treated Water	8/29/2005	ND(1.0)	ND(2.1)	1.95	8.3	3.7	450	3620
Treated Water	3/18/2006	ND(1.0)	ND(1.0)	1.92	8.2	2.79	482	4040
Treated Water	10/1/2008	ND(0.2)	ND(1.0)	2.14	ND(10)	2.66	465	4170
OW-01S	7/28/2005	19.4	23.5	2.45	17.2	3.2	114	1320
OW-01M	7/27/2005	16.3	18.9	2.31	27	1.01	311	3450
OW-01D	7/27/2005	ND(1.0)	ND(1.3)	1.14	46.1	0.321	441	6170
OW-02S	7/28/2005	15.3	14.8	3.79	35.6	3.81	126	1090
OW-02M	7/28/2005	5.4	5.7	2.19	32.4	0.735	342	4380
OW-02D	7/28/2005	ND(1.0)	ND(1.2)	0.966	51.2	0.1	616	9550
OW-05S	7/28/2005	23.4	25.6	2.3	17.1	3.55	105	1060
OW-05M	7/28/2005	8.6	8.8	2.74	35.4	0.621	417	5550
OW-05D	7/28/2005	ND(1.0)	ND(1.2)	1.11	57	0.151	480	8970
CW-01M	9/15/2005	18.1	17.8	2.34	21.6	1.11	318	2990
CW-01D	9/15/2005	ND(1.0)	1.6	0.951	32.1	0.972	379	6230
CW-02M	9/15/2005	15.8	15.5	2.3	23.1	0.908	342	3500
CW-02D	9/15/2005	ND(1.0)	1.6	0.982	41.6	0.28	601	8770
CW-03M	9/15/2005	8.8	8.1	2.57	24.2	0.642	464	4740
CW-03D	9/15/2005	ND(1.0)	ND(1.0)	1.4	29.2	0.304	672	9550
CW-04M	9/15/2005	19.2	19	1.5	12.3	1.18	240	3310
CW-04D	9/15/2005	ND(1.0)	ND(1.0)	1.01	26	0.188	534	7470

NOTES:

ND Not detected at the listed reporting limit.
mg/L milligrams per liter
µg/L micrograms per liter

Hexavalent chromium samples were analyzed with method E218.6.
Total chromium samples were analyzed with method E200.7.
Total chromium samples of the treated water were unfiltered.

TABLE 7
Treated Water Quality Compared to Third and Fourth Quarter 2008 Sampling Event Water Quality
PG&E Topock Compliance Monitoring Program

Location ID	Sample Date	Hexavalent Chromium (µg/L)	Total Chromium (µg/L)	Fluoride (mg/L)	Dissolved Molybdenum (µg/L)	Nitrate/Nitrite as Nitrogen (mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)
Treated Water	03/08/2006	ND (1.0)	ND (1.0)	1.92	8.20	2.79	482	4040
Treated Water	09/07/2006	ND (1.0)	ND (1.0)	1.93	13.6	2.50	486	4420
Treated Water	10/01/2008	ND (0.2)	ND (1.0)	2.14	ND (10)	2.66	465	4170
CW-01M	11/04/2008	1.33	1.37	2.77	ND (10)	2.61	488	4250
CW-01M	11/04/2008 (FD)	1.32	1.42	2.38	ND (10)	2.75	494	4150
CW-01D	11/04/2008	0.40	ND (1.0)	2.20	ND (10)	2.71	488	4180
CW-02M	11/05/2008	9.61	9.48	2.92	18.8	1.68	401	4190
CW-02D	11/05/2008	ND (1.0)	ND (1.0)	6.18	25.0	2.55	486	4030
CW-03M	11/05/2008	11.5	11.6	2.74	15.8	0.785	407	5250
CW-03D	11/05/2008	ND (1.0)	1.02	6.74	69.3	2.63	486	4070
CW-04M	11/05/2008	18.4	17.8	1.93	ND (10)	1.40	297	3720
CW-04D	11/05/2008	2.54	2.94	4.54	26.8	1.79	544	6110
OW-01S	08/05/2008	17.3	18.0	2.24 J	ND (10)	2.78	146	1720
OW-01S	08/05/2008 (FD)	19.2	18.6	2.16	ND (10)	2.79	163	1710
OW-01S	11/04/2008 (FD)	21.5	18.3	2.33	ND (10)	3.01	145	1470
OW-01S	11/04/2008	21.0	18.1	2.41	ND (10)	2.97	146	1460
OW-01M	08/05/2008	ND (1.0)	ND (1.0)	1.78	ND (10)	2.72	480	3950
OW-01M	11/04/2008	0.887	1.00	1.76	ND (10)	2.81	487	4240
OW-01D	08/05/2008	0.51	ND (1.0)	2.08	ND (10)	2.63	479	4120
OW-01D	11/04/2008	0.49 J	ND (1.0)	1.68	ND (10)	2.75	479	4190
OW-02S	08/05/2008	28.9	30.8	4.61	37.5	3.80	119	1010
OW-02S	11/03/2008	31.8	29.3	5.22	26.6	3.89	105	952
OW-02M	08/05/2008	ND (1.0)	ND (1.0)	1.77	ND (10)	2.80	481	4120
OW-02M	11/03/2008	1.02	1.27	1.98	ND (10)	3.69	475	4180
OW-02D	08/05/2008	ND (1.0)	ND (1.0)	1.94	11.3	2.83	498	4470
OW-02D	11/03/2008	ND (1.0)	ND (1.0)	2.08	ND (10)	3.01	473	4160
OW-05S	08/04/2008	22.6	21.6	2.47	12.8	3.53	112	1110
OW-05S	11/04/2008	25.6	22.9	2.47	16.9	3.98	120	934
OW-05M	08/04/2008	0.83	1.52	2.09	11.4	2.71	490	4630
OW-05M	11/04/2008	0.85	ND (1.0)	2.19	ND (10)	3.06	481	4130
OW-05D	08/04/2008	0.38	ND (1.0)	2.34	ND (10)	2.76	483	4270
OW-05D	11/04/2008	0.48	ND (1.0)	2.40	ND (10)	2.74	476	3930

TABLE 7
Treated Water Quality Compared to Third and Fourth Quarter 2008 Sampling Event Water Quality
PG&E Topock Compliance Monitoring Program

Notes:

FD	field duplicate
ND	parameter not detected at the listed reporting limit
mg/L	milligrams per liter
µg/L	micrograms per liter
J	concentration or RL (reporting limit) estimated by laboratory or data validation

Hexavalent chromium samples were analyzed with method E218.6.

Total chromium samples were analyzed with methods E200.7 and E200.8. Total chromium and molybdenum samples were filtered, except for the treated water.

Molybdenum samples were analyzed with method E200.8.

Fluoride and Sulfate samples were analyzed with method E300.0.

Nitrate/Nitrite as Nitrogen samples were analyzed with methods E300.0 and SM4500NO3E.

Total Dissolved Solid samples were analyzed with methods E160.1 and SM2540C.

TABLE 8
Manual Water Level Measurements and Elevations, Third and Fourth Quarter 2008
PG&E Topock Compliance Monitoring Program

Location ID	Well Depth (feet BTOC)	Measuring Point Elevation (feet AMSL)	Monitoring Date & Time		Water Level Measurement (feet BTOC)	Salinity (percent)	Groundwater/Water Elevation Adjusted for Salinity (feet AMSL)
CW-01M	190.0	566.16	04-Nov-08	2:08 PM	109.38	0.49	456.75
CW-01D	300.2	566.57	04-Nov-08	2:57 PM	109.52	0.50	457.01
CW-02M	202.0	549.37	05-Nov-08	4:28 PM	93.25	0.50	456.10
CW-02D	355.0	549.64	05-Nov-08	3:11 PM	92.77	0.53	456.87
CW-03M	222.0	534.21	05-Nov-08	1:22 PM	78.14	0.59	456.16
CW-03D	340.0	534.27	05-Nov-08	12:00 PM	77.45	0.76	457.26
CW-04M	169.8	518.66	05-Nov-08	10:19 PM	62.10	0.44	456.11
CW-04D	303.0	518.68	05-Nov-08	9:02 AM	61.96	0.63	456.94
OW-01S	113.5	550.21	05-Aug-08	12:39 PM	92.67	0.19	457.48
			04-Nov-08	10:58 AM	93.92	0.19	456.24
OW-01M	185.8	550.45	05-Aug-08	1:48 PM	92.64	0.51	457.78
			04-Nov-08	11:50 AM	93.52	0.51	456.91
OW-01D	277.0	550.48	05-Aug-08	11:24 AM	92.48	0.48	457.88
			04-Nov-08	12:58 PM	93.10	0.48	457.16
OW-02S	121.0	548.88	05-Aug-08	9:33 AM	91.44	0.13	457.35
			03-Nov-08	1:32 PM	92.51	0.13	456.28
OW-02M	210.3	548.59	05-Aug-08	8:30 AM	90.76	0.52	457.84
			03-Nov-08	12:10 PM	91.52	0.52	457.11
OW-02D	340.0	549.15	05-Aug-08	7:15 AM	91.02	0.52	458.08
			03-Nov-08	2:21 PM	91.42	0.52	457.72
OW-05S	110.3	551.83	04-Aug-08	2:04 PM	94.13	0.14	457.65
			04-Nov-08	8:40 AM	95.41	0.14	456.37
OW-05M	250.3	551.81	04-Aug-08	12:51 PM	93.29	0.49	458.42
			04-Nov-08	7:44 AM	94.70	0.49	457.04
OW-05D	350.0	552.33	04-Aug-08	11:23 AM	94.20	0.58	458.03
			04-Nov-08	9:27 AM	95.26	0.58	457.26

Notes:

AMSL above mean sea level
BTOC below top of polyvinyl chloride (PVC) casing

Salinity used to adjust water level to freshwater equivalent. Salinity values have been averaged in accordance with the Performance Monitoring Program.

TABLE 9
Vertical Gradients within the OW and CW Clusters
PG&E Topock Compliance Monitoring Program

Well Pairs	Vertical Gradient (ft/ft)[a]
CW-01D to CW-01M	0.0035
CW-02D to CW-02M	--
CW-03D to CW-03M	0.0110
CW-04D to CW-04M	0.0028
OW-01M to OW-01S	0.0071
OW-01D to OW-01M	0.0034
OW-02M to OW-02S	0.0064
OW-02D to OW-02M	0.0040

[a] Positive value signifies an upward gradient.

Gradients calculated using October 1 through October 30, 2008 average groundwater levels.

"--": Data unavailable for CW-02D. Transducer failure from 7/15/08 through present. Vertical gradient cannot be calculated.

TABLE 10
Field Parameter Measurements for Groundwater Samples, Third and Fourth Quarter 2008
PG&E Topock Compliance Monitoring Program

Location ID	Sampling Date	Specific Conductance (µmhos/cm)	Temperature (°C)	pH (pH units)	ORP (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Salinity (%)
CW-01M	11/4/2008	7699	29.93	7.83	104.5	6.38	1	0.5
CW-01D	11/4/2008	7679	29.93	7.83	99.7	5.9	1	0.5
CW-02M	11/5/2008	7577	29.62	7.9	76.6	2.22	0.7	0.49
CW-02D	11/5/2008	7597	30.79	8.07	87.4	5.37	0.8	0.49
CW-03M	11/5/2008	9333	29.84	7.69	68.8	0.35	0.8	0.6
CW-03D	11/5/2008	7656	30.67	8.08	83.6	5.31	1	0.5
CW-04M	11/5/2008	6606	29.35	7.78	89.6	0.78	0.7	0.43
CW-04D	11/5/2008	10340	30.44	7.9	111.8	2.82	0.6	0.67
OW-01S	8/5/2008	3001	31.7	7.72	68.7	4	2	0.19
OW-01S	11/4/2008	2839	29.51	7.73	102.9	3.92	1	0.18
OW-01M	8/5/2008	7643	30.7	7.66	74.1	7.56	3	0.49
OW-01M	11/4/2008	7443	30.36	7.61	125.3	8.89	1	0.48
OW-01D	8/5/2008	7609	30.5	7.68	78.8	6.4	1	0.49
OW-01D	11/4/2008	7498	30.21	7.76	115.3	10.5	3	0.48
OW-02S	8/5/2008	1931	31.5	7.89	77.5	7.46	4	0.12
OW-02S	11/3/2008	1830	28.79	7.93	49.7	7.09	6	0.12
OW-02M	8/5/2008	7608	30.7	7.72	105.7	7.3	0.7	0.49
OW-02M	11/3/2008	7317	29.77	7.61	46.8	7.11	1	0.47
OW-02D	8/5/2008	7674	28.7	7.88	107.7	7.51	0.5	0.5
OW-02D	11/3/2008	7212	29.71	7.61	136.4	8.69	1	0.47
OW-05S	8/4/2008	2067	31.1	7.71	73.1	7.06	14	0.13
OW-05S	11/4/2008	1798	28.87	7.87	121.2	6.56	5	0.12
OW-05M	8/4/2008	7718	29.3	7.64	101.6	7.38	0.5	0.5
OW-05M	11/4/2008	7409	30.03	7.65	146.9	5.69	1	0.48
OW-05D	8/4/2008	7600	30.4	7.64	127.6	7.25	1	0.49
OW-05D	11/4/2008	7396	30.63	7.68	123.7	6.1	1	0.48

Notes:

µmhos/cm	micro-mhos per centimeter
°C	degree centigrade
ORP	oxidation reduction potential
mV	millivolts
mg/L	milligrams per liter
NTU	Nephelometric Turbidity Unit
%	percentage

TABLE 11

Board Order No. R7-2006-0060 WDR Monitoring Information for Groundwater Samples, Third and Fourth Quarter 2008

PG&E Topock Compliance Monitoring Program

Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
CW-01D	CW-01D-018	Aurora Abbott	11/04/2008	15:32:03	TLI	EPA 120.1	SC	11/06/2008	Tina Acquiat	µmhos/cm	6340	2.00	0.153
					TLI	EPA 200.7	NAD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	1040	100	0.22
					TLI	EPA 200.7	BD	11/10/2008	Hao Ton/Hope Trinidad	mg/L	1.18	0.20	0.0048
					TLI	EPA 200.7	CAD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	96.0	20.0	0.47
					TLI	EPA 200.7	FE	11/13/2008	Hao Ton/Hope Trinidad	mg/L	0.0243	0.02	0.0024
					TLI	EPA 200.7	FETD	11/17/2008	Hao Ton/Hope Trinidad	mg/L	ND (0.02)	0.02	0.0024
					TLI	EPA 200.7	KD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	13.1	2.00	0.019
					TLI	EPA 200.7	MGD	12/05/2008	Hao Ton/Hope Trinidad	mg/L	8.50	0.50	0.006
					TLI	EPA 200.8	MOD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0336
					TLI	EPA 200.8	NID	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.127
					TLI	EPA 200.8	PBD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0182
					TLI	EPA 200.8	SBD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0225
					TLI	EPA 200.8	SED	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0161
					TLI	EPA 200.8	TLD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.018
					TLI	EPA 200.8	MND	11/10/2008	Linda Saetern/Romuel Chaves	mg/L	ND (0.01)	0.01	0.0000161
					TLI	EPA 200.8	ZND	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.115
					TLI	EPA 200.8	COBD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0252
					TLI	EPA 200.8	VD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0124
					TLI	EPA 200.8	CRTD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.0532
					TLI	EPA 200.8	CDD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (3.0)	3.0	0.023
					TLI	EPA 200.8	BED	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.0383
					TLI	EPA 200.8	BAD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	22.1	10.0	0.0162
					TLI	EPA 200.8	ASD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	1.28	0.10	0.015
					TLI	EPA 200.8	ALD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (50)	50	0.256
					TLI	EPA 200.8	AGD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0422
					TLI	EPA 200.8	CUD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.13
					TLI	EPA 218.6	CR6	11/12/2008	Michael Nonezyan	µg/L	0.40	0.20	0.0304
					TLI	EPA 245.1	HGD	11/08/2008	Romuel Chaves	µg/L	ND (0.2)	0.2	0.03

TABLE 11

Board Order No. R7-2006-0060 WDR Monitoring Information for Groundwater Samples, Third and Fourth Quarter 2008

PG&E Topock Compliance Monitoring Program

Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
CW-01D	CW-01D-018	Aurora Abbott	11/04/2008	15:32:03	TLI	EPA 300.0	CL	11/08/2008	Giawad Ghenniwa	mg/L	2060	200	28.0
					TLI	EPA 300.0	FL	11/05/2008	Giawad Ghenniwa	mg/L	2.20	0.50	0.025
					TLI	EPA 300.0	SO4	11/08/2008	Giawad Ghenniwa	mg/L	488	25.0	1.20
					TLI	SM 2320B	ALKC	11/05/2008	Iordan Stavrev	mg/L	ND (5.0)	5.0	1.53
					TLI	SM 2320B	ALKB	11/05/2008	Iordan Stavrev	mg/L	74.6	5.00	1.53
					TLI	SM 2320B	ALKT	11/05/2008	Iordan Stavrev	mg/L	74.6	5.00	1.53
					TLI	SM2130B	TRB	11/05/2008	Gautam Savani	NTU	0.154	0.10	0.007
					TLI	SM2540C	TDS	11/06/2008	Tina Acquiat	mg/L	4180	250	50.4
					TLI	SM4500NH3D	NH3N	11/06/2008	Iordan Stavrev	mg/L	ND (0.5)	0.5	0.009
					EMXT	SM4500NO3-E	NO3NO2N	11/12/2008	Elena Robles	mg/L	2.71	0.50	0.10
CW-01M	OW-90-018	Aurora Abbott	11/04/2008	14:05:29	TLI	EPA 120.1	SC	11/06/2008	Tina Acquiat	µmhos/cm	6440	2.00	0.153
					TLI	EPA 200.7	FETD	11/17/2008	Hao Ton/Hope Trinidad	mg/L	ND (0.02)	0.02	0.0024
					TLI	EPA 200.7	NAD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	1060	100	0.22
					TLI	EPA 200.7	KD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	14.4	2.00	0.019
					TLI	EPA 200.7	FE	11/13/2008	Hao Ton/Hope Trinidad	mg/L	0.0384	0.02	0.0024
					TLI	EPA 200.7	CAD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	123 J	20.0	0.47
					TLI	EPA 200.7	BD	11/10/2008	Hao Ton/Hope Trinidad	mg/L	1.03	0.20	0.0048
					TLI	EPA 200.7	MGD	12/05/2008	Hao Ton/Hope Trinidad	mg/L	9.72	0.50	0.006
					TLI	EPA 200.8	ZND	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.115
					TLI	EPA 200.8	MOD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0336
					TLI	EPA 200.8	BAD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	89.4	10.0	0.0162
					TLI	EPA 200.8	BED	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.0383
					TLI	EPA 200.8	CDD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (3.0)	3.0	0.023
					TLI	EPA 200.8	COBD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0252
					TLI	EPA 200.8	ASD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	1.35 J	0.10	0.015
					TLI	EPA 200.8	CRTD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	1.42	1.00	0.0532
					TLI	EPA 200.8	CUD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	7.07	5.00	0.13
					TLI	EPA 200.8	MND	11/10/2008	Linda Saetern/Romuel Chaves	mg/L	ND (0.01)	0.01	0.0000161

TABLE 11
Board Order No. R7-2006-0060 WDR Monitoring Information for Groundwater Samples, Third and Fourth Quarter 2008
PG&E Topock Compliance Monitoring Program

Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
CW-01M	OW-90-018	Aurora Abbott	11/04/2008	14:05:29	TLI	EPA 200.8	NID	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.127
					TLI	EPA 200.8	PBD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0182
					TLI	EPA 200.8	SBD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0225
					TLI	EPA 200.8	SED	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0161
					TLI	EPA 200.8	TLD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.018
					TLI	EPA 200.8	VD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0124
					TLI	EPA 200.8	AGD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0422
					TLI	EPA 200.8	ALD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (50)	50	0.256
					TLI	EPA 218.6	CR6	11/12/2008	Michael Nonezyan	µg/L	1.32	0.20	0.0304
					TLI	EPA 245.1	HGD	11/08/2008	Romuel Chaves	µg/L	ND (0.2)	0.2	0.03
					TLI	EPA 300.0	SO4	11/08/2008	Giawad Ghenniwa	mg/L	494	25.0	1.20
					TLI	EPA 300.0	FL	11/05/2008	Giawad Ghenniwa	mg/L	2.38	0.50	0.025
					TLI	EPA 300.0	CL	11/08/2008	Giawad Ghenniwa	mg/L	2080 J	200	28.0
					TLI	SM 2320B	ALKB	11/05/2008	Iordan Stavrev	mg/L	75.0	5.00	1.53
					TLI	SM 2320B	ALKC	11/05/2008	Iordan Stavrev	mg/L	ND (5.0)	5.0	1.53
					TLI	SM 2320B	ALKT	11/05/2008	Iordan Stavrev	mg/L	75.0	5.00	1.53
					TLI	SM2130B	TRB	11/05/2008	Gautam Savani	NTU	0.178	0.10	0.007
					TLI	SM2540C	TDS	11/06/2008	Tina Acquiat	mg/L	4150	250	50.4
					TLI	SM4500NH3D	NH3N	11/06/2008	Iordan Stavrev	mg/L	ND (0.5)	0.5	0.009
					EMXT	SM4500NO3-E	NO3NO2N	11/12/2008	Elena Robles	mg/L	2.75	0.50	0.10
CW-01M	CW-01M-018	Aurora Abbott	11/04/2008	14:32:29	TLI	EPA 120.1	SC	11/06/2008	Tina Acquiat	µmhos/cm	6500	2.00	0.153
					TLI	EPA 200.7	CAD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	174 J	20.0	0.47
					TLI	EPA 200.7	MGD	12/05/2008	Hao Ton/Hope Trinidad	mg/L	8.86	0.50	0.006
					TLI	EPA 200.7	KD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	13.9	2.00	0.019
					TLI	EPA 200.7	FE	11/13/2008	Hao Ton/Hope Trinidad	mg/L	0.0245	0.02	0.0024
					TLI	EPA 200.7	BD	11/10/2008	Hao Ton/Hope Trinidad	mg/L	1.23	0.20	0.0048
					TLI	EPA 200.7	NAD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	1020	100	0.22
					TLI	EPA 200.7	FETD	11/17/2008	Hao Ton/Hope Trinidad	mg/L	ND (0.02)	0.02	0.0024

TABLE 11

Board Order No. R7-2006-0060 WDR Monitoring Information for Groundwater Samples, Third and Fourth Quarter 2008

PG&E Topock Compliance Monitoring Program

Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
CW-01M	CW-01M-018	Aurora Abbott	11/04/2008	14:32:29	TLI	EPA 200.8	MND	11/10/2008	Linda Saetern/Romuel Chaves	mg/L	ND (0.01)	0.01	0.0000161
					TLI	EPA 200.8	ZND	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.115
					TLI	EPA 200.8	VD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0124
					TLI	EPA 200.8	TLD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.018
					TLI	EPA 200.8	SED	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0161
					TLI	EPA 200.8	SBD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0225
					TLI	EPA 200.8	PBD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0182
					TLI	EPA 200.8	NID	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.127
					TLI	EPA 200.8	MOD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0336
					TLI	EPA 200.8	AGD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0422
					TLI	EPA 200.8	ALD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (50)	50	0.256
					TLI	EPA 200.8	CUD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	6.94	5.00	0.13
					TLI	EPA 200.8	ASD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	0.95 J	0.10	0.015
					TLI	EPA 200.8	BAD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	90.2	10.0	0.0162
					TLI	EPA 200.8	BED	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.0383
					TLI	EPA 200.8	CDD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (3.0)	3.0	0.023
					TLI	EPA 200.8	COBD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0252
					TLI	EPA 200.8	CRTD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	1.37	1.00	0.0532
					TLI	EPA 218.6	CR6	11/12/2008	Michael Nonezyan	µg/L	1.33	0.20	0.0304
					TLI	EPA 245.1	HGD	11/08/2008	Romuel Chaves	µg/L	ND (0.2)	0.2	0.03
					TLI	EPA 300.0	CL	11/08/2008	Giawad Ghenniwa	mg/L	2720 J	200	28.0
					TLI	EPA 300.0	FL	11/05/2008	Giawad Ghenniwa	mg/L	2.77	0.50	0.025
					TLI	EPA 300.0	SO4	11/08/2008	Giawad Ghenniwa	mg/L	488	25.0	1.20
					TLI	SM 2320B	ALKB	11/05/2008	Iordan Stavrev	mg/L	67.0	5.00	1.53
					TLI	SM 2320B	ALKC	11/05/2008	Iordan Stavrev	mg/L	ND (5.0)	5.0	1.53
					TLI	SM 2320B	ALKT	11/05/2008	Iordan Stavrev	mg/L	67.0	5.00	1.53
					TLI	SM2130B	TRB	11/05/2008	Gautam Savani	NTU	0.141	0.10	0.007
					TLI	SM2540C	TDS	11/06/2008	Tina Acquiat	mg/L	4250	250	50.4

TABLE 11
Board Order No. R7-2006-0060 WDR Monitoring Information for Groundwater Samples, Third and Fourth Quarter 2008
PG&E Topock Compliance Monitoring Program

Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
CW-01M	CW-01M-018	Aurora Abbott	11/04/2008	14:32:29	TLI	SM4500NH3D	NH3N	11/06/2008	Iordan Stavrev	mg/L	ND (0.5)	0.5	0.009
					EMXT	SM4500NO3-E	NO3NO2N	11/12/2008	Elena Robles	mg/L	2.61	0.50	0.10
CW-02D	CW-02D-018	Barry Collom	11/05/2008	15:58:01	TLI	EPA 120.1	SC	11/07/2008	Tina Acquiat	µmhos/cm	6710	2.00	0.153
					TLI	EPA 200.7	MGD	12/05/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	3.26	0.50	0.006
					TLI	EPA 200.7	MND	11/18/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	ND (0.01)	0.01	0.0014
					TLI	EPA 200.7	KD	11/18/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	11.4	2.00	0.019
					TLI	EPA 200.7	FETD	11/18/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	ND (0.02)	0.02	0.0024
					TLI	EPA 200.7	FE	11/13/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	0.026	0.02	0.0024
					TLI	EPA 200.7	CAD	11/11/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	75.0	2.00	0.047
					TLI	EPA 200.7	BD	11/20/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	1.27	0.02	0.0048
					TLI	EPA 200.7	NAD	11/11/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	1080	100	0.22
					TLI	EPA 200.8	COBD	11/10/2008	Romuel Chaves	µg/L	ND (5.0)	5.0	0.0252
					TLI	EPA 200.8	VD	11/10/2008	Romuel Chaves	µg/L	5.59	5.00	0.0124
					TLI	EPA 200.8	TLD	11/10/2008	Romuel Chaves	µg/L	ND (1.0)	1.0	0.018
					TLI	EPA 200.8	SED	11/10/2008	Romuel Chaves	µg/L	ND (10)	10	0.0161
					TLI	EPA 200.8	SBD	11/13/2008	Romuel Chaves	µg/L	ND (10)	10	0.0225
					TLI	EPA 200.8	PBD	11/10/2008	Romuel Chaves	µg/L	ND (10)	10	0.0182
					TLI	EPA 200.8	NID	11/10/2008	Romuel Chaves	µg/L	ND (10)	10	0.127
					TLI	EPA 200.8	MOD	11/10/2008	Romuel Chaves	µg/L	25.0	10.0	0.0168
					TLI	EPA 200.8	ZND	11/13/2008	Romuel Chaves	µg/L	ND (10)	10	0.115
					TLI	EPA 200.8	CDD	11/10/2008	Romuel Chaves	µg/L	ND (3.0)	3.0	0.0115
					TLI	EPA 200.8	BED	11/13/2008	Romuel Chaves	µg/L	ND (1.0)	1.0	0.0383
					TLI	EPA 200.8	BAD	11/10/2008	Romuel Chaves	µg/L	12.1	10.0	0.0162
					TLI	EPA 200.8	ASD	11/10/2008	Romuel Chaves	µg/L	3.57	0.20	0.015
					TLI	EPA 200.8	ALD	11/13/2008	Romuel Chaves	µg/L	ND (50)	50	0.256
					TLI	EPA 200.8	AGD	11/10/2008	Romuel Chaves	µg/L	ND (5.0)	5.0	0.0211
					TLI	EPA 200.8	CUD	11/10/2008	Romuel Chaves	µg/L	ND (5.0)	5.0	0.13
					TLI	EPA 200.8	CRTD	11/13/2008	Romuel Chaves	µg/L	ND (1.0)	1.0	0.0532

TABLE 11
Board Order No. R7-2006-0060 WDR Monitoring Information for Groundwater Samples, Third and Fourth Quarter 2008
PG&E Topock Compliance Monitoring Program

Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
CW-02D	CW-02D-018	Barry Collom	11/05/2008	15:58:01	TLI	EPA 218.6	CR6	11/20/2008	Michael Nonezyan	µg/L	ND (1.0)	1.0	0.145
					TLI	EPA 245.1	HGD	11/19/2008	Romuel Chavez	µg/L	ND (0.2)	0.2	0.03
					TLI	EPA 300.0	CL	11/10/2008	Giawad Ghenniwa	mg/L	2030	200	28.0
					TLI	EPA 300.0	FL	11/10/2008	Giawad Ghenniwa	mg/L	6.18	0.50	0.025
					TLI	EPA 300.0	SO4	11/10/2008	Giawad Ghenniwa	mg/L	486	12.5	0.60
					TLI	SM 2320B	ALKB	11/11/2008	Iordan Stavrev	mg/L	58.0	5.00	1.53
					TLI	SM 2320B	ALKC	11/11/2008	Iordan Stavrev	mg/L	ND (5.0)	5.0	1.53
					TLI	SM 2320B	ALKT	11/11/2008	Iordan Stavrev	mg/L	58.0	5.00	1.53
					TLI	SM2130B	TRB	11/07/2008	Gautam Savani	NTU	0.232	0.10	0.007
					TLI	SM2540C	TDS	11/11/2008	Tina Acquiat	mg/L	4030	250	50.4
					TLI	SM4500NH3D	NH3N	11/11/2008	Iordan Stavrev	mg/L	ND (0.5)	0.5	0.009
					EMXT	SM4500NO3-E	NO3NO2N	11/17/2008	Elena Robles	mg/L	2.55	0.50	0.10
CW-02M	CW-02M-018	Barry Collom	11/05/2008	16:57:02	TLI	EPA 120.1	SC	11/07/2008	Tina Acquiat	µmhos/cm	6610	2.00	0.153
					TLI	EPA 200.7	MGD	12/05/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	8.80	0.50	0.006
					TLI	EPA 200.7	MND	11/18/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	ND (0.01)	0.01	0.0014
					TLI	EPA 200.7	KD	11/18/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	12.6	2.00	0.019
					TLI	EPA 200.7	FETD	11/18/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	ND (0.02)	0.02	0.0024
					TLI	EPA 200.7	FE	11/13/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	ND (0.02)	0.02	0.0024
					TLI	EPA 200.7	CAD	11/11/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	108	20.0	0.47
					TLI	EPA 200.7	BD	11/20/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	0.873	0.02	0.0048
					TLI	EPA 200.7	NAD	11/11/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	997	100	0.22
					TLI	EPA 200.8	MOD	11/10/2008	Romuel Chaves	µg/L	18.8	10.0	0.0168
					TLI	EPA 200.8	COBD	11/10/2008	Romuel Chaves	µg/L	ND (5.0)	5.0	0.0252
					TLI	EPA 200.8	ZND	11/13/2008	Romuel Chaves	µg/L	ND (10)	10	0.115
					TLI	EPA 200.8	VD	11/10/2008	Romuel Chaves	µg/L	ND (5.0)	5.0	0.0124
					TLI	EPA 200.8	TLD	11/10/2008	Romuel Chaves	µg/L	ND (1.0)	1.0	0.018
					TLI	EPA 200.8	SED	11/10/2008	Romuel Chaves	µg/L	ND (10)	10	0.0161
					TLI	EPA 200.8	SBD	11/13/2008	Romuel Chaves	µg/L	ND (10)	10	0.0225

TABLE 11
Board Order No. R7-2006-0060 WDR Monitoring Information for Groundwater Samples, Third and Fourth Quarter 2008
PG&E Topock Compliance Monitoring Program

Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
CW-02M	CW-02M-018	Barry Collom	11/05/2008	16:57:02	TLI	EPA 200.8	PBD	11/10/2008	Romuel Chaves	µg/L	ND (10)	10	0.0182
					TLI	EPA 200.8	NID	11/10/2008	Romuel Chaves	µg/L	ND (10)	10	0.127
					TLI	EPA 200.8	AGD	11/10/2008	Romuel Chaves	µg/L	ND (5.0)	5.0	0.0211
					TLI	EPA 200.8	CRTD	11/13/2008	Romuel Chaves	µg/L	9.48	1.00	0.0532
					TLI	EPA 200.8	CUD	11/10/2008	Romuel Chaves	µg/L	6.20	5.00	0.13
					TLI	EPA 200.8	CDD	11/10/2008	Romuel Chaves	µg/L	ND (3.0)	3.0	0.0115
					TLI	EPA 200.8	BED	11/13/2008	Romuel Chaves	µg/L	ND (1.0)	1.0	0.0383
					TLI	EPA 200.8	BAD	11/10/2008	Romuel Chaves	µg/L	67.0	10.0	0.0162
					TLI	EPA 200.8	ASD	11/10/2008	Romuel Chaves	µg/L	1.68	0.20	0.015
					TLI	EPA 200.8	ALD	11/13/2008	Romuel Chaves	µg/L	ND (50)	50	0.256
					TLI	EPA 218.6	CR6	11/20/2008	Michael Nonezyan	µg/L	9.61	1.00	0.145
					TLI	EPA 245.1	HGD	11/19/2008	Romuel Chavez	µg/L	ND (0.2)	0.2	0.03
					TLI	EPA 300.0	CL	11/10/2008	Giawad Ghenniwa	mg/L	2120	200	28.0
					TLI	EPA 300.0	FL	11/10/2008	Giawad Ghenniwa	mg/L	2.92	0.50	0.025
					TLI	EPA 300.0	SO4	11/10/2008	Giawad Ghenniwa	mg/L	401	12.5	0.60
					TLI	SM 2320B	ALKB	11/11/2008	Iordan Stavrev	mg/L	50.0	5.00	1.53
					TLI	SM 2320B	ALKC	11/11/2008	Iordan Stavrev	mg/L	ND (5.0)	5.0	1.53
					TLI	SM 2320B	ALKT	11/11/2008	Iordan Stavrev	mg/L	50.0	5.00	1.53
					TLI	SM2130B	TRB	11/07/2008	Gautam Savani	NTU	0.149	0.10	0.007
					TLI	SM2540C	TDS	11/11/2008	Tina Acquiat	mg/L	4190	250	50.4
					TLI	SM4500NH3D	NH3N	11/11/2008	Iordan Stavrev	mg/L	ND (0.5)	0.5	0.009
					EMXT	SM4500NO3-E	NO3NO2N	11/17/2008	Elena Robles	mg/L	1.68	0.50	0.10
CW-03D	CW-03D-018	Barry Collom	11/05/2008	12:47:53	TLI	EPA 120.1	SC	11/07/2008	Tina Acquiat	µmhos/cm	6760	2.00	0.153
					TLI	EPA 200.7	MGD	12/05/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	4.01	0.10	0.0006
					TLI	EPA 200.7	MND	11/18/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	ND (0.01)	0.01	0.0014
					TLI	EPA 200.7	KD	11/18/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	11.2	2.00	0.019
					TLI	EPA 200.7	FETD	11/18/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	ND (0.02)	0.02	0.0024
					TLI	EPA 200.7	FE	11/13/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	0.0203	0.02	0.0024

TABLE 11

Board Order No. R7-2006-0060 WDR Monitoring Information for Groundwater Samples, Third and Fourth Quarter 2008

PG&E Topock Compliance Monitoring Program

Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
CW-03D	CW-03D-018	Barry Collom	11/05/2008	12:47:53	TLI	EPA 200.7	CAD	11/11/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	75.8	2.00	0.047
					TLI	EPA 200.7	BD	11/20/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	1.34	0.02	0.0048
					TLI	EPA 200.7	NAD	11/11/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	1040	100	0.22
					TLI	EPA 200.8	CRTD	11/13/2008	Romuel Chaves	µg/L	1.02	1.00	0.0532
					TLI	EPA 200.8	CUD	11/10/2008	Romuel Chaves	µg/L	ND (5.0)	5.0	0.13
					TLI	EPA 200.8	ZND	11/13/2008	Romuel Chaves	µg/L	ND (10)	10	0.115
					TLI	EPA 200.8	VD	11/10/2008	Romuel Chaves	µg/L	ND (5.0)	5.0	0.0124
					TLI	EPA 200.8	TLD	11/10/2008	Romuel Chaves	µg/L	ND (1.0)	1.0	0.018
					TLI	EPA 200.8	SED	11/10/2008	Romuel Chaves	µg/L	ND (10)	10	0.0161
					TLI	EPA 200.8	SBD	11/13/2008	Romuel Chaves	µg/L	ND (10)	10	0.0225
					TLI	EPA 200.8	PBD	11/10/2008	Romuel Chaves	µg/L	ND (10)	10	0.0182
					TLI	EPA 200.8	NID	11/10/2008	Romuel Chaves	µg/L	ND (10)	10	0.127
					TLI	EPA 200.8	AGD	11/10/2008	Romuel Chaves	µg/L	ND (5.0)	5.0	0.0422
					TLI	EPA 200.8	MOD	11/10/2008	Romuel Chaves	µg/L	69.3	10.0	0.0336
					TLI	EPA 200.8	COBD	11/10/2008	Romuel Chaves	µg/L	ND (5.0)	5.0	0.0252
					TLI	EPA 200.8	CDD	11/10/2008	Romuel Chaves	µg/L	ND (3.0)	3.0	0.023
					TLI	EPA 200.8	BED	11/13/2008	Romuel Chaves	µg/L	ND (1.0)	1.0	0.0383
					TLI	EPA 200.8	BAD	11/10/2008	Romuel Chaves	µg/L	10.3	10.0	0.0162
					TLI	EPA 200.8	ASD	11/10/2008	Romuel Chaves	µg/L	1.39	0.20	0.015
					TLI	EPA 200.8	ALD	11/13/2008	Romuel Chaves	µg/L	ND (50)	50	0.256
					TLI	EPA 218.6	CR6	11/20/2008	Michael Nonezyan	µg/L	ND (1.0)	1.0	0.145
					TLI	EPA 245.1	HGD	11/19/2008	Romuel Chavez	µg/L	ND (0.2)	0.2	0.03
					TLI	EPA 300.0	CL	11/10/2008	Giawad Ghenniwa	mg/L	2020	200	28.0
					TLI	EPA 300.0	FL	11/10/2008	Giawad Ghenniwa	mg/L	6.74	0.50	0.025
					TLI	EPA 300.0	SO4	11/10/2008	Giawad Ghenniwa	mg/L	486	12.5	0.60
					TLI	SM 2320B	ALKB	11/11/2008	Iordan Stavrev	mg/L	56.0	5.00	1.53
					TLI	SM 2320B	ALKC	11/11/2008	Iordan Stavrev	mg/L	ND (5.0)	5.0	1.53
					TLI	SM 2320B	ALKT	11/11/2008	Iordan Stavrev	mg/L	56.0	5.00	1.53

TABLE 11

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PG&E Topock Compliance Monitoring Program

Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
CW-03D	CW-03D-018	Barry Collom	11/05/2008	12:47:53	TLI	SM2130B	TRB	11/07/2008	Gautam Savani	NTU	0.142	0.10	0.007
					TLI	SM2540C	TDS	11/11/2008	Tina Acquiat	mg/L	4070	250	50.4
					TLI	SM4500NH3D	NH3N	11/11/2008	Iordan Stavrev	mg/L	ND (0.5)	0.5	0.009
					EMXT	SM4500NO3-E	NO3NO2N	11/17/2008	Elena Robles	mg/L	2.63	0.50	0.10
CW-03M	CW-03M-018	Barry Collom	11/05/2008	14:01:01	TLI	EPA 120.1	SC	11/07/2008	Tina Acquiat	µmhos/cm	8290	2.00	0.153
					TLI	EPA 200.7	MGD	12/05/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	16.1	0.50	0.006
					TLI	EPA 200.7	MND	11/18/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	ND (0.01)	0.01	0.0014
					TLI	EPA 200.7	KD	11/18/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	16.7	2.00	0.019
					TLI	EPA 200.7	FETD	11/18/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	ND (0.02)	0.02	0.0024
					TLI	EPA 200.7	FE	11/13/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	0.0229	0.02	0.0024
					TLI	EPA 200.7	CAD	11/11/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	204	20.0	0.47
					TLI	EPA 200.7	BD	11/20/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	0.89	0.02	0.0048
					TLI	EPA 200.7	NAD	11/11/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	1280	100	0.22
					TLI	EPA 200.8	VD	11/10/2008	Romuel Chaves	µg/L	ND (5.0)	5.0	0.0124
					TLI	EPA 200.8	CUD	11/10/2008	Romuel Chaves	µg/L	ND (5.0)	5.0	0.13
					TLI	EPA 200.8	ZND	11/13/2008	Romuel Chaves	µg/L	ND (10)	10	0.115
					TLI	EPA 200.8	TLD	11/10/2008	Romuel Chaves	µg/L	ND (1.0)	1.0	0.018
					TLI	EPA 200.8	SED	11/10/2008	Romuel Chaves	µg/L	ND (10)	10	0.0161
					TLI	EPA 200.8	SBD	11/13/2008	Romuel Chaves	µg/L	ND (10)	10	0.0225
					TLI	EPA 200.8	PBD	11/10/2008	Romuel Chaves	µg/L	ND (10)	10	0.0182
					TLI	EPA 200.8	NID	11/10/2008	Romuel Chaves	µg/L	ND (10)	10	0.127
					TLI	EPA 200.8	MOD	11/10/2008	Romuel Chaves	µg/L	15.8	10.0	0.0336
					TLI	EPA 200.8	AGD	11/10/2008	Romuel Chaves	µg/L	ND (5.0)	5.0	0.0422
					TLI	EPA 200.8	CRTD	11/13/2008	Romuel Chaves	µg/L	11.6	1.00	0.0532
					TLI	EPA 200.8	ALD	11/13/2008	Romuel Chaves	µg/L	ND (50)	50	0.256
					TLI	EPA 200.8	ASD	11/10/2008	Romuel Chaves	µg/L	0.69	0.20	0.015
					TLI	EPA 200.8	BAD	11/10/2008	Romuel Chaves	µg/L	51.5	10.0	0.0162
					TLI	EPA 200.8	BED	11/13/2008	Romuel Chaves	µg/L	ND (1.0)	1.0	0.0383

TABLE 11

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PG&E Topock Compliance Monitoring Program

Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
CW-03M	CW-03M-018	Barry Collom	11/05/2008	14:01:01	TLI	EPA 200.8	CDD	11/10/2008	Romuel Chaves	µg/L	ND (3.0)	3.0	0.023
					TLI	EPA 200.8	COBD	11/10/2008	Romuel Chaves	µg/L	ND (5.0)	5.0	0.0252
					TLI	EPA 218.6	CR6	11/20/2008	Michael Nonezyan	µg/L	11.5	1.00	0.145
					TLI	EPA 245.1	HGD	11/19/2008	Romuel Chavez	µg/L	ND (0.2)	0.2	0.03
					TLI	EPA 300.0	CL	11/10/2008	Giawad Ghenniwa	mg/L	2660	200	28.0
					TLI	EPA 300.0	FL	11/10/2008	Giawad Ghenniwa	mg/L	2.74	0.50	0.025
					TLI	EPA 300.0	SO4	11/10/2008	Giawad Ghenniwa	mg/L	407	12.5	0.60
					TLI	SM 2320B	ALKB	11/11/2008	Iordan Stavrev	mg/L	56.0	5.00	1.53
					TLI	SM 2320B	ALKC	11/11/2008	Iordan Stavrev	mg/L	ND (5.0)	5.0	1.53
					TLI	SM 2320B	ALKT	11/11/2008	Iordan Stavrev	mg/L	56.0	5.00	1.53
					TLI	SM2130B	TRB	11/07/2008	Gautam Savani	NTU	0.275	0.10	0.007
					TLI	SM2540C	TDS	11/11/2008	Tina Acquiat	mg/L	5250	250	50.4
					TLI	SM4500NH3D	NH3N	11/11/2008	Iordan Stavrev	mg/L	ND (0.5)	0.5	0.009
					EMXT	SM4500NO3-E	NO3NO2N	11/17/2008	Elena Robles	mg/L	0.785	0.20	0.04
CW-04D	CW-04D-018	Barry Collom	11/05/2008	09:41:43	TLI	EPA 120.1	SC	11/07/2008	Tina Acquiat	µmhos/cm	9040	2.00	0.153
					TLI	EPA 200.7	MGD	12/05/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	9.19	0.50	0.006
					TLI	EPA 200.7	MND	11/18/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	ND (0.01)	0.01	0.0014
					TLI	EPA 200.7	KD	11/18/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	15.9	2.00	0.019
					TLI	EPA 200.7	FETD	11/18/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	ND (0.02)	0.02	0.0024
					TLI	EPA 200.7	FE	11/13/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	0.0248	0.02	0.0024
					TLI	EPA 200.7	CAD	11/11/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	162	20.0	0.47
					TLI	EPA 200.7	BD	11/20/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	1.30	0.02	0.0048
					TLI	EPA 200.7	NAD	11/11/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	1510	100	0.22
					TLI	EPA 200.8	VD	11/10/2008	Romuel Chaves	µg/L	ND (5.0)	5.0	0.0124
					TLI	EPA 200.8	CUD	11/10/2008	Romuel Chaves	µg/L	ND (5.0)	5.0	0.13
					TLI	EPA 200.8	ZND	11/13/2008	Romuel Chaves	µg/L	ND (10)	10	0.115
					TLI	EPA 200.8	TLD	11/10/2008	Romuel Chaves	µg/L	ND (1.0)	1.0	0.018
					TLI	EPA 200.8	SED	11/10/2008	Romuel Chaves	µg/L	ND (10)	10	0.0161

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Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
CW-04D	CW-04D-018	Barry Collom	11/05/2008	09:41:43	TLI	EPA 200.8	SBD	11/13/2008	Romuel Chaves	µg/L	ND (10)	10	0.0225
					TLI	EPA 200.8	PBD	11/10/2008	Romuel Chaves	µg/L	ND (10)	10	0.0182
					TLI	EPA 200.8	NID	11/10/2008	Romuel Chaves	µg/L	ND (10)	10	0.127
					TLI	EPA 200.8	MOD	11/10/2008	Romuel Chaves	µg/L	26.8	10.0	0.0336
					TLI	EPA 200.8	COBD	11/10/2008	Romuel Chaves	µg/L	ND (5.0)	5.0	0.0252
					TLI	EPA 200.8	CDD	11/10/2008	Romuel Chaves	µg/L	ND (3.0)	3.0	0.023
					TLI	EPA 200.8	BED	11/17/2008	Romuel Chaves	µg/L	ND (1.0)	1.0	0.0383
					TLI	EPA 200.8	BAD	11/10/2008	Romuel Chaves	µg/L	28.1	10.0	0.0162
					TLI	EPA 200.8	ASD	11/10/2008	Romuel Chaves	µg/L	2.89	0.20	0.015
					TLI	EPA 200.8	ALD	11/13/2008	Romuel Chaves	µg/L	ND (50)	50	0.256
					TLI	EPA 200.8	AGD	11/10/2008	Romuel Chaves	µg/L	ND (5.0)	5.0	0.0422
					TLI	EPA 200.8	CRTD	11/13/2008	Romuel Chaves	µg/L	2.94	1.00	0.0532
					TLI	EPA 218.6	CR6	11/20/2008	Michael Nonezyan	µg/L	2.54	1.00	0.145
					TLI	EPA 245.1	HGD	11/19/2008	Romuel Chavez	µg/L	ND (0.2)	0.2	0.03
					TLI	EPA 300.0	CL	11/10/2008	Giawad Ghenniwa	mg/L	2950	200	28.0
					TLI	EPA 300.0	FL	11/10/2008	Giawad Ghenniwa	mg/L	4.54	0.50	0.025
					TLI	EPA 300.0	SO4	11/10/2008	Giawad Ghenniwa	mg/L	544	12.5	0.60
					TLI	SM 2320B	ALKB	11/11/2008	Iordan Stavrev	mg/L	50.0	5.00	1.53
					TLI	SM 2320B	ALKC	11/11/2008	Iordan Stavrev	mg/L	ND (5.0)	5.0	1.53
					TLI	SM 2320B	ALKT	11/11/2008	Iordan Stavrev	mg/L	50.0	5.00	1.53
					TLI	SM2130B	TRB	11/07/2008	Gautam Savani	NTU	0.103	0.10	0.007
					TLI	SM2540C	TDS	11/11/2008	Tina Acquiat	mg/L	6110	250	50.4
					TLI	SM4500NH3D	NH3N	11/11/2008	Iordan Stavrev	mg/L	ND (0.5)	0.5	0.009
					EMXT	SM4500NO3-E	NO3NO2N	11/17/2008	Elena Robles	mg/L	1.79	0.20	0.04
CW-04M	CW-04M-018	Barry Collom	11/05/2008	10:49:00	TLI	EPA 120.1	SC	11/07/2008	Tina Acquiat	µmhos/cm	5840	2.00	0.153
					TLI	EPA 200.7	KD	11/18/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	11.8	2.00	0.019
					TLI	EPA 200.7	FETD	12/04/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	ND (0.02)	0.02	0.0024
					TLI	EPA 200.7	MGD	12/05/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	10.1	0.50	0.006

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Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
CW-04M	CW-04M-018	Barry Collom	11/05/2008	10:49:00	TLI	EPA 200.7	NAD	11/11/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	769	100	0.22
					TLI	EPA 200.7	CAD	11/11/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	127	20.0	0.47
					TLI	EPA 200.7	BD	11/20/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	0.648	0.02	0.0048
					TLI	EPA 200.7	MND	11/18/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	ND (0.01)	0.01	0.0014
					TLI	EPA 200.7	FE	11/13/2008	Hope Trinidad/Hao Ton/Daniel Kane	mg/L	0.0213	0.02	0.0024
					TLI	EPA 200.8	MOD	11/10/2008	Romuel Chaves	µg/L	ND (10)	10	0.0168
					TLI	EPA 200.8	ZND	11/13/2008	Romuel Chaves	µg/L	ND (10)	10	0.115
					TLI	EPA 200.8	VD	11/10/2008	Romuel Chaves	µg/L	ND (5.0)	5.0	0.0124
					TLI	EPA 200.8	TLD	11/10/2008	Romuel Chaves	µg/L	ND (1.0)	1.0	0.018
					TLI	EPA 200.8	SED	11/10/2008	Romuel Chaves	µg/L	ND (10)	10	0.0161
					TLI	EPA 200.8	SBD	11/13/2008	Romuel Chaves	µg/L	ND (10)	10	0.0225
					TLI	EPA 200.8	NID	11/10/2008	Romuel Chaves	µg/L	ND (10)	10	0.127
					TLI	EPA 200.8	CUD	11/10/2008	Romuel Chaves	µg/L	6.95	5.00	0.13
					TLI	EPA 200.8	COBD	11/10/2008	Romuel Chaves	µg/L	ND (5.0)	5.0	0.0252
					TLI	EPA 200.8	CDD	11/10/2008	Romuel Chaves	µg/L	ND (3.0)	3.0	0.0115
					TLI	EPA 200.8	BED	11/13/2008	Romuel Chaves	µg/L	ND (1.0)	1.0	0.0383
					TLI	EPA 200.8	BAD	11/10/2008	Romuel Chaves	µg/L	78.7	10.0	0.0162
					TLI	EPA 200.8	ASD	11/10/2008	Romuel Chaves	µg/L	1.87	0.20	0.015
					TLI	EPA 200.8	ALD	11/13/2008	Romuel Chaves	µg/L	ND (50)	50	0.256
					TLI	EPA 200.8	AGD	11/10/2008	Romuel Chaves	µg/L	ND (5.0)	5.0	0.0211
					TLI	EPA 200.8	CRTD	11/13/2008	Romuel Chaves	µg/L	17.8	1.00	0.0532
					TLI	EPA 200.8	PBD	11/10/2008	Romuel Chaves	µg/L	ND (10)	10	0.0182
					TLI	EPA 218.6	CR6	11/20/2008	Michael Nonezyan	µg/L	18.4	0.20	0.0304
					TLI	EPA 245.1	HGD	11/19/2008	Romuel Chavez	µg/L	ND (0.2)	0.2	0.03
					TLI	EPA 300.0	CL	11/10/2008	Giawad Ghenniwa	mg/L	1800	400	56.0
					TLI	EPA 300.0	FL	11/10/2008	Giawad Ghenniwa	mg/L	1.93	0.50	0.025
					TLI	EPA 300.0	SO4	11/10/2008	Giawad Ghenniwa	mg/L	297	5.00	0.24
					TLI	SM 2320B	ALKC	11/11/2008	Iordan Stavrev	mg/L	ND (5.0)	5.0	1.53

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Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
CW-04M	CW-04M-018	Barry Collom	11/05/2008	10:49:00	TLI	SM 2320B	ALKB	11/11/2008	Iordan Stavrev	mg/L	55.0	5.00	1.53
					TLI	SM 2320B	ALKT	11/11/2008	Iordan Stavrev	mg/L	55.0	5.00	1.53
					TLI	SM2130B	TRB	11/07/2008	Gautam Savani	NTU	0.10	0.10	0.007
					TLI	SM2540C	TDS	11/11/2008	Tina Acquiat	mg/L	3720	125	25.2
					TLI	SM4500NH3D	NH3N	11/11/2008	Iordan Stavrev	mg/L	ND (0.5)	0.5	0.009
					EMXT	SM4500NO3-E	NO3NO2N	11/17/2008	Elena Robles	mg/L	1.40	0.20	0.04
OW-01D	OW-01D-017	Barry Collom	08/05/2008	13:00:37	TLI	EPA 120.1	SC	08/08/2008	Tina Acquiat	µmhos/cm	6680	2.00	0.153
					TLI	EPA 200.7	NAD	09/24/2008	Hope Trinidad	mg/L	1310	100	0.22
					TLI	EPA 200.7	BD	08/08/2008	Hao Ton	mg/L	0.952	0.02	0.0048
					TLI	EPA 200.8	CRTD	08/13/2008	Romuel Chaves	µg/L	ND (1.0)	1.0	0.0532
					TLI	EPA 200.8	MOD	08/13/2008	Romuel Chaves	µg/L	ND (10)	10	0.0168
					TLI	EPA 218.6	CR6	08/07/2008	Jean-Paul Gleeson	µg/L	0.51	0.20	0.0304
					TLI	EPA 300.0	SO4	08/07/2008	Giawad Ghenniwa	mg/L	479	25.0	1.20
					TLI	EPA 300.0	CL	08/07/2008	Giawad Ghenniwa	mg/L	2140	100	14.0
					TLI	EPA 300.0	FL	08/07/2008	Giawad Ghenniwa	mg/L	2.08	0.50	0.025
					TLI	SM2130B	TRB	08/07/2008	Gautam Savani	NTU	0.35	0.10	0.007
					TLI	SM2540C	TDS	08/08/2008	Tina Acquiat	mg/L	4120	250	50.4
					EMXT	SM4500NO3-E	NO3NO2N	08/14/2008	Elena Robles	mg/L	2.63	0.10	0.02
OW-01D	OW-01D-018	Aurora Abbott	11/04/2008	13:37:29	TLI	EPA 120.1	SC	11/06/2008	Tina Acquiat	µmhos/cm	6240	2.00	0.153
					TLI	EPA 200.7	MGD	12/05/2008	Hao Ton/Hope Trinidad	mg/L	10.0	0.50	0.006
					TLI	EPA 200.7	FE	11/13/2008	Hao Ton/Hope Trinidad	mg/L	0.0778	0.02	0.0024
					TLI	EPA 200.7	FETD	11/17/2008	Hao Ton/Hope Trinidad	mg/L	ND (0.02)	0.02	0.0024
					TLI	EPA 200.7	KD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	14.8	2.00	0.019
					TLI	EPA 200.7	CAD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	128	20.0	0.47
					TLI	EPA 200.7	BD	11/10/2008	Hao Ton/Hope Trinidad	mg/L	1.20	0.20	0.0048
					TLI	EPA 200.7	NAD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	978	100	0.22
					TLI	EPA 200.8	BED	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.0383

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Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
OW-01D	OW-01D-018	Aurora Abbott	11/04/2008	13:37:29	TLI	EPA 200.8	AGD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0422
					TLI	EPA 200.8	CUD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	7.08	5.00	0.13
					TLI	EPA 200.8	CRTD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.0532
					TLI	EPA 200.8	CDD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (3.0)	3.0	0.023
					TLI	EPA 200.8	BAD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	34.8	10.0	0.0162
					TLI	EPA 200.8	ASD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	1.25	0.10	0.015
					TLI	EPA 200.8	ALD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (50)	50	0.256
					TLI	EPA 200.8	MND	11/10/2008	Linda Saetern/Romuel Chaves	mg/L	ND (0.01)	0.01	0.0000161
					TLI	EPA 200.8	NID	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.127
					TLI	EPA 200.8	VD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0124
					TLI	EPA 200.8	TLD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.018
					TLI	EPA 200.8	SED	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0161
					TLI	EPA 200.8	MOD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0336
					TLI	EPA 200.8	SBD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0225
					TLI	EPA 200.8	COBD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0252
					TLI	EPA 200.8	PBD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0182
					TLI	EPA 200.8	ZND	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.115
					TLI	EPA 218.6	CR6	11/12/2008	Michael Nonezyan	µg/L	0.49 J	0.20	0.0304
					TLI	EPA 245.1	HGD	11/08/2008	Romuel Chaves	µg/L	ND (0.2)	0.2	0.03
					TLI	EPA 300.0	CL	11/08/2008	Giawad Ghenniwa	mg/L	2240	200	28.0
					TLI	EPA 300.0	SO4	11/08/2008	Giawad Ghenniwa	mg/L	479	25.0	1.20
					TLI	EPA 300.0	FL	11/05/2008	Giawad Ghenniwa	mg/L	1.68	0.50	0.025
					TLI	SM 2320B	ALKT	11/05/2008	Iordan Stavrev	mg/L	71.0	5.00	1.53
					TLI	SM 2320B	ALKC	11/05/2008	Iordan Stavrev	mg/L	ND (5.0)	5.0	1.53
					TLI	SM 2320B	ALKB	11/05/2008	Iordan Stavrev	mg/L	71.0	5.00	1.53
					TLI	SM2130B	TRB	11/05/2008	Gautam Savani	NTU	1.23	0.10	0.007
					TLI	SM2540C	TDS	11/06/2008	Tina Acquiat	mg/L	4190	250	50.4
					TLI	SM4500NH3D	NH3N	11/06/2008	Iordan Stavrev	mg/L	ND (0.5)	0.5	0.009

TABLE 11
Board Order No. R7-2006-0060 WDR Monitoring Information for Groundwater Samples, Third and Fourth Quarter 2008
PG&E Topock Compliance Monitoring Program

Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
OW-01D	OW-01D-018	Aurora Abbott	11/04/2008	13:37:29	EMXT	SM4500NO3-E	NO3NO2N	11/12/2008	Elena Robles	mg/L	2.75	0.50	0.10
OW-01M	OW-01M-017	Barry Collom	08/05/2008	15:15:00	TLI	EPA 120.1	SC	08/08/2008	Tina Acquiat	µmhos/cm	6950	2.00	0.153
					TLI	EPA 200.7	NAD	09/24/2008	Hope Trinidad	mg/L	1260	100	0.22
					TLI	EPA 200.7	BD	08/08/2008	Hao Ton	mg/L	ND (0.02)	0.02	0.0048
					TLI	EPA 200.8	MOD	08/13/2008	Romuel Chaves	µg/L	ND (10)	10	0.0168
					TLI	EPA 200.8	CRTD	08/13/2008	Romuel Chaves	µg/L	ND (1.0)	1.0	0.0532
					TLI	EPA 218.6	CR6	08/07/2008	Jean-Paul Gleeson	µg/L	ND (1.0)	1.0	0.152
					TLI	EPA 300.0	CL	08/07/2008	Giawad Ghenniwa	mg/L	2250	100	14.0
					TLI	EPA 300.0	SO4	08/07/2008	Giawad Ghenniwa	mg/L	480	25.0	1.20
					TLI	EPA 300.0	FL	08/07/2008	Giawad Ghenniwa	mg/L	1.78	0.50	0.025
					TLI	SM2130B	TRB	08/07/2008	Gautam Savani	NTU	0.499	0.10	0.007
					TLI	SM2540C	TDS	08/08/2008	Tina Acquiat	mg/L	3950	250	50.4
					EMXT	SM4500NO3-E	NO3NO2N	08/14/2008	Elena Robles	mg/L	2.72	0.10	0.02
OW-01M	OW-01M-018	Aurora Abbott	11/04/2008	12:17:57	TLI	EPA 120.1	SC	11/06/2008	Tina Acquiat	µmhos/cm	6160	2.00	0.153
					TLI	EPA 200.7	FETD	11/17/2008	Hao Ton/Hope Trinidad	mg/L	ND (0.02)	0.02	0.0024
					TLI	EPA 200.7	KD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	16.5	2.00	0.019
					TLI	EPA 200.7	MGD	12/05/2008	Hao Ton/Hope Trinidad	mg/L	15.2	0.50	0.006
					TLI	EPA 200.7	NAD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	900	100	0.22
					TLI	EPA 200.7	FE	11/13/2008	Hao Ton/Hope Trinidad	mg/L	0.0238	0.02	0.0024
					TLI	EPA 200.7	CAD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	166	20.0	0.47
					TLI	EPA 200.7	BD	11/10/2008	Hao Ton/Hope Trinidad	mg/L	1.25	0.20	0.0048
					TLI	EPA 200.8	TLD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.018
					TLI	EPA 200.8	MOD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0336
					TLI	EPA 200.8	SED	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0161
					TLI	EPA 200.8	SBD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0225
					TLI	EPA 200.8	PBD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0182
					TLI	EPA 200.8	NID	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.127

TABLE 11

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PG&E Topock Compliance Monitoring Program

Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
OW-01M	OW-01M-018	Aurora Abbott	11/04/2008	12:17:57	TLI	EPA 200.8	VD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0124
					TLI	EPA 200.8	BAD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	90.1	10.0	0.0162
					TLI	EPA 200.8	ASD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	0.80	0.10	0.015
					TLI	EPA 200.8	MND	11/10/2008	Linda Saetern/Romuel Chaves	mg/L	ND (0.01)	0.01	0.0000161
					TLI	EPA 200.8	ZND	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.115
					TLI	EPA 200.8	BED	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.0383
					TLI	EPA 200.8	CDD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (3.0)	3.0	0.023
					TLI	EPA 200.8	COBD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0252
					TLI	EPA 200.8	CRTD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	1.00	1.00	0.0532
					TLI	EPA 200.8	CUD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	7.79	5.00	0.13
					TLI	EPA 200.8	ALD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (50)	50	0.256
					TLI	EPA 200.8	AGD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0422
					TLI	EPA 218.6	CR6	11/12/2008	Michael Nonezyan	µg/L	0.887	0.20	0.0304
					TLI	EPA 245.1	HGD	11/08/2008	Romuel Chaves	µg/L	ND (0.2)	0.2	0.03
					TLI	EPA 300.0	SO4	11/08/2008	Giawad Ghenniwa	mg/L	487	25.0	1.20
					TLI	EPA 300.0	FL	11/05/2008	Giawad Ghenniwa	mg/L	1.76	0.50	0.025
					TLI	EPA 300.0	CL	11/08/2008	Giawad Ghenniwa	mg/L	2000	200	28.0
					TLI	SM 2320B	ALKB	11/05/2008	Iordan Stavrev	mg/L	75.0	5.00	1.53
					TLI	SM 2320B	ALKC	11/05/2008	Iordan Stavrev	mg/L	ND (5.0)	5.0	1.53
					TLI	SM 2320B	ALKT	11/05/2008	Iordan Stavrev	mg/L	75.0	5.00	1.53
					TLI	SM2130B	TRB	11/05/2008	Gautam Savani	NTU	ND (0.1)	0.1	0.007
					TLI	SM2540C	TDS	11/06/2008	Tina Acquiat	mg/L	4240	250	50.4
					TLI	SM4500NH3D	NH3N	11/06/2008	Iordan Stavrev	mg/L	ND (0.5)	0.5	0.009
					EMXT	SM4500NO3-E	NO3NO2N	11/12/2008	Elena Robles	mg/L	2.81	0.50	0.10
OW-01S	OW-01S-017	Barry Collom	08/05/2008	14:05:11	TLI	EPA 120.1	SC	08/08/2008	Tina Acquiat	µmhos/cm	2680	2.00	0.153
					TLI	EPA 200.7	NAD	09/24/2008	Hope Trinidad	mg/L	386	20.0	0.044
					TLI	EPA 200.7	BD	09/02/2008	Hao Ton	mg/L	0.466	0.02	0.0048
					TLI	EPA 200.8	CRTD	08/13/2008	Romuel Chaves	µg/L	18.0	1.00	0.0532

TABLE 11

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Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
OW-01S	OW-01S-017	Barry Collom	08/05/2008	14:05:11	TLI	EPA 200.8	MOD	08/13/2008	Romuel Chaves	µg/L	ND (10)	10	0.0168
					TLI	EPA 218.6	CR6	08/07/2008	Jean-Paul Gleeson	µg/L	17.3	1.05	0.152
					TLI	EPA 300.0	FL	08/07/2008	Giawad Ghenniwa	mg/L	2.24 J	0.50	0.025
					TLI	EPA 300.0	SO4	08/07/2008	Giawad Ghenniwa	mg/L	146	5.00	0.24
					TLI	EPA 300.0	CL	08/07/2008	Giawad Ghenniwa	mg/L	753	100	14.0
					TLI	SM2130B	TRB	08/07/2008	Gautam Savani	NTU	0.29	0.10	0.007
					TLI	SM2540C	TDS	08/08/2008	Tina Acquiat	mg/L	1720	50.0	10.1
					EMXT	SM4500NO3-E	NO3NO2N	08/14/2008	Elena Robles	mg/L	2.78	0.10	0.02
OW-01S	MW-91-017	Barry Collom	08/05/2008	14:15:11	TLI	EPA 120.1	SC	08/08/2008	Tina Acquiat	µmhos/cm	2720	2.00	0.153
					TLI	EPA 200.7	BD	09/02/2008	Hao Ton	mg/L	0.418	0.02	0.0048
					TLI	EPA 200.7	NAD	09/24/2008	Hope Trinidad	mg/L	391	20.0	0.044
					TLI	EPA 200.8	CRTD	08/13/2008	Romuel Chaves	µg/L	18.6	1.00	0.0532
					TLI	EPA 200.8	MOD	08/13/2008	Romuel Chaves	µg/L	ND (10)	10	0.0168
					TLI	EPA 218.6	CR6	08/07/2008	Jean-Paul Gleeson	µg/L	19.2	0.20	0.0304
					TLI	EPA 300.0	SO4	08/07/2008	Giawad Ghenniwa	mg/L	163	5.00	0.24
					TLI	EPA 300.0	FL	08/07/2008	Giawad Ghenniwa	mg/L	2.16	0.50	0.025
					TLI	EPA 300.0	CL	08/07/2008	Giawad Ghenniwa	mg/L	773	40.0	5.60
					TLI	SM2130B	TRB	08/07/2008	Gautam Savani	NTU	0.272	0.10	0.007
					TLI	SM2540C	TDS	08/08/2008	Tina Acquiat	mg/L	1710	50.0	10.1
					EMXT	SM4500NO3-E	NO3NO2N	08/14/2008	Elena Robles	mg/L	2.79	0.10	0.02
OW-01S	OW-91-018	Aurora Abbott	11/04/2008	09:15:33	TLI	EPA 120.1	SC	11/06/2008	Tina Acquiat	µmhos/cm	2430	2.00	0.153
					TLI	EPA 200.7	FE	11/13/2008	Hao Ton/Hope Trinidad	mg/L	0.0571	0.02	0.0024
					TLI	EPA 200.7	MGD	12/05/2008	Hao Ton/Hope Trinidad	mg/L	20.6	0.50	0.006
					TLI	EPA 200.7	KD	11/14/2008	Hao Ton/Hope Trinidad	mg/L	19.3 J	0.50	0.0038
					TLI	EPA 200.7	BD	11/10/2008	Hao Ton/Hope Trinidad	mg/L	0.263	0.20	0.0048
					TLI	EPA 200.7	FETD	11/17/2008	Hao Ton/Hope Trinidad	mg/L	ND (0.02)	0.02	0.0024
					TLI	EPA 200.7	NAD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	314	20.0	0.044

TABLE 11

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PG&E Topock Compliance Monitoring Program

Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
OW-01S	OW-91-018	Aurora Abbott	11/04/2008	09:15:33	TLI	EPA 200.7	CAD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	91.9	20.0	0.47
					TLI	EPA 200.8	SBD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0225
					TLI	EPA 200.8	ZND	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.115
					TLI	EPA 200.8	COBD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0252
					TLI	EPA 200.8	VD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0124
					TLI	EPA 200.8	CRTD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	18.3	1.00	0.0532
					TLI	EPA 200.8	TLD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.018
					TLI	EPA 200.8	PBD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0182
					TLI	EPA 200.8	NID	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.127
					TLI	EPA 200.8	MOD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0168
					TLI	EPA 200.8	MND	11/10/2008	Linda Saetern/Romuel Chaves	mg/L	ND (0.01)	0.01	0.0000161
					TLI	EPA 200.8	SED	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0161
					TLI	EPA 200.8	AGD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0211
					TLI	EPA 200.8	BED	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.0383
					TLI	EPA 200.8	BAD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	108	10.0	0.0162
					TLI	EPA 200.8	ASD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	0.73	0.10	0.015
					TLI	EPA 200.8	ALD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (50)	50	0.256
					TLI	EPA 200.8	CUD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)J	5.0	0.13
					TLI	EPA 200.8	CDD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (3.0)	3.0	0.0115
					TLI	EPA 218.6	CR6	11/12/2008	Michael Nonezyan	µg/L	21.5	0.20	0.0304
					TLI	EPA 245.1	HGD	11/08/2008	Romuel Chaves	µg/L	ND (0.2)	0.2	0.03
					TLI	EPA 300.0	CL	11/08/2008	Giawad Ghenniwa	mg/L	707	50.0	7.00
					TLI	EPA 300.0	SO4	11/08/2008	Giawad Ghenniwa	mg/L	145	5.00	0.24
					TLI	EPA 300.0	FL	11/05/2008	Giawad Ghenniwa	mg/L	2.33	0.50	0.025
					TLI	SM 2320B	ALKT	11/05/2008	Iordan Stavrev	mg/L	70.0	5.00	1.53
					TLI	SM 2320B	ALKC	11/05/2008	Iordan Stavrev	mg/L	ND (5.0)	5.0	1.53
					TLI	SM 2320B	ALKB	11/05/2008	Iordan Stavrev	mg/L	70.0	5.00	1.53
					TLI	SM2130B	TRB	11/05/2008	Gautam Savani	NTU	0.563 J	0.10	0.007

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PG&E Topock Compliance Monitoring Program

Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
OW-01S	OW-91-018	Aurora Abbott	11/04/2008	09:15:33	TLI	SM2540C	TDS	11/06/2008	Tina Acquiat	mg/L	1470	50.0	10.1
					TLI	SM4500NH3D	NH3N	11/06/2008	Iordan Stavrev	mg/L	ND (0.5)	0.5	0.009
					EMXT	SM4500NO3-E	NO3NO2N	11/12/2008	Elena Robles	mg/L	3.01	0.50	0.10
OW-01S	OW-01S-018	Aurora Abbott	11/04/2008	11:20:33	TLI	EPA 120.1	SC	11/06/2008	Tina Acquiat	µmhos/cm	2430	2.00	0.153
					TLI	EPA 200.7	CAD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	94.3	20.0	0.47
					TLI	EPA 200.7	MGD	12/05/2008	Hao Ton/Hope Trinidad	mg/L	19.4	0.50	0.006
					TLI	EPA 200.7	KD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	9.09 J	2.00	0.019
					TLI	EPA 200.7	FETD	11/17/2008	Hao Ton/Hope Trinidad	mg/L	ND (0.02)	0.02	0.0024
					TLI	EPA 200.7	FE	11/13/2008	Hao Ton/Hope Trinidad	mg/L	0.0372	0.02	0.0024
					TLI	EPA 200.7	BD	11/10/2008	Hao Ton/Hope Trinidad	mg/L	0.315	0.20	0.0048
					TLI	EPA 200.7	NAD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	320	20.0	0.044
					TLI	EPA 200.8	CRTD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	18.1	1.00	0.0532
					TLI	EPA 200.8	MOD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0168
					TLI	EPA 200.8	AGD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0211
					TLI	EPA 200.8	ALD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (50)	50	0.256
					TLI	EPA 200.8	ASD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	0.83	0.10	0.015
					TLI	EPA 200.8	BAD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	106	10.0	0.0162
					TLI	EPA 200.8	BED	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.0383
					TLI	EPA 200.8	CDD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (3.0)	3.0	0.0115
					TLI	EPA 200.8	COBD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0252
					TLI	EPA 200.8	MND	11/10/2008	Linda Saetern/Romuel Chaves	mg/L	ND (0.01)	0.01	0.0000161
					TLI	EPA 200.8	CUD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	12.2 J	5.00	0.13
					TLI	EPA 200.8	NID	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.127
					TLI	EPA 200.8	PBD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0182
					TLI	EPA 200.8	SBD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0225
					TLI	EPA 200.8	SED	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0161
					TLI	EPA 200.8	TLD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.018
					TLI	EPA 200.8	VD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0124

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Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
OW-01S	OW-01S-018	Aurora Abbott	11/04/2008	11:20:33	TLI	EPA 200.8	ZND	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.115
					TLI	EPA 218.6	CR6	11/12/2008	Michael Nonezyan	µg/L	21.0	0.20	0.0304
					TLI	EPA 245.1	HGD	11/08/2008	Romuel Chaves	µg/L	ND (0.2)	0.2	0.03
					TLI	EPA 300.0	SO4	11/08/2008	Giawad Ghenniwa	mg/L	146	5.00	0.24
					TLI	EPA 300.0	FL	11/05/2008	Giawad Ghenniwa	mg/L	2.41	0.50	0.025
					TLI	EPA 300.0	CL	11/08/2008	Giawad Ghenniwa	mg/L	676	50.0	7.00
					TLI	SM 2320B	ALKT	11/05/2008	Iordan Stavrev	mg/L	72.0	5.00	1.53
					TLI	SM 2320B	ALKB	11/05/2008	Iordan Stavrev	mg/L	72.0	5.00	1.53
					TLI	SM 2320B	ALKC	11/05/2008	Iordan Stavrev	mg/L	ND (5.0)	5.0	1.53
					TLI	SM2130B	TRB	11/05/2008	Gautam Savani	NTU	0.73 J	0.10	0.007
					TLI	SM2540C	TDS	11/06/2008	Tina Acquiat	mg/L	1460	50.0	10.1
					TLI	SM4500NH3D	NH3N	11/06/2008	Iordan Stavrev	mg/L	ND (0.5)	0.5	0.009
					EMXT	SM4500NO3-E	NO3NO2N	11/12/2008	Elena Robles	mg/L	2.97	0.50	0.10
OW-02D	OW-02D-017	Barry Collom	08/05/2008	09:00:33	TLI	EPA 120.1	SC	08/08/2008	Tina Acquiat	µmhos/cm	7090	2.00	0.153
					TLI	EPA 200.7	NAD	09/24/2008	Hope Trinidad	mg/L	1360	20.0	0.044
					TLI	EPA 200.7	BD	08/08/2008	Hao Ton	mg/L	1.21	0.02	0.0048
					TLI	EPA 200.8	MOD	08/14/2008	Romuel Chaves	µg/L	11.3	10.0	0.0168
					TLI	EPA 200.8	CRTD	08/14/2008	Romuel Chaves	µg/L	ND (1.0)	1.0	0.0532
					TLI	EPA 218.6	CR6	08/07/2008	Jean-Paul Gleeson	µg/L	ND (1.0)	1.0	0.152
					TLI	EPA 300.0	FL	08/07/2008	Giawad Ghenniwa	mg/L	1.94	0.50	0.025
					TLI	EPA 300.0	SO4	08/07/2008	Giawad Ghenniwa	mg/L	498	25.0	1.20
					TLI	EPA 300.0	CL	08/07/2008	Giawad Ghenniwa	mg/L	2130	100	14.0
					TLI	SM2130B	TRB	08/07/2008	Gautam Savani	NTU	ND (0.1)	0.1	0.007
					TLI	SM2540C	TDS	08/08/2008	Tina Acquiat	mg/L	4470	250	50.4
					EMXT	SM4500NO3-E	NO3NO2N	08/14/2008	Elena Robles	mg/L	2.83	0.10	0.02
OW-02D	OW-02D-018	Aurora Abbott	11/03/2008	15:45:53	TLI	EPA 120.1	SC	11/06/2008	Tina Acquiat	µmhos/cm	6240	2.00	0.153
					TLI	EPA 200.7	FE	11/13/2008	Hao Ton/Hope Trinidad	mg/L	0.0258	0.02	0.0024

TABLE 11

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PG&E Topock Compliance Monitoring Program

Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
OW-02D	OW-02D-018	Aurora Abbott	11/03/2008	15:45:53	TLI	EPA 200.7	BD	11/10/2008	Hao Ton/Hope Trinidad	mg/L	0.999	0.20	0.0048
					TLI	EPA 200.7	CAD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	156	40.0	0.94
					TLI	EPA 200.7	FETD	11/17/2008	Hao Ton/Hope Trinidad	mg/L	ND (0.02)	0.02	0.0024
					TLI	EPA 200.7	MGD	12/05/2008	Hao Ton/Hope Trinidad	mg/L	21.1	0.50	0.006
					TLI	EPA 200.7	NAD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	1230	40.0	0.088
					TLI	EPA 200.7	KD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	14.4	2.00	0.019
					TLI	EPA 200.8	CRTD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.0532
					TLI	EPA 200.8	AGD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0211
					TLI	EPA 200.8	ALD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (50)	50	0.256
					TLI	EPA 200.8	ASD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	1.45	0.10	0.015
					TLI	EPA 200.8	BAD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	21.2	10.0	0.0162
					TLI	EPA 200.8	BED	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.0383
					TLI	EPA 200.8	COBD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0252
					TLI	EPA 200.8	CUD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	7.50	5.00	0.13
					TLI	EPA 200.8	MND	11/10/2008	Linda Saetern/Romuel Chaves	mg/L	ND (0.01)	0.01	0.0000161
					TLI	EPA 200.8	MOD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0168
					TLI	EPA 200.8	NID	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.127
					TLI	EPA 200.8	PBD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0182
					TLI	EPA 200.8	SBD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0225
					TLI	EPA 200.8	SED	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0161
					TLI	EPA 200.8	TLD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.018
					TLI	EPA 200.8	VD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0124
					TLI	EPA 200.8	ZND	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.115
					TLI	EPA 200.8	CDD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (3.0)	3.0	0.0115
					TLI	EPA 218.6	CR6	11/12/2008	Michael Nonezyan	µg/L	ND (1.0)	1.0	0.145
					TLI	EPA 245.1	HGD	11/08/2008	Romuel Chaves	µg/L	ND (0.2)	0.2	0.03
					TLI	EPA 300.0	FL	11/05/2008	Giawad Ghenniwa	mg/L	2.08	0.50	0.025
					TLI	EPA 300.0	SO4	11/08/2008	Giawad Ghenniwa	mg/L	473	25.0	1.20

TABLE 11

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PG&E Topock Compliance Monitoring Program

Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
OW-02D	OW-02D-018	Aurora Abbott	11/03/2008	15:45:53	TLI	EPA 300.0	CL	11/08/2008	Giawad Ghenniwa	mg/L	2060	100	14.0
					TLI	SM 2320B	ALKT	11/05/2008	Iordan Stavrev	mg/L	79.0	5.00	1.53
					TLI	SM 2320B	ALKB	11/05/2008	Iordan Stavrev	mg/L	79.0	5.00	1.53
					TLI	SM 2320B	ALKC	11/05/2008	Iordan Stavrev	mg/L	ND (5.0)	5.0	1.53
					TLI	SM2130B	TRB	11/05/2008	Gautam Savani	NTU	0.15	0.10	0.007
					TLI	SM2540C	TDS	11/06/2008	Tina Acquiat	mg/L	4160	250	50.4
					TLI	SM4500NH3D	NH3N	11/06/2008	Iordan Stavrev	mg/L	ND (0.5)	0.5	0.009
					EMXT	SM4500NO3-E	NO3NO2N	11/12/2008	Elena Robles	mg/L	3.01	0.50	0.10
OW-02M	OW-02M-017	Barry Collom	08/05/2008	09:55:00	TLI	EPA 120.1	SC	08/08/2008	Tina Acquiat	µmhos/cm	6880	2.00	0.153
					TLI	EPA 200.7	BD	08/08/2008	Hao Ton	mg/L	0.939	0.02	0.0048
					TLI	EPA 200.7	NAD	09/24/2008	Hope Trinidad	mg/L	1290	20.0	0.044
					TLI	EPA 200.8	MOD	08/14/2008	Romuel Chaves	µg/L	ND (10)	10	0.0168
					TLI	EPA 200.8	CRTD	08/14/2008	Romuel Chaves	µg/L	ND (1.0)	1.0	0.0532
					TLI	EPA 218.6	CR6	08/07/2008	Jean-Paul Gleeson	µg/L	ND (1.0)	1.0	0.152
					TLI	EPA 300.0	SO4	08/07/2008	Giawad Ghenniwa	mg/L	481	25.0	1.20
					TLI	EPA 300.0	FL	08/07/2008	Giawad Ghenniwa	mg/L	1.77	0.50	0.025
					TLI	EPA 300.0	CL	08/07/2008	Giawad Ghenniwa	mg/L	2090	100	14.0
					TLI	SM2130B	TRB	08/07/2008	Gautam Savani	NTU	0.176	0.10	0.007
					TLI	SM2540C	TDS	08/08/2008	Tina Acquiat	mg/L	4120	250	50.4
					EMXT	SM4500NO3-E	NO3NO2N	08/14/2008	Elena Robles	mg/L	2.80	0.10	0.02
OW-02M	OW-02M-018	Aurora Abbott	11/03/2008	12:35:14	TLI	EPA 120.1	SC	11/06/2008	Tina Acquiat	µmhos/cm	6190	2.00	0.153
					TLI	EPA 200.7	CAD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	148	40.0	0.94
					TLI	EPA 200.7	FE	11/13/2008	Hao Ton/Hope Trinidad	mg/L	ND (0.02)	0.02	0.0024
					TLI	EPA 200.7	FETD	11/17/2008	Hao Ton/Hope Trinidad	mg/L	ND (0.02)	0.02	0.0024
					TLI	EPA 200.7	KD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	17.4	2.00	0.019
					TLI	EPA 200.7	MGD	12/05/2008	Hao Ton/Hope Trinidad	mg/L	17.0	0.50	0.006
					TLI	EPA 200.7	NAD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	1280	40.0	0.088

TABLE 11

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PG&E Topock Compliance Monitoring Program

Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
OW-02M	OW-02M-018	Aurora Abbott	11/03/2008	12:35:14	TLI	EPA 200.7	BD	11/10/2008	Hao Ton/Hope Trinidad	mg/L	1.21	0.20	0.0048
					TLI	EPA 200.8	ALD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (50)	50	0.256
					TLI	EPA 200.8	CUD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	10.7	5.00	0.13
					TLI	EPA 200.8	AGD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0211
					TLI	EPA 200.8	SBD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0225
					TLI	EPA 200.8	ZND	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.115
					TLI	EPA 200.8	VD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0124
					TLI	EPA 200.8	COBD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0252
					TLI	EPA 200.8	SED	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0161
					TLI	EPA 200.8	ASD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	0.52	0.10	0.015
					TLI	EPA 200.8	PBD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0182
					TLI	EPA 200.8	NID	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.127
					TLI	EPA 200.8	MOD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0168
					TLI	EPA 200.8	MND	11/10/2008	Linda Saetern/Romuel Chaves	mg/L	ND (0.01)	0.01	0.0000161
					TLI	EPA 200.8	CRTD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	1.27	1.00	0.0532
					TLI	EPA 200.8	CDD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (3.0)	3.0	0.0115
					TLI	EPA 200.8	BED	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.0383
					TLI	EPA 200.8	BAD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	61.6	10.0	0.0162
					TLI	EPA 200.8	TLD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.018
					TLI	EPA 218.6	CR6	11/12/2008	Michael Nonezyan	µg/L	1.02	0.20	0.0304
					TLI	EPA 245.1	HGD	11/08/2008	Romuel Chaves	µg/L	ND (0.2)	0.2	0.03
					TLI	EPA 300.0	CL	11/08/2008	Giawad Ghenniwa	mg/L	2200	200	28.0
					TLI	EPA 300.0	SO4	11/08/2008	Giawad Ghenniwa	mg/L	475	25.0	1.20
					TLI	EPA 300.0	FL	11/05/2008	Giawad Ghenniwa	mg/L	1.98	0.50	0.025
					TLI	SM 2320B	ALKB	11/05/2008	Iordan Stavrev	mg/L	71.0	5.00	1.53
					TLI	SM 2320B	ALKT	11/05/2008	Iordan Stavrev	mg/L	71.0	5.00	1.53
					TLI	SM 2320B	ALKC	11/05/2008	Iordan Stavrev	mg/L	ND (5.0)	5.0	1.53
					TLI	SM2130B	TRB	11/05/2008	Gautam Savani	NTU	0.103	0.10	0.007

TABLE 11

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PG&E Topock Compliance Monitoring Program

Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
OW-02M	OW-02M-018	Aurora Abbott	11/03/2008	12:35:14	TLI	SM2540C	TDS	11/06/2008	Tina Acquiat	mg/L	4180	250	50.4
					TLI	SM4500NH3D	NH3N	11/06/2008	Iordan Stavrev	mg/L	ND (0.5)	0.5	0.009
					EMXT	SM4500NO3-E	NO3NO2N	11/12/2008	Elena Robles	mg/L	3.69	0.50	0.10
OW-02S	OW-02S-017	Barry Collom	08/05/2008	10:55:31	TLI	EPA 120.1	SC	08/08/2008	Tina Acquiat	µmhos/cm	1740	2.00	0.153
					TLI	EPA 200.7	NAD	09/23/2008	Hope Trinidad	mg/L	285	20.0	0.044
					TLI	EPA 200.7	BD	08/08/2008	Hao Ton	mg/L	ND (0.02)	0.02	0.0048
					TLI	EPA 200.8	CRTD	08/14/2008	Romuel Chaves	µg/L	30.8	1.00	0.0532
					TLI	EPA 200.8	MOD	08/14/2008	Romuel Chaves	µg/L	37.5	10.0	0.0168
					TLI	EPA 218.6	CR6	08/07/2008	Jean-Paul Gleeson	µg/L	28.9	1.05	0.152
					TLI	EPA 300.0	FL	08/07/2008	Giawad Ghenniwa	mg/L	4.61	0.50	0.025
					TLI	EPA 300.0	SO4	08/07/2008	Giawad Ghenniwa	mg/L	119	5.00	0.24
					TLI	EPA 300.0	CL	08/07/2008	Giawad Ghenniwa	mg/L	411	20.0	2.80
					TLI	SM2130B	TRB	08/07/2008	Gautam Savani	NTU	1.18	0.10	0.007
					TLI	SM2540C	TDS	08/08/2008	Tina Acquiat	mg/L	1010	50.0	10.1
					EMXT	SM4500NO3-E	NO3NO2N	08/14/2008	Elena Robles	mg/L	3.80	0.10	0.02
OW-02S	OW-02S-018	Aurora Abbott	11/03/2008	13:57:41	TLI	EPA 120.1	SC	11/06/2008	Tina Acquiat	µmhos/cm	1640	2.00	0.153
					TLI	EPA 200.7	BD	11/10/2008	Hao Ton/Hope Trinidad	mg/L	0.566	0.20	0.0048
					TLI	EPA 200.7	NAD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	289	20.0	0.044
					TLI	EPA 200.7	CAD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	31.3	2.00	0.047
					TLI	EPA 200.7	MGD	12/05/2008	Hao Ton/Hope Trinidad	mg/L	4.57	0.50	0.006
					TLI	EPA 200.7	FE	11/13/2008	Hao Ton/Hope Trinidad	mg/L	0.227	0.02	0.0024
					TLI	EPA 200.7	KD	11/14/2008	Hao Ton/Hope Trinidad	mg/L	9.34	0.50	0.0019
					TLI	EPA 200.7	FETD	11/17/2008	Hao Ton/Hope Trinidad	mg/L	ND (0.02)	0.02	0.0024
					TLI	EPA 200.8	ZND	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.115
					TLI	EPA 200.8	VD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	5.70	5.00	0.0124
					TLI	EPA 200.8	SED	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0161
					TLI	EPA 200.8	SBD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0225

TABLE 11
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PG&E Topock Compliance Monitoring Program

Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
OW-02S	OW-02S-018	Aurora Abbott	11/03/2008	13:57:41	TLI	EPA 200.8	MND	11/10/2008	Linda Saetern/Romuel Chaves	mg/L	ND (0.01)	0.01	0.0000161
					TLI	EPA 200.8	MOD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	26.6	10.0	0.0168
					TLI	EPA 200.8	CUD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.13
					TLI	EPA 200.8	NID	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.127
					TLI	EPA 200.8	PBD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0182
					TLI	EPA 200.8	CDD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (3.0)	3.0	0.0115
					TLI	EPA 200.8	COBD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0252
					TLI	EPA 200.8	CRTD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	29.3	1.00	0.0532
					TLI	EPA 200.8	TLD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.018
					TLI	EPA 200.8	BAD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	57.4	10.0	0.0162
					TLI	EPA 200.8	ALD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (50)	50	0.256
					TLI	EPA 200.8	BED	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.0383
					TLI	EPA 200.8	ASD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	1.61	0.10	0.015
					TLI	EPA 200.8	AGD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0211
					TLI	EPA 218.6	CR6	11/12/2008	Michael Nonezyan	µg/L	31.8	1.00	0.145
					TLI	EPA 245.1	HGD	11/08/2008	Romuel Chaves	µg/L	ND (0.2)	0.2	0.03
					TLI	EPA 300.0	FL	11/05/2008	Giawad Ghenniwa	mg/L	5.22	0.50	0.025
					TLI	EPA 300.0	SO4	11/08/2008	Giawad Ghenniwa	mg/L	105	50.0	2.40
					TLI	EPA 300.0	CL	11/08/2008	Giawad Ghenniwa	mg/L	412	20.0	2.80
					TLI	SM 2320B	ALKC	11/05/2008	Iordan Stavrev	mg/L	ND (5.0)	5.0	1.53
					TLI	SM 2320B	ALKT	11/05/2008	Iordan Stavrev	mg/L	101	5.00	1.53
					TLI	SM 2320B	ALKB	11/05/2008	Iordan Stavrev	mg/L	101	5.00	1.53
					TLI	SM2130B	TRB	11/05/2008	Gautam Savani	NTU	4.05	0.10	0.007
					TLI	SM2540C	TDS	11/06/2008	Tina Acquiat	mg/L	952	50.0	10.1
					TLI	SM4500NH3D	NH3N	11/06/2008	Iordan Stavrev	mg/L	ND (0.5)	0.5	0.009
					EMXT	SM4500NO3-E	NO3NO2N	11/12/2008	Elena Robles	mg/L	3.89	0.50	0.10
OW-05D	OW-05D-017	Barry Collom	08/04/2008	13:10:31	TLI	EPA 120.1	SC	08/08/2008	Tina Acquiat	µmhos/cm	6920	2.00	0.153
					TLI	EPA 200.7	BD	08/08/2008	Hao Ton	mg/L	1.25	0.02	0.0048

TABLE 11

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PG&E Topock Compliance Monitoring Program

Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
OW-05D	OW-05D-017	Barry Collom	08/04/2008	13:10:31	TLI	EPA 200.7	NAD	09/23/2008	Hope Trinidad	mg/L	1330	100	0.22
					TLI	EPA 200.8	CRTD	08/13/2008	Romuel Chaves	µg/L	ND (1.0)	1.0	0.0532
					TLI	EPA 200.8	MOD	08/13/2008	Romuel Chaves	µg/L	ND (10)	10	0.0168
					TLI	EPA 218.6	CR6	08/07/2008	Jean-Paul Gleeson	µg/L	0.38	0.20	0.0304
					TLI	EPA 300.0	SO4	08/07/2008	Giawad Ghenniwa	mg/L	483	25.0	1.20
					TLI	EPA 300.0	FL	08/07/2008	Giawad Ghenniwa	mg/L	2.34	0.50	0.025
					TLI	EPA 300.0	CL	08/07/2008	Giawad Ghenniwa	mg/L	2090	100	14.0
					TLI	SM2130B	TRB	08/07/2008	Gautam Savani	NTU	ND (0.1)J	0.1	0.007
					TLI	SM2540C	TDS	08/08/2008	Tina Acquiat	mg/L	4270	250	50.4
					EMXT	SM4500NO3-E	NO3NO2N	08/14/2008	Elena Robles	mg/L	2.76	0.10	0.02
OW-05D	OW-05D-018	Aurora Abbott	11/04/2008	10:12:17	TLI	EPA 120.1	SC	11/06/2008	Tina Acquiat	µmhos/cm	6290	2.00	0.153
					TLI	EPA 200.7	NAD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	881	100	0.22
					TLI	EPA 200.7	BD	11/10/2008	Hao Ton/Hope Trinidad	mg/L	1.07	0.20	0.0048
					TLI	EPA 200.7	CAD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	170	20.0	0.47
					TLI	EPA 200.7	FE	11/13/2008	Hao Ton/Hope Trinidad	mg/L	0.024	0.02	0.0024
					TLI	EPA 200.7	FETD	11/17/2008	Hao Ton/Hope Trinidad	mg/L	ND (0.02)	0.02	0.0024
					TLI	EPA 200.7	KD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	17.8	2.00	0.019
					TLI	EPA 200.7	MGD	12/05/2008	Hao Ton/Hope Trinidad	mg/L	21.2	0.50	0.006
					TLI	EPA 200.8	MOD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0168
					TLI	EPA 200.8	SBD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0225
					TLI	EPA 200.8	PBD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0182
					TLI	EPA 200.8	ZND	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.115
					TLI	EPA 200.8	VD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0124
					TLI	EPA 200.8	SED	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0161
					TLI	EPA 200.8	NID	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.127
					TLI	EPA 200.8	MND	11/10/2008	Linda Saetern/Romuel Chaves	mg/L	ND (0.01)	0.01	0.0000161
					TLI	EPA 200.8	CUD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	5.18	5.00	0.13
					TLI	EPA 200.8	ALD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (50)	50	0.256

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Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
OW-05D	OW-05D-018	Aurora Abbott	11/04/2008	10:12:17	TLI	EPA 200.8	COBD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0252
					TLI	EPA 200.8	CDD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (3.0)	3.0	0.0115
					TLI	EPA 200.8	BED	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.0383
					TLI	EPA 200.8	AGD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0211
					TLI	EPA 200.8	BAD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	25.9	10.0	0.0162
					TLI	EPA 200.8	TLD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.018
					TLI	EPA 200.8	ASD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	1.05	0.10	0.015
					TLI	EPA 200.8	CRTD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.0532
					TLI	EPA 218.6	CR6	11/12/2008	Michael Nonezyan	µg/L	0.48	0.20	0.0304
					TLI	EPA 245.1	HGD	11/08/2008	Romuel Chaves	µg/L	ND (0.2)	0.2	0.03
					TLI	EPA 300.0	SO4	11/08/2008	Giawad Ghenniwa	mg/L	476	25.0	1.20
					TLI	EPA 300.0	CL	11/08/2008	Giawad Ghenniwa	mg/L	1950	200	28.0
					TLI	EPA 300.0	FL	11/05/2008	Giawad Ghenniwa	mg/L	2.40	0.50	0.025
					TLI	SM 2320B	ALKT	11/05/2008	Iordan Stavrev	mg/L	73.0	5.00	1.53
					TLI	SM 2320B	ALKC	11/05/2008	Iordan Stavrev	mg/L	ND (5.0)	5.0	1.53
					TLI	SM 2320B	ALKB	11/05/2008	Iordan Stavrev	mg/L	73.0	5.00	1.53
					TLI	SM2130B	TRB	11/05/2008	Gautam Savani	NTU	ND (0.1)	0.1	0.007
					TLI	SM2540C	TDS	11/06/2008	Tina Acquiat	mg/L	3930	250	50.4
					TLI	SM4500NH3D	NH3N	11/06/2008	Iordan Stavrev	mg/L	ND (0.5)	0.5	0.009
					EMXT	SM4500NO3-E	NO3NO2N	11/12/2008	Elena Robles	mg/L	2.74	0.50	0.10
OW-05M	OW-05M-017	Barry Collom	08/04/2008	14:20:20	TLI	EPA 120.1	SC	08/08/2008	Tina Acquiat	µmhos/cm	7120	2.00	0.153
					TLI	EPA 200.7	NAD	09/23/2008	Hope Trinidad	mg/L	1230	100	0.22
					TLI	EPA 200.7	BD	08/11/2008	Hao Ton	mg/L	1.31	0.02	0.0048
					TLI	EPA 200.8	MOD	08/13/2008	Romuel Chaves	µg/L	11.4	10.0	0.0168
					TLI	EPA 200.8	CRTD	08/13/2008	Romuel Chaves	µg/L	1.52	1.00	0.0532
					TLI	EPA 218.6	CR6	08/07/2008	Jean-Paul Gleeson	µg/L	0.83	0.20	0.0304
					TLI	EPA 300.0	SO4	08/07/2008	Giawad Ghenniwa	mg/L	490	25.0	1.20
					TLI	EPA 300.0	FL	08/07/2008	Giawad Ghenniwa	mg/L	2.09	0.50	0.025

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Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
OW-05M	OW-05M-017	Barry Collom	08/04/2008	14:20:20	TLI	EPA 300.0	CL	08/07/2008	Giawad Ghenniwa	mg/L	2140	100	14.0
					TLI	SM2130B	TRB	08/07/2008	Gautam Savani	NTU	ND (0.1)J	0.1	0.007
					TLI	SM2540C	TDS	08/08/2008	Tina Acquiat	mg/L	4630	250	50.4
					EMXT	SM4500NO3-E	NO3NO2N	08/14/2008	Elena Robles	mg/L	2.71	0.10	0.02
OW-05M	OW-05M-018	Aurora Abbott	11/04/2008	08:13:11	TLI	EPA 120.1	SC	11/06/2008	Tina Acquiat	µmhos/cm	6310	2.00	0.153
					TLI	EPA 200.7	KD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	16.1	2.00	0.019
					TLI	EPA 200.7	NAD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	919	100	0.22
					TLI	EPA 200.7	MGD	12/05/2008	Hao Ton/Hope Trinidad	mg/L	14.0	0.50	0.006
					TLI	EPA 200.7	FETD	11/17/2008	Hao Ton/Hope Trinidad	mg/L	ND (0.02)	0.02	0.0024
					TLI	EPA 200.7	FE	11/13/2008	Hao Ton/Hope Trinidad	mg/L	0.0235	0.02	0.0024
					TLI	EPA 200.7	BD	11/10/2008	Hao Ton/Hope Trinidad	mg/L	1.14	0.20	0.0048
					TLI	EPA 200.7	CAD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	170	20.0	0.47
					TLI	EPA 200.8	MND	11/10/2008	Linda Saetern/Romuel Chaves	mg/L	ND (0.01)	0.01	0.0000161
					TLI	EPA 200.8	TLD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.018
					TLI	EPA 200.8	ALD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (50)	50	0.256
					TLI	EPA 200.8	SED	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0161
					TLI	EPA 200.8	ZND	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.115
					TLI	EPA 200.8	SBD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0225
					TLI	EPA 200.8	PBD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0182
					TLI	EPA 200.8	NID	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.127
					TLI	EPA 200.8	MOD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0168
					TLI	EPA 200.8	CRTD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.0532
					TLI	EPA 200.8	COBD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0252
					TLI	EPA 200.8	CDD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (3.0)	3.0	0.0115
					TLI	EPA 200.8	BED	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.0383
					TLI	EPA 200.8	ASD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	0.30	0.10	0.015
					TLI	EPA 200.8	AGD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0211
					TLI	EPA 200.8	VD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0124

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Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
OW-05M	OW-05M-018	Aurora Abbott	11/04/2008	08:13:11	TLI	EPA 200.8	CUD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.13
					TLI	EPA 200.8	BAD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	46.4	10.0	0.0162
					TLI	EPA 218.6	CR6	11/12/2008	Michael Nonezyan	µg/L	0.85	0.20	0.0304
					TLI	EPA 245.1	HGD	11/08/2008	Romuel Chaves	µg/L	ND (0.2)	0.2	0.03
					TLI	EPA 300.0	SO4	11/08/2008	Giawad Ghenniwa	mg/L	481	25.0	1.20
					TLI	EPA 300.0	FL	11/05/2008	Giawad Ghenniwa	mg/L	2.19	0.50	0.025
					TLI	EPA 300.0	CL	11/08/2008	Giawad Ghenniwa	mg/L	2230	200	28.0
					TLI	SM 2320B	ALKT	11/05/2008	Iordan Stavrev	mg/L	76.0	5.00	1.53
					TLI	SM 2320B	ALKC	11/05/2008	Iordan Stavrev	mg/L	ND (5.0)	5.0	1.53
					TLI	SM 2320B	ALKB	11/05/2008	Iordan Stavrev	mg/L	76.0	5.00	1.53
					TLI	SM2130B	TRB	11/05/2008	Gautam Savani	NTU	0.145	0.10	0.007
					TLI	SM2540C	TDS	11/06/2008	Tina Acquiat	mg/L	4130	250	50.4
					TLI	SM4500NH3D	NH3N	11/06/2008	Iordan Stavrev	mg/L	ND (0.5)	0.5	0.009
					EMXT	SM4500NO3-E	NO3NO2N	11/12/2008	Elena Robles	mg/L	3.06	0.50	0.10
OW-05S	OW-05S-017	Barry Collom	08/04/2008	15:15:56	TLI	EPA 120.1	SC	08/08/2008	Tina Acquiat	µmhos/cm	1880	2.00	0.153
					TLI	EPA 200.7	BD	08/08/2008	Hao Ton	mg/L	ND (0.02)	0.02	0.0048
					TLI	EPA 200.7	NAD	09/23/2008	Hope Trinidad	mg/L	275	20.0	0.044
					TLI	EPA 200.8	CRTD	08/13/2008	Romuel Chaves	µg/L	21.6	1.00	0.0532
					TLI	EPA 200.8	MOD	08/13/2008	Romuel Chaves	µg/L	12.8	10.0	0.0168
					TLI	EPA 218.6	CR6	08/07/2008	Jean-Paul Gleeson	µg/L	22.6	1.05	0.152
					TLI	EPA 300.0	SO4	08/07/2008	Giawad Ghenniwa	mg/L	112	5.00	0.24
					TLI	EPA 300.0	CL	08/07/2008	Giawad Ghenniwa	mg/L	470	20.0	2.80
					TLI	EPA 300.0	FL	08/07/2008	Giawad Ghenniwa	mg/L	2.47	0.50	0.025
					TLI	SM2130B	TRB	08/07/2008	Gautam Savani	NTU	1.96 J	0.10	0.007
					TLI	SM2540C	TDS	08/08/2008	Tina Acquiat	mg/L	1110	50.0	10.1
					EMXT	SM4500NO3-E	NO3NO2N	08/14/2008	Elena Robles	mg/L	3.53	0.10	0.02
OW-05S	OW-05S-018	Aurora Abbott	11/04/2008	08:58:00	TLI	EPA 120.1	SC	11/06/2008	Tina Acquiat	µmhos/cm	1560	2.00	0.153

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Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
OW-05S	OW-05S-018	Aurora Abbott	11/04/2008	08:58:00	TLI	EPA 200.7	NAD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	218	20.0	0.044
					TLI	EPA 200.7	MGD	12/05/2008	Hao Ton/Hope Trinidad	mg/L	8.48	0.50	0.006
					TLI	EPA 200.7	KD	11/14/2008	Hao Ton/Hope Trinidad	mg/L	11.7	0.50	0.0038
					TLI	EPA 200.7	FETD	11/17/2008	Hao Ton/Hope Trinidad	mg/L	ND (0.02)	0.02	0.0024
					TLI	EPA 200.7	FE	11/13/2008	Hao Ton/Hope Trinidad	mg/L	0.0982	0.02	0.0024
					TLI	EPA 200.7	CAD	11/11/2008	Hao Ton/Hope Trinidad	mg/L	53.3	2.00	0.047
					TLI	EPA 200.7	BD	11/10/2008	Hao Ton/Hope Trinidad	mg/L	0.384	0.20	0.0048
					TLI	EPA 200.8	SED	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0161
					TLI	EPA 200.8	ZND	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.115
					TLI	EPA 200.8	TLD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.018
					TLI	EPA 200.8	BED	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (1.0)	1.0	0.0383
					TLI	EPA 200.8	AGD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	5.12	5.00	0.0211
					TLI	EPA 200.8	ALD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (50)	50	0.256
					TLI	EPA 200.8	VD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0124
					TLI	EPA 200.8	BAD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	61.6	10.0	0.0162
					TLI	EPA 200.8	SBD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0225
					TLI	EPA 200.8	CDD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (3.0)	3.0	0.0115
					TLI	EPA 200.8	COBD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.0252
					TLI	EPA 200.8	CRTD	11/13/2008	Linda Saetern/Romuel Chaves	µg/L	22.9	1.00	0.0532
					TLI	EPA 200.8	MND	11/10/2008	Linda Saetern/Romuel Chaves	mg/L	ND (0.01)	0.01	0.0000161
					TLI	EPA 200.8	MOD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	16.9	10.0	0.0168
					TLI	EPA 200.8	ASD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	0.91	0.10	0.015
					TLI	EPA 200.8	NID	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.127
					TLI	EPA 200.8	PBD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (10)	10	0.0182
					TLI	EPA 200.8	CUD	11/10/2008	Linda Saetern/Romuel Chaves	µg/L	ND (5.0)	5.0	0.13
					TLI	EPA 218.6	CR6	11/12/2008	Michael Nonezyan	µg/L	25.6	1.00	0.145
					TLI	EPA 245.1	HGD	11/08/2008	Romuel Chaves	µg/L	ND (0.2)	0.2	0.03
					TLI	EPA 300.0	FL	11/05/2008	Giawad Ghenniwa	mg/L	2.47	0.50	0.025

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Location	Sample ID	Sampler Name	Sample Date	Sample Time	Lab	Analysis Method	Parameter	Analysis Date	Lab Technician	Units	Result	RL	MDL
OW-05S	OW-05S-018	Aurora Abbott	11/04/2008	08:58:00	TLI	EPA 300.0	SO4	11/08/2008	Giawad Ghenniwa	mg/L	120	5.00	0.24
					TLI	EPA 300.0	CL	11/08/2008	Giawad Ghenniwa	mg/L	399	20.0	2.80
					TLI	SM 2320B	ALKB	11/05/2008	Iordan Stavrev	mg/L	90.0	5.00	1.53
					TLI	SM 2320B	ALKC	11/05/2008	Iordan Stavrev	mg/L	ND (5.0)	5.0	1.53
					TLI	SM 2320B	ALKT	11/05/2008	Iordan Stavrev	mg/L	90.0	5.00	1.53
					TLI	SM2130B	TRB	11/05/2008	Gautam Savani	NTU	3.96	0.10	0.007
					TLI	SM2540C	TDS	11/06/2008	Tina Acquiat	mg/L	934	50.0	10.1
					TLI	SM4500NH3D	NH3N	11/06/2008	Iordan Stavrev	mg/L	ND (0.5)	0.5	0.009
					EMXT	SM4500NO3-E	NO3NO2N	11/12/2008	Elena Robles	mg/L	3.98	0.50	0.10

TABLE 11

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NOTES:

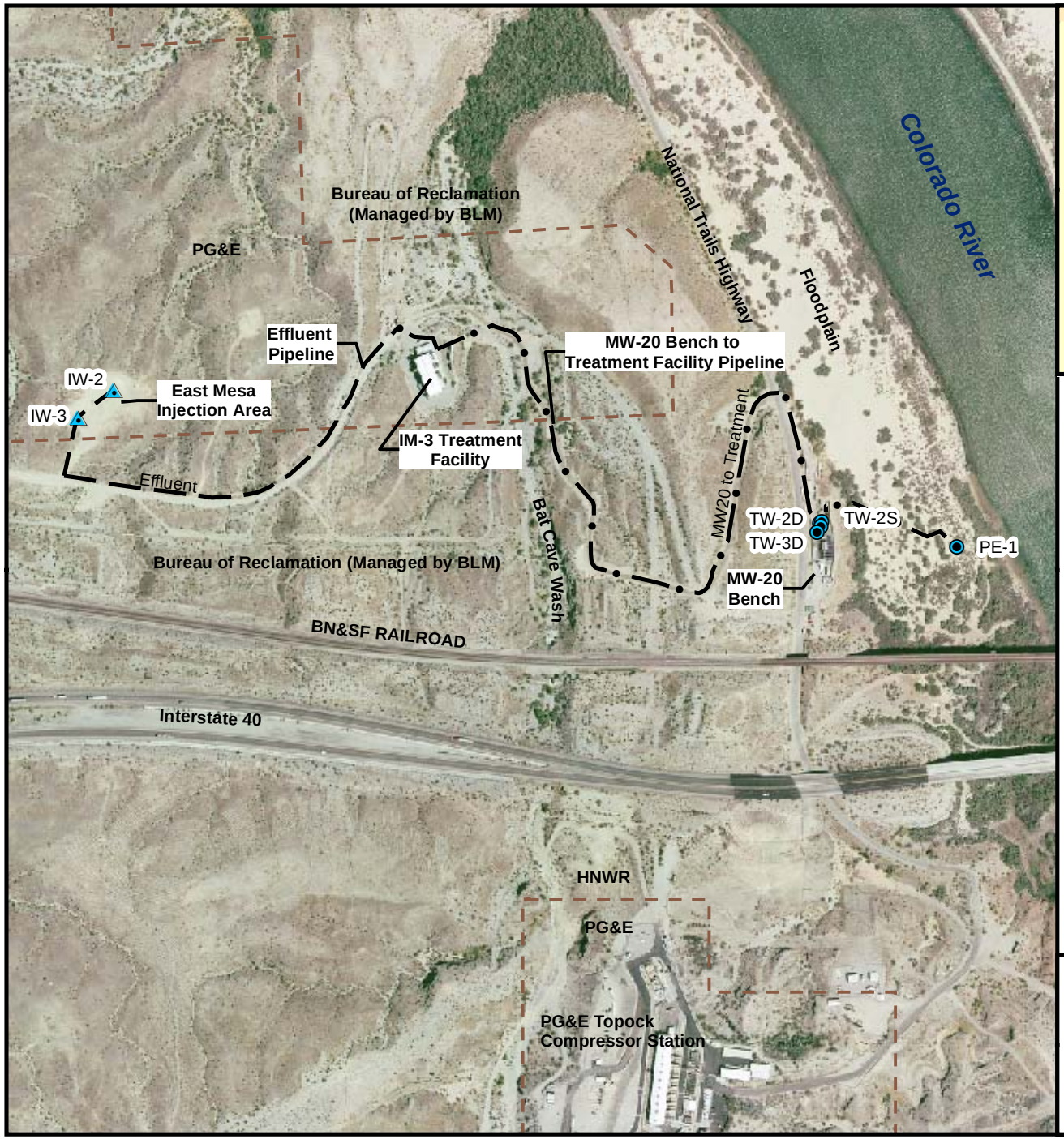
MDL	method detection limit corrected for sample dilution
RL	reporting limit
ND	parameter not detected at the listed reporting limit
J	concentration or RL estimated by laboratory or data validation
µmhos/cm	micro-mhos per centimeter
NTU	Nephelometric Turbidity Unit
mg/L	milligrams per liter
µg/L	micrograms per liter

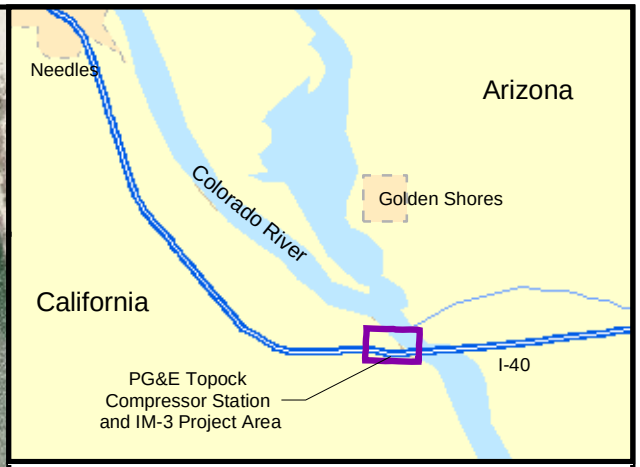
TLI	Truesdail Laboratories, Inc.
EMXT	Emax Laboratories
WDR	Waste Discharge Requirements

SC	specific conductance	KD	potassium, dissolved
PH	pH	CAD	calcium, dissolved
TDS	total dissolved solids	MOD	molybdenum, dissolved
TRB	turbidity	NID	nickel, dissolved
CRTD	chromium, dissolved	PBD	lead, dissolved
CR6	hexavalent chromium	HGD	mercury, dissolved
CL	chloride	SED	selenium, dissolved
FL	fluoride	TLD	thallium, dissolved
ALD	aluminum, dissolved	COBD	cobalt, dissolved
BD	boron, dissolved	CDD	cadmium, dissolved
FE	iron	BED	beryllium, dissolved
FETD	iron, dissolved	AGD	silver, dissolved
MND	manganese, dissolved	VD	vanadium, dissolved
ZND	zinc, dissolved	NO3NO2N	nitrate/nitrite (as N)
SBD	antimony, dissolved	NH3N	ammonia (as N)
ASD	arsenic, dissolved	SO4	sulfate
BAD	barium, dissolved	SBD	antimony, dissolved
CUD	copper, dissolved	ALKB	alkalinity, bicarbonate as CaCO3
MGD	magnesium, dissolved	ALKC	alkalinity, as carbonate
NAD	sodium, dissolved	ALKT	alkalinity, total as CACO3

NO2NO3NC nitrate/nitrite as nitrogen was calculated as the sum of nitrate as nitrogen and nitrite as nitrogen.

Figures





N

0 550 1,100 Feet

1 inch equals 550 feet

LEGEND

- PG&E Property Line
- Existing IM Extraction Well
- Existing IM Injection Well
- Treatment Facility Pipeline

Notes: Location map shows Interim Measures No.3 (IM-3) facilities as of of January 2006. Aerial photography taken May 2005.

FIGURE 1
SITE LOCATION AND LAYOUT

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

CH2MHILL

\\ZINFANDEL\PROJ\PACIFICGASELECTRICCO\TOPOCKPROGRAM\GIS\MAPFILES\2006\IM3_MARCH06_LOCS_IM3_FACILITIES_SHIFTED.MXD IM3_MARCH06_LOCS_IM3_FACILITIES_SHIFTED.PDF 3/11/2008 13:15:05

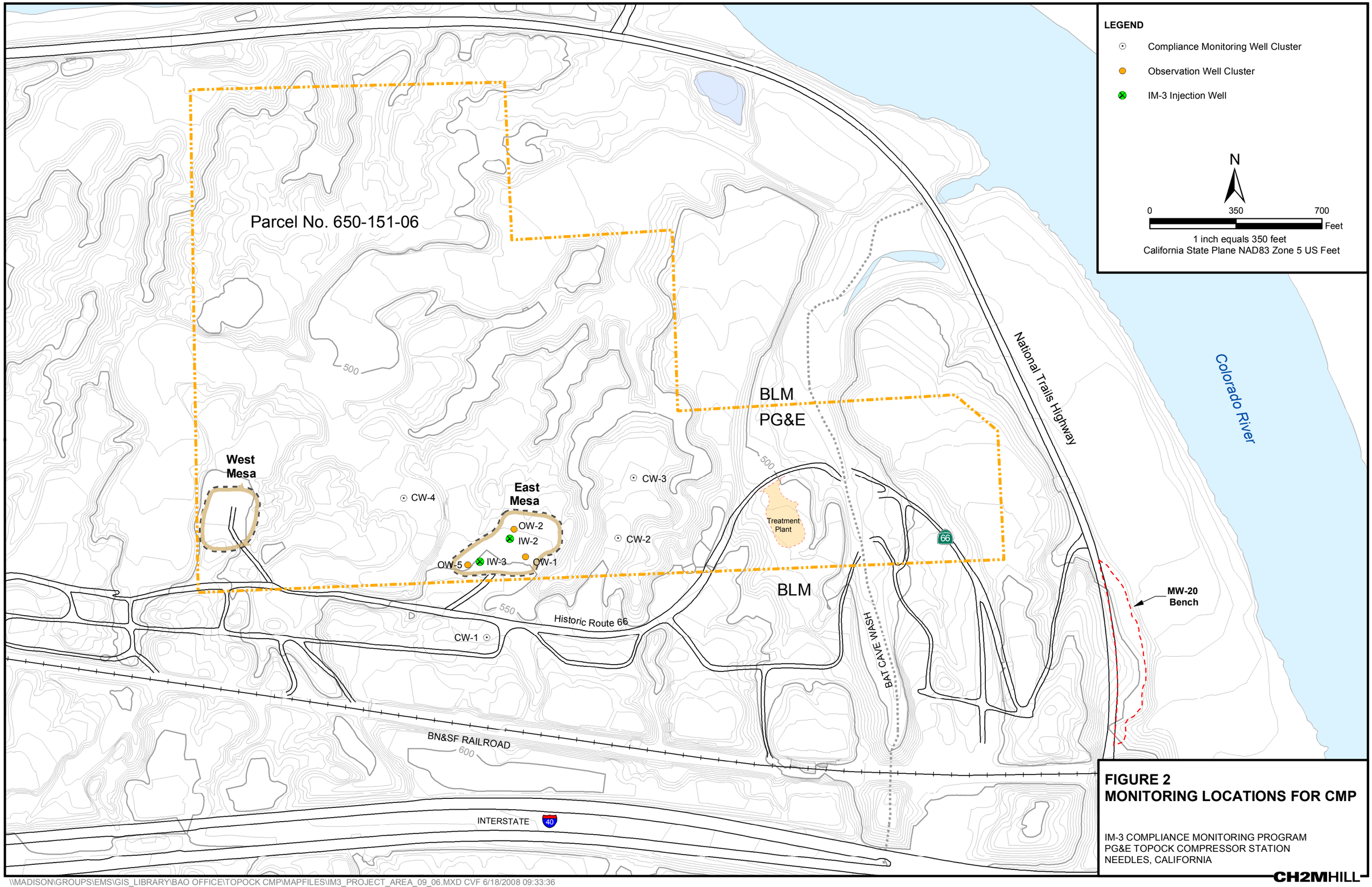
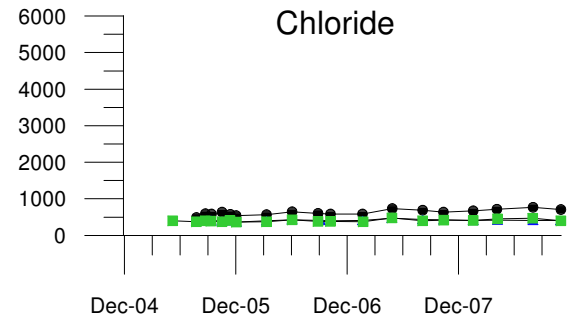


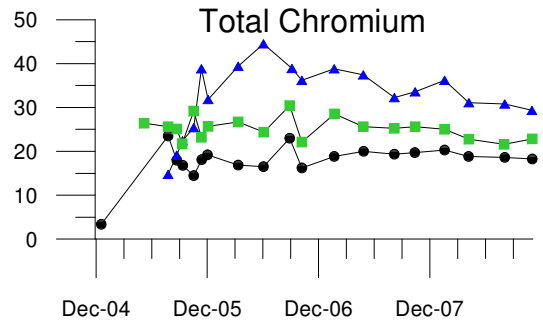
FIGURE 2
MONITORING LOCATIONS FOR CMP

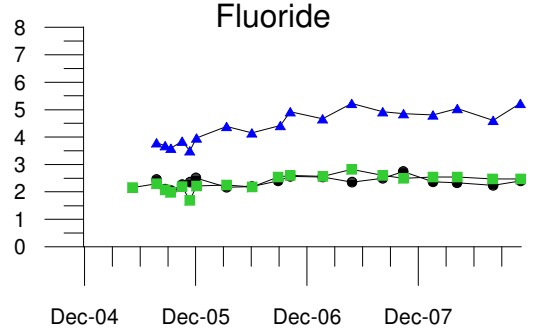
IM-3 COMPLIANCE MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

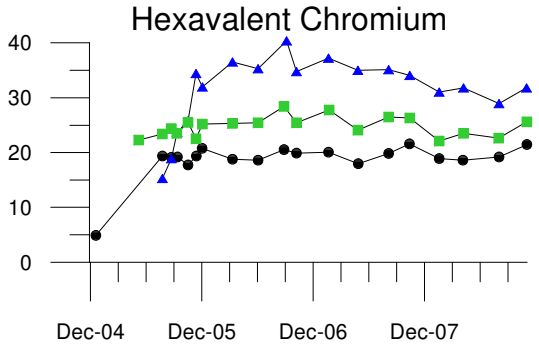
CH2MHILL

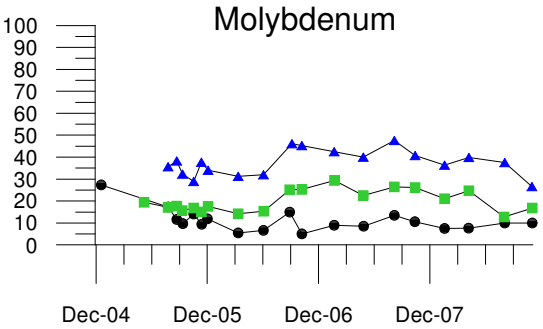
\\MADISON\GROUPS\EMS\GIS_LIBRARY\BAO OFFICE\TOPOCK CMP\MAPFILES\IM3_PROJECT_AREA_09_06.MXD CVF 6/18/2008 09:33:36

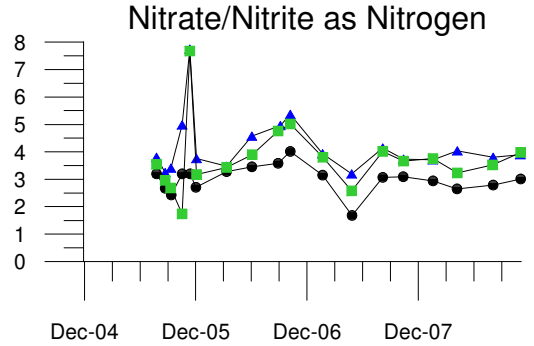


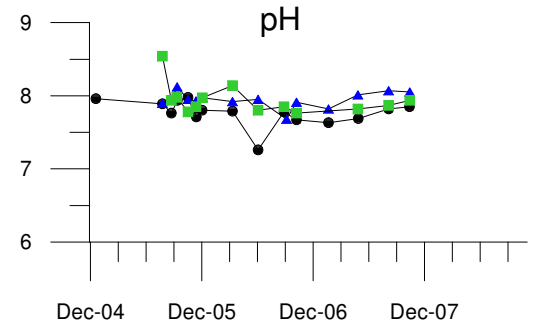


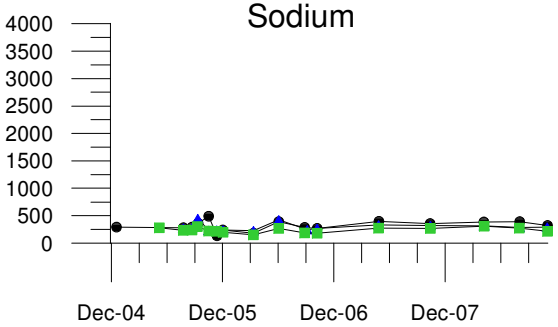


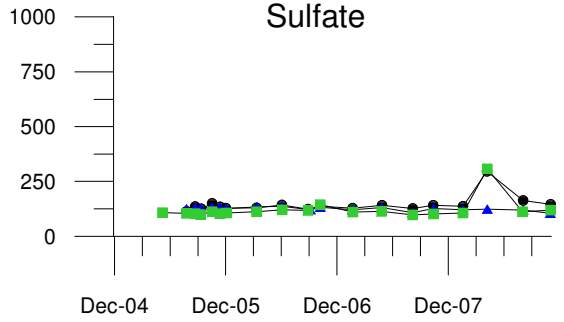


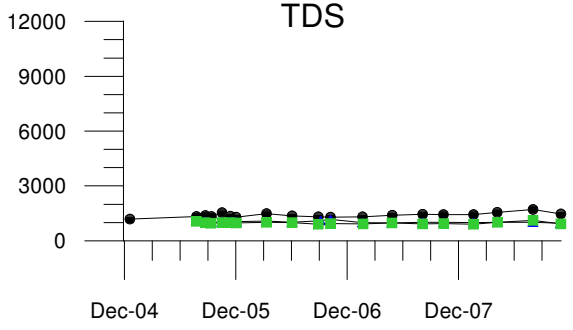


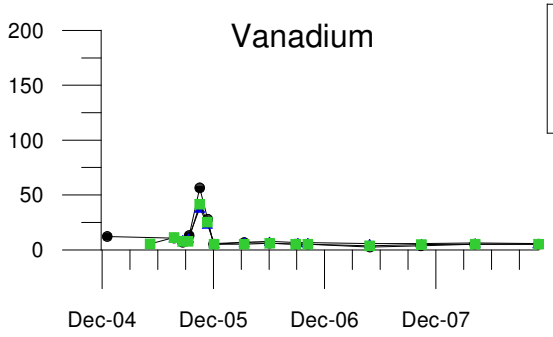


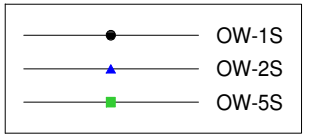








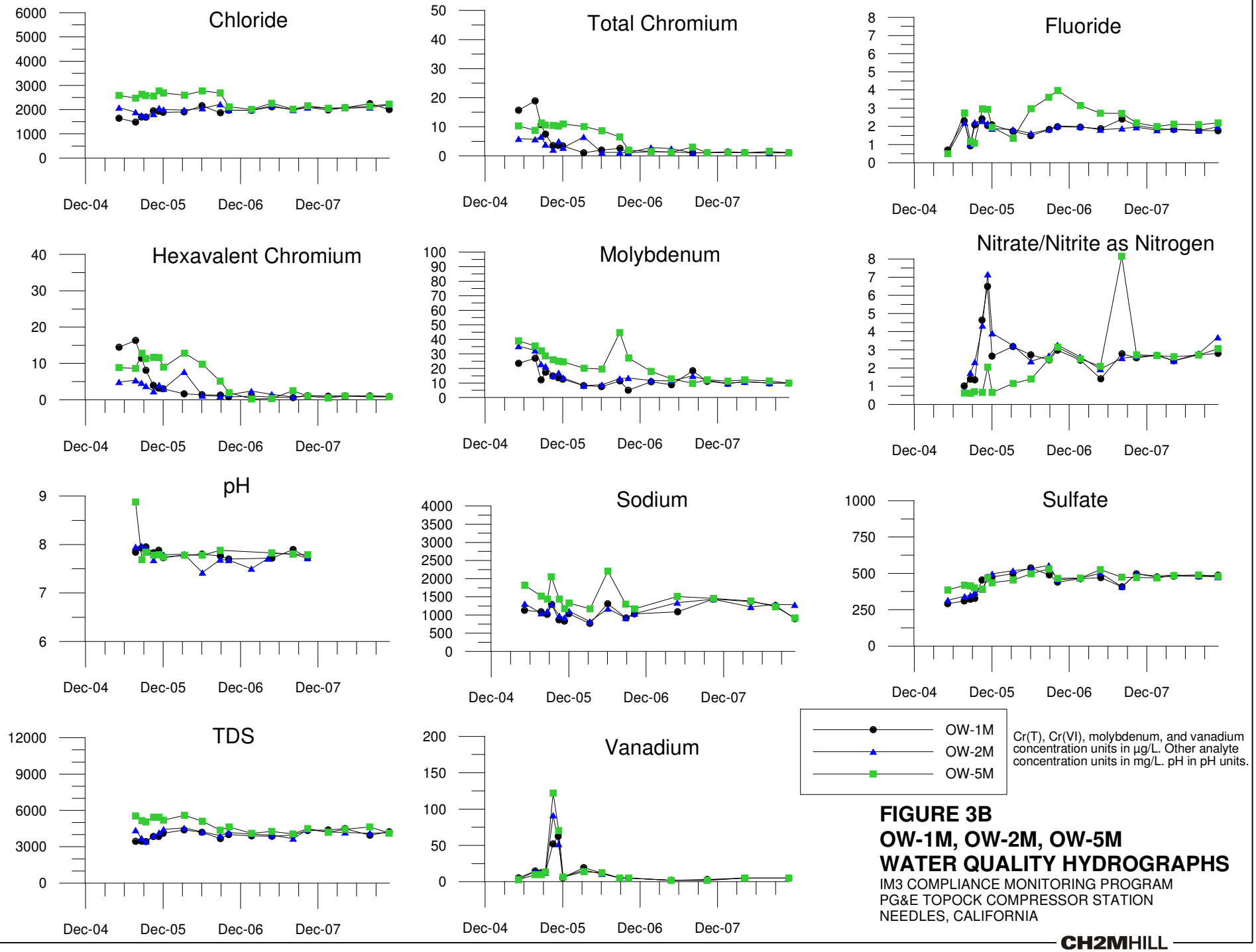




Cr(T), Cr(VI), molybdenum, and vanadium concentration units in µg/L. Other analyte concentration units in mg/L. pH in pH units.

FIGURE 3A
OW-1S, OW-2S, OW-5S
WATER QUALITY HYDROGRAPHS
IM3 COMPLIANCE MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

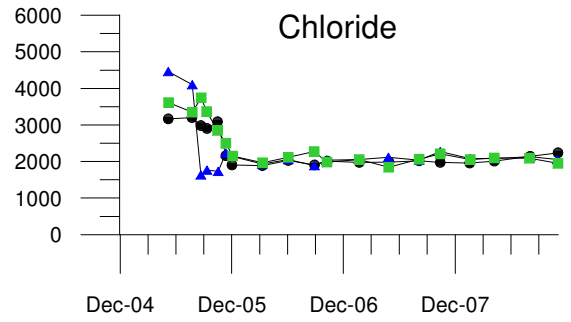
CH2MHILL

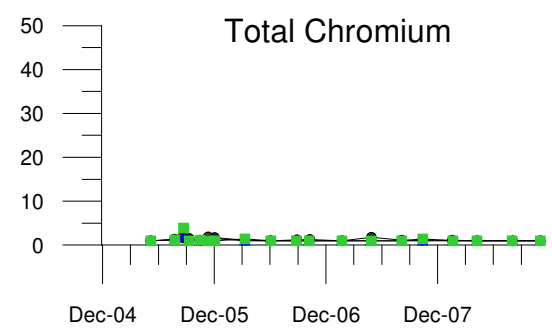


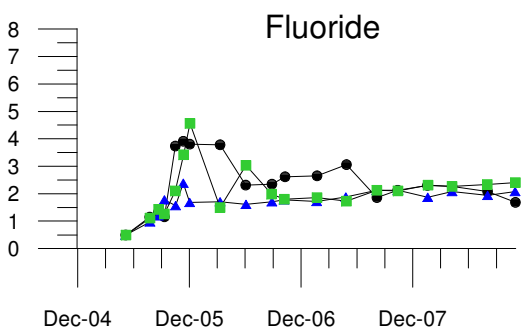
Cr(T), Cr(VI), molybdenum, and vanadium concentration units in µg/L. Other analyte concentration units in mg/L. pH in pH units.

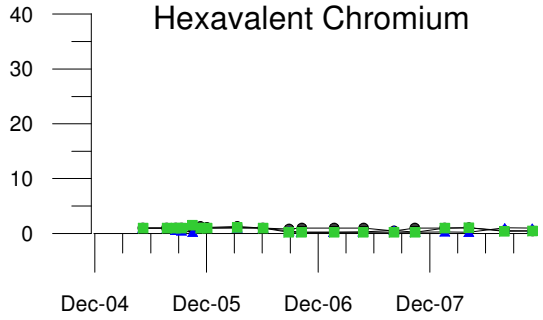
FIGURE 3B
OW-1M, OW-2M, OW-5M
WATER QUALITY HYDROGRAPHS
IM3 COMPLIANCE MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

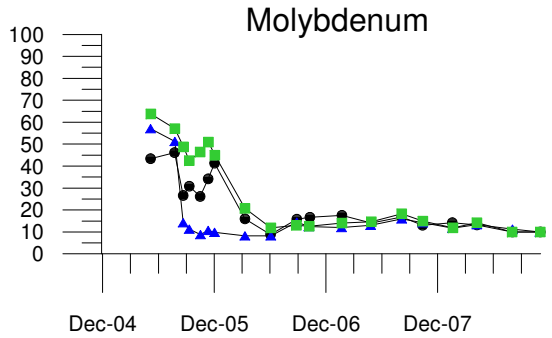
CH2MHILL

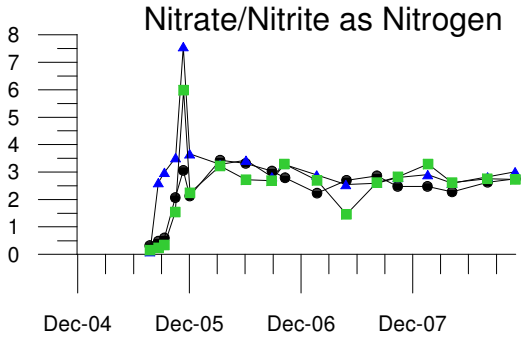


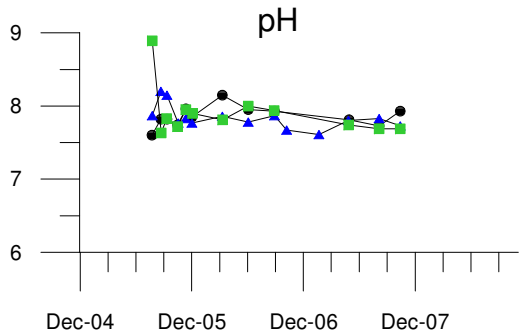


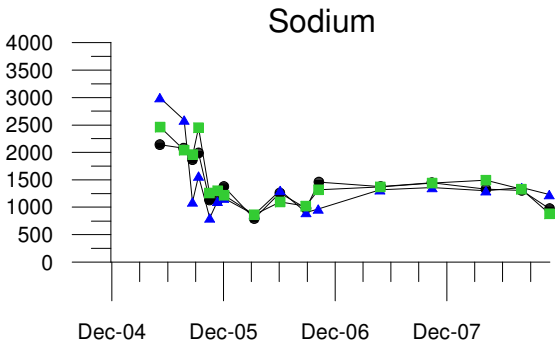


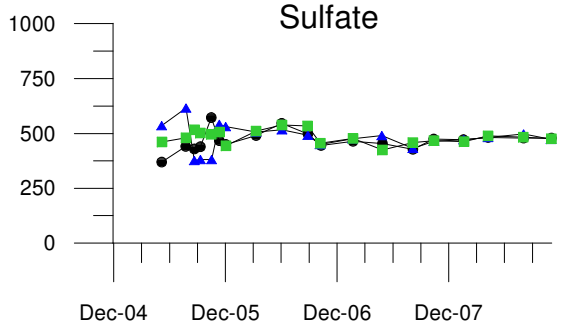


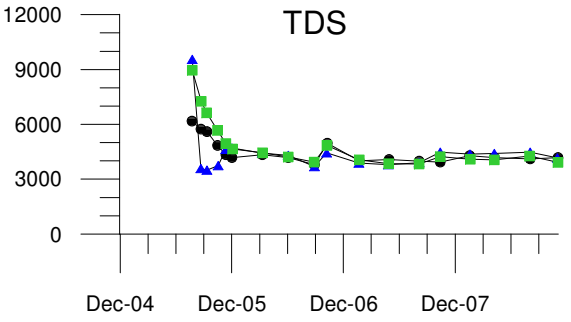


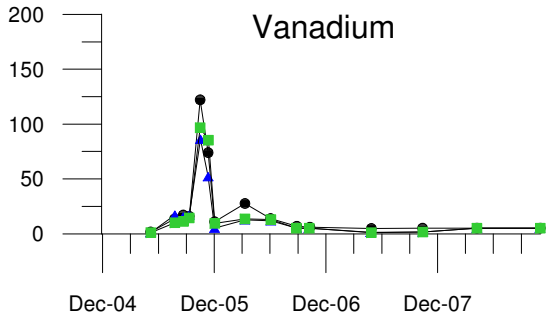


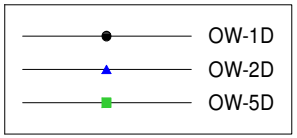








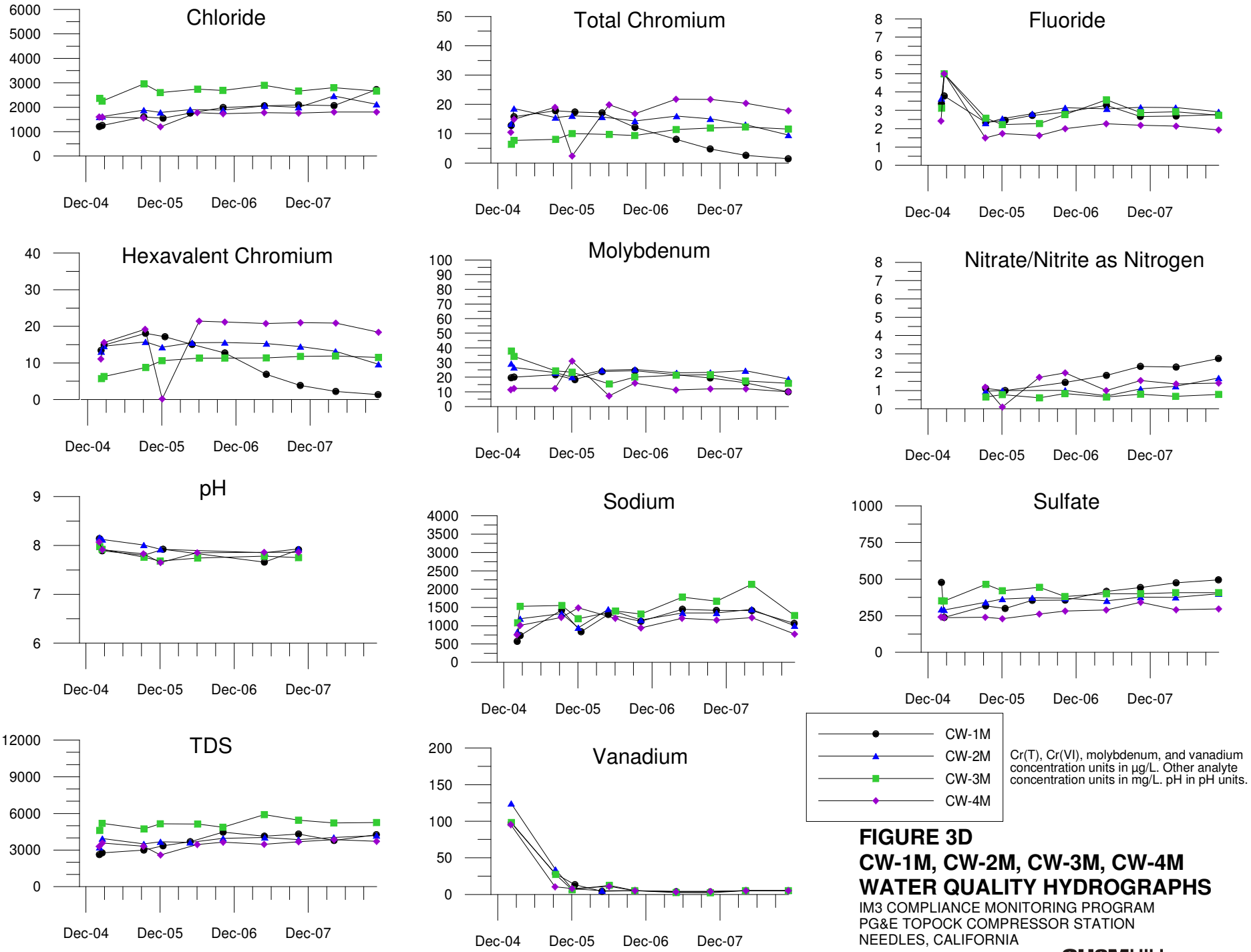




Cr(T), Cr(VI), molybdenum, and vanadium concentration units in µg/L. Other analyte concentration units in mg/L. pH in pH units.

FIGURE 3C
OW-1D, OW-2D, OW-5D
WATER QUALITY HYDROGRAPHS
IM3 COMPLIANCE MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

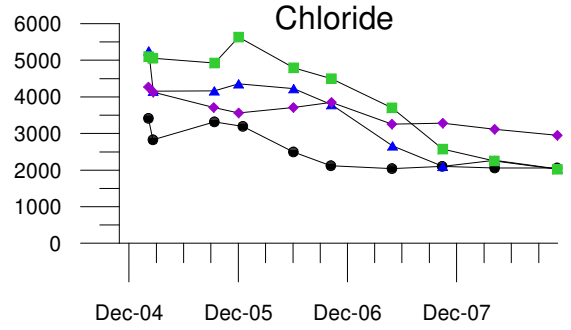
CH2MHILL

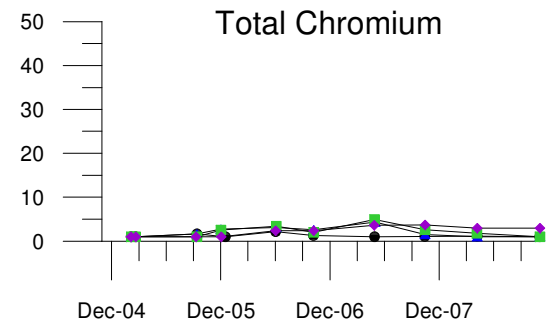


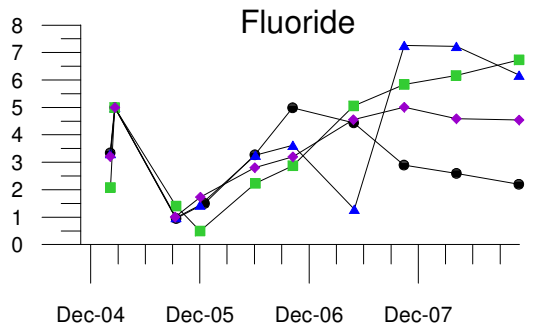
Cr(T), Cr(VI), molybdenum, and vanadium concentration units in µg/L. Other analyte concentration units in mg/L. pH in pH units.

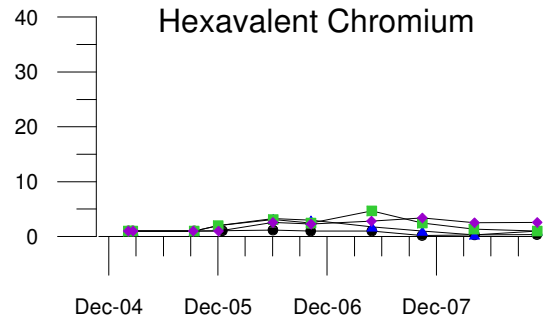
FIGURE 3D
CW-1M, CW-2M, CW-3M, CW-4M
WATER QUALITY HYDROGRAPHS
IM3 COMPLIANCE MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

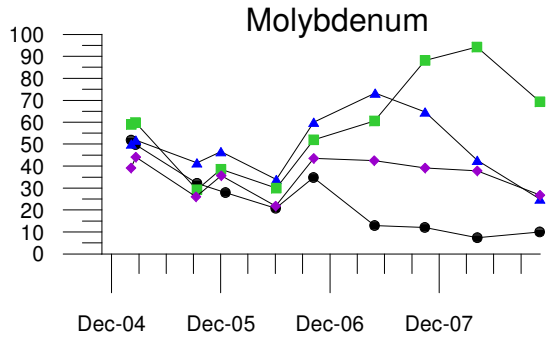
CH2MHILL

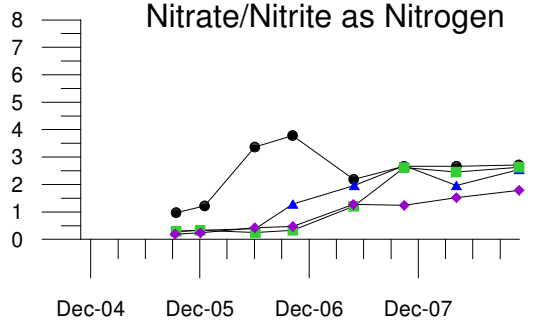


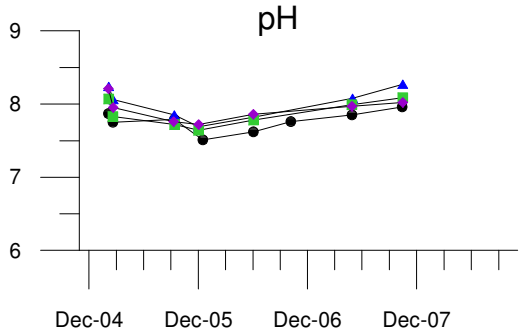


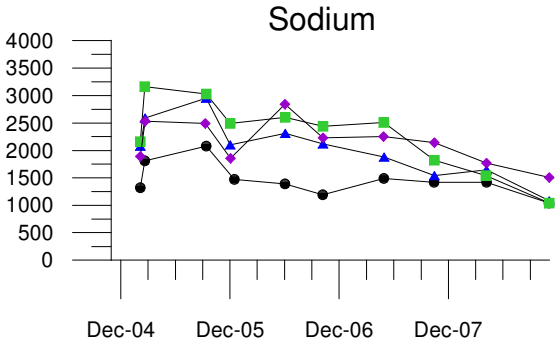


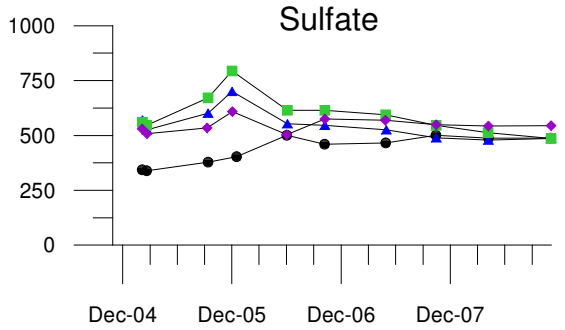


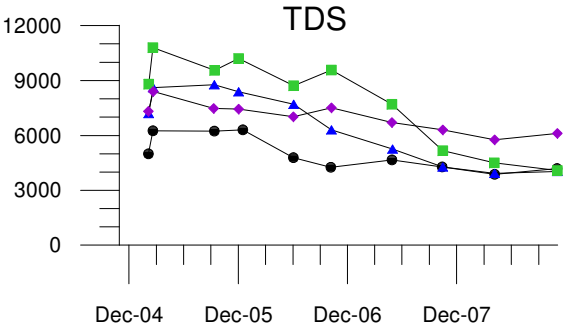


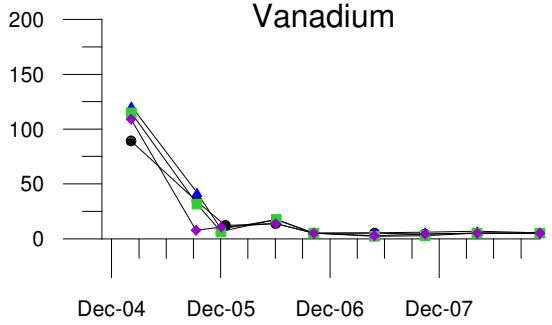


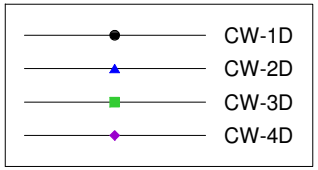








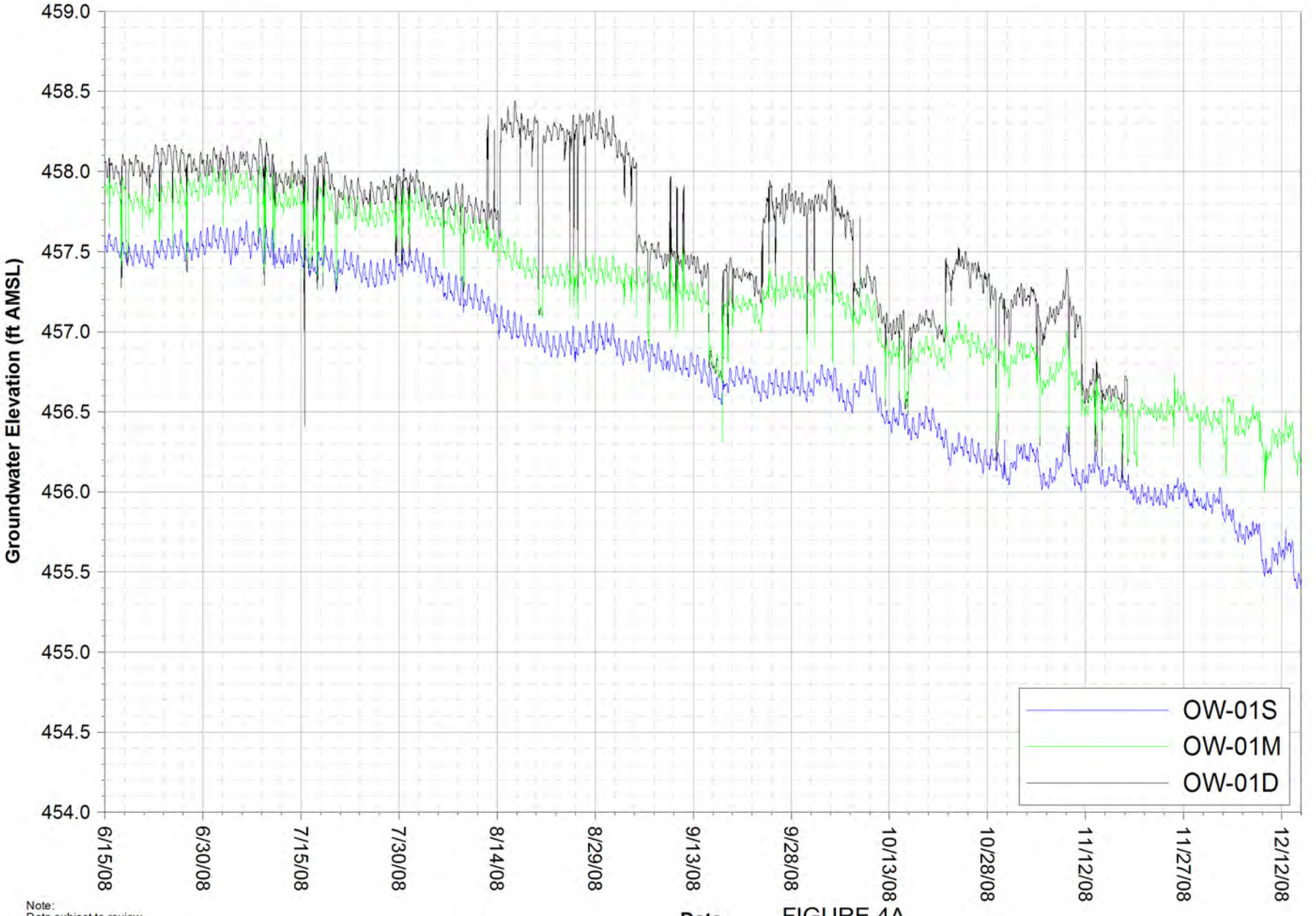




Cr(T), Cr(VI), molybdenum, and vanadium concentration units in µg/L. Other analyte concentration units in mg/L. pH in pH units.

FIGURE 3E
CW-1D, CW-2D, CW-3D, CW-4D
WATER QUALITY HYDROGRAPHS
IM3 COMPLIANCE MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

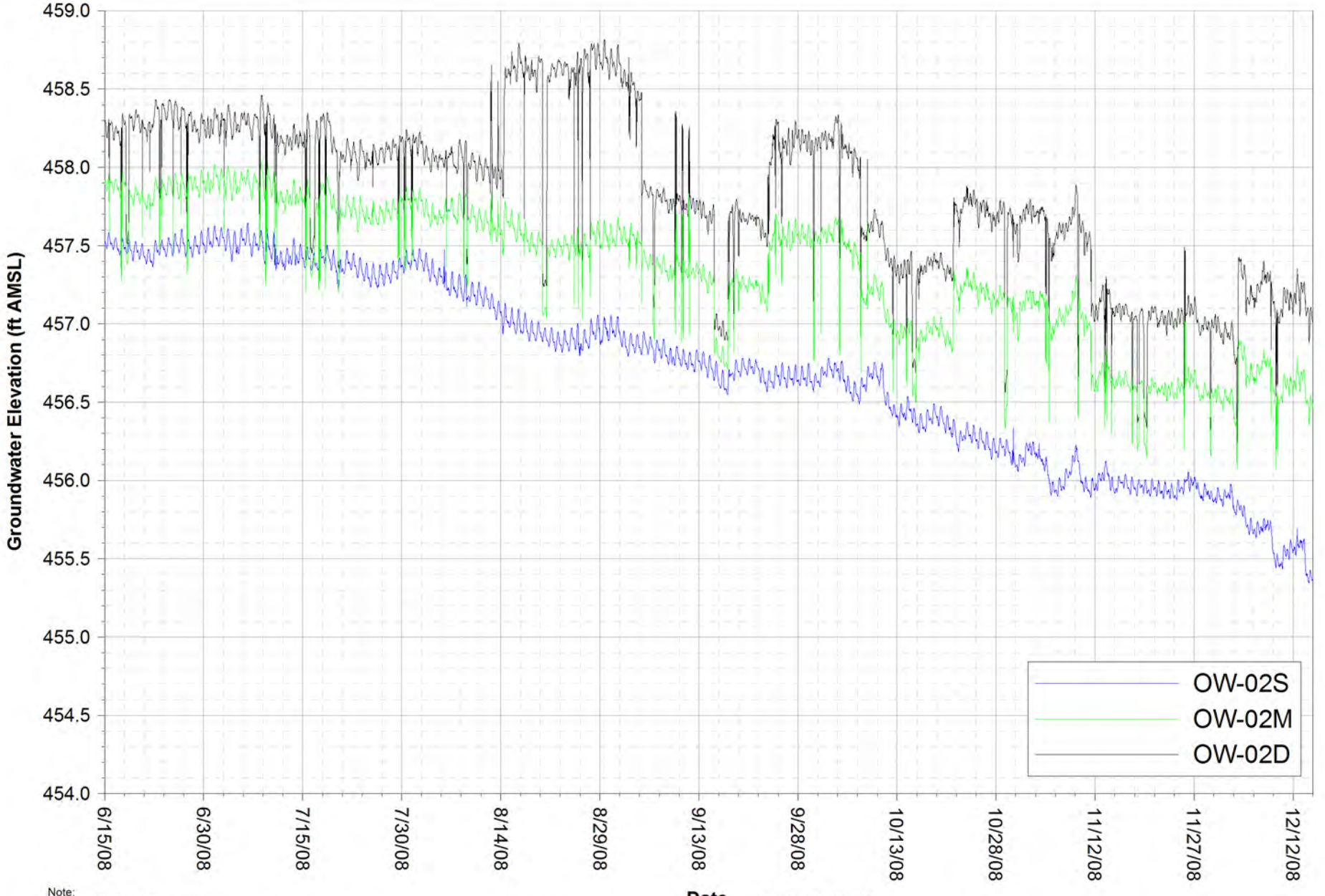
CH2MHILL



Note:
Data subject to review.
OW-01D data unavailable after 11/18/08 due to transducer failure.
Injection well IW-03 was in full operation 6/25 - 8/15, 9/4-9/25, 10/6-10/22, and 11/10/2008 to present.
Injection well IW-02 was in operation on 8/12 - 9/4/08, 9/9/-9/11, 9/23-10/8, and 10/21-11/11/2008.

FIGURE 4A
OW-01 GROUNDWATER ELEVATION HYDROGRAPHS
IM-3 COMPLIANCE MONITORING PROGRAM
PG & E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

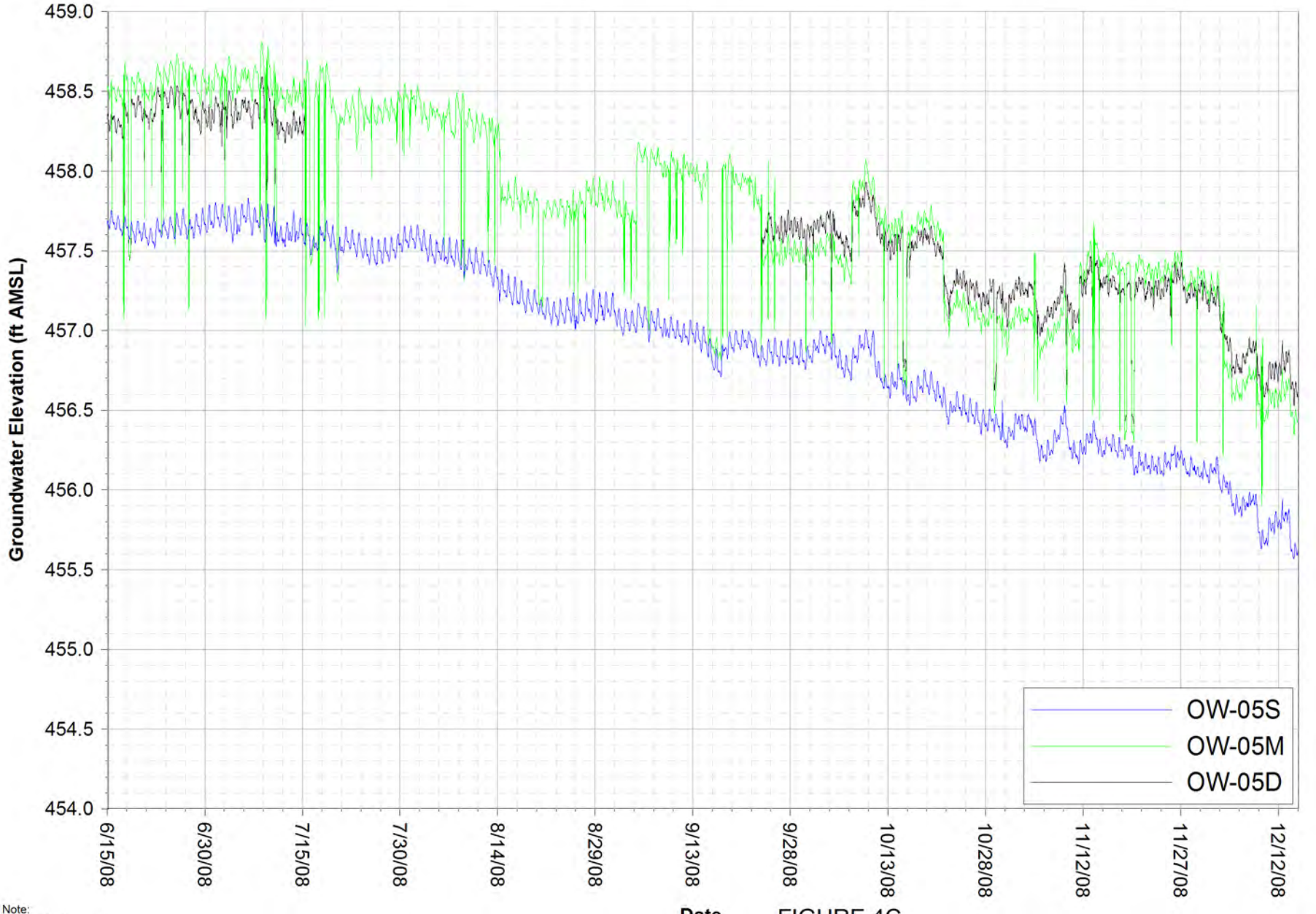
CH2MHILL



Note:
Data subject to review.
Injection well IW-03 was in full operation 6/25 - 8/15, 9/4-9/25, 10/6-10/22, and 11/10/2008 to present.
Injection well IW-02 was in operation on 8/12 - 9/4/08, 9/9/-9/11, 9/23-10/8, and 10/21-11/11/2008.

FIGURE 4B
OW-02 GROUNDWATER ELEVATION HYDROGRAPHS
IM-3 COMPLIANCE MONITORING PROGRAM
PG & E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

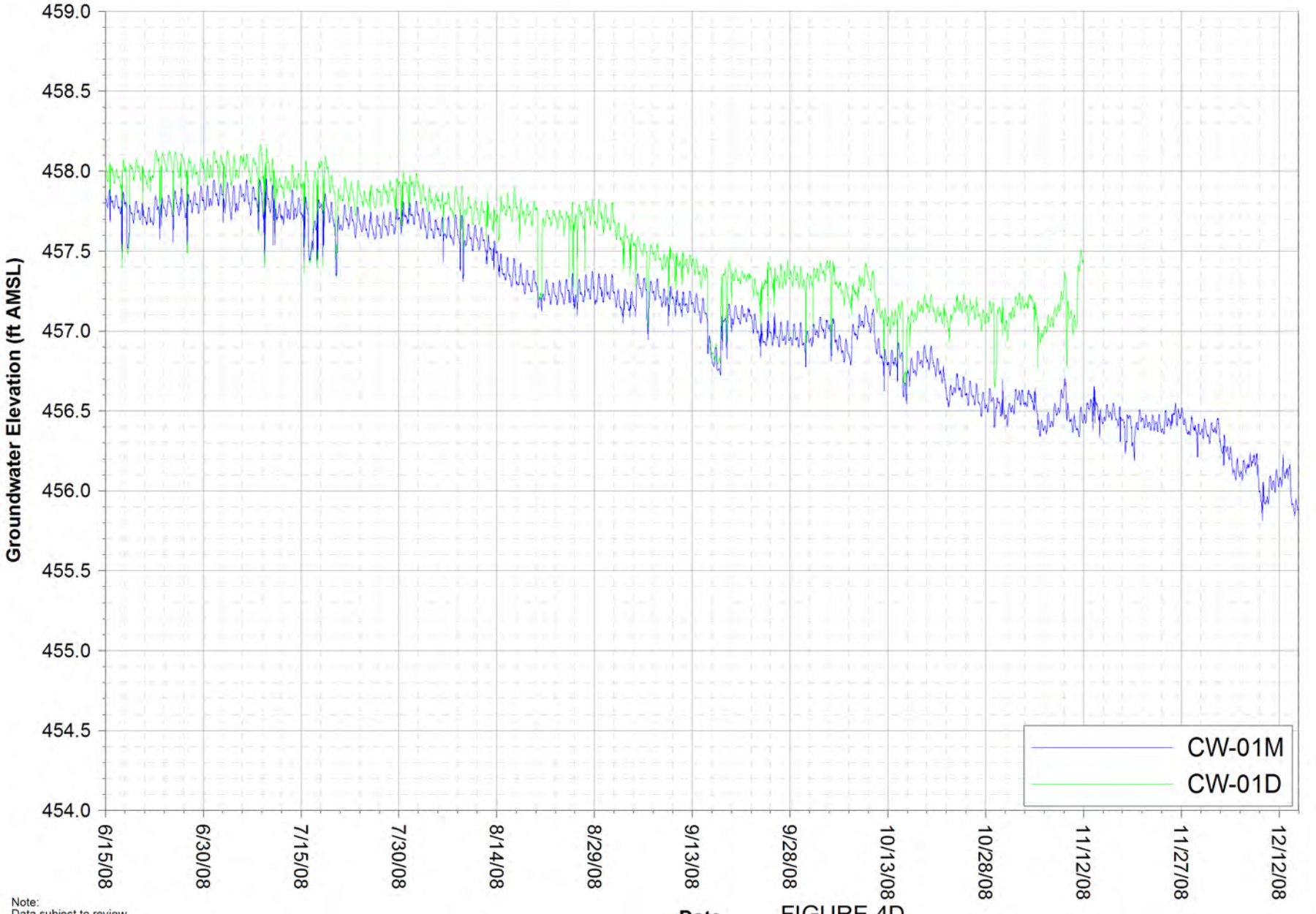
CH2MHILL



Note:
Data subject to review.
OW-05D data unavailable 7/15/08 to 9/23/08 due to transducer failure.
Injection well IW-03 was in full operation 6/25 - 8/15, 9/4-9/25, 10/6-10/22, and 11/10/2008 to present.
Injection well IW-02 was in operation on 8/12 - 9/4/08, 9/9/-9/11, 9/23-10/8, and 10/21-11/11/2008.

FIGURE 4C
OW-05 GROUNDWATER ELEVATION HYDROGRAPHS
IM-3 COMPLIANCE MONITORING PROGRAM
PG & E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

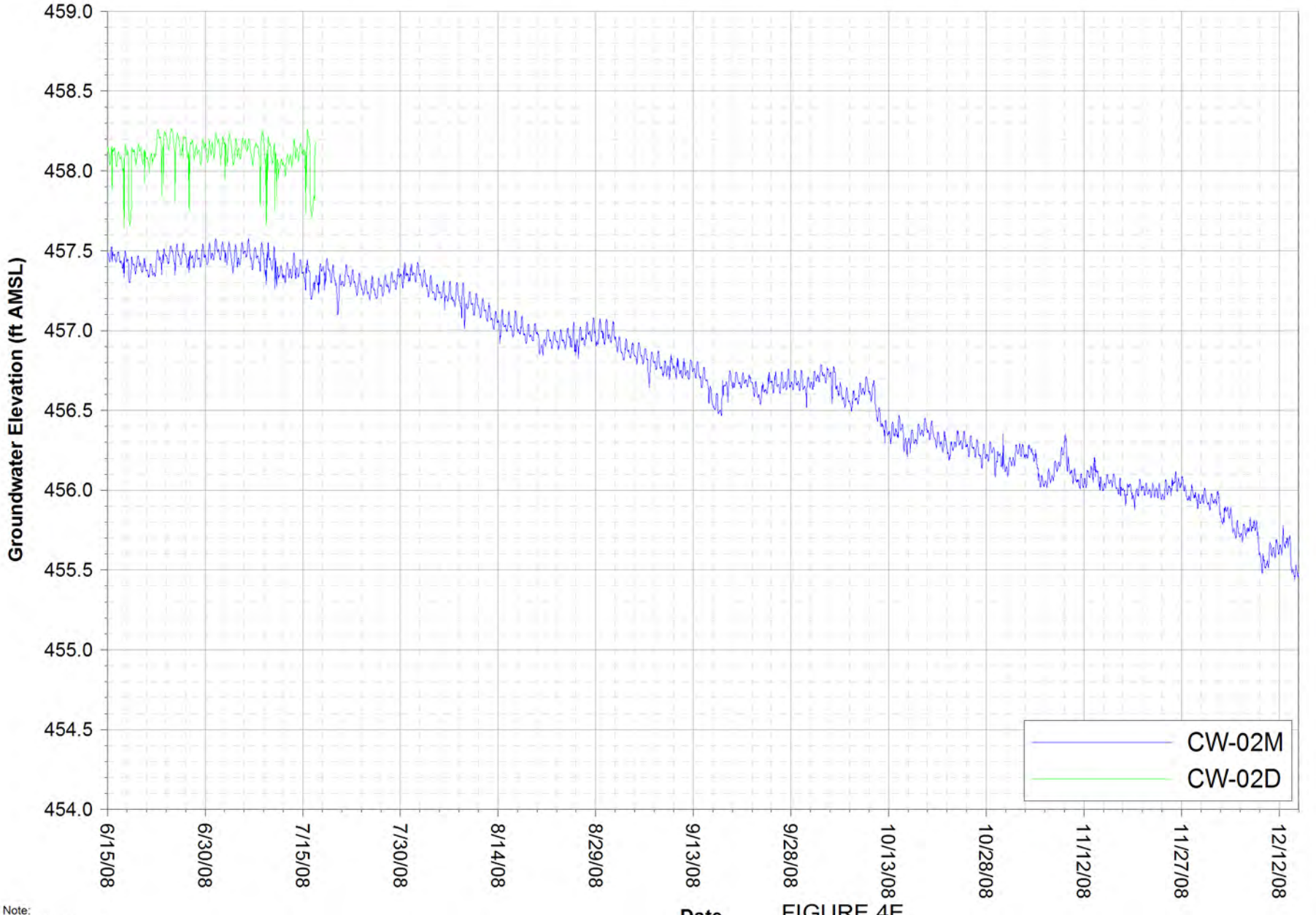
CH2MHILL



Note:
Data subject to review.
CW-1D not available after 11/12/2008 due to transducer failure.
Injection well IW-03 was in full operation 6/25 - 8/15, 9/4-9/25, 10/6-10/22, and 11/10/2008 to present.
Injection well IW-02 was in operation on 8/12 - 9/4/08, 9/9/-9/11, 9/23-10/8, and 10/21-11/11/2008.

FIGURE 4D
CW-01 GROUNDWATER ELEVATION HYDROGRAPHS
IM-3 COMPLIANCE MONITORING PROGRAM
PG & E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

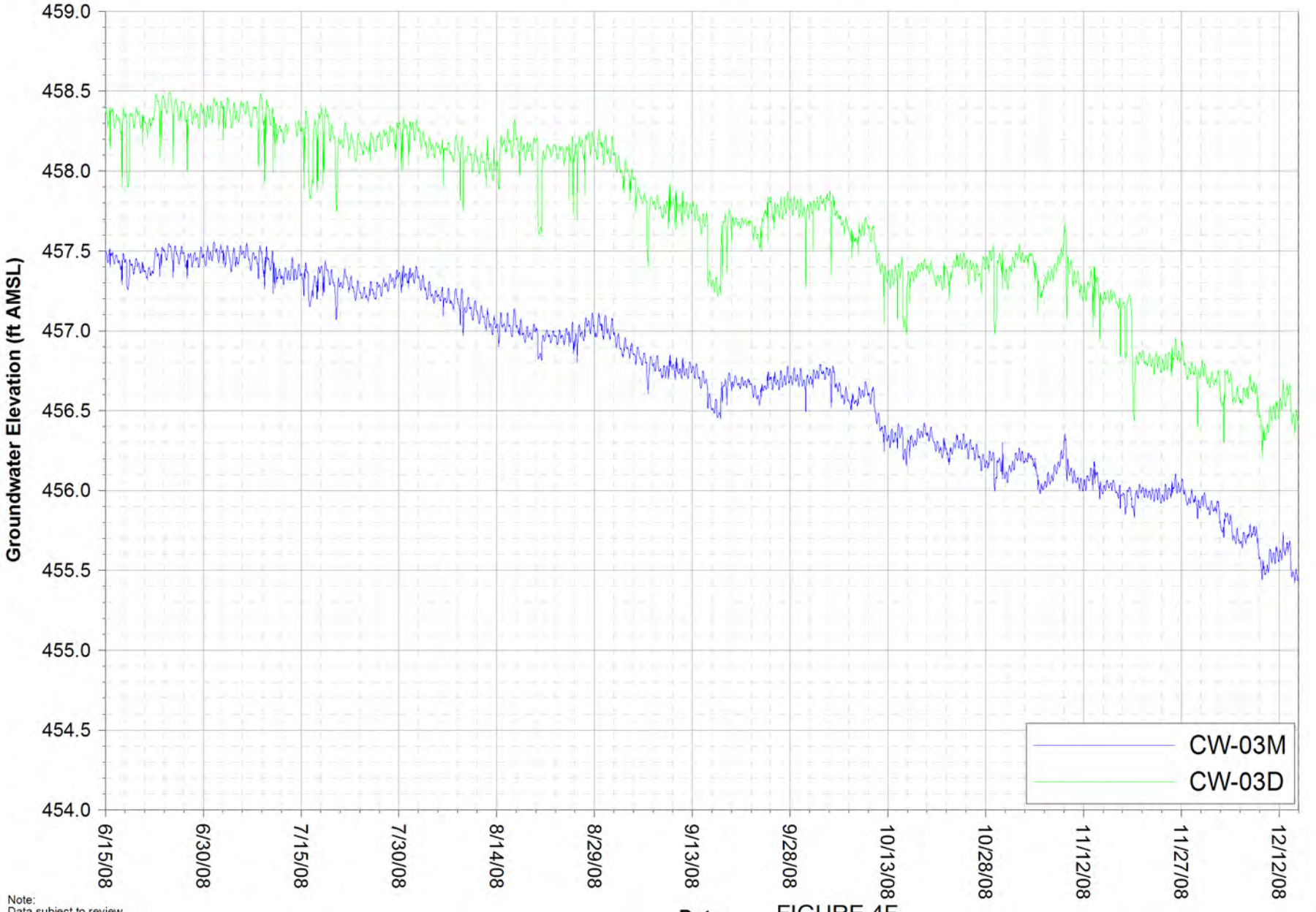
CH2MHILL



Note:
Data subject to review.
CW-02D data unavailable 7/15/08 to present due to transducer failure.
Injection well IW-03 was in full operation 6/25 - 8/15, 9/4-9/25, 10/6-10/22, and 11/10/2008 to present.
Injection well IW-02 was in operation on 8/12 - 9/4/08, 9/9/-9/11, 9/23-10/8, and 10/21-11/11/2008.

FIGURE 4E
CW-02 GROUNDWATER ELEVATION HYDROGRAPHS
IM-3 COMPLIANCE MONITORING PROGRAM
PG & E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

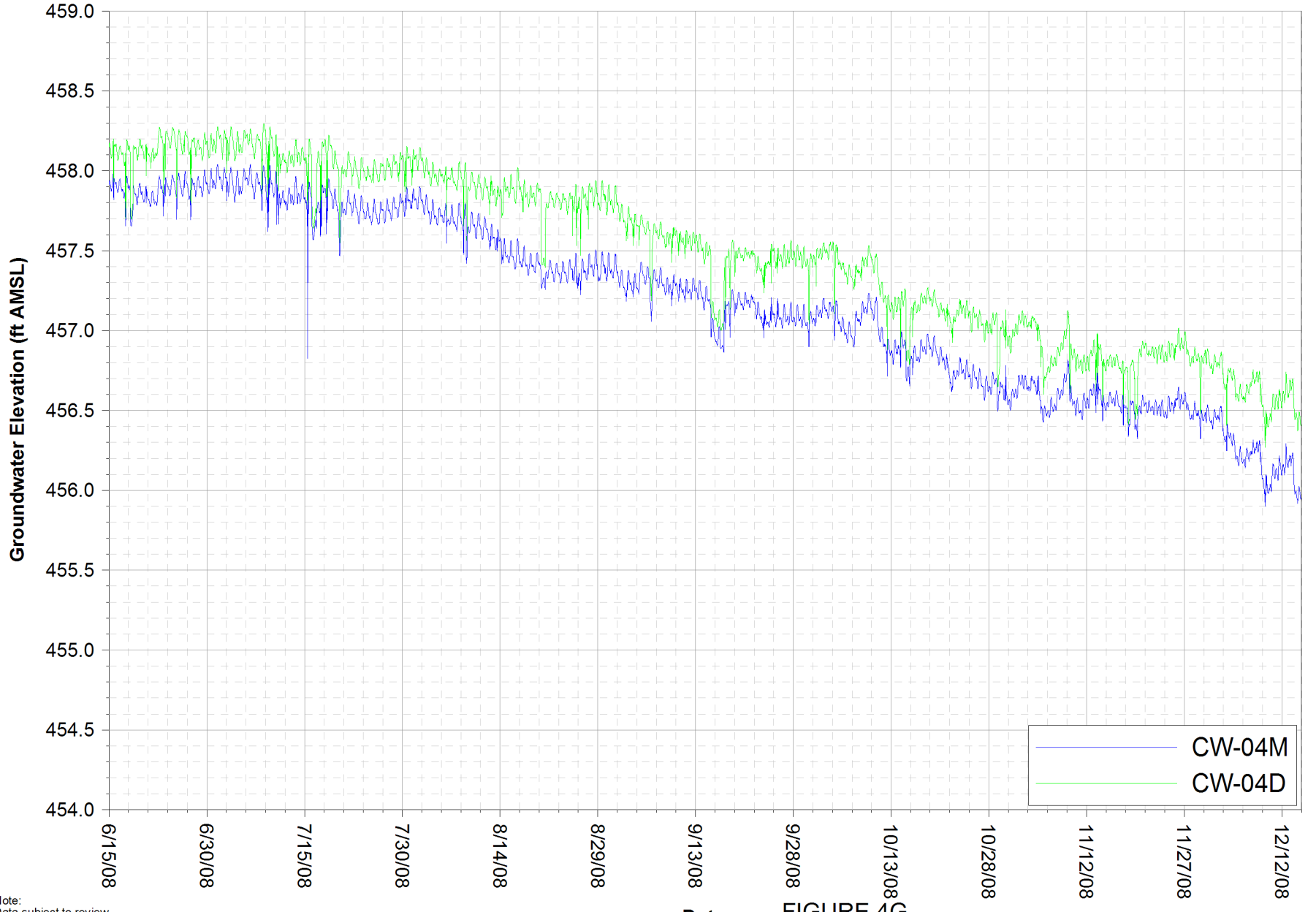
CH2MHILL



Note:
Data subject to review.
Injection well IW-03 was in full operation 6/25 - 8/15, 9/4-9/25, 10/6-10/22, and 11/10/2008 to present.
Injection well IW-02 was in operation on 8/12 - 9/4/08, 9/9/-9/11, 9/23-10/8, and 10/21-11/11/2008.

FIGURE 4F
CW-03 GROUNDWATER ELEVATION HYDROGRAPHS
IM-3 COMPLIANCE MONITORING PROGRAM
PG & E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

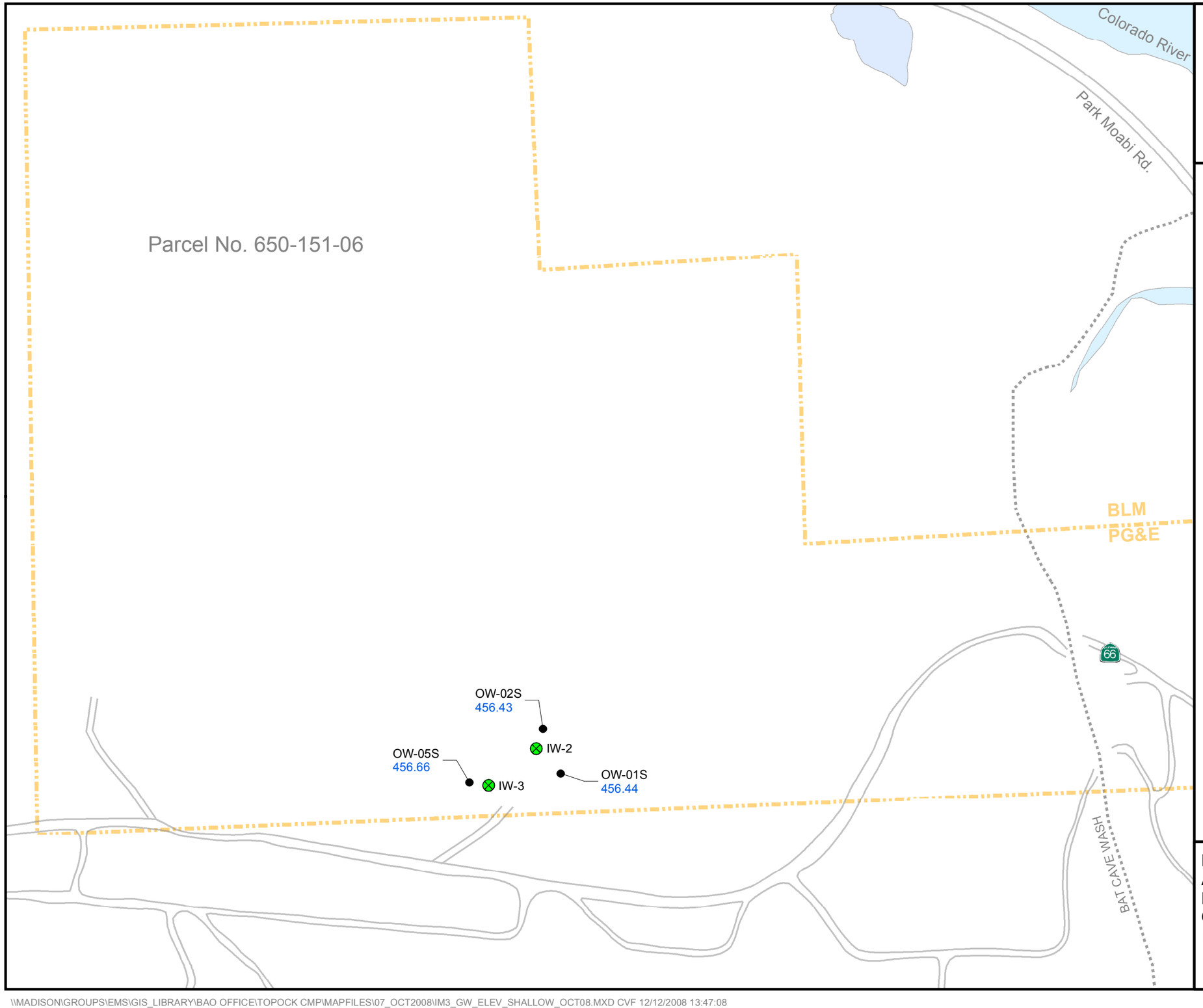
CH2MHILL



Note:
Data subject to review.
Injection well IW-03 was in full operation 6/25 - 8/15, 9/4-9/25, 10/6-10/22, and 11/10/2008 to present.
Injection well IW-02 was in operation on 8/12 - 9/4/08, 9/9/-9/11, 9/23-10/8, and 10/21-11/11/2008.

FIGURE 4G
CW-04 GROUNDWATER ELEVATION HYDROGRAPHS
IM-3 COMPLIANCE MONITORING PROGRAM
PG & E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CH2MHILL



N

0 250 500 Feet

1 inch equals 250 feet

California State Plane NAD83 Zone 5 US Feet

LEGEND

- Groundwater Monitoring, Compliance, and Observation Well
- IM-3 Injection Well

Groundwater Elevations for Shallow Wells in IM-3 Injection Area

OW-02S
457.29
Salinity and temperature adjusted groundwater head elevation in feet above mean sea level (MSL)

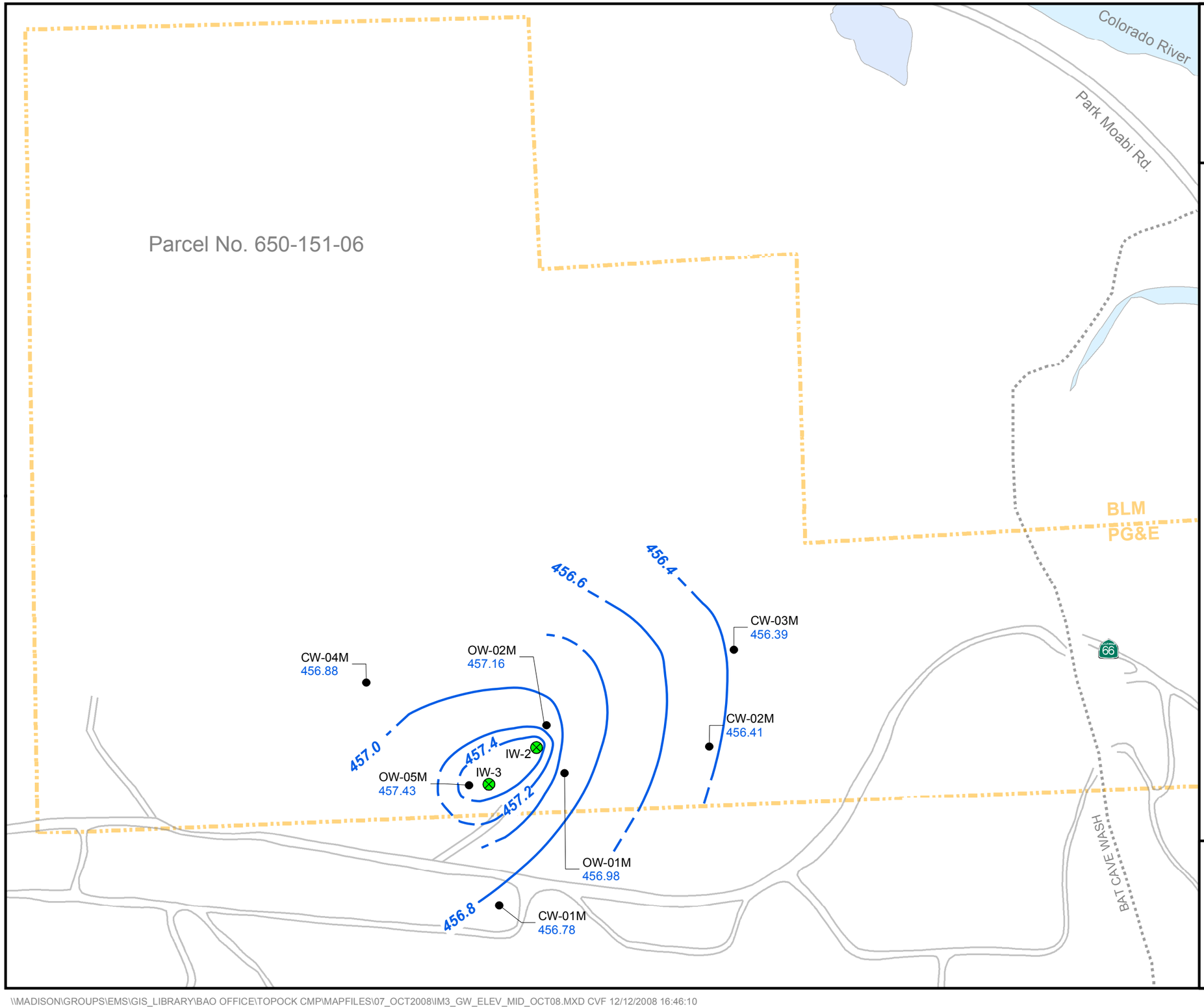
Notes:
Data posted and contoured from monthly average heads measured with transducers at 30 minute intervals.

FIGURE 5A
AVERAGE GROUNDWATER ELEVATIONS FOR SHALLOW WELLS OCTOBER 1 TO OCTOBER 31, 2008

IM3 COMPLIANCE MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CH2MHILL

\\MADISON\GROUPS\EMS\GIS_LIBRARY\BAO OFFICE\TOPOCK CMP\MAPFILES\07_OCT2008\IM3_GW_ELEV_SHALLOW_OCT08.MXD CVF 12/12/2008 13:47:08



N

0 250 500 Feet

1 inch equals 250 feet

California State Plane NAD83 Zone 5 US Feet

LEGEND

- Groundwater Monitoring, Compliance, and Observation Well
- IM-3 Injection Well

Groundwater Elevations for Mid-depth Wells in IM-3 Injection Area

- OW-02M 457.16 — Salinity and temperature adjusted groundwater head elevation in feet above mean sea level (MSL)
- Groundwater elevation contour in feet above MSL (0.2 foot interval), dashed where inferred

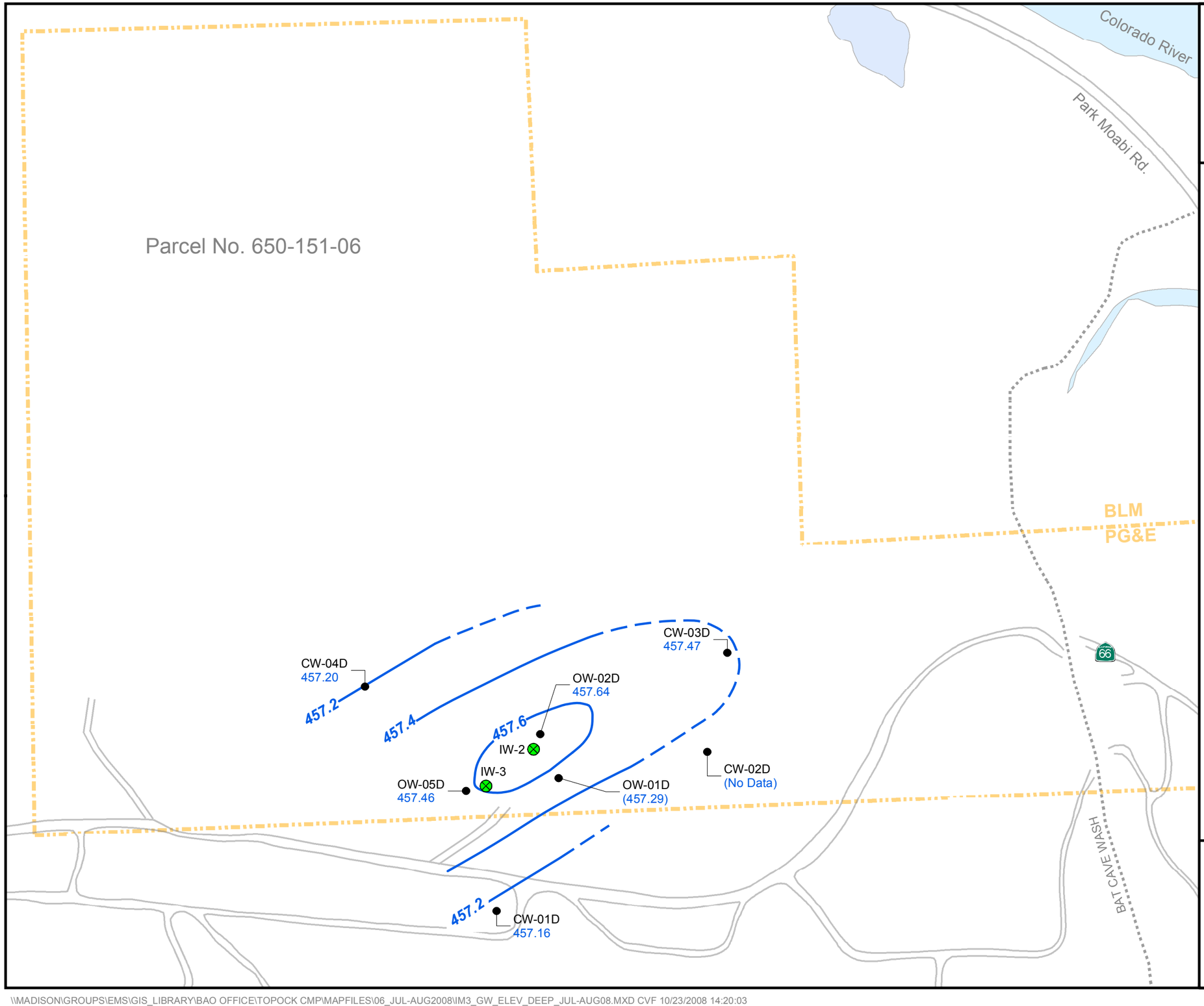
Notes:
Data posted and contoured from monthly average heads measured with transducers at 30 minute intervals.

FIGURE 5B
AVERAGE GROUNDWATER ELEVATION CONTOURS FOR MID-DEPTH WELLS OCTOBER 1 TO OCTOBER 31, 2008

IM3 COMPLIANCE MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CH2MHILL

\\MADISON\GROUPS\EMS\GIS_LIBRARY\BAO OFFICE\TOPOCK CMP\MAPFILES\07_OCT2008\IM3_GW_ELEV_MID_OCT08.MXD CVF 12/12/2008 16:46:10



N

0 250 500 Feet

1 inch equals 250 feet

California State Plane NAD83 Zone 5 US Feet

LEGEND

- Groundwater Monitoring, Compliance and Observation Well
- IM-3 Injection Well

Groundwater Elevations for Deep Wells in IM-3 Injection Area

- OW-05D 457.46 — Salinity and temperature adjusted groundwater head elevation in feet above mean sea level (MSL)
- Groundwater elevation contour in feet above MSL (0.2 foot interval), dashed where inferred

Notes:
Data posted and contoured from monthly average heads measured with tranducers at 30 minute intervals. (OW-01D) andexcluded from contouring. CW-02D transducer failed.

FIGURE 5C
AVERAGE GROUNDWATER ELEVATION CONTOURS FOR DEEP WELLS OCTOBER 1 TO OCTOBER 31, 2008

IM3 COMPLIANCE MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CH2MHILL

\\MADISON\GROUPS\EMS\GIS_LIBRARY\BAO OFFICE\TOPOCK CMP\MAPFILES\06_JUL-AUG2008\IM3_GW_ELEV_DEEP_JUL-AUG08.MXD CVF 10/23/2008 14:20:03

Appendix A
Laboratory Reports, Fourth Quarter 2008

TRUESDAIL LABORATORIES, INC.

EXCELLENCE IN INDEPENDENT TESTING

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

December 8, 2008

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

Dear Mr. Duffy:

SUBJECT: REVISED CASE NARRATIVE PG&E TOPOCK 2008-CMP-018, GROUNDWATER MONITORING PROJECT, TLI NO.: 979606

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock 2008-CMP-018 groundwater-monitoring project. 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 are under Section 5.

The samples were received and delivered with the chain of custody on November 4, 2008, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

The results for samples 979606-1MS, 979606-7MS, 979606-8MS, 979606-10MS, 979606-11MS, 979606-12MS, 979606-13, and 979606-13MS for Hexavalent Chromium analysis by EPA 218.6 were just outside the retention time window. Because the matrix spike recovery was within acceptable limits, the data is accepted.

Due to the difficulty of getting the QC for Dissolved Magnesium by EPA 200.7 to pass, Mr. Shawn Duffy requested that this SDG be reported without the Magnesium results. The Magnesium data is to be submitted when it becomes available.

The metals report pages have been revised to include the Dissolved Magnesium results. The raw data has been included.

No other violations or non-conformance actions occurred for this data package.

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

Respectfully Submitted,
TRUESDAIL LABORATORIES, INC.

for Sean Conde
Mona Nassimi
Manager, Analytical Services

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

TRUESDAIL LABORATORIES, INC.

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www.truesdail.com

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Fifteen (15) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM0.01

Laboratory No.: 979606
Date: December 3, 2008
Collected: November 3-4, 2008
Received: November 4, 2008

ANALYST LIST

	PARAMETER	ANALYST
EPA 120.1	Specific Conductivity	Tina Acquiat
SM 2540C	Total Dissolved Solids	Tina Acquiat
SM 2320B	Alkalinity	Iordan Stavrev
SM 2130B	Turbidity	Gautam Savani
EPA 300.0	Anions	Giawad Ghenniwa
SM 4500-NH3 D	Ammonia	Iordan Stavrev
EPA 200.7	Metals by ICP	Hao Ton / Hope Trinidad
EPA 200.8	Metals by ICP/MS	Linda Saetern / Romuel Chaves
EPA 245.1	Mercury	Romuel Chaves
EPA 218.6	Hexavalent Chromium	Michael Nonezyan

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Fifteen (15) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM0.01
P.O. No.: 370367.MP.02.CM.01

Laboratory No.: **979606**
Date: December 3, 2008
Collected: November 3-4, 2008
Received: November 4, 2008
Analyzed: November 12, 2008
Analytical Batch: 11CrH08X

Investigation: **Hexavalent Chromium by IC Using Method EPA 218.6**

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
979606-1	OW-02M-018	12:35	12:28	µg/L	1.05	0.20	1.02
979606-2	OW-02S-018	13:57	16:56	µg/L	5.00	1.00	31.8
979606-3	OW-02D-018	15:45	17:38	µg/L	5.00	1.00	ND
979606-4	OW-05M-018	08:13	12:59	µg/L	1.05	0.20	0.85
979606-5	OW-05S-018	08:58	18:30	µg/L	5.00	1.00	25.6
979606-6	OW-91-018	09:15	13:20	µg/L	1.05	0.20	21.5
979606-7	OW-05D-018	10:12	13:30	µg/L	1.05	0.20	0.48
979606-8	OW-01D-018	13:37	13:41	µg/L	1.05	0.20	0.49
979606-9	OW-01S-018	11:20	14:12	µg/L	1.05	0.20	21.0
979606-10	OW-01M-018	12:17	14:22	µg/L	1.05	0.20	0.89
979606-11	OW-90-018	14:05	14:33	µg/L	1.05	0.20	1.32
979606-12	CW-01M-018	14:32	14:43	µg/L	1.05	0.20	1.33
979606-13	CW-01D-018	15:32	14:57	µg/L	1.05	0.20	0.40
979606-14	OW-87-018	16:00	15:08	µg/L	1.05	0.20	ND
979606-15	OW-88-018	15:52	15:18	µg/L	1.05	0.20	ND

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for -Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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www.truesdail.com

REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Fifteen (15) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM0.01
P.O. No.: 370367.MP.02.CM.01

Laboratory No.: 979606
Date: December 3, 2008
Collected: November 3-4, 2008
Received: November 4, 2008
Analyzed: November 12, 2008
Analytical Batch: 11CrH08X

Investigation: **Hexavalent Chromium by IC Using Method EPA 218.6**

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	979606-2	31.8	31.8	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	979606-1	1.02	1.06	5.00	5.30	6.16	6.32	97.0%	90-110%	Yes
MS	979606-2	31.8	5.00	10.0	50.0	80.6	81.8	97.6%	90-110%	Yes
MS	979606-3	0.00	5.00	1.00	5.00	5.14	5.00	103%	90-110%	Yes
MS	979606-4	0.85	1.06	1.00	1.06	1.85	1.91	94.3%	90-110%	Yes
MS	979606-5	25.6	5.00	10.0	50.0	74.4	75.6	97.6%	90-110%	Yes
MS	979606-6	21.5	1.06	25.0	26.5	46.2	48.0	93.2%	90-110%	Yes
MS	979606-7	0.48	1.06	1.00	1.06	1.52	1.54	98.1%	90-110%	Yes
MS	979606-8	0.49	1.06	1.00	1.06	1.55	1.55	100%	90-110%	Yes
MS	979606-9	21.0	1.06	25.0	26.5	46.4	47.5	95.8%	90-110%	Yes
MS	979606-10	0.89	1.06	1.00	1.06	1.84	1.95	90.3%	90-110%	Yes
MS	979606-11	1.32	1.06	5.00	5.30	6.67	6.62	101%	90-110%	Yes
MS	979606-12	1.33	1.06	5.00	5.30	6.49	6.63	97.4%	90-110%	Yes
MS	979606-13	0.40	1.06	1.00	1.06	1.42	1.46	96.2%	90-110%	Yes
MS	979606-14	0.00	1.06	1.00	1.06	1.02	1.06	96.2%	90-110%	Yes
MS	979606-15	0.00	1.06	1.00	1.06	1.02	1.06	96.2%	90-110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sam Cando
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

EXCELLENCE IN INDEPENDENT TESTING

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www.truesdail.com

REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Fifteen (15) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM0.01
P.O. No.: 370367.MP.02.CM.01

Laboratory No.: 979606
Date: December 3, 2008
Collected: November 3-4, 2008
Received: November 4, 2008
Analyzed: November 12, 2008
Analytical Batch: 11CrH08X

Investigation: **Hexavalent Chromium by IC Using Method EPA 218.6**

QA/QC Summary

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
BLANK	ND	<0.200	---	<0.200	Yes
MRCCS	4.83	5.00	96.6%	90% - 110%	Yes
MRCVS#1	9.81	10.0	98.1%	95% - 105%	Yes
MRCVS#2	9.81	10.0	98.1%	95% - 105%	Yes
MRCVS#3	10.0	10.0	100%	95% - 105%	Yes
MRCVS#4	9.93	10.0	99.3%	95% - 105%	Yes
MRCVS#5	9.88	10.0	98.8%	95% - 105%	Yes
MRCVS#6	9.94	10.0	99.4%	95% - 105%	Yes
LCS	4.87	5.00	97.4%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sam Conde
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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www.truesdail.com

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

REPORT

Sample: Fifteen (15) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM0.01
P.O. No.: 370367.MP.02.CM.01

Laboratory No.: 979606
Date: December 3, 2008
Collected: November 3-4, 2008
Received: November 4, 2008
Prep/ Analyzed: November 6, 2008
Analytical Batch: 11EC08D

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	MDL	DF	RL	Results
979606-1	OW-02M-018	µmhos/cm	EPA 120.1	0.099	1.00	2.00	6190
979606-2	OW-02S-018	µmhos/cm	EPA 120.1	0.099	1.00	2.00	1640
979606-3	OW-02D-018	µmhos/cm	EPA 120.1	0.099	1.00	2.00	6240
979606-4	OW-05M-018	µmhos/cm	EPA 120.1	0.099	1.00	2.00	6310
979606-5	OW-05S-018	µmhos/cm	EPA 120.1	0.099	1.00	2.00	1560
979606-6	OW-91-018	µmhos/cm	EPA 120.1	0.099	1.00	2.00	2430
979606-7	OW-05D-018	µmhos/cm	EPA 120.1	0.099	1.00	2.00	6290
979606-8	OW-01D-018	µmhos/cm	EPA 120.1	0.099	1.00	2.00	6240
979606-9	OW-01S-018	µmhos/cm	EPA 120.1	0.099	1.00	2.00	2430
979606-10	OW-01M-018	µmhos/cm	EPA 120.1	0.099	1.00	2.00	6160
979606-11	OW-90-018	µmhos/cm	EPA 120.1	0.099	1.00	2.00	6440
979606-12	CW-01M-018	µmhos/cm	EPA 120.1	0.099	1.00	2.00	6500
979606-13	CW-01D-018	µmhos/cm	EPA 120.1	0.099	1.00	2.00	6340

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	979637	1.16	1.17	0.86%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<2.00	---	<2.00	Yes
CCS	700	706	99.2%	90% - 110%	Yes
CVS#1	967	990	97.7%	90% - 110%	Yes
CVS#2	968	990	97.8%	90% - 110%	Yes
LCS	700	706	99.2%	90% - 110%	Yes
LCSD	701	706	99.3%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sean Carle
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

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

Sample: Fifteen (15) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM0.01
P.O. No.: 370367.MP.02.CM.01

Laboratory No.: 979606
Date: December 3, 2008
Collected: November 3-4, 2008
Received: November 4, 2008
Prep/ Analyzed: November 6, 2008
Analytical Batch: 11TDS08A

Investigation: Total Dissolved Solids by SM 2540C

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
979606-1	OW-02M-018	mg/L	SM 2540C	250	4180
979606-2	OW-02S-018	mg/L	SM 2540C	50.0	952
979606-3	OW-02D-018	mg/L	SM 2540C	250	4160
979606-4	OW-05M-018	mg/L	SM 2540C	250	4130
979606-5	OW-05S-018	mg/L	SM 2540C	50.0	934
979606-6	OW-91-018	mg/L	SM 2540C	50.0	1470
979606-7	OW-05D-018	mg/L	SM 2540C	250	3930
979606-8	OW-01D-018	mg/L	SM 2540C	250	4190
979606-9	OW-01S-018	mg/L	SM 2540C	50.0	1460
979606-10	OW-01M-018	mg/L	SM 2540C	250	4240
979606-11	OW-90-018	mg/L	SM 2540C	250	4150
979606-12	CW-01M-018	mg/L	SM 2540C	250	4250
979606-13	CW-01D-018	mg/L	SM 2540C	250	4180

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	979606-8	4190	4130	0.72%	≤ 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<10.0	---	<10.0	Yes
LCS 1	499	500	99.8%	90% - 110%	Yes
LCS 2	501	500	100%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

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

Laboratory No.: 979606

Sample: Fifteen (15) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM0.01
P.O. No.: 370367.MP.02.CM.01

Date: December 3, 2008
Collected: November 3-4, 2008
Received: November 4, 2008
Prep/ Analyzed: November 5, 2008
Analytical Batch: 11ALK08A

Investigation:

Alkalinity by SM 2320B

Analytical Results Total Alkalinity, Bicarbonate, Carbonate

TLI I.D.	Field I.D.	Units	RL	Total Alkalinity	Bicarbonate	Carbonate
979606-1	OW-02M-018	mg/L	5.00	71.0	71.0	ND
979606-2	OW-02S-018	mg/L	5.00	101	101	ND
979606-3	OW-02D-018	mg/L	5.00	79.0	79.0	ND
979606-4	OW-05M-018	mg/L	5.00	76.0	76.0	ND
979606-5	OW-05S-018	mg/L	5.00	90.0	90.0	ND
979606-6	OW-91-018	mg/L	5.00	70.0	70.0	ND
979606-7	OW-05D-018	mg/L	5.00	73.0	73.0	ND
979606-8	OW-01D-018	mg/L	5.00	71.0	71.0	ND
979606-9	OW-01S-018	mg/L	50.0	72.0	72.0	ND
979606-10	OW-01M-018	mg/L	5.00	75.0	75.0	ND
979606-11	OW-90-018	mg/L	5.00	75.0	75.0	ND
979606-12	CW-01M-018	mg/L	5.00	67.0	67.0	ND
979606-13	CW-01D-018	mg/L	5.00	74.6	74.6	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	979606-10	75.0	73.0	2.70%	≤ 20%	Yes

QC Std I.D.	Lab Number	Conc.of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	979606-11	75.0	1.00	100	100	170	175	95.0%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<5.00	---	<5.00	Yes
LCS	98.0	100	98.0%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sam Cunha
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

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

Sample: Fifteen (15) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM0.01
P.O. No.: 370367.MP.02.CM.01

Laboratory No.: 979606
Date: December 3, 2008
Collected: November 3-4, 2008
Received: November 4, 2008
Prep/ Analyzed: November 5, 2008
Analytical Batch: 11TUC08D

Investigation: **Turbidity by Method SM 2130B**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
979606-1	OW-02M-018	12:35	NTU	1.00	0.100	0.103
979606-2	OW-02S-018	13:57	NTU	1.00	0.100	4.05
979606-3	OW-02D-018	15:45	NTU	1.00	0.100	0.150
979606-4	OW-05M-018	08:13	NTU	1.00	0.100	0.145
979606-5	OW-05S-018	08:58	NTU	1.00	0.100	3.96
979606-6	OW-91-018	09:15	NTU	1.00	0.100	0.563
979606-7	OW-05D-018	10:12	NTU	1.00	0.100	ND
979606-8	OW-01D-018	13:37	NTU	1.00	0.100	1.23
979606-9	OW-01S-018	11:20	NTU	1.00	0.100	0.730
979606-10	OW-01M-018	12:17	NTU	1.00	0.100	ND
979606-11	OW-90-018	14:05	NTU	1.00	0.100	0.178
979606-12	CW-01M-018	14:32	NTU	1.00	0.100	0.141
979606-13	CW-01D-018	15:32	NTU	1.00	0.100	0.154

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	979606-10	ND	ND	0.00%	< 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.100	---	<0.100	Yes
LCS	8.03	8.00	100%	90% - 110%	Yes
LCS	8.10	8.00	101%	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.

for Mona Nassimi, Manager
Analytical Services

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Fifteen (15) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM0.01
P.O. No.: 370367.MP.02.CM.01

Laboratory No.: 979606
Date: December 3, 2008
Collected: November 3-4, 2008
Received: November 4, 2008
Prep/ Analyzed: November 6, 2008
Analytical Batch: 11NH3-E08A

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

Analytical Results Ammonia as N

TLI I.D.	Field I.D.	Sample Time	Method	Units	DF	RL	Results
979606-1	OW-02M-018	12:35	SM 4500-NH3 D	mg/L	1.00	0.500	ND
979606-2	OW-02S-018	13:57	SM 4500-NH3 D	mg/L	1.00	0.500	ND
979606-3	OW-02D-018	15:45	SM 4500-NH3 D	mg/L	1.00	0.500	ND
979606-4	OW-05M-018	08:13	SM 4500-NH3 D	mg/L	1.00	0.500	ND
979606-5	OW-05S-018	08:58	SM 4500-NH3 D	mg/L	1.00	0.500	ND
979606-6	OW-91-018	09:15	SM 4500-NH3 D	mg/L	1.00	0.500	ND
979606-7	OW-05D-018	10:12	SM 4500-NH3 D	mg/L	1.00	0.500	ND
979606-8	OW-01D-018	13:37	SM 4500-NH3 D	mg/L	1.00	0.500	ND
979606-9	OW-01S-018	11:20	SM 4500-NH3 D	mg/L	1.00	0.500	ND
979606-10	OW-01M-018	12:17	SM 4500-NH3 D	mg/L	1.00	0.500	ND
979606-11	OW-90-018	14:05	SM 4500-NH3 D	mg/L	1.00	0.500	ND
979606-12	CW-01M-018	14:32	SM 4500-NH3 D	mg/L	1.00	0.500	ND
979606-13	CW-01D-018	15:32	SM 4500-NH3 D	mg/L	1.00	0.500	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	979606-7	ND	ND	0.0%	≤ 20%	Yes

QC Std I.D.	Lab Number	Conc.of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	979606-7	0.00	1.00	6.00	6.00	6.54	6.00	109%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500	---	<0.500	Yes
MRCCS	5.84	6.00	97.3%	90% - 110%	Yes
MRCVS#1	6.14	6.00	102%	90% - 110%	Yes
MRCVS#2	5.89	6.00	98.2%	90% - 110%	Yes
LCS	10.1	10.0	101%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi, Manager
Analytical Services

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Fifteen (15) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM0.01
P.O. No.: 370367.MP.02.CM.01

Laboratory No.: 979606
Date: December 3, 2008
Collected: November 3-4, 2008
Received: November 4, 2008
Prep/ Analyzed: November 5, 2008
Analytical Batch: 11AN08D

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
979606-1	OW-02M-018	12:35	11:43	mg/L	5.00	0.500	1.98
979606-2	OW-02S-018	13:57	11:55	mg/L	5.00	0.500	5.22
979606-3	OW-02D-018	15:45	12:06	mg/L	5.00	0.500	2.08
979606-4	OW-05M-018	08:13	12:18	mg/L	5.00	0.500	2.19
979606-5	OW-05S-018	08:58	12:29	mg/L	5.00	0.500	2.47
979606-6	OW-91-018	09:15	13:03	mg/L	5.00	0.500	2.33
979606-7	OW-05D-018	10:12	13:15	mg/L	5.00	0.500	2.40
979606-8	OW-01D-018	13:37	13:26	mg/L	5.00	0.500	1.68
979606-9	OW-01S-018	11:20	14:46	mg/L	5.00	0.500	2.41
979606-10	OW-01M-018	12:17	15:32	mg/L	5.00	0.500	1.76
979606-11	OW-90-018	14:05	15:43	mg/L	5.00	0.500	2.38
979606-12	CW-01M-018	14:32	15:54	mg/L	5.00	0.500	2.77
979606-13	CW-01D-018	15:32	16:06	mg/L	5.00	0.500	2.20

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sam Candler
Mona Nassimi, Manager
Analytical Services

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Fifteen (15) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM0.01
P.O. No.: 370367.MP.02.CM.01

Laboratory No.: 979606
Date: December 3, 2008
Collected: November 3-4, 2008
Received: November 4, 2008
Prep/ Analyzed: November 5, 2008
Analytical Batch: 11AN08D

Investigation: **Fluoride by Ion Chromatography using EPA 300.0**

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	979402-2	0.412	0.430	4.3%	≤ 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	979402-2	0.412	1.00	2.00	2.00	2.40	2.41	99.4%	85-115%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500	---	<0.500	Yes
MRCCS	4.13	4.00	103%	90% - 110%	Yes
MRCVS#1	3.12	3.00	104%	90% - 110%	Yes
MRCVS#2	3.11	3.00	104%	90% - 110%	Yes
MRCVS#3	3.12	3.00	104%	90% - 110%	Yes
LCS	4.13	4.00	103%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sam Cade
Mona Nassimi, Manager
Analytical Services

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Fifteen (15) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM0.01
P.O. No.: 370367.MP.02.CM.01

Laboratory No.: 979606
Date: December 3, 2008
Collected: November 3-4, 2008
Received: November 4, 2008
Prep/ Analyzed: November 8, 2008
Analytical Batch: 11AN08I

Investigation: **Chloride by Ion Chromatography using EPA 300.0**

Analytical Results Chloride

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
979606-1	OW-02M-018	12:35	15:16	mg/L	1000	200	2200
979606-2	OW-02S-018	13:57	15:28	mg/L	100	20.0	412
979606-3	OW-02D-018	15:45	15:39	mg/L	500	100	2060
979606-4	OW-05M-018	08:13	15:51	mg/L	1000	200	2230
979606-5	OW-05S-018	08:58	16:02	mg/L	100	20.0	399
979606-6	OW-91-018	09:15	16:14	mg/L	250	50.0	707
979606-7	OW-05D-018	10:12	16:48	mg/L	1000	200	1950
979606-8	OW-01D-018	13:37	16:59	mg/L	1000	200	2240
979606-9	OW-01S-018	11:20	17:11	mg/L	250	50.0	676
979606-10	OW-01M-018	12:17	17:22	mg/L	1000	200	2000
979606-11	OW-90-018	14:05	17:33	mg/L	1000	200	2080
979606-12	CW-01M-018	14:32	17:45	mg/L	1000	200	2720
979606-13	CW-01D-018	15:32	17:56	mg/L	1000	200	2060

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Fifteen (15) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM0.01
P.O. No.: 370367.MP.02.CM.01

Laboratory No.: 979606
Date: December 3, 2008
Collected: November 3-4, 2008
Received: November 4, 2008
Prep/ Analyzed: November 8, 2008
Analytical Batch: 11AN08I

Investigation: **Chloride by Ion Chromatography using EPA 300.0**

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	979636-1	671	666	0.75%	≤ 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	979636-1	671	200	4.00	800	1480	1471	101%	85-115%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500	---	<0.500	Yes
MRCCS	4.05	4.00	101%	90% - 110%	Yes
MRCVS#1	2.98	3.00	99.3%	90% - 110%	Yes
MRCVS#2	2.97	3.00	99.0%	90% - 110%	Yes
MRCVS#3	2.96	3.00	98.7%	90% - 110%	Yes
MRCVS#4	2.98	3.00	99.3%	90% - 110%	Yes
MRCVS#5	2.98	3.00	99.3%	90% - 110%	Yes
LCS	4.14	4.00	104%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conde

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Fifteen (15) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM0.01
P.O. No.: 370367.MP.02.CM.01

Laboratory No.: 979606
Date: December 3, 2008
Collected: November 3-4, 2008
Received: November 4, 2008
Prep/ Analyzed: November 8, 2008
Analytical Batch: 11AN08I

Investigation: **Sulfate by Ion Chromatography using EPA 300.0**

Analytical Results Sulfate

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
979606-1	OW-02M-018	12:35	18:08	mg/L	50.0	25.0	475
979606-2	OW-02S-018	13:57	15:28	mg/L	100	50.0	105
979606-3	OW-02D-018	15:45	18:19	mg/L	50.0	25.0	473
979606-4	OW-05M-018	08:13	18:30	mg/L	50.0	25.0	481
979606-5	OW-05S-018	08:58	19:05	mg/L	10.0	5.00	120
979606-6	OW-91-018	09:15	19:16	mg/L	10.0	5.00	145
979606-7	OW-05D-018	10:12	19:27	mg/L	50.0	25.0	476
979606-8	OW-01D-018	13:37	19:39	mg/L	50.0	25.0	479
979606-9	OW-01S-018	11:20	19:50	mg/L	10.0	5.00	146
979606-10	OW-01M-018	12:17	20:02	mg/L	50.0	25.0	487
979606-11	OW-90-018	14:05	20:13	mg/L	50.0	25.0	494
979606-12	CW-01M-018	14:32	20:25	mg/L	50.0	25.0	488
979606-13	CW-01D-018	15:32	20:36	mg/L	50.0	25.0	488

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sam Gandi
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Fifteen (15) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM0.01
P.O. No.: 370367.MP.02.CM.01

Laboratory No.: 979606
Date: December 3, 2008
Collected: November 3-4, 2008
Received: November 4, 2008
Prep/ Analyzed: November 8, 2008
Analytical Batch: 11AN08I

Investigation: **Sulfate by Ion Chromatography using EPA 300.0**

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	979636-1	1080	1080	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	979636-1	1080	200	10.0	2000	3100	3080	101%	85-115%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500	---	<0.500	Yes
MRCCS	20.3	20.0	102%	90% - 110%	Yes
MRCVS#1	15.0	15.0	100%	90% - 110%	Yes
MRCVS#2	15.0	15.0	100%	90% - 110%	Yes
MRCVS#3	15.0	15.0	100%	90% - 110%	Yes
MRCVS#4	15.1	15.0	101%	90% - 110%	Yes
LCS	20.3	20.0	102%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sean Conlon
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Fifteen (15) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM0.01
P.O. No.: 370367.MP.02.CM.01

Laboratory No.: 979606
Date: December 3, 2008
Collected: November 3-4, 2008
Received: November 4, 2008
Prep/ Analyzed: November 13, 2008
Analytical Batch: 111308A

Investigation: **Total Iron by Inductively Coupled Argon Plasma Atomic Emission Spectrometer using EPA 200.7**

Analytical Results Total Iron

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
979606-1	OW-02M-018	12:35	12:23	µg/L	1.00	20.0	ND
979606-2	OW-02S-018	13:57	12:39	µg/L	1.00	20.0	227
979606-3	OW-02D-018	15:45	12:44	µg/L	1.00	20.0	25.8
979606-4	OW-05M-018	08:13	12:48	µg/L	1.00	20.0	23.5
979606-5	OW-05S-018	08:58	15:16	µg/L	1.00	20.0	98.2
979606-6	OW-91-018	09:15	15:20	µg/L	1.00	20.0	57.1
979606-7	OW-05D-018	10:12	15:24	µg/L	1.00	20.0	24.0
979606-8	OW-01D-018	13:37	15:28	µg/L	1.00	20.0	77.8
979606-9	OW-01S-018	11:20	15:33	µg/L	1.00	20.0	37.2
979606-10	OW-01M-018	12:17	15:37	µg/L	1.00	20.0	23.8
979606-11	OW-90-018	14:05	15:41	µg/L	1.00	20.0	38.4
979606-12	CW-01M-018	14:32	15:45	µg/L	1.00	20.0	24.5
979606-13	CW-01D-018	15:32	15:49	µg/L	1.00	20.0	24.3

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Fifteen (15) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM0.01
P.O. No.: 370367.MP.02.CM.01

Laboratory No.: 979606
Date: December 3, 2008
Collected: November 3-4, 2008
Received: November 4, 2008
Prep/ Analyzed: November 13, 2008
Analytical Batch: 111308A

Investigation: **Total Iron by Inductively Coupled Argon Plasma Atomic Emission Spectrometer using EPA 200.7**

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	979606-1	ND	ND	0.00%	≤ 20%	Yes

QC Std I.D.	Lab Number	Conc.of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	979606-1	0.00	1.00	2000	2000	1740	2000	87.0%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<20.0	---	<20.0	Yes
MRCCS	5070	5000	101%	90% - 110%	Yes
MRCVS#1	5260	5000	105%	90% - 110%	Yes
MRCVS#2	5220	5000	104%	90% - 110%	Yes
ICS	2080	2000	104%	80% - 120%	Yes
LCS	5020	5000	100%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sam Candler
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

EXCELLENCE IN INDEPENDENT TESTING

Established 1931

14201 FRANKLIN AVENUE
TUSTIN, CALIFORNIA 92780-7008
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REPORT

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

Samples: Fifteen (15) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM0.01
P.O. No.: 370367.MP.02.CM.01

Investigation: California Title 22, Section 26 Metals [dissolved]

Laboratory No.: 979606
Reported December 3, 2008
Collected: November 3-4, 2008
Received: November 4, 2008
Analyzed: See Below
Revision 4

Analytical Results

SAMPLE ID: OW-02M-018 **Time Collected:** 12:35 **LAB ID:** 979606-1

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	ND	1.00	µg/L	50.0	111308A	11/13/08	17:08
Antimony	EPA 200.8	ND	1.00	µg/L	10.0	111308A	11/13/08	17:08
Arsenic	EPA 200.8	0.52	1.00	µg/L	0.20	111008A	11/10/08	13:51
Barium	EPA 200.8	61.6	1.00	µg/L	10.0	111008A	11/10/08	13:51
Beryllium	EPA 200.8	ND	1.00	µg/L	1.00	111308A	11/13/08	17:08
Cadmium	EPA 200.8	ND	1.00	µg/L	3.00	111008A	11/10/08	13:51
Chromium	EPA 200.8	1.27	1.00	µg/L	1.00	111308A	11/13/08	17:08
Cobalt	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	13:51
Copper	EPA 200.8	10.7	1.00	µg/L	5.00	111008A	11/10/08	13:51
Lead	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:51
Magnesium	EPA 200.7	17000	10.0	µg/L	500	120508A	12/05/08	16:50
Manganese	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:51
Mercury	EPA 245.1	ND	1.00	µg/L	0.20	11Hg08A	11/08/08	N/A
Molybdenum	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:51
Nickel	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:51
Selenium	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:51
Silver	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	13:51
Thallium	EPA 200.8	ND	1.00	µg/L	1.00	111008A	11/10/08	13:51
Vanadium	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	13:51
Zinc	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:51
Boron	EPA 200.7	1210	1.00	µg/L	200	111008A	11/10/08	16:29
Calcium	EPA 200.7	148000	200	µg/L	40000	111108A	11/11/08	15:18
Iron	EPA 200.7	ND	1.00	µg/L	20.0	111708A	11/17/08	10:41
Potassium	EPA 200.7	17400	10.0	µg/L	2000	111108A	11/11/08	13:01
Sodium	EPA 200.7	1280000	200	µg/L	40000	111108A	11/11/08	15:18

Revision 4

SAMPLE ID: OW-02S-018 **Time Collected:** 13:57 **LAB ID:** 979606-2

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	ND	1.00	µg/L	50.0	111308A	11/13/08	17:14
Antimony	EPA 200.8	ND	1.00	µg/L	10.0	111308A	11/13/08	17:14
Arsenic	EPA 200.8	1.61	1.00	µg/L	0.20	111008A	11/10/08	13:58
Barium	EPA 200.8	57.4	1.00	µg/L	10.0	111008A	11/10/08	13:58
Beryllium	EPA 200.8	ND	1.00	µg/L	1.00	111308A	11/13/08	17:14
Cadmium	EPA 200.8	ND	1.00	µg/L	3.00	111008A	11/10/08	13:58
Chromium	EPA 200.8	29.3	1.00	µg/L	1.00	111308A	11/13/08	17:14
Cobalt	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	13:58
Copper	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	13:58
Lead	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:58
Magnesium	EPA 200.7	4570	10.0	µg/L	500	120508A	12/05/08	16:54
Manganese	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:58
Mercury	EPA 245.1	ND	1.00	µg/L	0.20	11Hg08A	11/08/08	N/A
Molybdenum	EPA 200.8	26.6	1.00	µg/L	10.0	111008A	11/10/08	13:58
Nickel	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:58
Selenium	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:58
Silver	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	13:58
Thallium	EPA 200.8	ND	1.00	µg/L	1.00	111008A	11/10/08	13:58
Vanadium	EPA 200.8	5.70	1.00	µg/L	5.00	111008A	11/10/08	13:58
Zinc	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:58
Boron	EPA 200.7	566	1.00	µg/L	200	111008A	11/10/08	16:45
Calcium	EPA 200.7	31300	10.0	µg/L	2000	111108A	11/11/08	13:17
Iron	EPA 200.7	ND	1.00	µg/L	20.0	111708A	11/17/08	13:10
Potassium	EPA 200.7	9340	1.00	µg/L	500	111408A	11/14/08	14:42
Sodium	EPA 200.7	289000	100	µg/L	20000	111108A	11/11/08	15:23

Revision 4

SAMPLE ID: OW-02D-018 **Time Collected:** 15:45 **LAB ID:** 979606-3

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	ND	1.00	µg/L	50.0	111308A	11/13/08	17:21
Antimony	EPA 200.8	ND	1.00	µg/L	10.0	111308A	11/13/08	17:21
Arsenic	EPA 200.8	1.45	1.00	µg/L	0.20	111008A	11/10/08	14:04
Barium	EPA 200.8	21.2	1.00	µg/L	10.0	111008A	11/10/08	14:04
Beryllium	EPA 200.8	ND	1.00	µg/L	1.00	111308A	11/13/08	17:21
Cadmium	EPA 200.8	ND	1.00	µg/L	3.00	111008A	11/10/08	14:04
Chromium	EPA 200.8	ND	1.00	µg/L	1.00	111308A	11/13/08	17:21
Cobalt	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	14:04
Copper	EPA 200.8	7.50	1.00	µg/L	5.00	111008A	11/10/08	14:04
Lead	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:04
Magnesium	EPA 200.7	21100	10.00	µg/L	500	120508A	12/05/08	16:58
Manganese	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:04
Mercury	EPA 245.1	ND	1.00	µg/L	0.20	11Hg08A	11/08/08	N/A
Molybdenum	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:04
Nickel	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:04
Selenium	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:04
Silver	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	14:04
Thallium	EPA 200.8	ND	1.00	µg/L	1.00	111008A	11/10/08	14:04
Vanadium	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	14:04
Zinc	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:04
Boron	EPA 200.7	999	1.00	µg/L	200	111008A	11/10/08	16:49
Calcium	EPA 200.7	156000	200	µg/L	40000	111108A	11/11/08	15:29
Iron	EPA 200.7	ND	1.00	µg/L	20.0	111708A	11/17/08	11:21
Potassium	EPA 200.7	14400	10.0	µg/L	2000	111108A	11/11/08	13:21
Sodium	EPA 200.7	1230000	200	µg/L	40000	111108A	11/11/08	15:29

Revision 4

SAMPLE ID: OW-05M-018 **Time Collected:** 08:13 **LAB ID:** 979606-4

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	ND	1.00	µg/L	50.0	111308A	11/13/08	17:28
Antimony	EPA 200.8	ND	1.00	µg/L	10.0	111308A	11/13/08	17:28
Arsenic	EPA 200.8	0.30	1.00	µg/L	0.20	111008A	11/10/08	14:11
Barium	EPA 200.8	46.4	1.00	µg/L	10.0	111008A	11/10/08	14:11
Beryllium	EPA 200.8	ND	1.00	µg/L	1.00	111308A	11/13/08	17:28
Cadmium	EPA 200.8	ND	1.00	µg/L	3.00	111308A	11/13/08	17:28
Chromium	EPA 200.8	ND	1.00	µg/L	1.00	111308A	11/13/08	17:28
Cobalt	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	14:11
Copper	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	14:11
Lead	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:11
Magnesium	EPA 200.7	14000	10.0	µg/L	500	120508A	12/05/08	17:02
Manganese	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:11
Mercury	EPA 245.1	ND	1.00	µg/L	0.20	11Hg08A	11/08/08	N/A
Molybdenum	EPA 200.8	ND	1.00	µg/L	10.0	111308A	11/13/08	17:28
Nickel	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:11
Selenium	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:11
Silver	EPA 200.8	ND	1.00	µg/L	5.00	111308A	11/13/08	17:28
Thallium	EPA 200.8	ND	1.00	µg/L	1.00	111008A	11/10/08	14:11
Vanadium	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	14:11
Zinc	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:11
Boron	EPA 200.7	1140	1.00	µg/L	200	111008A	11/10/08	16:53
Calcium	EPA 200.7	170000	100	µg/L	20000	111108A	11/11/08	16:27
Iron	EPA 200.7	ND	1.00	µg/L	20.0	111708A	11/17/08	11:25
Potassium	EPA 200.7	16100	10.0	µg/L	2000	111108A	11/11/08	13:25
Sodium	EPA 200.7	919000	500	µg/L	100000	111108A	11/11/08	19:08

Revision 4

SAMPLE ID: OW-05S-018		Time Collected:	08:58			LAB ID:	979606-5	
Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	ND	1.00	µg/L	50.0	111308A	11/13/08	17:41
Antimony	EPA 200.8	ND	1.00	µg/L	10.0	111308A	11/13/08	17:41
Arsenic	EPA 200.8	0.91	1.00	µg/L	0.20	111008A	11/10/08	14:30
Barium	EPA 200.8	61.6	1.00	µg/L	10.0	111008A	11/10/08	14:30
Beryllium	EPA 200.8	ND	1.00	µg/L	1.00	111308A	11/13/08	17:41
Cadmium	EPA 200.8	ND	1.00	µg/L	3.00	111008A	11/10/08	14:30
Chromium	EPA 200.8	22.9	1.00	µg/L	1.00	111308A	11/13/08	17:41
Cobalt	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	14:30
Copper	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	14:30
Lead	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:30
Magnesium	EPA 200.7	8480	10.0	µg/L	500	120508A	12/05/08	17:06
Manganese	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:30
Mercury	EPA 245.1	ND	1.00	µg/L	0.20	11Hg08A	11/08/08	N/A
Molybdenum	EPA 200.8	16.9	1.00	µg/L	10.0	111008A	11/10/08	14:30
Nickel	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:30
Selenium	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:30
Silver	EPA 200.8	5.12	1.00	µg/L	5.00	111008A	11/10/08	14:30
Thallium	EPA 200.8	ND	1.00	µg/L	1.00	111008A	11/10/08	14:30
Vanadium	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	14:30
Zinc	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:30
Boron	EPA 200.7	384	1.00	µg/L	200	111008A	11/10/08	17:39
Calcium	EPA 200.7	53300	10.0	µg/L	2000	111108A	11/11/08	13:41
Iron	EPA 200.7	ND	1.00	µg/L	20.0	111708A	11/17/08	11:29
Potassium	EPA 200.7	11700	2.00	µg/L	500	111408A	11/14/08	15:51
Sodium	EPA 200.7	218000	100	µg/L	20000	111108A	11/11/08	16:31

Revision 4

SAMPLE ID: OW-91-018 **Time Collected:** 09:15 **LAB ID:** 979606-6

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	ND	1.00	µg/L	50.0	111308A	11/13/08	17:47
Antimony	EPA 200.8	ND	1.00	µg/L	10.0	111308A	11/13/08	17:47
Arsenic	EPA 200.8	0.73	1.00	µg/L	0.20	111008A	11/10/08	14:37
Barium	EPA 200.8	108	1.00	µg/L	10.0	111008A	11/10/08	14:37
Beryllium	EPA 200.8	ND	1.00	µg/L	1.00	111308A	11/13/08	17:47
Cadmium	EPA 200.8	ND	1.00	µg/L	3.00	111008A	11/10/08	14:37
Chromium	EPA 200.8	18.3	1.00	µg/L	1.00	111308A	11/13/08	17:47
Cobalt	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	14:37
Copper	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	14:37
Lead	EPA 200.8	ND	1.00	µg/L	10.00	111008A	11/10/08	14:37
Magnesium	EPA 200.7	20600	10.0	µg/L	500	120508A	12/05/08	17:10
Manganese	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:37
Mercury	EPA 245.1	ND	1.00	µg/L	0.20	11Hg08A	11/08/08	N/A
Molybdenum	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:37
Nickel	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:37
Selenium	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:37
Silver	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	14:37
Thallium	EPA 200.8	ND	1.00	µg/L	1.00	111008A	11/10/08	14:37
Vanadium	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	14:37
Zinc	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:37
Boron	EPA 200.7	263	1.00	µg/L	200	111008A	11/10/08	17:43
Calcium	EPA 200.7	91900	100	µg/L	20000	111108A	11/11/08	16:35
Iron	EPA 200.7	ND	1.00	µg/L	20.0	111708A	11/17/08	11:34
Potassium	EPA 200.7	19300	2.00	µg/L	500	111408A	11/14/08	15:55
Sodium	EPA 200.7	314000	100	µg/L	20000	111108A	11/11/08	16:35

Revision 4

SAMPLE ID: OW-05D-018 **Time Collected:** 10:12 **LAB ID:** 979606-7

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	ND	1.00	µg/L	50.0	111308A	11/13/08	17:54
Antimony	EPA 200.8	ND	1.00	µg/L	10.0	111308A	11/13/08	17:54
Arsenic	EPA 200.8	1.05	1.00	µg/L	0.20	111008A	11/10/08	14:44
Barium	EPA 200.8	25.9	1.00	µg/L	10.0	111008A	11/10/08	14:44
Beryllium	EPA 200.8	ND	1.00	µg/L	1.00	111308A	11/13/08	17:54
Cadmium	EPA 200.8	ND	1.00	µg/L	3.00	111008A	11/10/08	14:44
Chromium	EPA 200.8	ND	1.00	µg/L	1.00	111308A	11/13/08	17:54
Cobalt	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	14:44
Copper	EPA 200.8	5.18	1.00	µg/L	5.00	111008A	11/10/08	14:44
Lead	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:44
Magnesium	EPA 200.7	21200	10.0	µg/L	500	120508A	12/05/08	17:14
Manganese	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:44
Mercury	EPA 245.1	ND	1.00	µg/L	0.20	11Hg08A	11/08/08	N/A
Molybdenum	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:44
Nickel	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:44
Selenium	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:44
Silver	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	14:44
Thallium	EPA 200.8	ND	1.00	µg/L	1.00	111008A	11/10/08	14:44
Vanadium	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	14:44
Zinc	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:44
Boron	EPA 200.7	1070	1.00	µg/L	200	111008A	11/10/08	17:47
Calcium	EPA 200.7	170000	100	µg/L	20000	111108A	11/11/08	16:39
Iron	EPA 200.7	ND	1.00	µg/L	20.0	111708A	11/17/08	11:38
Potassium	EPA 200.7	17800	10.0	µg/L	2000	111108A	11/11/08	13:49
Sodium	EPA 200.7	881000	500	µg/L	100000	111108A	11/11/08	19:12

Revision 4

SAMPLE ID: OW-01D-018 **Time Collected:** 13:37 **LAB ID:** 979606-8

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	ND	1.00	µg/L	50.0	111308A	11/13/08	18:01
Antimony	EPA 200.8	ND	1.00	µg/L	10.0	111308A	11/13/08	18:01
Arsenic	EPA 200.8	1.25	1.00	µg/L	0.20	111008A	11/10/08	14:50
Barium	EPA 200.8	34.8	1.00	µg/L	10.0	111008A	11/10/08	14:50
Beryllium	EPA 200.8	ND	1.00	µg/L	1.00	111308A	11/13/08	18:01
Cadmium	EPA 200.8	ND	2.00	µg/L	3.00	111008A	11/10/08	16:04
Chromium	EPA 200.8	ND	1.00	µg/L	1.00	111308A	11/13/08	18:01
Cobalt	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	14:50
Copper	EPA 200.8	7.08	1.00	µg/L	5.00	111008A	11/10/08	14:50
Lead	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:50
Magnesium	EPA 200.7	10000	10.0	µg/L	500	120508A	12/05/08	17:18
Manganese	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:50
Mercury	EPA 245.1	ND	1.00	µg/L	0.20	11Hg08A	11/08/08	N/A
Molybdenum	EPA 200.8	ND	2.00	µg/L	10.0	111008A	11/10/08	16:04
Nickel	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:50
Selenium	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:50
Silver	EPA 200.8	ND	2.00	µg/L	5.00	111008A	11/10/08	16:04
Thallium	EPA 200.8	ND	1.00	µg/L	1.00	111008A	11/10/08	14:50
Vanadium	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	14:50
Zinc	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:50
Boron	EPA 200.7	1200	1.00	µg/L	200	111008A	11/10/08	17:51
Calcium	EPA 200.7	128000	100	µg/L	20000	111108A	11/11/08	16:44
Iron	EPA 200.7	ND	1.00	µg/L	20.0	111708A	11/17/08	11:42
Potassium	EPA 200.7	14800	10.0	µg/L	2000	111108A	11/11/08	13:53
Sodium	EPA 200.7	978000	500	µg/L	100000	111108A	11/11/08	19:16

Revision 4

SAMPLE ID: OW-01S-018 **Time Collected:** 11:20 **LAB ID:** 979606-9

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	ND	1.00	µg/L	50.0	111308A	11/13/08	18:08
Antimony	EPA 200.8	ND	1.00	µg/L	10.0	111308A	11/13/08	18:08
Arsenic	EPA 200.8	0.83	1.00	µg/L	0.20	111008A	11/10/08	14:57
Barium	EPA 200.8	106	1.00	µg/L	10.0	111008A	11/10/08	14:57
Beryllium	EPA 200.8	ND	1.00	µg/L	1.00	111308A	11/13/08	18:08
Cadmium	EPA 200.8	ND	1.00	µg/L	3.00	111008A	11/10/08	14:57
Chromium	EPA 200.8	18.1	1.00	µg/L	1.00	111308A	11/13/08	18:08
Cobalt	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	14:57
Copper	EPA 200.8	12.2	1.00	µg/L	5.00	111008A	11/10/08	14:57
Lead	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:57
Magnesium	EPA 200.7	19400	10.0	µg/L	500	120508A	12/05/08	17:39
Manganese	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:57
Mercury	EPA 245.1	ND	1.00	µg/L	0.20	11Hg08A	11/08/08	N/A
Molybdenum	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:57
Nickel	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:57
Selenium	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:57
Silver	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	14:57
Thallium	EPA 200.8	ND	1.00	µg/L	1.00	111008A	11/10/08	14:57
Vanadium	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	14:57
Zinc	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	14:57
Boron	EPA 200.7	315	1.00	µg/L	200	111008A	11/10/08	17:55
Calcium	EPA 200.7	94300	100	µg/L	20000	111108A	11/11/08	16:48
Iron	EPA 200.7	ND	1.00	µg/L	20.0	111708A	11/17/08	11:46
Potassium	EPA 200.7	9090	10.0	µg/L	2000	111108A	11/11/08	13:57
Sodium	EPA 200.7	320000	100	µg/L	20000	111108A	11/11/08	16:48

Revision 4

SAMPLE ID: OW-01M-018 **Time Collected:** 12:17 **LAB ID:** 979606-10

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	ND	1.00	µg/L	50.0	111308A	11/13/08	18:34
Antimony	EPA 200.8	ND	1.00	µg/L	10.0	111308A	11/13/08	18:34
Arsenic	EPA 200.8	0.80	1.00	µg/L	0.20	111008A	11/10/08	15:04
Barium	EPA 200.8	90.1	1.00	µg/L	10.0	111008A	11/10/08	15:04
Beryllium	EPA 200.8	ND	1.00	µg/L	1.00	111308A	11/13/08	18:34
Cadmium	EPA 200.8	ND	2.00	µg/L	3.00	111008A	11/10/08	16:10
Chromium	EPA 200.8	1.00	1.00	µg/L	1.00	111308A	11/13/08	18:34
Cobalt	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	15:04
Copper	EPA 200.8	7.79	1.00	µg/L	5.00	111008A	11/10/08	15:04
Lead	EPA 200.8	ND	1.00	µg/L	10.00	111008A	11/10/08	15:04
Magnesium	EPA 200.7	15200	10.0	µg/L	500	120508A	12/05/08	17:43
Manganese	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	15:04
Mercury	EPA 245.1	ND	1.00	µg/L	0.20	11Hg08A	11/08/08	N/A
Molybdenum	EPA 200.8	ND	2.00	µg/L	10.0	111008A	11/10/08	16:10
Nickel	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	15:04
Selenium	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	15:04
Silver	EPA 200.8	ND	2.00	µg/L	5.00	111008A	11/10/08	16:10
Thallium	EPA 200.8	ND	1.00	µg/L	1.00	111008A	11/10/08	15:04
Vanadium	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	15:04
Zinc	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	15:04
Boron	EPA 200.7	1250	1.00	µg/L	200	111008A	11/10/08	18:00
Calcium	EPA 200.7	166000	100	µg/L	20000	111108A	11/11/08	16:52
Iron	EPA 200.7	ND	1.00	µg/L	20.0	111708A	11/17/08	11:50
Potassium	EPA 200.7	16500	10.0	µg/L	2000	111108A	11/11/08	14:01
Sodium	EPA 200.7	900000	500	µg/L	100000	111108A	11/11/08	19:20

Revision 5

SAMPLE ID: OW-90-018 **Time Collected:** 15:32 **LAB ID:** 979606-11

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	ND	1.00	µg/L	50.0	111308A	11/13/08	18:40
Antimony	EPA 200.8	ND	1.00	µg/L	10.0	111308A	11/13/08	18:40
Arsenic	EPA 200.8	1.35	1.00	µg/L	0.20	111008A	11/10/08	15:11
Barium	EPA 200.8	89.4	1.00	µg/L	10.0	111008A	11/10/08	15:11
Beryllium	EPA 200.8	ND	1.00	µg/L	1.00	111308A	11/13/08	18:40
Cadmium	EPA 200.8	ND	2.00	µg/L	3.00	111008A	11/10/08	16:17
Chromium	EPA 200.8	1.42	1.00	µg/L	1.00	111308A	11/13/08	18:40
Cobalt	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	15:11
Copper	EPA 200.8	7.07	1.00	µg/L	5.00	111008A	11/10/08	15:11
Lead	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	15:11
Magnesium	EPA 200.7	9720	10.0	µg/L	500	120508A	12/05/08	17:47
Manganese	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	15:11
Mercury	EPA 245.1	ND	1.00	µg/L	0.20	11Hg08A	11/08/08	N/A
Molybdenum	EPA 200.8	ND	2.00	µg/L	10.0	111008A	11/10/08	16:17
Nickel	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	15:11
Selenium	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	15:11
Silver	EPA 200.8	ND	2.00	µg/L	5.00	111008A	11/10/08	16:17
Thallium	EPA 200.8	ND	1.00	µg/L	1.00	111008A	11/10/08	15:11
Vanadium	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	15:11
Zinc	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	15:11
Boron	EPA 200.7	1030	1.00	µg/L	200	111008A	11/10/08	18:04
Calcium	EPA 200.7	123000	100	µg/L	20000	111108A	11/11/08	16:56
Iron	EPA 200.7	ND	1.00	µg/L	20.0	111708A	11/17/08	11:54
Potassium	EPA 200.7	14400	10.0	µg/L	2000	111108A	11/11/08	14:06
Sodium	EPA 200.7	1060000	500	µg/L	100000	111108A	11/11/08	19:24

Revision 5

SAMPLE ID: CW-01M-018 **Time Collected:** 14:25 **LAB ID:** 979606-12

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	ND	1.00	µg/L	50.0	111308A	11/13/08	18:47
Antimony	EPA 200.8	ND	1.00	µg/L	10.0	111308A	11/13/08	18:47
Arsenic	EPA 200.8	0.95	1.00	µg/L	0.20	111008A	11/10/08	15:17
Barium	EPA 200.8	90.2	1.00	µg/L	10.0	111008A	11/10/08	15:17
Beryllium	EPA 200.8	ND	1.00	µg/L	1.00	111308A	11/13/08	18:47
Cadmium	EPA 200.8	ND	2.00	µg/L	3.00	111008A	11/10/08	16:24
Chromium	EPA 200.8	1.37	1.00	µg/L	1.00	111308A	11/13/08	18:47
Cobalt	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	15:17
Copper	EPA 200.8	6.94	1.00	µg/L	5.00	111008A	11/10/08	15:17
Lead	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	15:17
Magnesium	EPA 200.7	8860	10.0	µg/L	500	120508A	12/05/08	18:00
Manganese	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	15:17
Mercury	EPA 245.1	ND	1.00	µg/L	0.20	11Hg08A	11/08/08	N/A
Molybdenum	EPA 200.8	ND	2.00	µg/L	10.0	111008A	11/10/08	16:24
Nickel	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	15:17
Selenium	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	15:17
Silver	EPA 200.8	ND	2.00	µg/L	5.00	111008A	11/10/08	16:24
Thallium	EPA 200.8	ND	1.00	µg/L	1.00	111008A	11/10/08	15:17
Vanadium	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	15:17
Zinc	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	15:17
Boron	EPA 200.7	1230	1.00	µg/L	200	111008A	11/10/08	18:08
Calcium	EPA 200.7	174000	100	µg/L	20000	111108A	11/11/08	17:00
Iron	EPA 200.7	ND	1.00	µg/L	20.0	111708A	11/17/08	11:58
Potassium	EPA 200.7	13900	10.0	µg/L	2000	111108A	11/11/08	14:10
Sodium	EPA 200.7	1020000	500	µg/L	100000	111108A	11/11/08	19:28

TRUESDAIL LABORATORIES, INC.

Report Continued

Revision 5

SAMPLE ID: CW-01D-018 **Time Collected:** 12:52 **LAB ID:** 979606-13

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	ND	1.00	µg/L	50.0	111308A	11/13/08	18:54
Antimony	EPA 200.8	ND	1.00	µg/L	10.0	111308A	11/13/08	18:54
Arsenic	EPA 200.8	1.28	1.00	µg/L	0.20	111008A	11/10/08	15:24
Barium	EPA 200.8	22.1	1.00	µg/L	10.0	111008A	11/10/08	15:24
Beryllium	EPA 200.8	ND	1.00	µg/L	1.00	111308A	11/13/08	18:54
Cadmium	EPA 200.8	ND	2.00	µg/L	3.00	111008A	11/10/08	16:30
Chromium	EPA 200.8	ND	1.00	µg/L	1.00	111308A	11/13/08	18:54
Cobalt	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	15:24
Copper	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	15:24
Lead	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	15:24
Magnesium	EPA 200.7	8500	10.0	µg/L	500	120508A	12/05/08	18:04
Manganese	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	15:24
Mercury	EPA 245.1	ND	1.00	µg/L	0.20	11Hg08A	11/08/08	N/A
Molybdenum	EPA 200.8	ND	2.00	µg/L	10.0	111008A	11/10/08	16:30
Nickel	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	15:24
Selenium	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	15:24
Silver	EPA 200.8	ND	2.00	µg/L	5.00	111008A	11/10/08	16:30
Thallium	EPA 200.8	ND	1.00	µg/L	1.00	111008A	11/10/08	15:24
Vanadium	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	15:24
Zinc	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	15:24
Boron	EPA 200.7	1180	1.00	µg/L	200	111008A	11/10/08	18:12
Calcium	EPA 200.7	96000	100	µg/L	20000	111108A	11/11/08	18:00
Iron	EPA 200.7	ND	1.00	µg/L	20.0	111708A	11/17/08	13:05
Potassium	EPA 200.7	13100	10.0	µg/L	2000	111108A	11/11/08	14:17
Sodium	EPA 200.7	1040000	500	µg/L	100000	111108A	11/11/08	19:32

ND: Not detected,or below limit of detection.

DF: Dilution factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi, Manager
Analytical Services

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

CHAIN OF CUSTODY RECORD

[2008-CMP-018]

979606

COC Number 1 / 5[illegible]-10d-TLI
Turnaround Time 1 [illegible]s
Date 11/4/08 Page 1 OF 2

COMPANY E2
PROJECT PG&E Topock
ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612
PHONE (530) 229-3303 FAX (530) 339-3303
P.O. NUM 370367.MP.02.CM.01 TEAM 1
SAMPLERS (SIGNATURE) Aurora M.A. Abbott

Container:	250 ml Poly	500 ml Poly	500 ml Poly	1 Liter Poly	1 Liter Poly	1 Liter Poly	1 Liter Poly	1 Liter Poly	1 Liter Poly
Preservatives:	(NH4)2SO4/NH4OH, 4°C	HNO3	HNO3	4°C	4°C	4°C	4°C	4°C	H2SO4, pH<2, 4°C
Filtered:	Field	Field	NA	NA	NA	NA	NA	NA	NA
Holding Time:	28	180	180	28	28	28	28	28	28

ALERT !! Level III QC

	SAMPLE I.D.	DATE	TIME	Matrix	A Cr6 (218.6) Field Filtered	B 22 Al,B,Ca,Mo,K,Na,Mn,Fe Metals (E200.7) Field Filtered Title	C Total Metals (200.7) Total Iron, unfiltered	D Specific Conductance (120.1)	D TDS (SM2540C)	D Anions (300) Cl, Fl, SO4	D Turbidity (SM2130)	D Alkalinity (SM2320B)	F Ammonia (SM4500NH3)	Number of Containers	COMMENTS
-1	OW-02M-018	11/3/08	1235	GW	X	X	X	X	X	X	X	X	X	5	
-2	OW-02S-018	11/3/08	1357	GW	X	X	X	X	X	X	X	X	X	5	
-3	OW-02D-018	11/3/08	1545	GW	X	X	X	X	X	X	X	X	X	5	
-4	OW-05M-018	11/4/08	0813	GW	X	X	X	X	X	X	X	X	X	5	
-5	OW-05S-018	11/4/08	0858	GW	X	X	X	X	X	X	X	X	X	5	
-6	OW-91-018	11/4/08	0915	GW	X	X	X	X	X	X	X	X	X	5	
-7	OW-05D-018	11/4/08	1012	GW	X	X	X	X	X	X	X	X	X	5	
-8	OW-01D-018	11/4/08	1371	GW	X	X	X	X	X	X	X	X	X	5	
-9	OW-01S-018	11/4/08	1120	GW	X	X	X	X	X	X	X	X	X	5	

pH-2

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished) Aurora M.A. Abbott	Aurora Abbott	E2	11/4/08 1645
Signature (Received) [illegible]	[illegible]	[illegible]	1645
Signature (Relinquished) [illegible]	[illegible]	[illegible]	11-4-08 2130
Signature (Received) L. Shakumura	L. Shakumura	TLI	11/4/08 2148
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS
RECEIVED COOL ☐ WARM ☐ °F
CUSTODY SEALED YES ☐ NO ☐
SPECIAL REQUIREMENTS:

For Sample Conditions See Form Attached

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

CHAIN OF CUSTODY RECORD

[2008-CMP-018]

979606

COC Number 1/1 150-10d-TLI
Turnaround Time 10 ays
Date 11/4/08 Page 2 OF 2

COMPANY E2
PROJECT PG&E Topock
ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612
PHONE (530) 229-3303 FAX (530) 339-3303
P.O. NUM 370367.MP.02.CM.01 TEAM 1
SAMPLERS (SIGNATURE) Aurora M.H. Abbott

Container	250 ml Poly	500 ml Poly	500 ml Poly	1 Liter Poly	1 Liter Poly	1 Liter Poly	1 Liter Poly	1 Liter Poly	1 Liter Poly
Preservatives	(NH4)2SO4/NH4OH, 4°C	HNO3	HNO3	4°C	4°C	4°C	4°C	4°C	H2SO4, pH<2, 4°C
Filtered	Field	Field	NA	NA	NA	NA	NA	NA	NA
Holding Time	28	180	180	28	28	28	28	28	28
	Cr6 (218.6) Field Filtered A	22 Al B Ca Mn K Na Mn Fe Metals (E200.7) Field Filtered Title B	Total Metals (200.7) Total Iron, unfiltered C	Specific Conductance (120.1)	TDS (SM2540C) D	Anions (300) Cl, Fl, SO4	Turbidity (SM2130)	Alkalinity (SM2320B)	Ammonia (SM4500NH3) E

ALERT !!
Level III QC

	SAMPLE I.D.	DATE	TIME	Matrix	Number of Containers	COMMENTS
10	OW-01M-018	11/4/08	1211	GW	5	
11	OW-90-018	11/4/08	1405	GW	5	
12	CW-01M-018	11/4/08	1132	GW	5	
13	CW-01D-018	11/4/08	1532	GW	5	
14	OW-87-018	11/3/08	1600	GW	5	
15	OW-88-018	11/4/08	1552	GW	5	
					5	
					5	
					1	

CHAIN OF CUSTODY SIGNATURE RECORD

	Signature	Printed Name	Company/ Agency	Date/ Time
Relinquished	Aurora M.H. Abbott	Aurora Abbott	E2	11/4/08 1645
Received		Hipolito	TLI	11-4-08 1645
Relinquished		Hipolito	TLI	11-4-08 2140
Received	L. Shakespeare	Shakespeare	TLI	11/4/08 2140
Relinquished				
Received				

SAMPLE CONDITIONS
RECEIVED COOL ☐ WARM ☐ °F
CUSTODY SEALED YES ☐ NO ☐
SPECIAL REQUIREMENTS:

129

TRUESDAIL LABORATORIES, INC.

EXCELLENCE IN INDEPENDENT TESTING

Established 1931

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

December 8, 2008

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

Dear Mr. Duffy:

SUBJECT: REVISED CASE NARRATIVE PG&E TOPOCK 2008-CMP-018, GROUNDWATER MONITORING PROJECT, TLI NO.: 979669

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock 2008-CMP-018 groundwater-monitoring project. 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 are under Section 5.

The samples were received and delivered with the chain of custody on November 6, 2008, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

Sample 979669-2 was re-analyzed for Total Dissolved Iron due to the high relative standard deviation. The result from the re-analysis is reported.

Due to the difficulty of getting the QC for Dissolved Magnesium by EPA 200.7 to pass, Mr. Shawn Duffy requested that this SDG be reported without the Magnesium results. The Magnesium data is to be submitted when it becomes available.

No other violations or non-conformance 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.

San Cande

for Mona Nassimi
Manager, Analytical Services

K. R. P. Iyer

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

TRUESDAIL LABORATORIES, INC.

EXCELLENCE IN INDEPENDENT TESTING

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Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Seven (7) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM.01

Laboratory No.: 979669
Date: December 4, 2008
Collected: November 5, 2008
Received: November 6, 2008

ANALYST LIST

METHOD	PARAMETER	ANALYST
EPA 120.1	Specific Conductivity	Tina Acquiat
SM 2540C	Total Dissolved Solids	Tina Acquiat
SM 2320B	Alkalinity	Iordan Stavrev
SM 2130B	Turbidity	Gautam Savani
EPA 300.0	Anions	Giawad Ghenniwa
SM 4500-NH3 D	Ammonia	Iordan Stavrev
EPA 200.7	Metals by ICP	Hope Trinidad / Hao Ton / Daniel Kane
EPA 200.8	Metals by ICP/MS	Romuel Chavez
EPA 245.1	Mercury	Romuel Chavez
EPA 218.6	Hexavalent Chromium	Michael Nonezyan

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REPORT

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Sample: Seven (7) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM.01
P.O. No.: 370367.MP.02.CM.01

Laboratory No.: 979669
Date: December 4, 2008
Collected: November 5, 2008
Received: November 6, 2008
Analyzed: November 20, 2008
Analytical Batch: 11CrH08AI

Investigation: **Hexavalent Chromium by IC Using Method EPA 218.6**

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
979669-1	CW-04D-018	09:41	15:40	µg/L	5.00	1.00	2.54
979669-2	CW-04M-018	10:49	15:52	µg/L	1.05	0.20	18.4
979669-3	CW-03D-018	12:47	17:59	µg/L	5.00	1.00	ND
979669-4	CW-03M-018	14:01	18:42	µg/L	5.00	1.00	11.5
979669-5	CW-02D-018	15:58	19:13	µg/L	5.00	1.00	ND
979669-6	CW-02M-018	16:57	19:34	µg/L	5.00	1.00	9.61
979669-7	OW-89-018	17:35	17:39	µg/L	1.05	0.20	ND

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conlan
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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Laboratory No.: 979669
Date: December 4, 2008
Collected: November 5, 2008
Received: November 6, 2008
Analyzed: November 20, 2008
Analytical Batch: 11CrH08AI

Investigation: **Hexavalent Chromium by IC Using Method EPA 218.6**

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	979559-4	11.5	11.6	0.87%	< 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	979669-1	2.54	5.00	5.00	25.0	26.0	27.5	93.8%	90-110%	Yes
MS	979669-2	18.4	1.06	20.0	21.2	38.5	39.6	94.8%	90-110%	Yes
MS	979669-3	0.00	5.00	1.00	5.00	5.14	5.00	103%	90-110%	Yes
MS	979669-4	11.5	5.00	15.0	75.0	81.5	86.5	93.3%	90-110%	Yes
MS	979669-5	0.00	5.00	1.00	5.00	4.78	5.00	95.6%	90-110%	Yes
MS	979669-6	9.61	5.00	15.0	75.0	79.6	84.6	93.3%	90-110%	Yes
MS	979669-7	0.00	1.06	1.00	1.06	1.04	1.06	98.1%	90-110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sam Cowin
Mona Nassimi, Manager
Analytical Services

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Laboratory No.: 979669
Date: December 4, 2008
Collected: November 5, 2008
Received: November 6, 2008
Analyzed: November 20, 2008
Analytical Batch: 11CrH08Al

Investigation: **Hexavalent Chromium by IC Using Method EPA 218.6**

QA/QC Summary

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.200	---	<0.200	Yes
MRCCS	5.27	5.00	105%	90% - 110%	Yes
MRCVS#1	9.90	10.0	99.0%	95% - 105%	Yes
MRCVS#2	9.78	10.0	97.8%	95% - 105%	Yes
MRCVS#3	9.69	10.0	96.9%	95% - 105%	Yes
MRCVS#4	9.73	10.0	97.3%	95% - 105%	Yes
MRCVS#5	9.82	10.0	98.2%	95% - 105%	Yes
MRCVS#6	9.81	10.0	98.1%	95% - 105%	Yes
LCS	5.28	5.00	106%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).

DF: Dilution Factor.

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sam Casola
Mona Nassimi, Manager
Analytical Services

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Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM.01
P.O. No.: 370367.MP.02.CM.01

Laboratory No.: 979669

Date: December 4, 2008
Collected: November 5, 2008
Received: November 6, 2008
Prep/ Analyzed: November 7, 2008
Analytical Batch: 11EC08E

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	MDL	DF	RL	Results
979669-1	CW-04D-018	µmhos/cm	EPA 120.1	0.099	1.00	2.00	9040
979669-2	CW-04M-018	µmhos/cm	EPA 120.1	0.099	1.00	2.00	5840
979669-3	CW-03D-018	µmhos/cm	EPA 120.1	0.099	1.00	2.00	6760
979669-4	CW-03M-018	µmhos/cm	EPA 120.1	0.099	1.00	2.00	8290
979669-5	CW-02D-018	µmhos/cm	EPA 120.1	0.099	1.00	2.00	6710
979669-6	CW-02M-018	µmhos/cm	EPA 120.1	0.099	1.00	2.00	6610

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	979669-6	6610	6620	0.15%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<1.00	---	<1.00	Yes
CCS	700	706	99.2%	90% - 110%	Yes
CVS#1	967	990	97.7%	90% - 110%	Yes
CVS#2	967	990	97.7%	90% - 110%	Yes
LCS	701	706	99.3%	90% - 110%	Yes
LCSD	701	706	99.3%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi, Manager
Analytical Services

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REPORT

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Attention: Shawn Duffy

Sample: Seven (7) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM.01
P.O. No.: 370367.MP.02.CM.01

Laboratory No.: 979669
Date: December 4, 2008
Collected: November 5, 2008
Received: November 6, 2008
Prep/ Analyzed: November 11, 2008
Analytical Batch: 11TDS08C

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

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
979669-1	CW-04D-018	mg/L	SM 2540C	250	6110
979669-2	CW-04M-018	mg/L	SM 2540C	125	3720
979669-3	CW-03D-018	mg/L	SM 2540C	250	4070
979669-4	CW-03M-018	mg/L	SM 2540C	250	5250
979669-5	CW-02D-018	mg/L	SM 2540C	250	4030
979669-6	CW-02M-018	mg/L	SM 2540C	250	4190

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	979669-6	4190	4270	0.95%	≤ 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<25.0	---	<25.0	Yes
LCS 1	507	500	101%	90% - 110%	Yes
LCS 2	503	500	101%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

For Sam Conde
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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Laboratory No.: 979669

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Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM.01
P.O. No.: 370367.MP.02.CM.01

Date: December 4, 2008
Collected: November 5, 2008
Received: November 6, 2008
Prep/ Analyzed: November 11, 2008
Analytical Batch: 11ALK08C

Investigation:

Alkalinity by SM 2320B

Analytical Results Total Alkalinity, Bicarbonate, Carbonate

TLI I.D.	Field I.D.	Units	RL	Total Alkalinity	Bicarbonate	Carbonate
979669-1	CW-04D-018	mg/L	5.00	50.0	50.0	ND
979669-2	CW-04M-018	mg/L	5.00	55.0	55.0	ND
979669-3	CW-03D-018	mg/L	5.00	56.0	56.0	ND
979669-4	CW-03M-018	mg/L	5.00	56.0	56.0	ND
979669-5	CW-02D-018	mg/L	5.00	58.0	58.0	ND
979669-6	CW-02M-018	mg/L	5.00	50.0	50.0	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	979669-6	50.0	49.0	2.02%	≤ 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	979669-6	50.0	1.00	100	100	155	150	105%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<5.00	---	<5.00	Yes
LCS	102	100	102%	90% - 110%	Yes

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Mona Nassimi, Manager
Analytical Services

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Attention: Shawn Duffy

Sample: Seven (7) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM.01
P.O. No.: 370367.MP.02.CM.01

Laboratory No.: 979669
Date: December 4, 2008
Collected: November 5, 2008
Received: November 6, 2008
Prep/ Analyzed: November 7, 2008
Analytical Batch: 11TUC08E

Investigation: **Turbidity by Method SM 2130B**

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
979669-1	CW-04D-018	09:41	NTU	1.00	0.100	0.103
979669-2	CW-04M-018	10:49	NTU	1.00	0.100	0.100
979669-3	CW-03D-018	12:47	NTU	1.00	0.100	0.142
979669-4	CW-03M-018	14:01	NTU	1.00	0.100	0.275
979669-5	CW-02D-018	15:58	NTU	1.00	0.100	0.232
979669-6	CW-02M-018	16:57	NTU	1.00	0.100	0.149

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	979647-11	ND	ND	0.00%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.100	---	<0.100	Yes
LCS	7.66	8.00	95.8%	90% - 110%	Yes
LCS	7.70	8.00	96.3%	90% - 110%	Yes
LCS	7.75	8.00	96.9%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sean Carla
Mona Nassimi, Manager
Analytical Services

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P.O. No.: 370367.MP.02.CM.01

Laboratory No.: 979669
Date: December 4, 2008
Collected: November 5, 2008
Received: November 6, 2008
Prep/ Analyzed: November 11, 2008
Analytical Batch: 11NH3-E08C

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

Analytical Results Ammonia as N

TLI I.D.	Field I.D.	Sample Time	Method	Units	DF	RL	Results
979669-1	CW-04D-018	09:41	SM 4500-NH3 D	mg/L	1.00	0.500	ND
979669-2	CW-04M-018	10:49	SM 4500-NH3 D	mg/L	1.00	0.500	ND
979669-3	CW-03D-018	12:47	SM 4500-NH3 D	mg/L	1.00	0.500	ND
979669-4	CW-03M-018	14:01	SM 4500-NH3 D	mg/L	1.00	0.500	ND
979669-5	CW-02D-018	15:58	SM 4500-NH3 D	mg/L	1.00	0.500	ND
979669-6	CW-02M-018	16:57	SM 4500-NH3 D	mg/L	1.00	0.500	ND

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	979669-1	ND	ND	0.00%	≤ 20%	Yes

QC Std I.D.	Lab Number	Conc.of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	979669-1	0.00	1.00	6.00	6.00	6.00	6.00	100%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500	---	<0.500	Yes
MRCCS	6.05	6.00	101%	90% - 110%	Yes
MRCVS#1	6.05	6.00	101%	90% - 110%	Yes
LCS	10.1	10.0	101%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sean Candler
Mona Nassimi, Manager
Analytical Services

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Laboratory No.: 979669
Date: December 4, 2008
Collected: November 5, 2008
Received: November 6, 2008
Prep/ Analyzed: November 10, 2008
Analytical Batch: 11AN08J

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
979669-1	CW-04D-018	09:41	10:06	mg/L	5.00	0.500	4.54
979669-2	CW-04M-018	10:49	10:18	mg/L	5.00	0.500	1.93
979669-3	CW-03D-018	12:47	10:29	mg/L	5.00	0.500	6.74
979669-4	CW-03M-018	14:01	10:41	mg/L	5.00	0.500	2.74
979669-5	CW-02D-018	15:58	10:52	mg/L	5.00	0.500	6.18
979669-6	CW-02M-018	16:57	11:03	mg/L	5.00	0.500	2.92

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	979669-2	1.93	1.97	2.05%	≤ 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	979669-2	1.93	5.00	4.00	20.0	22.6	21.9	103%	85-115%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500	---	<0.500	Yes
MRCCS	4.12	4.00	103%	90% - 110%	Yes
MRCVS#1	3.12	3.00	104%	90% - 110%	Yes
LCS	4.13	4.00	103%	90% - 110%	Yes

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Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sam Cadra
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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Project No.: 370367.MP.02.CM.01
P.O. No.: 370367.MP.02.CM.01

Laboratory No.: 979669
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Collected: November 5, 2008
Received: November 6, 2008
Prep/ Analyzed: November 10, 2008
Analytical Batch: 11AN08J

Investigation: **Chloride by Ion Chromatography using EPA 300.0**

Analytical Results Chloride

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
979669-1	CW-04D-018	09:41	12:46	mg/L	1000	200	2950
979669-2	CW-04M-018	10:49	12:12	mg/L	2000	400	1800
979669-3	CW-03D-018	12:47	12:58	mg/L	1000	200	2020
979669-4	CW-03M-018	14:01	13:09	mg/L	1000	200	2660
979669-5	CW-02D-018	15:58	13:20	mg/L	1000	200	2030
979669-6	CW-02M-018	16:57	14:31	mg/L	1000	200	2120

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	979669-2	1800	1780	1.12%	≤ 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	979669-2	1800	2000	2.00	4000	5930	5800	103%	85-115%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500	---	<0.500	Yes
MRCCS	4.04	4.00	101%	90% - 110%	Yes
MRCVS#1	3.00	3.00	100%	90% - 110%	Yes
MRCVS#2	3.04	3.00	101%	90% - 110%	Yes
MRCVS#3	2.99	3.00	99.7%	90% - 110%	Yes
LCS	4.04	4.00	101%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sean Conlin
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

EXCELLENCE IN INDEPENDENT TESTING

Established 1931

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

REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Seven (7) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM.01
P.O. No.: 370367.MP.02.CM.01

Laboratory No.: 979669
Date: December 4, 2008
Collected: November 5, 2008
Received: November 6, 2008
Prep/ Analyzed: November 10, 2008
Analytical Batch: 11AN08J

Investigation: **Sulfate by Ion Chromatography using EPA 300.0**

Analytical Results Sulfate

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
979669-1	CW-04D-018	09:41	18:11	mg/L	25.0	12.5	544
979669-2	CW-04M-018	10:49	18:22	mg/L	10.0	5.00	297
979669-3	CW-03D-018	12:47	18:34	mg/L	25.0	12.5	486
979669-4	CW-03M-018	14:01	18:45	mg/L	25.0	12.5	407
979669-5	CW-02D-018	15:58	18:56	mg/L	25.0	12.5	486
979669-6	CW-02M-018	16:57	19:31	mg/L	25.0	12.5	401

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sam Cardu
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Seven (7) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM.01
P.O. No.: 370367.MP.02.CM.01

Laboratory No.: 979669
Date: December 4, 2008
Collected: November 5, 2008
Received: November 6, 2008
Prep/ Analyzed: November 10, 2008
Analytical Batch: 11AN08J

Investigation: **Sulfate by Ion Chromatography using EPA 300.0**

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	979663-3	367	365	0.55%	≤ 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	979663-3	367	100	4.00	400	772	767	101%	85-115%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<0.500	---	<0.500	Yes
MRCCS	20.4	20.0	102%	90% - 110%	Yes
MRCVS#1	15.1	15.0	101%	90% - 110%	Yes
MRCVS#2	15.1	15.0	101%	90% - 110%	Yes
MRCVS#3	15.1	15.0	101%	90% - 110%	Yes
MRCVS#4	15.1	15.0	101%	90% - 110%	Yes
MRCVS#5	15.1	15.0	101%	90% - 110%	Yes
LCS	20.4	20.0	102%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sam Cash
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Seven (7) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM.01
P.O. No.: 370367.MP.02.CM.01

Laboratory No.: 979669
Date: December 4, 2008
Collected: November 5, 2008
Received: November 6, 2008
Prep/ Analyzed: November 13, 2008
Analytical Batch: 111308A

Investigation: **Total Iron by Inductively Coupled Argon Plasma Atomic Emission Spectrometer using EPA 200.7**

Analytical Results Total Iron

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
979669-1	CW-04D-018	09:41	15:53	µg/L	1.00	20.0	24.8
979669-2	CW-04M-018	10:49	17:24	µg/L	1.00	20.0	21.3
979669-3	CW-03D-018	12:47	17:28	µg/L	1.00	20.0	20.3
979669-4	CW-03M-018	14:01	17:32	µg/L	1.00	20.0	22.9
979669-5	CW-02D-018	15:58	17:36	µg/L	1.00	20.0	26.0
979669-6	CW-02M-018	16:57	17:40	µg/L	1.00	20.0	ND

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sean Carda
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Seven (7) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM.01
P.O. No.: 370367.MP.02.CM.01

Laboratory No.: 979669
Date: December 4, 2008
Collected: November 5, 2008
Received: November 6, 2008
Prep/ Analyzed: November 13, 2008
Analytical Batch: 111308A

Investigation: **Total Iron by Inductively Coupled Argon Plasma Atomic Emission Spectrometer using EPA 200.7**

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	979606-1	ND	ND	0.00%	≤ 20%	Yes

QC Std I.D.	Lab Number	Conc.of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	979606-1	0.00	1.00	2000	2000	1740	2000	87.0%	75-125%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
Blank	ND	<20.0	---	<20.0	Yes
MRCCS	5070	5000	101%	90% - 110%	Yes
MRCVS#1	5220	5000	104%	90% - 110%	Yes
MRCVS#2	4910	5000	98.2%	90% - 110%	Yes
MRCVS#3	5160	5000	103%	90% - 110%	Yes
ICS	2060	2000	104%	80% - 120%	Yes
LCS	5020	5000	100%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sam Cantu
Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

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

Samples: Seven (7) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 370367.MP.02.CM.01
P.O. No.: 370367.MP.02.CM.01

Investigation: California Title 22, Section 26 Metals [dissolved]

Laboratory No.: 979669
Reported December 8, 2008
Collected: March 28, 4582
Received: November 6, 2008
Analyzed: See Below
Revision 1

Analytical Results

SAMPLE ID: CW-04D-018 **Time Collected:** 09:41 **LAB ID:** 979669-1

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	ND	1.00	µg/L	50.0	111308A	11/13/08	14:21
Antimony	EPA 200.8	ND	1.00	µg/L	10.0	111308A	11/13/08	14:21
Arsenic	EPA 200.8	2.89	1.00	µg/L	0.20	111008A	11/10/08	13:12
Barium	EPA 200.8	28.1	1.00	µg/L	10.0	111008A	11/10/08	13:12
Beryllium	EPA 200.8	ND	1.00	µg/L	1.00	111708A	11/17/08	11:21
Cadmium	EPA 200.8	ND	2.00	µg/L	3.00	111008A	11/10/08	16:37
Chromium	EPA 200.8	2.94	1.00	µg/L	1.00	111308A	11/13/08	14:21
Cobalt	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	13:12
Copper	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	13:12
Lead	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:12
Magnesium	EPA 200.7	9190	10.0	µg/L	500	120508A	12/05/08	15:28
Manganese	EPA 200.7	ND	1.00	µg/L	10.0	111808A	11/18/08	15:56
Mercury	EPA 245.1	ND	1.00	µg/L	0.20	11HG08D	11/19/08	N/A
Molybdenum	EPA 200.8	26.8	2.00	µg/L	10.0	111008A	11/10/08	16:37
Nickel	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:12
Selenium	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:12
Silver	EPA 200.8	ND	2.00	µg/L	5.00	111008A	11/10/08	16:37
Thallium	EPA 200.8	ND	1.00	µg/L	1.00	111008A	11/10/08	13:12
Vanadium	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	13:12
Zinc	EPA 200.8	ND	1.00	µg/L	10.0	111308A	11/13/08	14:21
Boron	EPA 200.7	1300	1.00	µg/L	20.0	112008A	11/20/08	12:06
Calcium	EPA 200.7	162000	100	µg/L	20000	111108A	11/11/08	18:04
Iron	EPA 200.7	ND	1.00	µg/L	20.0	111808A	11/18/08	15:56
Potassium	EPA 200.7	15900	10.0	µg/L	2000	111808A	11/18/08	17:20
Sodium	EPA 200.7	1510000	500	µg/L	100000	111108A	11/11/08	19:36

Revision 1

SAMPLE ID: CW-04M-018 **Time Collected:** 10:49 **LAB ID:** 979669-2

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	ND	1.00	µg/L	50.0	111308A	11/13/08	14:48
Antimony	EPA 200.8	ND	1.00	µg/L	10.0	111308A	11/13/08	14:48
Arsenic	EPA 200.8	1.87	1.00	µg/L	0.20	111008A	11/10/08	13:18
Barium	EPA 200.8	78.7	1.00	µg/L	10.0	111008A	11/10/08	13:18
Beryllium	EPA 200.8	ND	1.00	µg/L	1.00	111308A	11/13/08	14:48
Cadmium	EPA 200.8	ND	1.00	µg/L	3.00	111008A	11/10/08	13:18
Chromium	EPA 200.8	17.8	1.00	µg/L	1.00	111308A	11/13/08	14:48
Cobalt	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	13:18
Copper	EPA 200.8	6.95	1.00	µg/L	5.00	111008A	11/10/08	13:18
Lead	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:18
Magnesium	EPA 200.7	10100	10.0	µg/L	500	120508A	12/05/08	15:41
Manganese	EPA 200.7	ND	1.00	µg/L	10.0	111808A	11/18/08	16:12
Mercury	EPA 245.1	ND	1.00	µg/L	0.20	11HG08D	11/19/08	N/A
Molybdenum	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:18
Nickel	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:18
Selenium	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:18
Silver	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	13:18
Thallium	EPA 200.8	ND	1.00	µg/L	1.00	111008A	11/10/08	13:18
Vanadium	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	13:18
Zinc	EPA 200.8	ND	1.00	µg/L	10.0	111308A	11/13/08	14:48
Boron	EPA 200.7	648	1.00	µg/L	20.0	112008A	11/20/08	12:23
Calcium	EPA 200.7	127000	100	µg/L	20000	111108A	11/11/08	18:08
Iron	EPA 200.7	ND	1.00	µg/L	20.0	120408A	12/04/08	17:44
Potassium	EPA 200.7	11800	10.0	µg/L	2000	111808A	11/18/08	17:54
Sodium	EPA 200.7	769000	500	µg/L	100000	111108A	11/11/08	19:41

Revision 1

SAMPLE ID: CW-03D-018 **Time Collected:** 12:47 **LAB ID:** 979669-3

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	ND	1.00	µg/L	50.0	111308A	11/13/08	14:54
Antimony	EPA 200.8	ND	1.00	µg/L	10.0	111308A	11/13/08	14:54
Arsenic	EPA 200.8	1.39	1.00	µg/L	0.20	111008A	11/10/08	13:25
Barium	EPA 200.8	10.3	1.00	µg/L	10.0	111008A	11/10/08	13:25
Beryllium	EPA 200.8	ND	1.00	µg/L	1.00	111308A	11/13/08	14:54
Cadmium	EPA 200.8	ND	2.00	µg/L	3.00	111008A	11/10/08	16:43
Chromium	EPA 200.8	1.02	1.00	µg/L	1.00	111308A	11/13/08	14:54
Cobalt	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	13:25
Copper	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	13:25
Lead	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:25
Magnesium	EPA 200.7	4010	1.00	µg/L	100	120508A	12/05/08	15:45
Manganese	EPA 200.7	ND	1.00	µg/L	10.0	111808A	11/18/08	16:16
Mercury	EPA 245.1	ND	1.00	µg/L	0.20	11HG08D	11/19/08	N/A
Molybdenum	EPA 200.8	69.3	2.00	µg/L	10.0	111008A	11/10/08	16:43
Nickel	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:25
Selenium	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:25
Silver	EPA 200.8	ND	2.00	µg/L	5.00	111008A	11/10/08	16:43
Thallium	EPA 200.8	ND	1.00	µg/L	1.00	111008A	11/10/08	13:25
Vanadium	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	13:25
Zinc	EPA 200.8	ND	1.00	µg/L	10.0	111308A	11/13/08	14:54
Boron	EPA 200.7	1340	1.00	µg/L	20.0	112008A	11/20/08	12:27
Calcium	EPA 200.7	75800	10.0	µg/L	2000	111108A	11/11/08	14:48
Iron	EPA 200.7	ND	1.00	µg/L	20.0	111808A	11/18/08	16:16
Potassium	EPA 200.7	11200	10.0	µg/L	2000	111808A	11/18/08	17:59
Sodium	EPA 200.7	1040000	500	µg/L	100000	111108A	11/11/08	19:45

Revision 1

SAMPLE ID: CW-03M-018 **Time Collected:** 14:01 **LAB ID:** 979669-4

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	ND	1.00	µg/L	50.0	111308A	11/13/08	15:47
Antimony	EPA 200.8	ND	1.00	µg/L	10.0	111308A	11/13/08	16:42
Arsenic	EPA 200.8	0.69	1.00	µg/L	0.20	111008A	11/10/08	13:31
Barium	EPA 200.8	51.5	1.00	µg/L	10.0	111008A	11/10/08	13:31
Beryllium	EPA 200.8	ND	1.00	µg/L	1.00	111308A	11/13/08	15:47
Cadmium	EPA 200.8	ND	2.00	µg/L	3.00	111008A	11/10/08	16:50
Chromium	EPA 200.8	11.6	1.00	µg/L	1.00	111308A	11/13/08	15:47
Cobalt	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	13:31
Copper	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	13:31
Lead	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:31
Magnesium	EPA 200.7	16100	10.0	µg/L	500	120508A	12/05/08	16:01
Manganese	EPA 200.7	ND	1.00	µg/L	10.0	111808A	11/18/08	16:21
Mercury	EPA 245.1	ND	1.00	µg/L	0.20	11HG08D	11/19/08	N/A
Molybdenum	EPA 200.8	15.8	2.00	µg/L	10.0	111008A	11/10/08	16:50
Nickel	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:31
Selenium	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:31
Silver	EPA 200.8	ND	2.00	µg/L	5.00	111008A	11/10/08	16:50
Thallium	EPA 200.8	ND	1.00	µg/L	1.00	111008A	11/10/08	13:31
Vanadium	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	13:31
Zinc	EPA 200.8	ND	1.00	µg/L	10.0	111308A	11/13/08	15:47
Boron	EPA 200.7	890	1.00	µg/L	20.0	112008A	11/20/08	12:31
Calcium	EPA 200.7	204000	100	µg/L	20000	111108A	11/11/08	18:17
Iron	EPA 200.7	ND	1.00	µg/L	20.0	111808A	11/18/08	16:21
Potassium	EPA 200.7	16700	10.0	µg/L	2000	111808A	11/18/08	18:03
Sodium	EPA 200.7	1280000	500	µg/L	100000	111108A	11/11/08	20:31

Revision 1

SAMPLE ID: CW-02M-018 **Time Collected:** 16:57 **LAB ID:** 979669-5

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	ND	1.00	µg/L	50.0	111308A	11/13/08	15:55
Antimony	EPA 200.8	ND	1.00	µg/L	10.0	111308A	11/13/08	15:55
Arsenic	EPA 200.8	3.57	1.00	µg/L	0.20	111008A	11/10/08	13:38
Barium	EPA 200.8	12.1	1.00	µg/L	10.0	111008A	11/10/08	13:38
Beryllium	EPA 200.8	ND	1.00	µg/L	1.00	111308A	11/13/08	15:55
Cadmium	EPA 200.8	ND	1.00	µg/L	3.00	111008A	11/10/08	13:38
Chromium	EPA 200.8	ND	1.00	µg/L	1.00	111308A	11/13/08	15:55
Cobalt	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	13:38
Copper	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	13:38
Lead	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:38
Magnesium	EPA 200.7	3260	10.0	µg/L	500	120508A	12/05/08	16:41
Manganese	EPA 200.7	ND	1.00	µg/L	10.0	111808A	11/18/08	17:30
Mercury	EPA 245.1	ND	1.00	µg/L	0.20	11HG08D	11/19/08	N/A
Molybdenum	EPA 200.8	25.0	1.00	µg/L	10.0	111008A	11/10/08	13:38
Nickel	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:38
Selenium	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:38
Silver	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	13:38
Thallium	EPA 200.8	ND	1.00	µg/L	1.00	111008A	11/10/08	13:38
Vanadium	EPA 200.8	5.59	1.00	µg/L	5.00	111008A	11/10/08	13:38
Zinc	EPA 200.8	ND	1.00	µg/L	10.0	111308A	11/13/08	15:55
Boron	EPA 200.7	1270	1.00	µg/L	20.0	112008A	11/20/08	12:55
Calcium	EPA 200.7	75000	10.0	µg/L	2000	111108A	11/11/08	14:56
Iron	EPA 200.7	ND	1.00	µg/L	20.0	120408A	12/04/08	17:30
Potassium	EPA 200.7	11400	10.0	µg/L	2000	111808A	11/18/08	18:07
Sodium	EPA 200.7	1080000	500	µg/L	100000	111108A	11/11/08	20:35

Revision 1

SAMPLE ID: OW-89-018 **Time Collected:** 17:35 **LAB ID:** 979669-6

Parameter	Method	Reported Value	DF	Units	RL	Batch	Date Analyzed	Time Analyzed
Aluminum	EPA 200.8	ND	1.00	µg/L	50.0	111308A	11/13/08	16:01
Antimony	EPA 200.8	ND	1.00	µg/L	10.0	111308A	11/13/08	16:01
Arsenic	EPA 200.8	1.68	1.00	µg/L	0.20	111008A	11/10/08	13:45
Barium	EPA 200.8	67.0	1.00	µg/L	10.0	111008A	11/10/08	13:45
Beryllium	EPA 200.8	ND	1.00	µg/L	1.00	111308A	11/13/08	16:01
Cadmium	EPA 200.8	ND	1.00	µg/L	3.00	111008A	11/10/08	13:45
Chromium	EPA 200.8	9.48	1.00	µg/L	1.00	111308A	11/13/08	16:01
Cobalt	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	13:45
Copper	EPA 200.8	6.20	1.00	µg/L	5.00	111008A	11/10/08	13:45
Lead	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:45
Magnesium	EPA 200.7	8800	10.0	µg/L	500	120508A	12/05/08	16:46
Manganese	EPA 200.7	ND	1.00	µg/L	10.0	111808A	11/18/08	17:34
Mercury	EPA 245.1	ND	1.00	µg/L	0.20	11HG08D	11/19/08	N/A
Molybdenum	EPA 200.8	18.8	1.00	µg/L	10.0	111008A	11/10/08	13:45
Nickel	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:45
Selenium	EPA 200.8	ND	1.00	µg/L	10.0	111008A	11/10/08	13:45
Silver	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	13:45
Thallium	EPA 200.8	ND	1.00	µg/L	1.00	111008A	11/10/08	13:45
Vanadium	EPA 200.8	ND	1.00	µg/L	5.00	111008A	11/10/08	13:45
Zinc	EPA 200.8	ND	1.00	µg/L	10.0	111308A	11/13/08	16:01
Boron	EPA 200.7	873	1.00	µg/L	20.0	112008A	11/20/08	12:59
Calcium	EPA 200.7	108000	100	µg/L	20000	111108A	11/11/08	18:25
Iron	EPA 200.7	ND	1.00	µg/L	20.0	111808A	11/18/08	17:34
Potassium	EPA 200.7	12600	10.0	µg/L	2000	111808A	11/18/08	18:31
Sodium	EPA 200.7	997000	500	µg/L	100000	111108A	11/11/08	20:39

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

for Sam Candler
Mona Nassimi, Manager
Analytical Services

979669

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

CHAIN OF CUSTODY RECORD

[2008-CMP-018]

COC Number 1/1/1950-10d-TLI
Turnaround Time 10 Days
Date 11-6-08 Page ___ OF ___

COMPANY E2
PROJECT PG&E Topock
ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612
PHONE (530) 229-3303 FAX (530) 339-3303
P.O. NUM 370367.MP.02.CM.01 TEAM 1
SAMPLERS (SIGNATURE

SAMPLE I.D.	DATE	TIME	Matrix	A Cr6 (218.8) Field Filtered	B 22 Al,B,Ca,Mg,K,Na,Mn,Fe Filtered Title Metals (E200.7) Field	C Total Metals (200.7) Total Iron, unfiltered	D Specific Conductance (120.1)	D TDS (SM2540C)	D Anions (300) Cl, Fl, SO4	D Turbidity (SM2130)	D Alkalinity (SM2320B)	E Ammonia (SM4500NH3)	Number of Containers	COMMENTS
Container:				250 ml Poly	500 ml Poly	500 ml Poly	1 Liter Poly	1 Liter Poly	1 Liter Poly	1 Liter Poly	1 Liter Poly	1 Liter Poly		
Preservatives:				(NH4)2SO4/NH4OH, 4°C	HNO3	HNO3	4°C	4°C	4°C	4°C	4°C	H2SO4, pH<2, 4°C		
Filtered:				Field	Field	NA	NA	NA	NA	NA	NA	NA		
Holding Time:				28	180	180	28	28	28	28	28	28		
-1	CW-04D-018	11-5-08	0941	GW	X	X	X	X	X	X	X	X	X	5	pH<2
-2	CW-04M-018		1049		X	X	X	X	X	X	X	X	X	5	
-3	CW-03D-018		1207		X	X	X	X	X	X	X	X	X	5	
-4	CW-03M-018		1401		X	X	X	X	X	X	X	X	X	5	
-5	CW-02D-018		1538		X	X	X	X	X	X	X	X	X	5	
-6	CW-02M-018		1657		X	X	X	X	X	X	X	X	X	5	
-7	OW-89-018		1735		X									BK 1	
														5	
														5	

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Barry Collom	CH2M Hill	11-6-08 1600
Signature (Received)	Higuera	E2	Date/ Time 11-06-08 1600
Signature (Relinquished)	Hipolito	E2	Date/ Time 11-06-08 2200
Signature (Received)		Company/ Agency	Date/ Time
Signature (Relinquished)		Company/ Agency	Date/ Time
Signature (Received)		Company/ Agency	Date/ Time

ALERT !!
Level III QC
for Sample Containers
See Form Attached

SAMPLE CONDITIONS
RECEIVED COOL ☐ WARM ☐ °F
CUSTODY SEALED YES ☐ NO ☐
SPECIAL REQUIREMENTS:

109

08K033

EMAX LABORATORIES, INC.
EMAX Laboratories, Inc.
1835 W. 205th Street, Torrance, CA 90501
Tel: (310) 618 8889 Ext. 119 Fax: (310) 618 0818
Joe Kelbley jkelbley@emaxlabs.com

CHAIN OF CUSTODY RECORD

[2008-CMP-018]

COC Number
Turnaround Time
Date 11/4/08 Page 1 OF 2

COMPANY E2
PROJECT PG&E Topock
ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612
PHONE (530) 229-3303 FAX (530) 339-3303
P.O. NUM 370367.MP.02.CM.01 TEAM 1
SAMPLERS (SIGNATURE Aurora M.H. Abbott

	Container:	1 Liter Poly
	Preservatives:	H2SO4, pH<2, 4°C
	Filtered:	NA
	Holding Time:	28

	SAMPLE I.D.	DATE	TIME	Matrix	Nitrate/Nitrite (SM4500NO3-E)	Number of Containers	COMMENTS
1	OW-02M-018	11/3/08	1235	GW	X	1	
2	OW-02S-018	11/3/08	1357	GW	X	1	
3	OW-02D-018	11/3/08	1545	GW	X	1	
4	OW-05M-018	11/4/08	0813	GW	X	1	
5	OW-05S-018	11/4/08	0858	GW	X	1	
6	OW-91-018	11/4/08	0915	GW	X	1	
7	OW-05D-018	11/4/08	1012	GW	X	1	
8	OW-01D-018	11/4/08	1337	GW	X	1	
9	OW-01S-018	11/4/08	1120	GW	X	1	

CHAIN OF CUSTODY SIGNATURE RECORD

	Signature	Printed Name	Company/ Agency	Date/ Time
Relinquished	Aurora M.H. Abbott	Aurora Abbott	E2	11/4/08 1645
Received				Date/ Time 11-4-08 1645
Relinquished			TLI	Date/ Time 11/5/08 845
Received	Phil Hatcher	Phil Hatcher	EMAX	Date/ Time 11 5 08 845
Relinquished	Phil Hatcher	Phil Hatcher	EMAX	Date/ Time 11 5 08 1300
Received		INDIA WATER	EMAX	Date/ Time 11/5/08 1300

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

SPECIAL REQUIREMENTS:

T = 2.4 C

1001

08K033

EMAX LABORATORIES, INC.
EMAX Laboratories, Inc.
1835 W. 205th Street, Torrance, CA 90501
Tel: (310) 618 8889 Ext. 119 Fax: (310) 618 0818
Joe Kelbley jkelbley@emaxlabs.com

CHAIN OF CUSTODY RECORD

[2008-CMP-018]

COC Number
Turnaround Time
Date 11/4/08 Page 2 OF 2

COMPANY E2
PROJECT PG&E Topock
ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612
PHONE (530) 229-3303 FAX (530) 339-3303
P.O. NUM 370367.MP.02.CM.01 TEAM 1
SAMPLERS (SIGNATURE Aurora M. Abbott

	SAMPLE I.D.	DATE	TIME	Matrix	Container: 1-Liter Poly	Preservatives: H2SO4, pH<2, 4°C	Filtered: NA	Holding Time: 28	Nitrate/Nitrite (SM4500NO3-E)	Number of Containers	COMMENTS
10	OW-01M-018	11/4/08	1217	GW					X	1	
11	OW-90-018	11/4/08	1405	GW					X	1	
12	CW-01M-018	11/4/08	1932	GW					X	1	
13	CW-01D-018	11/4/09	1532	GW					X	1	
										1	
										1	
										1	
										1	
										1	

CHAIN OF CUSTODY SIGNATURE RECORD

	Signature	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Aurora M. Abbott	Aurora Abbott	E2	11/4/08 1645
Signature (Received)				11-4-08
Signature (Relinquished)				11/5/08
Signature (Received)	Phil Hatcher	Phil Hatcher	EMAX	11-5-08 845am
Signature (Relinquished)	Phil Hatcher	Phil Hatcher	EMAX	11-5-08 1300
Signature (Received)		INDRA PATEL	EMAX	11-5-08 1300

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

SPECIAL REQUIREMENTS:

1002

CLIENT: CH2M HILL TOPOCK

SDG: 08K033

Analyst names:

1. SM4500NO3: Elena Robles

CASE NARRATIVE

CLIENT: **CH2M HILL**

PROJECT: **PG&E'S TOPOCK GAS COMPRESSOR STAT**

SDG: **08K033**

METHOD SM4500NO3
NITRATE/NITRITE-N

Thirteen (13) water samples were received on 11/05/08 for Nitrate/Nitrite-N analysis by Method SM4500NO3 in accordance with "Standard Method for the Examination of Water and Wastewater".

1. **Holding Time**

   Analysis met holding time criteria.

2. **Method Blank**

   Method blank was free of contamination at the reporting limit.

3. **Lab Control Sample/Lab Control Sample Duplicate**

   Lab control results were within QC limit.

4. **Duplicate**

   Sample K033-01 was analyzed for duplicate. %RPD was within QC limit.

5. **Matrix Spike/Matrix Spike Duplicate**

   Sample K033-01 was spiked. Recovery was within QC limit.

6. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met.

METHOD SM4500NO3
NITRATE/NITRITE-N

Client : CH2M HILL
Project : PG&E'S TOPOCK GAS COMPRESSOR STAT
Batch No. : 08K033

Matrix : WATER
Instrument ID : I70

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	NAK003WB	ND	1	NA	0.100	0.0200	11/12/0817:12	NA	NAK00311	NAK00308	NAK003W	NA	NA
LCS1W	NAK003WL	0.524	1	NA	0.100	0.0200	11/12/0817:12	NA	NAK00312	NAK00308	NAK003W	NA	NA
LCD1W	NAK003WC	0.529	1	NA	0.100	0.0200	11/12/0817:12	NA	NAK00313	NAK00308	NAK003W	NA	NA
OW-02M-018	K033-01	3.69	5	NA	0.500	0.100	11/12/0817:13	NA	NAK00314	NAK00308	NAK003W	11/03/0812:35	11/05/08
OW-02M-018DUP	K033-01D	3.31	5	NA	0.500	0.100	11/12/0817:13	NA	NAK00315	NAK00308	NAK003W	11/03/0812:35	11/05/08
OW-02M-018MS	K033-01M	4.17	5	NA	0.500	0.100	11/12/0817:14	NA	NAK00316	NAK00308	NAK003W	11/03/0812:35	11/05/08
OW-02S-018	K033-02	3.89	5	NA	0.500	0.100	11/12/0817:15	NA	NAK00317	NAK00308	NAK003W	11/03/0813:57	11/05/08
OW-02D-018	K033-03	3.01	5	NA	0.500	0.100	11/12/0817:15	NA	NAK00318	NAK00308	NAK003W	11/03/0815:45	11/05/08
OW-05M-018	K033-04	3.06	5	NA	0.500	0.100	11/12/0817:16	NA	NAK00321	NAK00308	NAK003W	11/04/0808:13	11/05/08
OW-05S-018	K033-05	3.98	5	NA	0.500	0.100	11/12/0817:17	NA	NAK00322	NAK00308	NAK003W	11/04/0808:58	11/05/08
OW-91-018	K033-06	3.01	5	NA	0.500	0.100	11/12/0817:17	NA	NAK00323	NAK00308	NAK003W	11/04/0809:15	11/05/08
OW-05D-018	K033-07	2.74	5	NA	0.500	0.100	11/12/0817:17	NA	NAK00324	NAK00308	NAK003W	11/04/0810:12	11/05/08
OW-01D-018	K033-08	2.75	5	NA	0.500	0.100	11/12/0817:18	NA	NAK00325	NAK00308	NAK003W	11/04/0813:37	11/05/08
OW-01S-018	K033-09	2.97	5	NA	0.500	0.100	11/12/0817:18	NA	NAK00326	NAK00308	NAK003W	11/04/0811:20	11/05/08
OW-01M-018	K033-10	2.81	5	NA	0.500	0.100	11/12/0817:18	NA	NAK00327	NAK00308	NAK003W	11/04/0812:17	11/05/08
OW-90-018	K033-11	2.75	5	NA	0.500	0.100	11/12/0817:19	NA	NAK00328	NAK00308	NAK003W	11/04/0814:05	11/05/08
CW-01M-018	K033-12	2.61	5	NA	0.500	0.100	11/12/0817:19	NA	NAK00329	NAK00308	NAK003W	11/04/0814:32	11/05/08
CW-01D-018	K033-13	2.71	5	NA	0.500	0.100	11/12/0817:19	NA	NAK00330	NAK00308	NAK003W	11/04/0815:32	11/05/08

08K069

EMAX Laboratories, Inc.
1835 W. 205th Street, Torrance, CA 90501
Tel: (310) 618 8889 Ext. 119 Fax: (310) 618 0818
Joe Kelbley jkelbley@emaxlabs.com

CHAIN OF CUSTODY RECORD

[2008-CMP-018]

COC Number 1/1/1950-12d-EMAX
Turnaround Time 12 Days
Date 11-6-05 Page ___ OF ___

COMPANY E2
PROJECT PG&E Topock
ADDRESS 155 Grand Ave Ste 1000, Oakland, CA 94612
PHONE (530) 229-3303 FAX (530) 339-3303
P.O. NUM 370367.MP.02.CM.01 TEAM 1
SAMPLERS (SIGNATURE

Container: 1 Liter Poly
Preservatives: H2SO4, pH<2, 4°C
Filtered: NA
Holding Time: 28

	SAMPLE I.D.	DATE	TIME	Matrix	Nitrate/Nitrite (SM4500NO3-E)	Number of Containers	COMMENTS
1	CW-04D-018	11-5-08	0941	GW	X	1	
2	CW-04M-018		1049		X	1	
3	CW-03D-018		1247		X	1	
4	CW-03M-018		1401		X	1	
5	CW-02D-018		1538		X	1	
6	CW-02M-018		1657		X	1	
						1	
						1	
						1	

CHAIN OF CUSTODY SIGNATURE RECORD

Signature	Printed Name	Company/Agency	Date/Time
(Relinquished)	Barry Collom	CH2M Hill	11-6-08 1600
(Received)		TLI	11-06-08 1600
(Relinquished)		TLI	11-06-08 2200
(Received)	Phil Hatcher	EMAX	11-7-08 830
(Relinquished)	Phil Hatcher	EMAX	11-7-08 1230
(Received)	J-LUNA	CMQ2	11-7-08 1230

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ 3.6°C

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

CLIENT: CH2M HILL TOPOCK

SDG: 08K069

Analyst names:

1. SM4500NO3: Elena Robles

CASE NARRATIVE

CLIENT: **CH2M HILL**

PROJECT: **PG&E'S TOPOCK GAS COMPRESSOR STAT**

SDG: **08K069**

METHOD SM4500NO3
NITRATE/NITRITE-N

Six (6) water samples were received on 11/17/08 for Nitrate/Nitrite-N analysis by Method SM4500NO3 in accordance with "Standard Method for the Examination of Water and Wastewater".

1. **Holding Time**

   Analysis met holding time criteria.

2. **Method Blank**

   Method blank was free of contamination at the reporting limit.

3. **Lab Control Sample/Lab Control Sample Duplicate**

   Lab control results were within QC limit.

4. **Duplicate**

   Sample K069-01 was analyzed for duplicate. %RPD was within QC limit.

5. **Matrix Spike/Matrix Spike Duplicate**

   Sample K069-01 was spiked. Recovery was within QC limit.

6. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met.

Y

METHOD SM4500NO3
NITRATE/NITRITE-N

Client : CH2M HILL
Project : PG&E'S TOPOCK GAS COMPRESSOR STAT
Batch No. : 08K069

Matrix : WATER
Instrument ID : I70

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	NAK004WB	ND	1	NA	0.100	0.0200	11/17/0816:59	NA	NAK00411	NAK00408	NAK004W	NA	NA
LCS1W	NAK004WL	0.509	1	NA	0.100	0.0200	11/17/0816:59	NA	NAK00412	NAK00408	NAK004W	NA	NA
LCD1W	NAK004WC	0.520	1	NA	0.100	0.0200	11/17/0817:00	NA	NAK00413	NAK00408	NAK004W	NA	NA
CW-04D-018	K069-01	1.79	2	NA	0.200	0.0400	11/17/0817:00	NA	NAK00414	NAK00408	NAK004W	11/05/0809:41	11/07/08
CW-04D-018DUP	K069-01D	1.85	2	NA	0.200	0.0400	11/17/0817:01	NA	NAK00415	NAK00408	NAK004W	11/05/0809:41	11/07/08
CW-04D-018MS	K069-01M	2.31	2	NA	0.200	0.0400	11/17/0817:02	NA	NAK00416	NAK00408	NAK004W	11/05/0809:41	11/07/08
CW-04M-018	K069-02	1.40	2	NA	0.200	0.0400	11/17/0817:03	NA	NAK00417	NAK00408	NAK004W	11/05/0810:49	11/07/08
CW-03D-018	K069-03	2.63	5	NA	0.500	0.100	11/17/0817:04	NA	NAK00418	NAK00408	NAK004W	11/05/0812:47	11/07/08
CW-03M-018	K069-04	0.785	2	NA	0.200	0.0400	11/17/0817:05	NA	NAK00421	NAK00408	NAK004W	11/05/0814:01	11/07/08
CW-02D-018	K069-05	2.55	5	NA	0.500	0.100	11/17/0817:06	NA	NAK00422	NAK00408	NAK004W	11/05/0815:58	11/07/08
CW-02M-018	K069-06	1.68	5	NA	0.500	0.100	11/17/0817:06	NA	NAK00423	NAK00408	NAK004W	11/05/0816:57	11/07/08

Appendix B
Field Data Sheets, Fourth Quarter 2008

Topock Sampling Log

Project Name PGE Topock CMP
Job Number 370367.MP.02.CM.01
Field Team 1
Field Conditions Sunny, mostly clear, breeze SE, low 80s
Sampling Event 2008-CMP-018
Date 11/4/08
Page 1 of 1

Well/Sample Number CW-01M-018
QC Sample ID ~~NA~~ (A) OW-90-018
QC Sample Time ~~NA~~ (A) 1405
Purge Start Time 1409 - 1436
Purge Method _____ **Ded. Pump** _____
Flow Cell (Y) / N
Min. Purge Volume (gal)/(L) 42.0 **Purge Rate** (gpm)/(mLpm) 2

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity ~~%~~ PPT	TDS g/L	Eh/ORP mv	Comments (See description below
109.48	1402	6	7.82	7.703	1	6.03	29.83	4.23	5.009	102.8	284 Hz
109.46	1406	14	7.83	7.694	1	6.34	29.88	4.22	5.006	104.0	
109.48	1419	20	7.83	7.704	1	6.37	29.86	4.22	5.007	104.4	
109.48	1423	28	7.83	7.705	1	6.37	29.90	4.22	5.006	104.6	
109.46	1426	34	7.83	7.703	1	6.40	29.88	4.22	5.006	104.6	
109.48	1430	42	7.83	7.699	1	6.38	29.93	4.22	5.005	104.5	

Parameter Stabilization Criteria		+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV
Did Parameters Stabilize prior to sampling?									
Previous Field measurement	(4/9/2008)	8.16	7432	0.7	7.07	29.77	0.407	—	32.9
Are measurements consistent with previous?		Y	Y	Y	lower	NA	Y	—	higher

Sample Time 1432 **Sample Location:** pump tubing X well port _____ spigot _____ bailer _____ other _____
Comments: NO DEDICATED R.F. IN WELL USED TEMP. PUMP.

Initial Depth to Water (ft BTOC) 109.38
Field measured confirmation of Well Depth (ft btoc): _____
WD (Well Depth - from database) ft btoc (190)
SWH (Standing Water Height) = WD-Initial Depth 80.62
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 13.8
Three Casing Volumes = 42.0

Measure Point: (Well TOC) Steel Casing **WATER LEVEL METER SERIAL NUMBER:** PGE-2005-03

Initial DTW / Before Removal		If Transducer		
Time	Initial DTW	Approx. 5 min After Reinstallation Time	Approx. 5 min After Reinstallation Final DTW	Time of Removal 1402
1401	109.38	1445	109.41	Time of Reinstallation 1440

Comments:

Color: (clear) grey, yellow, brown, black, cloudy, green
Odor: (none) sulphur, organic, other
Solids: (Trace) Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock CMP | Sampling Event 2008-CMP-018
Job Number 370367.MP.02.CM.01 | Date 11/4/08
Field Team 1 | Field Conditions sunny, some high, breeze, few low clouds, from SE, 80 | Page 1 of 1 | PJC

Well/Sample Number CW-01D-018 | QC Sample ID NA EQUIP. OW-98-018 | QC Sample Time ~~N/A~~ AM 1552
Purge Start Time ~~1456~~ AM 1457 - 1535 | Purge Method Temp. | Ded. Pump No
Flow Cell (Y) / N | Min. Purge Volume (gal)/(L) 97.2 | Purge Rate (gpm)/(mLpm) 3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity ~~%~~ PPT	TDS g/L	Eh/ORP mv	Comments (See description below
109.65	1502	15	7.52	7.668	5	2.64	29.93	4.20	4.986	103.0	Hz 296
109.65	1508	33	7.77	7.673	7	5.42	29.95	4.21	4.988	101.9	
109.65	1513	48	7.80	7.677	4	5.72	29.91	4.21	4.990	101.1	
109.65	1519	66	7.82	7.677	1	5.82	29.92	4.21	4.989	100.3	
109.65	1524	81	7.83	7.677	1	5.87	29.94	4.21	4.996	99.9	
109.65	1530	99	7.83	7.679	1	5.90	29.93	4.21	4.991	99.7	
	~~1533~~	~~99~~									

Parameter Stabilization Criteria		+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV
Did Parameters Stablize prior to sampling?		Y	Y	Y	Y	NA	Y	—	Y
Previous Field measurement	(4/9/2008)	8.13	7506	1.2	7.06	29.86	0.411		42.7
Are measurements consistent with previous?						NA			

Sample Time 1532 | Sample Location: | pump tubing X | well port ____ | spigot ____ | bailer ____ | other ____
Comments: pump @ ≈ 120.0 ft Took OW-98-018 @ 1552

Initial Depth to Water (ft BTOC) 109.52
Field measured confirmation of Well Depth (ft btoc): ____
WD (Well Depth - from database) ft btoc (300.2000
SWH (Standing Water Height) = WD-Initial Depth 190.68
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 32.4
Three Casing Volumes = 97.2

Measure Point: (Well TOC) Steel Casing | WATER LEVEL METER SERIAL NUMBER: PGE-2005-03

Initial DTW / Before Removal		If Transducer: Approx. 5 min After Reinstallation		Time of Removal 1453
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1544
1450	109.52	1553	109.55	

Comments:

Color: (clear), grey, yellow, brown, black, cloudy, green
Odor (none), sulphur, organic, other
Solids: (Trace), Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Topock Sampling Log

Project Name PGE Topock CMP
Job Number 370367.MP.02.CM.01
Field Team 1
Field Conditions Sunny, mostly clear, breeze SE, low 80s
Sampling Event 2008-CMP-018
Date 11/4/08
Page 1 of 1

Well/Sample Number CW-01M-018
QC Sample ID ~~NA~~ (A) OW-90-018
QC Sample Time ~~NA~~ (A) 1405
Purge Start Time 1409 - 1436
Purge Method _____ **Ded. Pump** _____
Flow Cell (Y) / N
Min. Purge Volume (gal)/(L) 42.0 **Purge Rate** (gpm)/(mLpm) 2

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity ~~%~~ PPT	TDS g/L	Eh/ORP mv	Comments (See description below
109.48	1402	6	7.82	7.703	1	6.03	29.83	4.23	5.009	102.8	284 Hz
109.46	1406	14	7.83	7.694	1	6.34	29.88	4.22	5.006	104.0	
109.48	1419	20	7.83	7.704	1	6.37	29.86	4.22	5.007	104.4	
109.48	1423	28	7.83	7.705	1	6.37	29.90	4.22	5.006	104.6	
109.46	1426	34	7.83	7.703	1	6.40	29.88	4.22	5.006	104.6	
109.48	1430	42	7.83	7.699	1	6.38	29.93	4.22	5.005	104.5	

Parameter Stabilization Criteria		+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV
Did Parameters Stabilize prior to sampling?									
Previous Field measurement	(4/9/2008)	8.16	7432	0.7	7.07	29.77	0.407	—	32.9
Are measurements consistent with previous?		Y	Y	Y	lower	NA	Y	—	higher

Sample Time 1432 **Sample Location:** pump tubing X well port _____ spigot _____ bailer _____ other _____
Comments: NO DEDICATED R.F. IN WELL USED TEMP. PUMP.

Initial Depth to Water (ft BTOC) 109.38
Field measured confirmation of Well Depth (ft btoc): _____
WD (Well Depth - from database) ft btoc (190)
SWH (Standing Water Height) = WD-Initial Depth 80.62
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 13.8
Three Casing Volumes = 42.0

Measure Point: (Well TOC) Steel Casing **WATER LEVEL METER SERIAL NUMBER:** PGE-2005-03

Initial DTW / Before Removal		If Transducer		
Time	Initial DTW	Approx. 5 min After Reinstallation Time	Approx. 5 min After Reinstallation Final DTW	Time of Removal 1402
1401	109.38	1445	109.41	Time of Reinstallation 1440

Comments:

Color: (clear) grey, yellow, brown, black, cloudy, green
Odor: (none) sulphur, organic, other
Solids: (Trace) Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock CMP | Sampling Event 2008-CMP-018
Job Number 370367.MP.02.CM.01 | Date 11/4/08
Field Team 1 | Field Conditions sunny, some high, breeze, few low clouds, from SE, 80 | Page 1 of 1 | PJC

Well/Sample Number CW-01D-018 | QC Sample ID NA EQUIP. OW-98-018 | QC Sample Time ~~N/A~~ AM 1552
Purge Start Time ~~1456~~ AM 1457 - 1535 | Purge Method Temp. | Ded. Pump No
Flow Cell (Y) / N | Min. Purge Volume (gal)/(L) 97.2 | Purge Rate (gpm)/(mLpm) 3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity ~~%~~ PPT	TDS g/L	Eh/ORP mv	Comments (See description below
109.65	1502	15	7.52	7.668	5	2.64	29.93	4.20	4.986	103.0	Hz 296
109.65	1508	33	7.77	7.673	7	5.42	29.95	4.21	4.988	101.9	
109.65	1513	48	7.80	7.677	4	5.72	29.91	4.21	4.990	101.1	
109.65	1519	66	7.82	7.677	1	5.82	29.92	4.21	4.989	100.3	
109.65	1524	81	7.83	7.677	1	5.87	29.94	4.21	4.996	99.9	
109.65	1530	99	7.83	7.679	1	5.90	29.93	4.21	4.991	99.7	
	~~1533~~	~~99~~									

Parameter Stabilization Criteria		+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV
Did Parameters Stablize prior to sampling?		Y	Y	Y	Y	NA	Y	—	Y
Previous Field measurement	(4/9/2008)	8.13	7506	1.2	7.06	29.86	0.411		42.7
Are measurements consistent with previous?						NA			

Sample Time 1532 | Sample Location: | pump tubing X | well port ____ | spigot ____ | bailer ____ | other ____
Comments: pump @ ≈ 120.0 ft Took OW-98-018 @ 1552

Initial Depth to Water (ft BTOC) 109.52
Field measured confirmation of Well Depth (ft btoc): ____
WD (Well Depth - from database) ft btoc (300.2000
SWH (Standing Water Height) = WD-Initial Depth 190.68
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 32.4
Three Casing Volumes = 97.2

Measure Point: (Well TOC) Steel Casing | WATER LEVEL METER SERIAL NUMBER: PGE-2005-03

Initial DTW / Before Removal		If Transducer: Approx. 5 min After Reinstallation		Time of Removal 1453
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1544
1450	109.52	1553	109.55	

Comments:

Color: (clear), grey, yellow, brown, black, cloudy, green
Odor (none), sulphur, organic, other
Solids: (Trace), Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Topock Sampling Log

Project Name PGE Topock CMP
Job Number 370367.MP.02.CM.01
Field Team 1
Field Conditions Sunny, clear, Windy from West @ 8

Sampling Event 2008-CMP-018
Date 11/5/08
Page 1 of 2

BGL 1

Well/Sample Number CW-02M-018
QC Sample ID NA
QC Sample Time N/A
Purge Start Time 1628 - 1700
Purge Method Temp
Ded. Pump No
Flow Cell (Y) / N
Min. Purge Volume (gal) (L) 55.5
Purge Rate (gpm)/(mLpm) 2

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity PPT %	TDS g/L	Eh/ORP mv	Comments (See description below
93.38	1633	9	7.77	7.645	2.5	2.06	29.45	4.20	4.978	93.6	265 Hz
93.39	1637	18	7.88	7.600	1.3	2.21	29.54	4.16	4.936	89.8	
93.39	1642	28	7.90	7.585	0.8	2.23	29.59	4.16	4.929	85.1	
93.37	1646	~~34~~ 37	7.89	7.577	0.6	2.24	29.60	4.15	4.926	81.6	
93.39	1651	~~46~~ 46	7.90	7.580	0.8	2.22	29.61	4.15	4.927	78.7	
93.39	1656	56	7.90	7.577	0.7	2.22	29.62	4.15	4.928	76.6	

Parameter Stabilization Criteria		+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV
Did Parameters Stablize prior to sampling?		Y	Y	Y	Y	I	Y	Y	Y
Previous Field measurement	(4/8/2008)	8.31	5850	2.2	1.97	29.8	0.317		21.4
Are measurements consistent with previous?		Y	Y	Y	Y	NA	Y	—	Higher

Sample Time 1657 Sample Location: pump tubing X well port ___ spigot ___ bailer ___ other ___
Comments: Took Equipment Blank - OW-89-018 @ 1735

Initial Depth to Water (ft BTOC) 93.25
Field measured confirmation of Well Depth (ft btoc): ___
WD (Well Depth - from database) ft btoc (202)
SWH (Standing Water Height) = WD-Initial Depth 108.75
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 18.3
Three Casing Volumes = 55.5

Measure Point: (Well TOC) Steel Casing
WATER LEVEL METER SERIAL NUMBER: PGE-2005-03

Initial DTW / Before Removal		If Transducer		
Time	Initial DTW	Approx. 5 min After Reinstallation Time	Final DTW	Time of Removal 1622
1621	93.25	1713	93.25	Time of Reinstallation 1709

Comments:

Color: (clear), grey, yellow, brown, black, cloudy, green
Odor (none) sulphur, organic, other
Solids: (Trace) Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Topock Sampling Log

Project Name PGE Topock CMP
Job Number 370367.MP.02.CM.01
Field Team 1
Field Conditions Sunny, clear, Windy from West @ 8

Sampling Event 2008-CMP-018
Date 11/5/08
Page 1 of 2

BGL 1

Well/Sample Number CW-02M-018
QC Sample ID NA
QC Sample Time N/A
Purge Start Time 1628 - 1700
Purge Method Temp
Ded. Pump No
Flow Cell (Y) / N
Min. Purge Volume (gal) (L) 55.5
Purge Rate (gpm)/(mLpm) 2

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity PPT %	TDS g/L	Eh/ORP mv	Comments (See description below
93.38	1633	9	7.77	7.645	2.5	2.06	29.45	4.20	4.978	93.6	265 Hz
93.39	1637	18	7.88	7.600	1.3	2.21	29.54	4.16	4.936	89.8	
93.39	1642	28	7.90	7.585	0.8	2.23	29.59	4.16	4.929	85.1	
93.37	1646	~~34~~ 37	7.89	7.577	0.6	2.24	29.60	4.15	4.926	81.6	
93.39	1651	~~46~~ 46	7.90	7.580	0.8	2.22	29.61	4.15	4.927	78.7	
93.39	1656	56	7.90	7.577	0.7	2.22	29.62	4.15	4.928	76.6	

Parameter Stabilization Criteria		+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV
Did Parameters Stablize prior to sampling?		Y	Y	Y	Y	I	Y	Y	Y
Previous Field measurement	(4/8/2008)	8.31	5850	2.2	1.97	29.8	0.317		21.4
Are measurements consistent with previous?		Y	Y	Y	Y	NA	Y	—	Higher

Sample Time 1657 Sample Location: pump tubing X well port ___ spigot ___ bailer ___ other ___
Comments: Took Equipment Blank - OW-89-018 @ 1735

Initial Depth to Water (ft BTOC) 93.25
Field measured confirmation of Well Depth (ft btoc): ___
WD (Well Depth - from database) ft btoc (202)
SWH (Standing Water Height) = WD-Initial Depth 108.75
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 18.3
Three Casing Volumes = 55.5

Measure Point: (Well TOC) Steel Casing
WATER LEVEL METER SERIAL NUMBER: PGE-2005-03

Initial DTW / Before Removal		If Transducer		
Time	Initial DTW	Approx. 5 min After Reinstallation Time	Final DTW	Time of Removal 1622
1621	93.25	1713	93.25	Time of Reinstallation 1709

Comments:

Color: (clear), grey, yellow, brown, black, cloudy, green
Odor (none) sulphur, organic, other
Solids: (Trace) Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

BKC

Project Name PGE Topock CMP — **Sampling Event** 2008-CMP-018
Job Number 370367.MP.02.CM.01 — **Date** 11/5/08
Field Team 1 — **Field Conditions** sunny, clear, breeze (from West), low 70s, upper 60s — **Page** 1 of 1

Well/Sample Number CW-02D-018 — **QC Sample ID** NA — **QC Sample Time** N/A
Purge Start Time ~~1430~~ 1511 - 1401 — **Purge Method** Temp. — **Ded. Pump** NO
Flow Cell (Y) / N — **Min. Purge Volume** (gal) (L) 133.7 — **Purge Rate** (gpm) (mLpm) 3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity ~~%~~ PPT	TDS g/L	Eh/ORP mv	Comments (See description below
92.98	1518	22	8.03	7.616	0.9	4.95	29.76	4.11	4.951	84.6	291 Hz
92.93	1525	44	8.09	7.626	8.2	5.36	30.59	4.17	4.951	83.7	
92.91	1532	67	8.06	7.609	1.4	5.39	30.70	4.16	4.945	85.2	
92.90	1540	89	8.06	7.606	1.2	5.36	30.75	4.16	4.939	86.5	
92.95	1548	111	8.06	7.599	1.0	5.36	30.75	4.16	4.937	87.2	
92.93	1556	134	8.07	7.597	0.8	5.37	30.79	4.15	4.939	87.4	

Parameter Stabilization Criteria		+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?		Y	Y	Y	Y	NA	Y	Y	Y	
Previous Field measurement	(4/9/2008)	8.56	7446	1.2	6.89	30.82	0.407		51	
Are measurements consistent with previous?		Y	Y	Y	Y	NA	Y	—	slightly higher	

Sample Time 1558 — Sample Location: pump tubing X — well port ____ — spigot ____ — bailer ____ — other ____
Comments: ____

Initial Depth to Water (ft BTOC) 92.78
Field measured confirmation of Well Depth (ft btoc): —
WD (Well Depth - from database) ft btoc (355)
SWH (Standing Water Height) = WD-Initial Depth 262.2
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 44.6
Three Casing Volumes = 133.7

Measure Point: (Well TOC) Steel Casing — WATER LEVEL METER SERIAL NUMBER: PGE-2005-03

Initial DTW / Before Removal		If Transducer: Approx. 5 min After Reinstallation		Time of Removal 1500
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1609
1458	92.78	1615	92.73	

Comments:

Color: (clear), grey, yellow, brown, black, cloudy, green
Odor (none), sulphur, organic, other
Solids: (Trace), Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

BLE

Project Name PGE Topock CMP — **Sampling Event** 2008-CMP-018
Job Number 370367.MP.02.CM.01 — **Date** 11/5/08
Field Team 1 — **Field Conditions** Sunny, Very few high clouds, 15, wind from West — **Page** 1 of 1

Well/Sample Number CW-03M-018 — **QC Sample ID** NA — **QC Sample Time** N/A
Purge Start Time 1322 – 1403 — **Purge Method** Temp. — **Ded. Pump** No
Flow Cell (Y) / N — **Min. Purge Volume** (gal)/(L) 73.4 — **Purge Rate** (gpm)/(mLpm) 2

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity ~~%~~ PPT	TDS g/L	Eh/ORP mv	Comments (See description below
78.33	1329	14	7.66	9.638	1	0.23	29.45	5.43	6.342	89.5	.246.2 Hz
78.31	1335	26	7.71	9.503	1	0.35	29.72	5.29	6.167	82.3	
78.33	1341	38	7.70	9.382	3.0	0.38	29.79	5.22	6.099	75.8	Had to switch flasks
78.33	1347	50	7.71	9.369	2.6	0.36	29.79	5.21	6.092	73.2	
78.34	1353	62	7.70	9.363	1.1	0.35	29.83	5.21	6.083	70.5	
78.34	1359	74	7.69	9.333	0.8	0.35	29.84	5.20	6.070	68.8	

Parameter Stabilization Criteria		+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV
Did Parameters Stablize prior to sampling?		Y	Y	Y	Y	NA	—	—	Y
Previous Field measurement	(4/8/2008)	8.37	9136	0.5	0.48	29.73	0.507		26.6
Are measurements consistent with previous?		Y	Y	Y	Y	NA	Y	—	higher

Sample Time 1401 — Sample Location: pump tubing X — well port ____ — spigot ____ — bailer ____ — other ____

Comments: ____

Initial Depth to Water (ft BTOC) 78.14 — Measure Point: (Well TOC) Steel Casing — WATER LEVEL METER SERIAL NUMBER: PGE-2005-03
Field measured confirmation of Well Depth (ft btoc): —
WD (Well Depth - from database) ft btoc (222)
SWH (Standing Water Height) = WD-Initial Depth 143.86
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 24.45
Three Casing Volumes = 73.4

Initial DTW / Before Removal		If Transducer: Approx. 5 min After Reinstallation		Time of Removal 1314
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1413
1313	78.14	1418	78.14	

Comments:

Color: (clear), grey, yellow, brown, black, cloudy, green — **Odor** (none), sulphur, organic, other — **Solids:** (Trace), Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock CMP
Job Number 370367.MP.02.CM.01
Field Team 1
Field Conditions 75 sunny, windy from W, very few high clouds

Sampling Event 2008-CMP-018
Date 11/5/08
Page 1 of 1

Well/Sample Number CW-03D-018
QC Sample ID NA
QC Sample Time N/A
Purge Start Time 1200 – ~~1302~~ 1250 AM
Purge Method Temp. Ded. Pump NP
Flow Cell: (Y) / N
Min. Purge Volume (gal)/(L) 134 Purge Rate (gpm)/(mLpm) 3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity PPT %	TDS g/L	Eh/ORP mv	Comments (See description below
77.54	1207	21	8.05	7.784	1	2.92	29.51	4.27	5.057	91.6	260 Hz
77.53	1215	45	8.07	7.659	3	5.28	30.48	4.19	4.978	86.7	
77.53	1222	66	8.07	7.658	2	5.30	30.54	4.19	4.978	85.2	
77.51	1230	90	8.08	7.655	1	5.30	30.64	4.19	4.976	84.5	
77.51	1237	111	8.08	7.688	1	5.29	30.65	4.19	4.978	84.0	
77.51	1245	135	8.08	7.656	1.0	5.31	30.67	4.19	4.977	83.6	

Parameter Stabilization Criteria		+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?		Y	Y	Y	Y	NA	Y	Y	Y	
Previous Field measurement	(4/8/2008)	8.83	7873	1.2	7.56	30.57	0.432		31.8	
Are measurements consistent with previous?		Y	Y	Y	Y	NA	Y	Y	Y	

Sample Time 1247 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____
Comments: Tip of transducer is beat up.

Initial Depth to Water (ft BTOC) 77.45
Field measured confirmation of Well Depth (ft btoc): ____
WD (Well Depth - from database) ft btoc (340)
SWH (Standing Water Height) = WD-Initial Depth 262.50
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 44.6
Three Casing Volumes = 133.9

Measure Point: (Well TOC) Steel Casing WATER LEVEL METER SERIAL NUMBER: PGE-2005-03

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 1150
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1256
1149	77.45	1301	77.47	

Comments:

Color: (clear), grey, yellow, brown, black, cloudy, green
Odor: (none), sulphur, organic, other
Solids: (Trace), Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock CMP — **Sampling Event** 2008-CMP-018
Job Number 370[illegible]67.MP.02.CM.01 — **Date** 11/5/08
Field Team 1 — **Field Conditions** Sunny, clear, 72, Windy from West — **Page** 1 of 1

Bil

Well/Sample Number CW-04M-018 — **QC Sample ID** NA — **QC Sample Time** NA
Purge Start Time 1019 - 1052 — **Purge Method** Temp. — **Ded. Pump** No
Flow Cell (Y) / N — **Min. Purge Volume** (ga)/(L) 55 — **Purge Rate** (gpm)/(mLpm) 2

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity ~~%~~ PPT	TDS g/L	Eh/ORP mv	Comments (See description below
62.35	1023	8	7.79	6.744	2	0.88	28.95	3.67	4.386	104.5	219 H2
62.36	1028	18	7.79	6.640	1	0.82	29.39	3.61	4.312	99.2	
62.37	1032	26	7.79	6.610	1	0.86	29.34	3.59	4.301	96.4	
62.31	1037	36	7.79	6.606	1.1	0.80	29.41	3.59	4.299	939	221
62.31	1041	44	7.78	6.607	0.8	0.78	29.39	3.59	4.297	92.2	
62.31	1046	55	7.78	6.606	0.7	0.78	29.35	3.58	4.292	89.6	

Parameter Stabilization Criteria	+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV
Did Parameters Stabilize prior to sampling?	Y	Y	Y	Y	NA	Y	Y	Y
Previous Field measurement (4/9/2008)	7.96	6343	0.9	0.8	29.49	0.343	Y	72
Are measurements consistent with previous?	Y	Y	Y	Y	NA	Y	—	Y

Sample Time 1049 — Sample Location: pump tubing X — well port ____ — spigot ____ — bailer ____ — other ____

Comments: ____

Initial Depth to Water (ft BTOC) 62.06
Field measured confirmation of Well Depth (ft btoc): ____
WD (Well Depth - from database) ft btoc (169.8000
SWH (Standing Water Height) = WD-Initial Depth 107.74
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 18.3
Three Casing Volumes = 55

Measure Point: (Well TOC) Steel Casing — WATER LEVEL METER SERIAL NUMBER: PGE-2005-03

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 1011
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1059
1010	62.06	1105	62.50	

Comments:

Color: (clear), grey, yellow, brown, black, cloudy, green — **Odor** (none), sulphur, organic, other — **Solids:** (Trace), Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock CMP
Job Number 370367.MP.02.CM.01
Field Team 1 Field Conditions sunny few high clouds, 70-75

Sampling Event 2008-CMP-018
Date 11/5/08
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BHL

Well/Sample Number CW-04D-018 QC Sample ID NA QC Sample Time N/A

Purge Start Time 0902 - 0945 Purge Method Temp. Ded. Pump NO

Flow Cell: Y / N Min. Purge Volume (ga)/(L) 123 Purge Rate (gpm)/(mLpm) 3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity PPT %	TDS g/L	Eh/ORP mv	Comments (See description below
62.56	0909	21	7.86	8.028	1	4.44	29.77	4.42	5.220	150.2	292 Hz
62.63	0916	42	7.92	9.799	4	3.19	30.44	5.50	6.418	141.0	
62.60	0923	63	7.92	10.22	1	2.88	30.47	5.72	6.646	129.3	
62.52	~~0929~~ 0930	84	7.90	10.27	1	2.84	30.46	5.75	6.680	121.0	TURNED PUMP DOWN 262 Hz
62.53	0932	105	7.90	10.30	1	2.83	30.43	5.77	6.702	117.1	FILLING UP TANK TOO FAST.
62.49	0939	123	7.90	10.34	0.6	2.82	30.44	5.80	6.734	119.9	

Parameter Stabilization Criteria		+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stablize prior to sampling?		Y	Y	Y	Y	NA	Y	Y	Y	
Previous Field measurement	(4/9/2008)	8.12	10289	1.2	3.14	30.46	0.576	7	99.8	
Are measurements consistent with previous?		Y	slightly higher	Y	Y	NA	Y	—	slightly higher	

Sample Time 0941 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC) 61.96

Field measured confirmation of Well Depth (ft btoc): ____

WD (Well Depth - from database) ft btoc (303)

SWH (Standing Water Height) = WD-Initial Depth 241.04

D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 In)

One Casing Volume = D*SWH 40.97

Three Casing Volumes = 123

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: PGE-2005-03

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 0845
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 0952
0844	61.96	0959	62.09	

Comments:

Color: clear, grey, yellow, brown, black, cloudy, green **Odor** none, sulphur, organic, other **Solids:** Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock CMP
Job Number 370367.MP.02.CM.01
Field Team 1 Field Conditions Sunny, very few high clouds, mid 80s, breeze from S

Sampling Event 2008-CMP-018
Date 11/3/2008
Page 1 of 1

Well/Sample Number OW-02M-018 QC Sample ID NA QC Sample Time N/A

Purge Start Time ~~11:58~~ AA. 1210 end: 1242 Purge Method ~~temp~~ Ded. Pump No

Flow Cell (Y) / N Min. Purge Volume (gal)/(L) 60.6 Purge Rate (gpm) (mLpm) 3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L.	Temp. °C	Salinity ppt	TDS g/L	Eh/ORP mv	Comments (See description below
~~11.52~~ AA	~~11:58~~ AA	12	7.61	~~7.314~~ 7.317	~~18~~ 3	6.80	29.28	4.02	4.800	56.3	
91.60	1216 AA	18	7.62	7.298	2	7.08	29.60	4.00	4.754	54.0	
91.61	1220	30	7.59	7.328	1	7.16	29.78	4.00	4.761	51.1	
91.62	1223	39	7.61	7.316	1	7.13	29.77	4.00	4.759	48.6	
91.62	1227	48	7.61	7.317	1	7.11	29.77	4.00	4.755	46.8	
91.62	1230	60	7.61	7.315	1	7.12	29.80	4.00	4.760	47.7	Bubbles in line (entrained air)

Parameter Stabilization Criteria	+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV
Did Parameters Stablize prior to sampling?	Y	Y	Y	Y	NA	Y	Y	Y
Previous Field measurement (8/5/2008)	7.72	7608	0.7	7.3	30.7	0.49		105.7
Are measurements consistent with previous?	Y	Y	Y	Y	NA	Y	Y	Y

Sample Time 1235 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC) 91.52

Field measured confirmation of Well Depth (ft btoc): ____

WD (Well Depth - from database) ft btoc (210.3000

SWH (Standing Water Height) = WD-Initial Depth 118.78

D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)

One Casing Volume = D*SWH 20.19

Three Casing Volumes = 60.6

Color: (clear) grey, yellow, brown, black, cloudy, green

Measure Point: (Well TOC) Steel Casing

WATER LEVEL METER SERIAL NUMBER: PGE-2005-03

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 1139
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1246
1135	91.52	1259	91.51	

Comments:

Odor (none) sulphur, organic, other

Solids: (Trace) Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

760-326-3308

PG&E Utility User

Topock Sampling Log

Project Name: PGE Topock CMP
Job Number: 370367.MP.02.CM.01
Field Team: 1
Field Conditions: sunny, clear, mid 80s, breeze from S.
Sampling Event: 2008-CMP-018
Date: 11/3/08
Page: 1 of 1

Well/Sample Number: OW-02S-018
QC Sample ID: NA
QC Sample Time: N/A
Purge Start Time: 1332 - 1400
Purge Method: Temp
Ded. Pump: No
Flow Cell: (Y) / N
Min. Purge Volume (gal)/(L): NA / 14.52
Purge Rate (gpm)/(mLpm): NA / 1

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity ppt	TDS g/L	Eh/ORP mv	Comments (See description below
92.91	1334	2	7.97	1.829	63	7.15	28.45	0.92	1.189	57.7	
92.93	1336	4	7.86	1.828	11	7.10	28.73	0.92	1.188	40.0	
missed	1338	6	7.82	1.827	9	7.05	28.76	0.92	1.187	38.1	
92.91	~~1340~~ 1347	8	7.91	1.831	29	7.13	28.78	0.92	1.190	46.7	
92.93	~~1342~~ 1349	12	7.89	1.830	21	7.11	28.77	0.92	1.189	49.3	
92.93	~~1344~~ 1351	14	7.91	1.830	11	7.10	28.76	0.92	1.189	49.4	
92.93	1353	16	7.92	1.830	10	7.09	28.77	0.92	1.190	49.8	
92.93	1355	18	7.93	1.830	6	7.09	28.79	0.92	1.190	49.7	

Parameter Stabilization Criteria		+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV
Did Parameters Stablize prior to sampling?		Y	Y	Y	Y	NA	Y	Y	Y
Previous Field measurement	(8/5/2008)	7.89	1931	4	7.46	31.5	0.12		77.5
Are measurements consistent with previous?		Y	Y	Y	Y	NA	Y	Y	Y

Sample Time: 1357 Sample Location: pump tubing X well port ___ spigot ___ bailer ___ other ___

Comments: Sounded well, total depth. Set pump 1 foot above bottom. Stopped @ 1440, line detached. reattached. Restart 1345

Initial Depth to Water (ft BTOC): 92.51
Field measured confirmation of Well Depth (ft btoc): 102.5
WD (Well Depth - from database) ft btoc (121)
SWH (Standing Water Height) = WD-Initial Depth 29.49
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 4.8433
Three Casing Volumes = 14.5299

Measure Point: (Well TOC) Steel Casing WATER LEVEL METER SERIAL NUMBER: PGE-2005-03

Initial DTW / Before Removal		If Transducer		
Time	Initial DTW	Approx. 5 min After Reinstallation Time	Final DTW	Time of Removal 1306
1305	92.51	1402	92.56	Time of Reinstallation 1402

Comments:

Color: (clear) grey, yellow, brown, black, cloudy, green

Odor (none), sulphur, organic, other

Solids: (trace) Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock CMP
Job Number 370367.MP.02.CM.01
Field Team 1
Field Conditions Sunny, clear, ~~mid 70s~~ 85 ish, slight breeze from S.

Sampling Event 2008-CMP-018
Date 11/3/08
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Well/Sample Number OW-02D-018
QC Sample ID NA
QC Sample Time ~~N/A~~ OW-87-018
Purge Start Time 1421 - 1546
Purge Method Temp
Ded. Pump
Flow Cell (Y) / N
Min. Purge Volume (gal)/(L) 127.0
Purge Rate (gpm)/(mLpm) 3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity	TDS g/L	Eh/ORP mv	Comments (See description below)
91.81	1428	21	8.1 ~~6.83~~ ~~3.60~~	7.422	3	5.64	29.43	4.06 ~~8.1~~ ~~4.06~~	4.824	63.1	Wires twisted giving pH wrong reading
91.83	~~1435~~ 1440	~~42~~ 57	7.2 ~~7.05~~	7.309	5	7.30	29.26	4.00 ~~4.2~~	4.764	56.7	
91.85	1442	63	7.1	7.304	2	7.51	29.22	4.00	4.748	57.4	Calibrated New YSI
91.61	~~1449~~ 1512	84	~~8.79~~	7.160	1	8.82	29.70	3.91	4.655	141.5	restart ~~1408~~ 1508 looked @ wrong meter
91.58	~~1456~~ 1519	105	7.60	7.189	1	8.81	29.83	3.92	4.674	138.2	
91.57	~~1503~~ 1526	127	7.61	7.198	1	8.70	29.68	3.93	4.680	137.2	
91.57	~~1533~~ 1535	~~148~~ 154	7.61	7.212	1	8.69	29.71	3.94	4.688	136.4	
	1542	175									
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stablize prior to sampling?			Y	Y	Y	Y	NA	Y	Y	Y	
Previous Field measurement (8/5/2008)			7.88	7674	0.5	7.51	28.7	0.5		107.7	
Are measurements consistent with previous?			X	Y	Y	higher	NA	Y	Y	higher	

Sample Time ~~1545~~ 1545
Sample Location: pump tubing X well port ___ spigot ___ bailer ___ other ___

Comments: ~~1421~~ 1445 stopped purge to check pH probe. Used Ultra meter SN 602432 to check pHs to ~~m~~ see if they were within range for first 3 pH readings. Did quick cal. no dor
Took EQipment Blank 16:00

Initial Depth to Water (ft BTOC) 91.42
Field measured confirmation of Well Depth (ft btoc): —
WD (Well Depth - from database) ft btoc (340)
SWH (Standing Water Height) = WD-Initial Depth 248.58
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 42.2586
Three Casing Volumes = 127.0

Measure Point: (Well TOC) Steel Casing
WATER LEVEL METER SERIAL NUMBER: PGE-2005-23

Initial DTW / Before Removal		If Transducer			
		Approx. 5 min After Reinstallation			
Time	Initial DTW	Time	Final DTW	Time of Removal	1411
1410	91.42	1601	91.43	Time of Reinstallation	~~1553~~ 1557
Comments:					

Color: (clear), grey, yellow, brown, black, cloudy, green
Odor (none), sulphur, organic, other
Solids: (Trace), Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Topock Sampling Log

BLL

Project Name: PGE Topock CMP
Job Number: 370367.MP.02.CM.01
Field Team: 1
Field Conditions: sunny, few low clouds, highs upper 60s, low 70s, breeze SE
Sampling Event: 2008-CMP-018
Date: 11/4/08
Page: 1 of 1

Well/Sample Number: OW-05M-018
QC Sample ID: NA
QC Sample Time: N/A
Purge Start Time: 0744 - 0816
Purge Method: Temp
Ded. Pump: No
Flow Cell: (Y) / N
Min. Purge Volume (gal)/(L): 79.4
Purge Rate (gpm)/(mLpm): 3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity PPT %	TDS g/L	Eh/ORP mv	Comments (See description below
95.12	0748	12	7.52	7.362	2	4.12	29.70	4.03	4.792	162.2	
95.13	0753	27	7.65	7.388	2	5.24	30.23	4.04	4.801	155.9	
95.13	0751	39	7.68	7.389	1	5.67	30.08	4.04	4.804	153.7	
95.13	0802	54	7.67	7.402	1	5.68	30.08	4.05	4.812	150.3	
95.13	0806	66	7.66	7.407	1	5.71	30.07	4.05	4.815	148.8	
95.13	0811	81	7.65	7.409	1	5.69	30.03	4.05	4.819	146.9	
Parameter Stablization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stablize prior to sampling?			Y	Y	Y	Y	NA	Y	Y	Y	
Previous Field measurement (8/4/2008)			7.64	7718	0.5	7.38	29.3	0.5		101.6	
Are measurements consistent with previous?			Y	Y	Y	Y	NA	Y	Y	Y	

Sample Time: 0813 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: Cap needs to be fixed, cannot be locked.

Initial Depth to Water (ft BTOC): 94.70
Field measured confirmation of Well Depth (ft btoc): —
WD (Well Depth - from database) ft btoc: (250.3000
SWH (Standing Water Height) = WD-Initial Depth: 155.6
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041: (2 in)
One Casing Volume = D*SWH: 26.452
Three Casing Volumes = 79.4

Measure Point: (Well TOC) Steel Casing

WATER LEVEL METER SERIAL NUMBER: PGE-2005-03

Initial DTW / Before Removal		If Transducer		
Time	Initial DTW	Approx. 5 min After Reinstallation Time	Final DTW	Time of Removal: 7:36
94.70	0735	0826	94.70	Time of Reinstallation: 0820

Comments:

Color: (clear), grey, yellow, brown, black, cloudy, green

Odor: (none), sulphur, organic, other

Solids: (Trace), Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

BK

Topock Sampling Log

Project Name PGE Topock CMP
Job Number 370367.MP.02.CM.01
Field Team 1
Field Conditions Sunny, wind from SE, upper 60s, low 70s, few high clouds

Sampling Event 2008-CMP-018
Date 11/4/2008
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Well/Sample Number OW-05S-018
QC Sample ID NA
QC Sample Time N/A
Purge Start Time 0840 – 0958
Purge Method Temp
Ded. Pump NO
Flow Cell (Y) / N
Min. Purge Volume (gal)/(L) 7.6
Purge Rate (gpm)/(mLpm) 1

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below
95.56	0842	2	7.87	1.868	59	6.50	28.20	0.94	1.207	111.0	Pump @ 242 Hz
95.56	0844	4	7.89	1.818	61	6.56	28.57	0.92	1.183	113.5	
95.57	0846	6	7.89	1.806	36	6.54	28.71	0.91	1.172	115.4	
95.58	0848	8	7.88	1.807	15	6.53	28.78	0.91	1.174	117.5	
95.58	0850	10	7.88	1.799	11	6.55	28.79	0.90	1.170	119.3	
95.58	0852	12	7.88	1.796	7	6.56	28.86	0.90	1.169	120.7	
95.58	0854	14	7.87	1.798	5	6.56	28.87	0.90	1.167	121.2	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stablize prior to sampling?			Y	Y	Y	Y	NA	Y	Y	Y	
Previous Field measurement (8/4/2008)			7.71	2067	14	7.06	31.1	0.13		73.1	
Are measurements consistent with previous?			Y	Y	Y	Y	NA	Y		Y	

Sample Time 0858
Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____
Comments: Set pump at ~105.0'

Initial Depth to Water (ft BTOC) 95.41
Field measured confirmation of Well Depth (ft btoc): ——
WD (Well Depth - from database) ft btoc (110.3000
SWH (Standing Water Height) = WD-Initial Depth 14.89
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 2.53
Three Casing Volumes = 7.6

Measure Point: (Well TOC) Steel Casing
WATER LEVEL METER SERIAL NUMBER: PGE-2005-03

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		
Time	Initial DTW	Time	Final DTW	
0833	95.41	09:06	95.41	Time of Removal 0834; Time of Reinstallation 0901

Comments:

Color: (clear) grey, yellow, brown, black, cloudy, green
Odor (none) sulphur, organic, other
Solids: (Trace), Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Topock Sampling Log

Project Name PGE Topock CMP
Job Number 370367.MP.02.CM.01
Field Team 1
Field Conditions sunny, 75, scattered high clouds, breeze from SE
Sampling Event 2008-CMP-018
Date 11/4/2008
Page 1 of 1

BGC

Well/Sample Number OW-06D-018
QC Sample ID NA
QC Sample Time N/A
Purge Start Time ~~1027~~ 0927 – 1014
Purge Method Temp
Ded. Pump NO
Flow Cell (Y) / N
Min. Purge Volume (gal)/(L) 130
Purge Rate (gpm)/(mLpm) 3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	~~PPT~~ Salinity ~~PSU~~	TDS g/L	Eh/ORP mv	Comments (See description below
95.52	0934	21	7.43	7.449	1	2.08	30.44	4.07	4.843	128.1	
95.52	0941	43	7.61	7.406	1	4.84	30.47	4.05	4.814	124.7	
95.52	0949	65	7.69	7.369	1	6.06	30.59	4.02	4.789	123.7	~~Not~~ no noticeable bubbles in line.
95.52	0956	86	7.69	7.380	1	6.13	30.60	4.03	4.797	123.6	
95.52	~~1004~~ 1010	109	7.68	7.392	1	6.11	30.62	4.04	4.805	123.7	
95.50	1010	130	7.68	7.396	1	6.10	30.63	4.04	4.808	123.7	

Parameter Stabilization Criteria		+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stablize prior to sampling?		Y	Y	Y	Y	NA	Y	Y	Y	
Previous Field measurement	(8/4/2008)	7.64	7600	1	7.25	30.4	0.49		1276	
Are measurements consistent with previous?		Y	Y	Y	Y	NA	Y	Y	higher (Y) → looked at 8/4/08 event	

Sample Time 1012 **Sample Location:** pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC) 95.26
Field measured confirmation of Well Depth (ft btoc): ~~—~~
WD (Well Depth - from database) ft btoc (350)
SWH (Standing Water Height) = WD-Initial Depth 254.74
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 43.4
Three Casing Volumes = 130.0

Measure Point: (Well TOC) Steel Casing **WATER LEVEL METER SERIAL NUMBER:** PGE-2005-03

Initial DTW / Before Removal		If Transducer: Approx. 5 min After Reinstallation		
Time	Initial DTW	Time	Final DTW	Time of Removal 0914
0913	95.26	~~1016~~ NA	95.20	Time of Reinstallation 1018
Comments:		1023		

Color: clear, grey, yellow, brown, black, cloudy, green ~~N/A~~ NA

Odor (none), sulphur, organic, other

Solids: (trace), Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock CMP
Job Number 370367.MP.02.CM.01
Field Team 1
Field Conditions Sunny, few low clouds, 81, Windy from SE

Sampling Event 2008-CMP-018
Date 11/4/08
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BAC

Well/Sample Number OW-01D-018
QC Sample ID NA
QC Sample Time N/A
Purge Start Time 1258 — 1339
Purge Method Temp.
Ded. Pump No
Flow Cell: Y / N
Min. Purge Volume (gal)/(L) 93.8
Purge Rate (gpm)/(mLpm) 3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	PPT Salinity ~~%~~	TDS g/L	Eh/ORP mv	Comments (See description below
96.55	1303	15	7.36	7.396	2	6.35	29.86	4.05	4.810	120.3	~~206 Hz~~ 291 Hz
96.80	1308	30	7.49	7.429	1	2.88	30.08	4.06	4.830	117.0	
96.80	1313	45	7.70	7.500	23	9.69	30.25	4.10	4.873	115.2	Lots of Bubbles
96.82	1318	60	7.74	7.500	3	10.47	30.18	4.10	4.875	114.6	Lots of Bubbles
96.82	1323	75	7.75	7.498	12	10.49	30.19	4.10	4.870	114.8	Lots of Bubbles; turbidity affected.
96.82	1328	90	7.75	7.498	10	10.54	30.21	4.10	4.874	115.0	Lots of bubbles
96.88	1333	105	7.76	7.494	5	10.53	30.19	4.10	4.867	115.2	"
96.88	1336	114	7.76	7.498	3	10.49	30.21	4.10	4.875	115.3	"
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?			Y	Y	Y	Y	NA	Y	~~Y~~ N/A	Y	
Previous Field measurement (8/5/2008)			7.68	7609	1	6.4	30.5	0.49	—	78.8	
Are measurements consistent with previous?			Y	Y	Y	higher	NA	Y	—	yes	

Sample Time 1337 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: Cap needs to be fixed, can open well without lock.

Initial Depth to Water (ft BTOC) 93.10
Field measured confirmation of Well Depth (ft btoc): ____
WD (Well Depth - from database) ft btoc (277)
SWH (Standing Water Height) = WD-Initial Depth 183.9
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 31.3
Three Casing Volumes = 93.8

Measure Point: (Well TOC) Steel Casing
WATER LEVEL METER SERIAL NUMBER: PGE-2005-03

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 1252
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1344
1251	93.10	1349	93.42	

Comments:

Color: (clear), grey, yellow, brown, black, cloudy, green
Odor (none), sulphur, organic, other
Solids: (Trace), Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name: PGE Topock CMP
Job Number: 370367.MP.02.CM.01
Field Team: 1
Field Conditions: Sunny, cloudy, 70s windy SE
Sampling Event: 2008-CMP-018
Date: 11/4/08
Page: 1 of 1
BAC

Well/Sample Number: OW-01S-018
QC Sample ID: NA OW-91-018
QC Sample Time: 0915
Purge Start Time: 1058 - 1126
Purge Method: Temp
Ded. Pump: NO
Flow Cell: (Y) N
Min. Purge Volume (gal)/(L): 10.0
Purge Rate (gpm)/(mLpm): 0.5

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity PPT %	TDS g/L	Eh/ORP mv	Comments (See description below
93.97	1102	2	7.66	3.132	9	3.56	29.26	1.60	2.012	97.9	
93.97	1106	4	7.69	3.007	6	3.73	29.35	1.55	1.946	99.4	
93.97	1110	6	7.71	2.916	5	3.86	29.42	1.50	1.890	100.8	
93.97	1114	8	7.72	2.852	3	3.91	29.51	1.47	1.854	101.9	
93.97	1118	10	7.73	2.839	1	3.92	29.51	1.45	1.825	102.9	

Parameter Stabilization Criteria		+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV
Did Parameters Stablize prior to sampling?		Y	Y	Y	Y	NA	Y	Y	Y
Previous Field measurement	(8/5/2008)	7.72	3001	2	4	31.7	0.19	Y	68.7
Are measurements consistent with previous?		Y	higher	Y	Y	NA	Y	—	Y

Sample Time: 11:20 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____
Comments: ____

Initial Depth to Water (ft BTOC): 93.92
Field measured confirmation of Well Depth (ft btoc): ____
WD (Well Depth - from database) ft btoc: (113.5)
SWH (Standing Water Height) = WD-Initial Depth: 19.58
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041: (2 In)
One Casing Volume = D*SWH: ~~19.58~~ 3.3286
Three Casing Volumes = 10.0

Color: (clear) grey, yellow, brown, black, cloudy, green

Odor (none), sulphur, organic, other

Measure Point: (Well TOC) Steel Casing

WATER LEVEL METER SERIAL NUMBER: PGE-2005-03

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal: 1043
Time	Initial DTW	Time	Final DTW	Time of Reinstallation: 1131
1042	93.92	1136	93.92	

Comments: ____

Solids: (Trace), Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

PAC

Project Name PGE Topock CMP
Job Number 370367.MP.02.CM.01
Field Team 1
Field Conditions sunny, few high clouds, low 80s, slight breeze

Sampling Event 2008-CMP-018
Date 11/4/08
Page 1 of 1

Well/Sample Number OW-01M-018
QC Sample ID NA
QC Sample Time N/A

Purge Start Time 1150 (1st first min. establishing flow rate) -1219
Purge Method Temp
Ded. Pump NO

Flow Cell (Y) / N
Min. Purge Volume (gal) / (L) 47.1
Purge Rate (gpm) / (mLpm) 2

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity PPT ~~%~~	TDS g/L	Eh/ORP mv	Comments (See description below
93.82	1156	~~8~~ 10	7.56	7.420	2	8.71	29.87	4.06	4.825	122.8	
93.84	1159	16	7.57	7.426	1	8.95	30.15	4.06	4.823	123.5	
93.84	1203	24	7.58	7.447	1	8.79	30.32	4.07	4.840	124.7	
93.72	1207	32	7.59	7.444	1	8.83	30.31	4.07	4.838	125.0	
93.75	1211	40	7.60	7.438	1	8.89	30.34	4.07	4.834	125.2	
93.69	1215	48	7.61	7.443	1	8.89	30.36	4.07	4.839	125.3	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stablize prior to sampling?			Y	Y	Y	Y	NA	Y	Y	Y	
Previous Field measurement (8/5/2008)			7.66	7643	3	7.56	30.7	0.49		74.1	
Are measurements consistent with previous?			Y	Y	Y	higher	NA	Y	Y	Higher	Salinity included 8/5/08 event

Sample Time 1217 Sample Location: pump tubing X well port ____ spigot ____ bailer (Y) other ____

Comments: ____

Initial Depth to Water (ft BTOC) 93.52
Field measured confirmation of Well Depth (ft btoc): ____
WD (Well Depth - from database) ft btoc (185.8000
SWH (Standing Water Height) = WD-Initial Depth 92.28
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 15.7
Three Casing Volumes = 47.1

Measure Point: (Well TOC) Steel Casing

WATER LEVEL METER SERIAL NUMBER: PGE-2005-03

Initial DTW / Before Removal		If Transducer: Approx. 5 min After Reinstallation	
Time	Initial DTW	Time	Final DTW
1145	93.52	1227	93.52

Time of Removal 1146 (PAC)
Time of Reinstallation ~~1225~~ 1222

Comments:

Color: (clear), grey, yellow, brown, black, cloudy, green
Odor (none), sulphur, organic, other
Solids: (Trace), Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand