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January 15, 2008

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

Subject: Board Order R7-2006-0060, WDID No. 7B 36 2033 001 - Interim Measures Compliance Monitoring Program Semiannual Groundwater Monitoring Report, Second Half 2007, PG&E Topock Compressor Station, Needles, California.

Dear Mr. Yue and Mr. Perdue:

Enclosed is the *Semiannual Groundwater Monitoring Report, Second Half 2007* for the Interim Measure Compliance Monitoring Program (CMP) at the PG&E Topock Compressor Station. This monitoring report presents the results of the third and fourth quarter 2007 CMP groundwater monitoring events, and has been prepared in conformance with RWQCB Order No. R7-2006-0060, as well as with 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, total chromium, total dissolved solids 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: hexavalent chromium greater than 32.6 µg/L, total chromium greater than 28.0 µg/L, total dissolved solids greater than 10,800 mg/L, and pH outside of the range of 7.6 to 8.89. Data collected during third quarter 2007 and associated contingency plan actions were discussed in the *Compliance Monitoring Program Groundwater Monitoring*

Report, Third Quarter 2007, submitted October 5, 2007. The following paragraph discusses fourth quarter 2007 data and associated contingency plan actions.

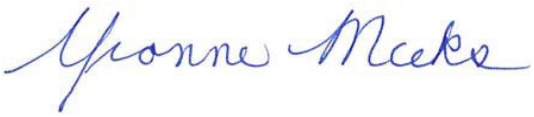
During the fourth quarter 2007 monitoring event, samples from the well OW-2S exceeded the hexavalent chromium action level (34.1 µg/L) and the total chromium action level (33.6 µg/L). A review of the water quality parameters indicative of treated groundwater injection (hexavalent chromium, total dissolved solids, sulfate, nitrate/nitrite and fluoride) confirm that injected water has not yet reached OW-2S and that these concentrations of total and hexavalent chromium are not related to injected water (which has significantly lower chromium concentrations), but instead are 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 hexavalent and total chromium with respect to OW-2S and OW-5S. The Colorado River Basin RWQCB concurred with this decision in a letter dated March 2, 2007. As such, the contingency plan was not triggered due to the hexavalent and total chromium concentrations detected in OW-2S during the fourth quarter 2007.

No other samples exceeded the action levels for hexavalent chromium, total chromium, pH or total dissolved solids during fourth quarter 2007 sampling. The next CMP sampling event is scheduled to occur later in January 2008.

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

Sincerely,



Yvonne Meeks
Topock Remediation Project Manager

Cc: Cliff Raley, RWQCB
Abdi Haile, RWQCB
Christopher Guerre, DTSC

Enclosure

Final Report

Compliance Monitoring Program Semiannual Groundwater Monitoring Report, Second Half 2007

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, 2008

CH2MHILL
155 Grand Avenue, Suite 1000
Oakland, CA 94612

Compliance Monitoring Program
Semiannual Groundwater Monitoring Report
Second Half 2007

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

On Behalf of

Pacific Gas and Electric Company

January 15, 2008

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

Serena Lee, P.G. No. 8259
Associate Hydrogeologist

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Acronyms and Abbreviations

µg/L	micrograms per liter
AMSL	above mean sea level
CCV	continuing calibration verification
CMP	Compliance Monitoring Program
Cr(T)	total dissolved chromium
Cr(VI)	hexavalent chromium
CVS	calibration verification standard
CW	compliance well
DTSC	California Department of Toxic Substances Control
ft	feet
IM	Interim Measure
IM No. 3	Interim Measure No. 3
IW	injection well
mg/L	milligrams per liter
MRP	Monitoring and Reporting Program
MS	Matrix Spike
PG&E	Pacific Gas and Electric Company
OW	observation well
QA	quality assurance
QAPP	Quality Assurance Project Plan
QC	quality control
RPD	relative percent difference
TDS	total dissolved solids
UCL	upper control limit
USEPA	United States Environmental Protection Agency
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, which 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 new 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 monitoring 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, 2006a). The Water Board concurred in a letter dated January 23, 2007 (Water Board, 2007). Observation wells (OWs) are now sampled for a limited suite of constituents during quarterly monitoring events. The first quarter 2007 sampling event was the first event to incorporate this change. Semiannual CMP events still retain the original constituent suite for the OWs and compliance wells (CWs).

Under the CMP, as of May 2007, 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.

For both quarterly and semiannual sampling events, laboratory analyses include dissolved total chromium (Cr[T]), hexavalent chromium (Cr[VI]), metals, specific conductance, pH, 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 semiannual report presents the results of the second half 2007 (third and fourth quarter) CMP groundwater monitoring event.

2.0 Second Half 2007 Activities

This section provides a summary of the monitoring and sampling activities completed during the second half 2007. The third quarter 2007 monitoring event was conducted during August 8th and 9th, 2007 and consisted of:

- Nine observation monitoring wells (OW series) 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-2S to assess field sampling and analytical quality control.

The fourth quarter 2007 event was conducted from October 16 to October 18, 2007 and consisted of:

- Nine observation monitoring wells were sampled for water quality analyses.
- Eight compliance monitoring wells (CW series) 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 OW-5M and CW-4M 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 results of the third quarter 2007 monitoring activities have been presented previously in the document *Compliance Monitoring Program Groundwater Monitoring Report, Third Quarter 2007* (CH2M HILL, 2007a). These results are also presented in this semiannual report.

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 are 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 2007 Results

This section summarizes the results of the CMP groundwater sampling conducted during the second half of 2007. Figure 2 presents the locations of the CMP groundwater wells.

The data presented include results for Cr(VI), Cr(T), pH, 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 and field data sheets for the fourth quarter 2007 monitoring are presented in Appendices A and B. Laboratory reports and field data sheets for the third quarter 2007 were previously reported in the prior monitoring report (CH2M HILL, 2007a).

3.1 Analytical Results

Seventeen compliance and observation wells were sampled during the fourth quarter 2007 sampling event. Analytical results for Cr(VI) and Cr(T), other metals, and other inorganic 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 2007 CMP sampling events. For shallow wells, the maximum detected Cr(VI) concentration was 35.1 micrograms per liter (µg/L) in well OW-2S on August 9, 2007. For the middle wells, the maximum detected Cr(VI) concentration was 21.0 µg/L in well CW-4M on October 18, 2007. For the deep wells, the maximum detected Cr(VI) concentration was 3.4 µg/L in well CW-4D on October 18, 2007.

During the second half of 2007, samples from one well exceeded the WQO of 32.6 µg/L for Cr(VI). The August 9, 2007 primary and field duplicate samples and the October 17, 2007 sample from well OW-2S had concentrations of 35.1 µg/L, 33.6 µg/L, and 34.1 µg/L, respectively. Review of the water quality parameters confirm these exceedances are not the result of the injection of treated groundwater, as the average concentration of Cr(VI) from the IM No. 3 treatment plant is normally less than 1.0 µg/L (CH2M HILL, 2007b). Cr(VI) concentrations at OW-2S have been consistently above the WQOs since November 2005. In addition, other parameters that would indicate arrival of the injected water at OW-2S (such as a change in sulfate or TDS concentrations) are not observed in samples from this well. The results are thus determined to be reflective of the natural variability in background water quality.

For shallow wells, the maximum detected Cr(T) concentration was 33.6 µg/L in well OW-2S on October 17, 2007. For the middle wells, the maximum detected Cr(T) concentration was 21.7 µg/L in well CW-4M on October 18, 2007. For the deep wells, the maximum detected Cr(T) concentration was 3.73 µg/L in well CW-4D on October 18, 2007.

During the second half of 2007, samples from one well exceeded the WQO of 28 µg/L for Cr(T). The August 9, 2007 primary and field duplicate samples and the October 17, 2007 sample from well OW-2S had concentrations of 32.3 µg/L, 31.4 µg/L, and 33.6 µg/L, respectively. Consistent with the Cr(VI) levels found in the same wells, these exceedances of Cr(T) are reflective of the natural variance in background water quality.

3.1.2 Other Metals and Cations

Table 4 presents the other metals and general chemistry results for the CMP groundwater wells sampled during the second half of 2007. Since the first quarter 2007, the observation wells are sampled for a limited suite of constituents during quarterly monitoring events. Metals and cations detected in the second half of 2007 sampling included aluminum, arsenic, barium, boron, calcium, copper, dissolved iron, magnesium, manganese, molybdenum, nickel, potassium, selenium, sodium, vanadium, and zinc. Concentrations of metals and cations detected during the fourth quarter sampling event are similar to those detected in previous sampling events.

3.1.3 Other Inorganic Analytes

Table 5 presents other inorganic analyte results from the CMP groundwater wells. During the second half of 2007, 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).

3.2 Analytical Data Quality Review

The laboratory analytical data generated from the second half 2007 monitoring events 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

Matrix interference has been encountered at the Topock site, in selected monitoring wells, that affected the sensitivity for Cr(VI) analyzed by the ion chromatography methods. CH2M HILL, with the approval of the DTSC, has directed the laboratory to perform additional quality assurance (QA)/quality control (QC) analyses to aid in assessing if there is any effect on method sensitivity for each well location due to the sample matrix.

The laboratory was instructed to analyze a matrix spike (MS) of all samples to ensure that identification is accurate for detects, and for non-detects, the MS should verify there are no false negatives that go undetected.

The result reported by the laboratory on the final data package is chosen from the analysis where all QC controls are within the QC control limits.

For the third quarter 2007 sampling event, matrix interference was encountered in one groundwater sample that affected the sensitivity for Cr(VI) when using United States Environmental Protection Agency (USEPA) Method E218.6. The Cr(VI) sample result from OW-5M 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. The Cr(VI) reporting limit is typically 0.2 µg/L for groundwater samples collected under the CMP. No qualifier flags were applied.

For the fourth quarter 2007 sampling event, matrix interference was encountered in thirteen groundwater samples that affected the sensitivity for Cr(VI) when using USEPA Method E218.6. The Cr(VI) sample results from CW-1M, CW-2D, CW-2M, CW-3D, CW-3M, CW-4D, CW-4M (and its duplicate), OW-1D, OW-1M, OW-1S and OW-5M (and its duplicate) 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 2007 sampling event, all matrix spike acceptance criteria were met.

3.2.3 Quantitation and Sensitivity

For the third and fourth quarter 2007 sampling events, all method and analyte combinations met the project reporting limit objectives, with the exception of the matrix interference issues discussed in Section 3.2.1.

3.2.4 Holding Time Data Qualification

For the third and fourth quarter 2007 sampling events, all method holding time requirements were met, with the following exception. Based on the March 2007 USEPA Ruling, pH now has a 15 minute holding time. As a result, pH (SM4500-HB) samples analyzed in a certified lab contemporaneous with other analyses will require qualification. Therefore, pH results were qualified as estimated and "J" flagged.

3.2.5 Field and Laboratory Duplicates

For the third quarter 2007 sampling event, field and laboratory duplicate acceptance criteria were met.

For the fourth quarter 2007 sampling event, the sample results from OW-5M and its field duplicate had relative percent differences (RPDs) greater than the upper control limits (UCL) for dissolved - aluminum, magnesium, manganese, and zinc (E200.8). The detected and non-detect results were qualified as estimated and "J" flagged. All other field duplicate acceptance criteria were met.

3.2.6 Method Blanks

For the third and fourth quarter 2007 sampling events, method blank acceptance criteria were met.

3.2.7 Equipment Blanks

For the third and fourth quarter 2007 sampling events, equipment blank acceptance criteria were met.

3.2.8 Calibration

For the third quarter 2007 sampling event, initial and continuing calibration verifications (CCV) were performed as required by the methods. All calibration criteria were met, with the following exception. No second source calibration verification standard (CVS) was analyzed during the analysis of the anions due to analyst error. An additional CCV was analyzed instead. The CVS runs before and after this sample passed quality control criteria, so the absence of the sample-specific CVS did not affect the results of the analyses. Corrective action was taken by the laboratory to prevent the error from occurring again. No flags were applied.

For the fourth quarter 2007 sampling event, initial and CCV were performed as required by the methods. All calibration criteria were met, with the following exception. One Cr(VI) (E218.6) sample result (CW-1M) was qualified as estimated and "J" flagged due to CCV recoveries greater than the UCL.

3.2.9 Conclusion

For the third and fourth quarter 2007 groundwater sampling events, the completeness objectives were met for all method and analyte combinations, with the exception of pH due to the March 2007 USEPA Ruling. 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 3, 2007. 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 2007 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 to 16 µg/L
- Nitrate/nitrite as nitrogen: approximately 3 mg/L
- Sulfate: approximately 500 mg/L
- TDS: approximately 4,000 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 2007 sampling events. These samples were collected after approximately 27 months of injection. While the pre-injection OW and CW sample results were significantly different from the treated water quality, a number of the OW and CW third and fourth quarter 2007 sample results have changed in that these results 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, and CW-3D.

Wells OW-1M, OW-1D, OW-2M, OW-2D, OW-5M, OW-5D, CW-1M, CW-1D, CW-2D, and CW-3D 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 remaining CW wells (CW-2M, CW-3M, CW-4M, and CW-4D) 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 and compliance well 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-2D), 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, sulfate, chloride, and vanadium are particularly consistent 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. In general, most of the time-series analyses for the selected constituents show no trend in concentration, with only minor variation over time. Well CW-1D shows a decreasing trend in TDS and molybdenum and an increasing trend in sulfate. Similarly, well CW-2D shows overall decreasing trend in TDS and an increasing trend in nitrate/nitrite as nitrogen. These changes are attributed to the arrival of treated injection water. There are point occurrences of localized high or low values for a number of compounds, but these do not change the overall trend. For example, the initial February 2005 vanadium results appear to be anomalously high for every one of the compliance wells. Subsequent vanadium sampling results show significantly lower concentration and very little variation over time. Fluoride results also tend to show a spiked response, rather than the smooth trend seen in most of the analyte water quality hydrographs. While it is possible that these apparently anomalous point occurrences reflect some natural process, the overall response seen in the compliance well water quality hydrographs supports a natural system that is undergoing only gradual change for the 27-month period.

3.4 Water Level Measurements

Table 8 presents the manual water level measurements and groundwater elevations for the second half 2007 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 2007 reporting period at the observation and compliance monitoring wells. Some hydrographs may vary slightly from those in the third quarter report due to measuring point adjustments made from new transducer installations.

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 across the uplands portions of the site.

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 27 months of injection, the mound has increased in height by several tenths of a foot in elevation 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 September 15 through October 15, 2007 averages. During this time frame, injection occurred at IW-2 for 14 days and IW-3 for 17 days. 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. 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 September 15 through October 15, 2007 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 2007 monitoring events. Field data sheets for the fourth quarter 2007 event are presented in Appendix B. Field documentation for the third quarter 2007 event was previously presented in the prior monitoring report (CH2M HILL, 2007a).

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 second half of 2007 monitoring events:

- Sample location
- Sample identification number
- Sampler name
- Sample date
- Sample time
- Laboratory performing analysis
- Analysis method
- Analysis date
- Laboratory technician
- 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 late January during the first quarter of 2008. This event will include the sampling and analysis scope that was presented in the Compliance Monitoring Plan (CH2M HILL, 2005a and 2005c) and subsequent approved scope revisions (DTSC, 2007 and Water Board, 2007). The groundwater monitoring report for this quarterly CMP monitoring event will be submitted by April 15, 2008.

4.2 Semiannual Monitoring

The next semiannual monitoring event will occur in April during the second quarter of 2008. 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 and 2005c) and subsequent approved scope revisions (DTSC, 2007 and Water Board, 2007). The groundwater monitoring report for this semiannual CMP monitoring event will be submitted by July 15, 2008.

5.0 References

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California Regional Quality Control Board, Colorado River Basin Region (Water Board). 2007. Letter to PG&E. "Conditional Approval of Limited Sampling Frequency for Selected Metals/General, PG&E, Topock Compressor Station, Needles, California." January 23.

CH2M HILL. 2005a. *Groundwater Compliance Monitoring Plan for Interim Measure No. 3 Injection Area, Topock Compressor Station, Needles, California*. June 17.

_____. 2005b. *Sampling, Analysis, and Field Procedures Manual, Revision 1, PG&E Topock Compressor Station, Needles, California.* March 31.

_____. 2005c. *Addendum to the Compliance Monitoring Plan for the IM No. 3 Injection Area, Topock Compressor Station*. December 13.

_____. 2006a. *Request for Approval to Implement Limited Sampling Frequency for Selected Metals/General Minerals for PG&E Topock Compressor Station*. December 1.

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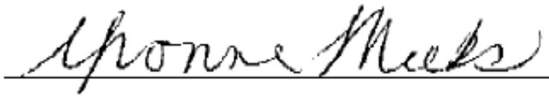
_____. 2007b. *October 2007 Monitoring Report for Interim Measures No. 3 Groundwater Treatment System, Water Discharge Requirements Order No. R7-2006-0060, Topock Compressor Station, Needles, California*. November 15.

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, 2008

Tables

TABLE 1
Operational Status of Interim Measures No. 3 Injection Wells Through Fourth Quarter 2007
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.

TABLE 2
Well Construction and Sampling Summary for Groundwater Samples, Fourth Quarter 2007
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 Installed	Remarks
IM Compliance Wells												
CW-01M	East Mesa	566.16	140 - 190	2 (PVC)	190.0	109.0	Temp Redi-Flo AR	3	42	124	Active	
CW-01D	East Mesa	566.57	250 - 300	2 (PVC)	300.2	109.2	Temp Redi-Flo AR	3	100	125	Active	
CW-02M	East Mesa	549.37	152 - 202	2 (PVC)	202.0	92.8	Temp Redi-Flo AR	2	56	108	Active	
CW-02D	East Mesa	549.64	285 - 335	2 (PVC)	355.0	92.5	Temp Redi-Flo AR	3	135	108	Active	
CW-03M	East Mesa	534.21	172 - 222	2 (PVC)	222.0	77.9	Temp Redi-Flo AR	2	75	93	Active	
CW-03D	East Mesa	534.27	270 - 320	2 (PVC)	340.0	77.5	Temp Redi-Flo AR	3	135	93	Active	
CW-04M	East Mesa	518.66	119.5 - 169.8	2 (PVC)	169.8	61.7	Temp Redi-Flo AR	2	56	77	Active	
CW-04D	East Mesa	518.68	233 - 283	2 (PVC)	303.0	61.7	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	93.5	Temp Redi-Flo AR	0.5	12	109	Active	
OW-01M	East Mesa	550.45	165 - 185	2 (PVC)	185.8	93.4	Temp Redi-Flo AR	3	48	109	Active	
OW-01D	East Mesa	550.48	257 - 277	2 (PVC)	277.0	93.0	Temp Redi-Flo AR	3	105	108	Active	
OW-02S	East Mesa	548.88	71 - 101	2 (PVC)	121.0	92.3	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	91.5	Temp Redi-Flo AR	3	127	107	Active	
OW-05S	East Mesa	551.83	70 - 110	2 (PVC)	110.3	95.1	Temp Redi-Flo AR	1	8	110	Active	
OW-05M	East Mesa	551.81	210 - 250	2 (PVC)	250.3	94.3	Temp Redi-Flo AR	3	81	110	Active	
OW-05D	East Mesa	552.33	300 - 320	2 (PVC)	350.0	94.7	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
Dedi	dedicated
Redi-Flo AR	adjustable-rate electric submersible pump
Temp	temporary

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 2007
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	10/17/2007		3.90 J	4.81
CW-01D	10/17/2007		ND (0.2)	1.05
CW-02M	10/18/2007		14.5	15.1
CW-02D	10/18/2007		ND (1.0)	1.55
CW-03M	10/18/2007		11.8	11.9
CW-03D	10/18/2007		2.50	2.63
CW-04M	10/18/2007		20.7	20.7
CW-04M	10/18/2007	(FD)	21.0	21.7
CW-04D	10/18/2007		3.40	3.73
OW-01S	08/09/2007		19.8	19.4
OW-01S	10/16/2007		21.6	19.7
OW-01M	08/09/2007		0.57	ND (1.0)
OW-01M	10/16/2007		1.10	ND (1.0)
OW-01D	08/09/2007		0.50	1.10
OW-01D	10/16/2007		1.00	1.15
OW-02S	08/09/2007		35.1	32.3
OW-02S	08/09/2007	(FD)	33.6	31.4
OW-02S	10/17/2007		34.1	33.6
OW-02M	08/09/2007		0.76	ND (1.0)
OW-02M	10/16/2007		1.20	1.11
OW-02D	08/09/2007		0.60	ND (1.0)
OW-02D	10/17/2007		ND (0.2)	ND (1.0)
OW-05S	08/09/2007		26.5	25.3
OW-05S	10/17/2007		26.3	25.6
OW-05M	08/08/2007		2.50	3.00
OW-05M	10/17/2007		ND (1.0)	ND (1.0)
OW-05M	10/17/2007	(FD)	ND (1.0)	ND (1.0)
OW-05D	08/09/2007		ND (0.2)	ND (1.0)
OW-05D	10/17/2007		ND (0.2)	1.38

Notes:

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

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

TABLE 4
Metal and Cation Results for Groundwater Samples, Third and Fourth Quarter 2007
PG&E Topock Compliance Monitoring Program

Method:		Filtered E200.7, E200.8, E245.1 and E245.2 (Mercury)																								
Location ID	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Cobalt	Copper	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Boron	Calcium	Iron [1]	Iron	Potassium	Magnesium	Sodium
		µg/L																		mg/L						
CW-01M	10/17/2007	ND (50)	ND (2.0)	2.06	86.1	ND (1.0)	ND (1.0)	ND (1.0)	3.03	ND (1.0)	ND (1.0)	ND (0.2)	19.5	ND (1.0)	1.93	ND (1.0)	ND (1.0)	3.57	19.0	1.18	138	ND (0.5)	ND (0.1)	10.9	10.9	1420
CW-01D	10/17/2007	118	ND (2.0)	2.32	20.3	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.2)	12.0	ND (1.0)	2.17	ND (1.0)	ND (1.0)	4.16	113	1.26	112	ND (0.5)	ND (0.1)	9.01	9.76	1420
CW-02M	10/18/2007	ND (50)	ND (2.0)	2.35	60.9	ND (1.0)	ND (1.0)	ND (1.0)	2.61	ND (1.0)	ND (1.0)	ND (0.2)	23.3	1.50	ND (1.0)	ND (1.0)	ND (1.0)	4.17	ND (10)	1.14	118	ND (0.5)	ND (0.1)	10.3	9.37	1350
CW-02D	10/18/2007	ND (50)	ND (2.0)	4.91	10.6	ND (1.0)	ND (1.0)	ND (1.0)	1.84	ND (1.0)	ND (1.0)	ND (0.2)	64.7	ND (1.0)	2.29	ND (1.0)	ND (1.0)	6.18	ND (10)	1.73	77.2	ND (0.5)	ND (0.1)	9.86	4.28	1540
CW-03M	10/18/2007	ND (50)	ND (2.0)	1.30	51.1	ND (1.0)	ND (1.0)	ND (1.0)	1.41	ND (1.0)	ND (1.0)	ND (0.2)	21.6	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	2.24	ND (10)	1.14	207	ND (0.5)	ND (0.1)	13.3	17.5	1670
CW-03D	10/18/2007	ND (50)	ND (2.0)	1.72	12.7	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.2)	88.2	ND (1.0)	1.84	ND (1.0)	ND (1.0)	2.75	ND (10)	1.70	105	ND (0.5)	ND (0.1)	12.1	8.13	1820
CW-04M	10/18/2007	ND (50)	ND (2.0)	2.70	71.8	ND (1.0)	ND (1.0)	ND (1.0)	3.48	ND (1.0)	ND (1.0)	ND (0.2)	11.5	ND (1.0)	1.02	ND (1.0)	ND (1.0)	3.96	ND (10)	0.809	123	ND (0.5)	ND (0.1)	9.99	11.2	1120
CW-04M	10/18/2007 (FD)	ND (50)	ND (2.0)	2.69	73.7	ND (1.0)	ND (1.0)	ND (1.0)	3.89	ND (1.0)	ND (1.0)	ND (0.2)	12.1	ND (1.0)	1.10	ND (1.0)	ND (1.0)	4.01	ND (10)	0.848	125	ND (0.5)	ND (0.1)	10.3	11.4	1160
CW-04D	10/18/2007	ND (50)	ND (2.0)	3.89	30.1	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	4.02	ND (0.2)	39.1	ND (1.0)	1.34	ND (1.0)	ND (1.0)	4.19	ND (10)	1.56	197	ND (0.5)	ND (0.1)	13.3	12.6	2140
OW-01S	08/09/2007	---	---	---	---	---	---	---	---	---	---	---	13.5	---	---	---	---	---	---	0.319	---	---	---	---	---	---
OW-01S	10/16/2007	ND (50)	ND (2.0)	1.32	78.2	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	1.21	ND (0.2)	10.6	1.73	1.91	ND (1.0)	ND (1.0)	3.66	ND (10)	0.327	95.1	ND (0.5)	ND (0.1)	7.59	16.7	353
OW-01M	08/09/2007	---	---	---	---	---	---	---	---	---	---	---	18.4	---	---	---	---	---	---	1.15	---	---	---	---	---	---
OW-01M	10/16/2007	ND (50)	ND (2.0)	1.41	96.2	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.2)	11.1	ND (1.0)	2.54	ND (1.0)	ND (1.0)	3.09	ND (10)	1.30	194	ND (0.5)	ND (0.1)	12.9	17.2	1440
OW-01D	08/09/2007	---	---	---	---	---	---	---	---	---	---	---	16.8	---	---	---	---	---	---	1.30	---	---	---	---	---	---
OW-01D	10/16/2007	ND (50)	ND (2.0)	2.36	32.8	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.2)	13.0	ND (1.0)	2.23	ND (1.0)	ND (1.0)	5.11	ND (10)	1.32	126	ND (0.5)	ND (0.1)	10.4	9.84	1450
OW-02S	08/09/2007	---	---	---	---	---	---	---	---	---	---	---	40.3	---	---	---	---	---	---	0.773	---	---	---	---	---	---
OW-02S	08/09/2007 (FD)	---	---	---	---	---	---	---	---	---	---	---	47.6	---	---	---	---	---	---	0.682	---	---	---	---	---	---
OW-02S	10/17/2007	ND (50)	ND (2.0)	2.39	45.1	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.2)	40.7	ND (1.0)	2.66	ND (1.0)	ND (1.0)	5.86	ND (10)	0.699	34.5	ND (0.5)	ND (0.1)	5.63	4.62	321
OW-02M	08/09/2007	---	---	---	---	---	---	---	---	---	---	---	15.0	---	---	---	---	---	---	1.22	---	---	---	---	---	---
OW-02M	10/16/2007	ND (50)	ND (2.0)	ND (1.0)	67.2	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.2)	11.8	ND (1.0)	2.42	ND (1.0)	ND (1.0)	2.38	ND (10)	1.26	191	ND (0.5)	ND (0.1)	13.1	19.0	1430
OW-02D	08/09/2007	---	---	---	---	---	---	---	---	---	---	---	15.9	---	---	---	---	---	---	1.07	---	---	---	---	---	---
OW-02D	10/17/2007	ND (50)	ND (2.0)	2.21	22.1	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.2)	14.3	ND (1.0)	2.54	ND (1.0)	ND (1.0)	1.81	ND (10)	1.16	209	ND (0.5)	ND (0.1)	13.6	23.6	1360
OW-05S	08/09/2007	---	---	---	---	---	---	---	---	---	---	---	26.5	---	---	---	---	---	---	0.451	---	---	---	---	---	---
OW-05S	10/17/2007	ND (50)	ND (2.0)	1.54	54.3	ND (1.0)	ND (1.0)	ND (1.0)	2.30	ND (1.0)	2.92	ND (0.2)	26.2	5.29	2.94	ND (1.0)	ND (1.0)	4.68	ND (10)	0.466	53.9	ND (0.5)	0.103	6.71	8.54	271
OW-05M	08/08/2007	---	---	---	---	---	---	---	---	---	---	---	9.80	---	---	---	---	---	---	1.13	---	---	---	---	---	---
OW-05M	10/17/2007	749 J	ND (2.0)	1.05	41.1	ND (1.0)	ND (1.0)	ND (1.0)	3.31	ND (1.0)	19.0 J	ND (0.2)	12.2	ND (1.0)	2.37	ND (1.0)	ND (1.0)	1.85	278 J	1.28	149	ND (0.5)	ND (0.1)	12.5	16.6 J	1460
OW-05M	10/17/2007 (FD)	ND (50)J	ND (2.0)	1.01	40.3	ND (1.0)	ND (1.0)	ND (1.0)	3.16	ND (1.0)	ND (1.0)J	ND (0.2)	12.2	ND (1.0)	2.35	ND (1.0)	ND (1.0)	1.65	ND (10)J	1.25	149	ND (0.5)	ND (0.1)	11.2	10.8 J	1420
OW-05D	08/09/2007	---	---	---	---	---	---	---	---	---	---	---	18.3	---	---	---	---	---	---	1.26	---	---	---	---	---	---
OW-05D	10/17/2007	138	ND (2.0)	1.33	24.6	ND (1.0)	ND (1.0)	ND (1.0)	2.94	ND (1.0)	ND (1.0)	ND (0.2)	14.9	1.00	2.46	ND (1.0)	ND (1.0)	1.66	ND (10)	1.18	197	ND (0.5)	ND (0.1)	14.2	22.2	1440

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

[1] Unfiltered Iron

Observation wells are sampled for a limited suite of constituents during quarterly events starting with the first quarter 2007 event, per DTSC's January 2007 letter.

TABLE 5

Other Inorganic Results for Groundwater Samples, Third and Fourth Quarter 2007

PG&E Topock Compliance Monitoring Program

	Method:	E120.1	SM4500-HB	SM2540C	E180.1/SM2130B	E300.0	E300.0	E300.0	SM4500NO3-E	SM2320B	SM2320B	SM2320B	SM4500NH3F
Location ID	**Sample Date**	**Specific Conductance (µmhos/cm)**	**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, bicarb as CaCo3 (mg/L)**	**Alkalinity as carbonate (mg/L)**	**Alkalinity, total as CaCo3 (mg/L)**	**Ammonia as Nitrogen (mg/L)**
CW-01M	10/17/2007	6450	7.91 J	4310	0.22	2090	2.66	443	2.31	50.0	ND (5.0)	50.0	ND (0.5)
CW-01D	10/17/2007	6470	7.96 J	4270	0.10	2100	2.90	501	2.66	72.5	ND (5.0)	72.5	ND (0.5)
CW-02M	10/18/2007	6340	7.93 J	3850	0.135	2000	3.17	376	1.09	50.0	ND (5.0)	50.0	ND (0.5)
CW-02D	10/18/2007	6760	8.27 J	4270	0.198	2100	7.26	489	2.69	46.7	ND (5.0)	46.7	ND (0.5)
CW-03M	10/18/2007	7820	7.75 J	5450	0.19	2660	2.88	400	0.799	46.7	ND (5.0)	46.7	ND (0.5)
CW-03D	10/18/2007	7970	8.09 J	5170	ND (0.1)	2570	5.84	546	2.62	46.7	ND (5.0)	46.7	ND (0.5)
CW-04M	10/18/2007	5560	7.86 J	3500	0.137	1760	2.19	342	1.55	55.0	ND (5.0)	55.0	ND (0.5)
CW-04M	10/18/2007 (FD)	5500	7.83 J	3680	0.165	1760	2.05	338	1.39	55.0	ND (5.0)	55.0	ND (0.5)
CW-04D	10/18/2007	9700	8.02 J	6310	ND (0.1)	3280	5.01	549	1.24	40.0	ND (5.0)	40.0	ND (0.5)
OW-01S	08/09/2007	2400	7.82 J	1450	0.915	686	2.50	127	3.07	---	---	---	---
OW-01S	10/16/2007	2220	7.85 J	1430	0.26	635	2.74	142	3.09	80.0	ND (5.0)	80.0	ND (0.5)
OW-01M	08/09/2007	6590	7.90 J	3970	0.873	2000	2.40	408	2.78	---	---	---	---
OW-01M	10/16/2007	6710	7.73 J	4350	ND (0.1)	2100	2.05	497	2.56	85.0	ND (5.0)	85.0	ND (0.5)
OW-01D	08/09/2007	6540	7.73 J	3990	0.144	2020	1.86	428	2.86	---	---	---	---
OW-01D	10/16/2007	6360	7.93 J	3940	0.181	1980	2.12	474	2.47	70.0	ND (5.0)	70.0	ND (0.5)
OW-02S	08/09/2007	1780	8.07 J	972	1.36	435	4.92	108	4.14	---	---	---	---
OW-02S	08/09/2007 (FD)	1760	8.06 J	1020	1.58	437	4.82	107	4.04	---	---	---	---
OW-02S	10/17/2007	1680	8.05 J	1010	0.785	423	4.86	127	3.74	100	ND (5.0)	100	ND (0.5)
OW-02M	08/09/2007	6550	7.80 J	3670	0.141	1990	1.88	408	2.55	---	---	---	---
OW-02M	10/16/2007	6750	7.72 J	4420	ND (0.1)	2090	1.95	496	2.62	85.0	ND (5.0)	85.0	ND (0.5)
OW-02D	08/09/2007	6580	7.83 J	3910	ND (0.1)	2040	2.12	432	2.59	---	---	---	---
OW-02D	10/17/2007	6860	7.73 J	4470	ND (0.1)	2280	2.12	465	2.81	92.5	ND (5.0)	92.5	ND (0.5)
OW-05S	08/09/2007	1660	7.87 J	932	1.87	406	2.60	97.8	4.01	---	---	---	---
OW-05S	10/17/2007	1580	7.94 J	948	0.622	422	2.50	102	3.66	87.5	ND (5.0)	87.5	ND (0.5)
OW-05M	08/08/2007	6800	7.80 J	4060	ND (0.1)	2020	2.71	473	8.15	---	---	---	---
OW-05M	10/17/2007	6590	7.79 J	4500	0.14	2140	2.12	457	2.72	75.0	ND (5.0)	75.0	ND (0.5)
OW-05M	10/17/2007 (FD)	6630	7.70 J	4200	ND (0.1)	2160	2.19	472	2.64	77.5	ND (5.0)	77.5	ND (0.5)
OW-05D	08/09/2007	6860	7.69 J	3830	0.191	2070	2.13	458	2.62	---	---	---	---
OW-05D	10/17/2007	6920	7.69 J	4230	0.20	2210	2.10	466	2.83	87.5	ND (5.0)	87.5	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
J	concentration or RL (reporting limit) estimated by laboratory or data validation
---	data not collected, available

Observation wells are sampled for a limited suite of constituents during quarterly events starting with the first quarter 2007 event, per DTSC's January 2007 letter.

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)	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	10/3/2007	ND(1.0)J	ND(1.0)	2.44	15.6	2.99	506	4230
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
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 method E200.7. Total chromium samples of the treated water were unfiltered.

TABLE 7
Treated Water Quality Compared to Third and Fourth Quarter 2007 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	10/03/2007	ND (1.0)J	ND (1.0)	2.44	15.6	2.99	506	4230
CW-01M	10/17/2007	3.90 J	4.81	2.66	19.5	2.31	443	4310
CW-01D	10/17/2007	ND (0.2)	1.05	2.90	12.0	2.66	501	4270
CW-02M	10/18/2007	14.5	15.1	3.17	23.3	1.09	376	3850
CW-02D	10/18/2007	ND (1.0)	1.55	7.26	64.7	2.69	489	4270
CW-03M	10/18/2007	11.8	11.9	2.88	21.6	0.799	400	5450
CW-03D	10/18/2007	2.50	2.63	5.84	88.2	2.62	546	5170
CW-04M	10/18/2007	20.7	20.7	2.19	11.5	1.55	342	3500
CW-04M	10/18/2007 (FD)	21.0	21.7	2.05	12.1	1.39	338	3680
CW-04D	10/18/2007	3.40	3.73	5.01	39.1	1.24	549	6310
OW-01S	08/09/2007	19.8	19.4	2.50	13.5	3.06	127	1450
OW-01S	10/16/2007	21.6	19.7	2.74	10.6	3.09	142	1430
OW-01M	08/09/2007	0.57	ND (1.0)	2.40	18.4	2.77	408	3970
OW-01M	10/16/2007	1.10	ND (1.0)	2.05	11.1	2.56	497	4350
OW-01D	08/09/2007	0.50	1.10	1.86	16.8	2.85	428	3990
OW-01D	10/16/2007	1.00	1.15	2.12	13.0	2.47	474	3940
OW-02S	08/09/2007	35.1	32.3	4.92	40.3	4.14	108	972
OW-02S	08/09/2007 (FD)	33.6	31.4	4.82	47.6	4.03	107	1020
OW-02S	10/17/2007	34.1	33.6	4.86	40.7	3.74	127	1010
OW-02M	08/09/2007	0.76	ND (1.0)	1.88	15.0	2.54	408	3670
OW-02M	10/16/2007	1.20	1.11	1.95	11.8	2.62	496	4420
OW-02D	08/09/2007	0.60	ND (1.0)	2.12	15.9	2.58	432	3910
OW-02D	10/17/2007	ND (0.2)	ND (1.0)	2.12	14.3	2.81	465	4470
OW-05S	08/09/2007	26.5	25.3	2.60	26.5	4.00	97.8	932
OW-05S	10/17/2007	26.3	25.6	2.50	26.2	3.66	102	948
OW-05M	08/08/2007	2.50	3.00	2.71	9.80	8.15	473	4060
OW-05M	10/17/2007 (FD)	ND (1.0)	ND (1.0)	2.19	12.2	2.64	472	4200
OW-05M	10/17/2007	ND (1.0)	ND (1.0)	2.12	12.2	2.72	457	4500
OW-05D	08/09/2007	ND (0.2)	ND (1.0)	2.13	18.3	2.61	458	3830
OW-05D	10/17/2007	ND (0.2)	1.38	2.10	14.9	2.83	466	4230

TABLE 7
Treated Water Quality Compared to Third and Fourth Quarter 2007 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 2007
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	17-Oct-07	2:48 PM	109.00	0.40	457.07
CW-01D	300.2	566.57	17-Oct-07	1:55 PM	109.24	0.45	457.21
CW-02M	202.0	549.37	18-Oct-07	7:46 AM	92.84	0.39	456.43
CW-02D	355.0	549.64	18-Oct-07	6:33 AM	92.52	0.93	457.88
CW-03M	222.0	534.21	18-Oct-07	9:51 AM	77.95	0.50	456.23
CW-03D	340.0	534.27	18-Oct-07	8:41 AM	77.50	0.97	457.58
CW-04M	169.8	518.66	18-Oct-07	11:32 AM	61.73	0.35	456.77
CW-04D	303.0	518.68	18-Oct-07	12:28 PM	61.70	0.91	457.60
OW-01S	113.5	550.21	09-Aug-07	12:04 PM	92.81	0.12	457.33
			16-Oct-07	2:12 PM	93.46	0.12	456.68
OW-01M	185.8	550.45	09-Aug-07	1:06 PM	92.43	0.45	457.90
			16-Oct-07	1:16 PM	93.36	0.45	457.03
OW-01D	277.0	550.48	09-Aug-07	1:52 PM	92.80	0.50	457.52
			16-Oct-07	11:40 AM	93.02	0.50	457.35
OW-02S	121.0	548.75	09-Aug-07	10:27 AM	91.53	0.11	457.13
		548.88	17-Oct-07	7:50 AM	92.32	0.11	456.47
OW-02M	210.3	548.59	09-Aug-07	9:31 AM	91.00	0.45	457.43
			16-Oct-07	2:50 PM	91.50	0.45	457.02
OW-02D	340.0	549.15	09-Aug-07	7:55 AM	90.58	0.51	458.29
			17-Oct-07	8:43 AM	91.48	0.51	457.62
OW-05S	110.3	551.75	09-Aug-07	6:52 AM	94.39	0.11	457.30
		551.83	17-Oct-07	1:12 PM	95.05	0.11	456.73
OW-05M	250.3	551.75	08-Aug-07	1:18 PM	93.69	0.45	457.86
		551.81	17-Oct-07	12:03 PM	94.33	0.45	457.36
OW-05D	350.0	552.35	09-Aug-07	5:12 AM	93.60	0.51	458.50
		552.33	17-Oct-07	10:39 AM	94.69	0.51	457.39

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	0.0030
CW-02D to CW-02M	0.0094
CW-03D to CW-03M	0.0128
CW-04D to CW-04M	0.0074
OW-01M to OW-01S	0.0047
OW-01D to OW-01M	0.0054
OW-02M to OW-02S	0.0043
OW-02D to OW-02M	0.0062

[a] Positive value signifies an upward gradient.

Gradients calculated using September 15 through October 15, 2007 average groundwater levels.

TABLE 10
Field Parameter Measurements for Groundwater Samples, Third and Fourth Quarter 2007
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	10/17/2007	6899	29.8	7.75	45.2	7.66	6	0.376
CW-01D	10/17/2007	6747	29.87	7.71	44.5	6.33	6	0.366
CW-02M	10/18/2007	6510	29.79	7.82	39.2	0.91	4	0.353
CW-02D	10/18/2007	7058	30.6	8.1	66	6.81	5	0.384
CW-03M	10/18/2007	8258	29.82	7.68	7.6	0.35	6	0.455
CW-03D	10/18/2007	8341	30.61	7.97	40.1	5.03	4	0.459
CW-04M	10/18/2007	5744	29.49	7.7	32.5	0.81	5	0.309
CW-04D	10/18/2007	10140	30.42	7.84	19.8	2.59	5	0.567
OW-01S	08/09/2007	2337	30.81	7.69	65.6	4.29	3.1	0.119
OW-01S	10/16/2007	2192	29.52	7.67	5.4	5.53	6	0.111
OW-01M	08/09/2007	6445	30.51	7.77	55.3	5.99	2.2	0.349
OW-01M	10/16/2007	6599	30.02	7.59	24.6	7.33	4	0.357
OW-01D	08/09/2007	6440	29.99	7.12	55	7.13	1.8	0.349
OW-01D	10/16/2007	6261	30.15	7.69	46	6.38	4	0.338
OW-02S	08/09/2007	1703	29.47	7.95	52.8	7.67	4.1	0.85
OW-02S	10/17/2007	1744	28.77	7.85	89.2	9.51	8	0.88
OW-02M	08/09/2007	6432	30.37	7.6	74.6	6.46	2.1	0.348
OW-02M	10/16/2007	6605	30.79	7.61	45.9	7.12	6	0.358
OW-02D	08/09/2007	6463	31.34	7.65	113.5	6.17	1.9	0.349
OW-02D	10/17/2007	7181	30.54	7.58	71.7	7.77	7	0.391
OW-05S	08/09/2007	1602	29.42	7.86	119.9	6.47	4.2	0.8
OW-05S	10/17/2007	1656	29.41	7.75	32.4	8.25	9	0.83
OW-05M	08/08/2007	6613	29.05	7.63	112.5	7.62	2	0.359
OW-05M	10/17/2007	6900	29.1	7.6	49.9	8.82	6	0.376
OW-05D	08/09/2007	6593	30.45	7.53	78.8	6.01	1.7	0.357
OW-05D	10/17/2007	7175	30.67	7.62	66.4	7.55	6	0.391

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 2007

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-014	Barry Collom	10/17/2007	14:42:00	EMXT	E245.2	HGD	10/22/2007	Noel Tan	µg/L	ND (0.2)	0.20	0.10
					TLI	EPA 120.1	SC	10/18/2007	Tina Acquiat	µmhos/cm	6470	2.00	0.153
					EMXT	EPA 200.7	FET	10/24/2007	Jon Elliott	mg/L	ND (0.5)	0.50	0.04
					EMXT	EPA 200.8	MGD	10/22/2007	Jon Elliott	mg/L	9.76	1.00	0.05
					EMXT	EPA 200.8	ZND	10/22/2007	Jon Elliott	µg/L	113	10.0	5.00
					EMXT	EPA 200.8	VD	10/22/2007	Jon Elliott	µg/L	4.16	1.00	0.50
					EMXT	EPA 200.8	TLD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	SED	10/22/2007	Jon Elliott	µg/L	2.17	1.00	0.50
					EMXT	EPA 200.8	SBD	10/22/2007	Jon Elliott	µg/L	ND (2.0)	2.00	0.50
					EMXT	EPA 200.8	PBD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	NID	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.10
					EMXT	EPA 200.8	NAD	10/25/2007	Jon Elliott	mg/L	1420	10.0	0.50
					EMXT	EPA 200.8	MND	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	KD	10/22/2007	Jon Elliott	mg/L	9.01	1.00	0.05
					EMXT	EPA 200.8	FETD	10/22/2007	Jon Elliott	mg/L	ND (0.1)	0.10	0.05
					EMXT	EPA 200.8	ASD	10/22/2007	Jon Elliott	µg/L	2.32	1.00	0.50
					EMXT	EPA 200.8	MOD	10/22/2007	Jon Elliott	µg/L	12.0	2.00	1.00
					EMXT	EPA 200.8	ALD	10/22/2007	Jon Elliott	µg/L	118	50.0	25.0
					EMXT	EPA 200.8	CUD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	BAD	10/22/2007	Jon Elliott	µg/L	20.3	1.00	0.50
					EMXT	EPA 200.8	BD	10/25/2007	Jon Elliott	mg/L	1.26	0.10	0.05
					EMXT	EPA 200.8	BED	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CAD	10/22/2007	Jon Elliott	mg/L	112	1.00	0.05
					EMXT	EPA 200.8	CDD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	COBD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CRTD	10/22/2007	Jon Elliott	µg/L	1.05	1.00	0.50
					EMXT	EPA 200.8	AGD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					TLI	EPA 218.6	CR6	10/17/2007	Jean Paul Gleeson	µg/L	ND (0.2)	0.20	0.03

TABLE 11

Board Order No. R7-2006-0060 WDR Monitoring Information for Groundwater Samples, Third and Fourth Quarter 2007

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-014	Barry Collom	10/17/2007	14:42:00	TLI	EPA 300.0	CL	10/24/2007	Giawad Ghenniwa	mg/L	2100	100	14.0
					TLI	EPA 300.0	FL	10/19/2007	Giawad Ghenniwa	mg/L	2.90	0.50	0.025
					TLI	EPA 300.0	SO4	10/24/2007	Giawad Ghenniwa	mg/L	501	12.5	0.60
					EMXT	SM 2320B	ALKB	10/23/2007	Supakit Deesopha	mg/L	72.5	5.00	1.00
					EMXT	SM 2320B	ALKC	10/23/2007	Supakit Deesopha	mg/L	ND (5.0)	5.00	1.00
					EMXT	SM 2320B	ALKT	10/23/2007	Supakit Deesopha	mg/L	72.5	5.00	1.00
					TLI	SM2130B	TRB	10/18/2007	Gautam Savani	NTU	0.10	0.10	0.007
					TLI	SM2540C	TDS	10/18/2007	Tina Acquiat	mg/L	4270	250	50.4
					TLI	SM4500-HB	PH	10/18/2007	Tina Acquiat	pH Units	7.96 J	2.00	0.07
					EMXT	SM4500NH3F	NH3N	10/24/2007	Charles Swab	mg/L	ND (0.5)	0.50	0.03
					EMXT	SM4500NO3-E	NO3NO2N	10/20/2007	Tina Hoang	mg/L	2.66	0.40	0.08
CW-01M	CW-01M-014	Barry Collom	10/17/2007	15:15:00	EMXT	E245.2	HGD	10/22/2007	Noel Tan	µg/L	ND (0.2)	0.20	0.10
					TLI	EPA 120.1	SC	10/18/2007	Tina Acquiat	µmhos/cm	6450	2.00	0.153
					EMXT	EPA 200.7	FET	10/24/2007	Jon Elliott	mg/L	ND (0.5)	0.50	0.04
					EMXT	EPA 200.8	TLD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	MGD	10/22/2007	Jon Elliott	mg/L	10.9	1.00	0.05
					EMXT	EPA 200.8	MOD	10/22/2007	Jon Elliott	µg/L	19.5	2.00	1.00
					EMXT	EPA 200.8	NAD	10/25/2007	Jon Elliott	mg/L	1420	10.0	0.50
					EMXT	EPA 200.8	NID	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.10
					EMXT	EPA 200.8	PBD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	FETD	10/22/2007	Jon Elliott	mg/L	ND (0.1)	0.10	0.05
					EMXT	EPA 200.8	SED	10/22/2007	Jon Elliott	µg/L	1.93	1.00	0.50
					EMXT	EPA 200.8	KD	10/22/2007	Jon Elliott	mg/L	10.9	1.00	0.05
					EMXT	EPA 200.8	VD	10/22/2007	Jon Elliott	µg/L	3.57	1.00	0.50
					EMXT	EPA 200.8	ZND	10/22/2007	Jon Elliott	µg/L	19.0	10.0	5.00
					EMXT	EPA 200.8	SBD	10/22/2007	Jon Elliott	µg/L	ND (2.0)	2.00	0.50
					EMXT	EPA 200.8	ASD	10/22/2007	Jon Elliott	µg/L	2.06	1.00	0.50
					EMXT	EPA 200.8	MND	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50

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-01M	CW-01M-014	Barry Collom	10/17/2007	15:15:00	EMXT	EPA 200.8	ALD	10/22/2007	Jon Elliott	µg/L	ND (50)	50.0	25.0
					EMXT	EPA 200.8	CUD	10/22/2007	Jon Elliott	µg/L	3.03	1.00	0.50
					EMXT	EPA 200.8	BAD	10/22/2007	Jon Elliott	µg/L	86.1	1.00	0.50
					EMXT	EPA 200.8	BD	10/25/2007	Jon Elliott	mg/L	1.18	0.10	0.05
					EMXT	EPA 200.8	BED	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CAD	10/22/2007	Jon Elliott	mg/L	138	1.00	0.05
					EMXT	EPA 200.8	CDD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	COBD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CRTD	10/22/2007	Jon Elliott	µg/L	4.81	1.00	0.50
					EMXT	EPA 200.8	AGD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					TLI	EPA 218.6	CR6	10/18/2007	Jean Paul Gleeson	µg/L	3.90 J	1.00	0.14
					TLI	EPA 300.0	CL	10/25/2007	Giawad Ghenniwa	mg/L	2090	100	14.0
					TLI	EPA 300.0	FL	10/19/2007	Giawad Ghenniwa	mg/L	2.66	0.50	0.025
					TLI	EPA 300.0	SO4	10/25/2007	Giawad Ghenniwa	mg/L	443	50.0	2.40
					EMXT	SM 2320B	ALKB	10/23/2007	Supakit Deesopha	mg/L	50.0	5.00	1.00
					EMXT	SM 2320B	ALKC	10/23/2007	Supakit Deesopha	mg/L	ND (5.0)	5.00	1.00
					EMXT	SM 2320B	ALKT	10/23/2007	Supakit Deesopha	mg/L	50.0	5.00	1.00
					TLI	SM2130B	TRB	10/18/2007	Gautam Savani	NTU	0.22	0.10	0.007
					TLI	SM2540C	TDS	10/18/2007	Tina Acquiat	mg/L	4310	250	50.4
					TLI	SM4500-HB	PH	10/18/2007	Tina Acquiat	pH Units	7.91 J	2.00	0.07
					EMXT	SM4500NH3F	NH3N	10/24/2007	Charles Swab	mg/L	ND (0.5)	0.50	0.03
					EMXT	SM4500NO3-E	NO3NO2N	10/20/2007	Tina Hoang	mg/L	2.31	0.40	0.08
CW-02D	CW-02D-014	Barry Collom	10/18/2007	7:38:00	EMXT	E245.2	HGD	10/25/2007	Noel Tan	µg/L	ND (0.2)	0.20	0.10
					TLI	EPA 120.1	SC	10/23/2007	Tina Acquiat	µmhos/cm	6760	2.00	0.153
					EMXT	EPA 200.7	FET	10/24/2007	Jon Elliott	mg/L	ND (0.5)	0.50	0.04
					EMXT	EPA 200.8	VD	10/30/2007	Jon Elliott	µg/L	6.18	1.00	0.50
					EMXT	EPA 200.8	MND	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	MOD	10/30/2007	Jon Elliott	µg/L	64.7	2.00	1.00

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
CW-02D	CW-02D-014	Barry Collom	10/18/2007	7:38:00	EMXT	EPA 200.8	NAD	10/31/2007	Jon Elliott	mg/L	1540	10.0	0.50
					EMXT	EPA 200.8	NID	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.10
					EMXT	EPA 200.8	PBD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	SBD	10/30/2007	Jon Elliott	µg/L	ND (2.0)	2.00	0.50
					EMXT	EPA 200.8	MGD	10/30/2007	Jon Elliott	mg/L	4.28	1.00	0.05
					EMXT	EPA 200.8	TLD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CUD	10/30/2007	Jon Elliott	µg/L	1.84	1.00	0.50
					EMXT	EPA 200.8	ZND	10/30/2007	Jon Elliott	µg/L	ND (10)	10.0	5.00
					EMXT	EPA 200.8	SED	10/30/2007	Jon Elliott	µg/L	2.29	1.00	0.50
					EMXT	EPA 200.8	BD	10/31/2007	Jon Elliott	mg/L	1.73	0.10	0.05
					EMXT	EPA 200.8	AGD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	ALD	10/30/2007	Jon Elliott	µg/L	ND (50)	50.0	25.0
					EMXT	EPA 200.8	KD	10/30/2007	Jon Elliott	mg/L	9.86	1.00	0.05
					EMXT	EPA 200.8	BAD	10/30/2007	Jon Elliott	µg/L	10.6	1.00	0.50
					EMXT	EPA 200.8	FETD	10/30/2007	Jon Elliott	mg/L	ND (0.1)	0.10	0.05
					EMXT	EPA 200.8	BED	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CAD	10/30/2007	Jon Elliott	mg/L	77.2	1.00	0.05
					EMXT	EPA 200.8	CDD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	COBD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CRTD	10/30/2007	Jon Elliott	µg/L	1.55	1.00	0.50
					EMXT	EPA 200.8	ASD	10/30/2007	Jon Elliott	µg/L	4.91	1.00	0.50
					TLI	EPA 218.6	CR6	10/18/2007	Jean Paul Gleeson	µg/L	ND (1.0)	1.00	0.14
					TLI	EPA 300.0	CL	10/25/2007	Giawad Ghenniwa	mg/L	2100	100	14.0
					TLI	EPA 300.0	FL	10/25/2007	Giawad Ghenniwa	mg/L	7.26	0.50	0.025
					TLI	EPA 300.0	SO4	10/25/2007	Giawad Ghenniwa	mg/L	489	12.5	0.60
					EMXT	SM 2320B	ALKC	10/23/2007	Supakit Deesopha	mg/L	ND (5.0)	5.00	1.00
					EMXT	SM 2320B	ALKT	10/23/2007	Supakit Deesopha	mg/L	46.7	5.00	1.00
					EMXT	SM 2320B	ALKB	10/23/2007	Supakit Deesopha	mg/L	46.7	5.00	1.00

TABLE 11
Board Order No. R7-2006-0060 WDR Monitoring Information for Groundwater Samples, Third and Fourth Quarter 2007
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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-02D	CW-02D-014	Barry Collom	10/18/2007	7:38:00	TLI	SM2130B	TRB	10/19/2007	Gautam Savani	NTU	0.198	0.10	0.007
					TLI	SM2540C	TDS	10/24/2007	Tina Acquiat	mg/L	4270	250	50.4
					TLI	SM4500-HB	PH	10/19/2007	Tina Acquiat	pH Units	8.27 J	2.00	0.07
					EMXT	SM4500NH3F	NH3N	10/24/2007	Charles Swab	mg/L	ND (0.5)	0.50	0.03
					EMXT	SM4500NO3-E	NO3NO2N	10/24/2007	Tina Hoang	mg/L	2.69	0.50	0.10
CW-02M	CW-02M-014	Barry Collom	10/18/2007	8:25:00	EMXT	E245.2	HGD	10/25/2007	Noel Tan	µg/L	ND (0.2)	0.20	0.10
					TLI	EPA 120.1	SC	10/23/2007	Tina Acquiat	µmhos/cm	6340	2.00	0.153
					EMXT	EPA 200.7	FET	10/24/2007	Jon Elliott	mg/L	ND (0.5)	0.50	0.04
					EMXT	EPA 200.8	VD	10/31/2007	Jon Elliott	µg/L	4.17	1.00	0.50
					EMXT	EPA 200.8	MGD	10/31/2007	Jon Elliott	mg/L	9.37	1.00	0.05
					EMXT	EPA 200.8	MND	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	MOD	10/31/2007	Jon Elliott	µg/L	23.3	2.00	1.00
					EMXT	EPA 200.8	NAD	10/31/2007	Jon Elliott	mg/L	1350	10.0	0.50
					EMXT	EPA 200.8	NID	10/31/2007	Jon Elliott	µg/L	1.50	1.00	0.10
					EMXT	EPA 200.8	PBD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	SBD	10/31/2007	Jon Elliott	µg/L	ND (2.0)	2.00	0.50
					EMXT	EPA 200.8	KD	10/31/2007	Jon Elliott	mg/L	10.3	1.00	0.05
					EMXT	EPA 200.8	TLD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	COBD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	ZND	10/31/2007	Jon Elliott	µg/L	ND (10)	10.0	5.00
					EMXT	EPA 200.8	SED	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	BAD	10/31/2007	Jon Elliott	µg/L	60.9	1.00	0.50
					EMXT	EPA 200.8	AGD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CUD	10/31/2007	Jon Elliott	µg/L	2.61	1.00	0.50
					EMXT	EPA 200.8	ASD	10/31/2007	Jon Elliott	µg/L	2.35	1.00	0.50
					EMXT	EPA 200.8	FETD	10/31/2007	Jon Elliott	mg/L	ND (0.1)	0.10	0.05
					EMXT	EPA 200.8	BD	10/31/2007	Jon Elliott	mg/L	1.14	0.10	0.05
					EMXT	EPA 200.8	BED	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50

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
CW-02M	CW-02M-014	Barry Collom	10/18/2007	8:25:00	EMXT	EPA 200.8	CAD	10/31/2007	Jon Elliott	mg/L	118	1.00	0.05
					EMXT	EPA 200.8	CDD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CRTD	10/31/2007	Jon Elliott	µg/L	15.1	1.00	0.50
					EMXT	EPA 200.8	ALD	10/31/2007	Jon Elliott	µg/L	ND (50)	50.0	25.0
					TLI	EPA 218.6	CR6	10/18/2007	Jean Paul Gleeson	µg/L	14.5	1.00	0.14
					TLI	EPA 300.0	CL	10/25/2007	Giawad Ghenniwa	mg/L	2000	100	14.0
					TLI	EPA 300.0	FL	10/25/2007	Giawad Ghenniwa	mg/L	3.17	0.50	0.025
					TLI	EPA 300.0	SO4	10/25/2007	Giawad Ghenniwa	mg/L	376	5.00	0.24
					EMXT	SM 2320B	ALKB	10/23/2007	Supakit Deesopha	mg/L	50.0	5.00	1.00
					EMXT	SM 2320B	ALKC	10/23/2007	Supakit Deesopha	mg/L	ND (5.0)	5.00	1.00
					EMXT	SM 2320B	ALKT	10/23/2007	Supakit Deesopha	mg/L	50.0	5.00	1.00
					TLI	SM2130B	TRB	10/19/2007	Gautam Savani	NTU	0.135	0.10	0.007
					TLI	SM2540C	TDS	10/24/2007	Tina Acquiat	mg/L	3850	250	50.4
					TLI	SM4500-HB	PH	10/19/2007	Tina Acquiat	pH Units	7.93 J	2.00	0.07
					EMXT	SM4500NH3F	NH3N	10/24/2007	Charles Swab	mg/L	ND (0.5)	0.50	0.03
					EMXT	SM4500NO3-E	NO3NO2N	10/24/2007	Tina Hoang	mg/L	1.09	0.10	0.02
CW-03D	CW-03D-014	Barry Collom	10/18/2007	9:40:00	EMXT	E245.2	HGD	10/25/2007	Noel Tan	µg/L	ND (0.2)	0.20	0.10
					TLI	EPA 120.1	SC	10/23/2007	Tina Acquiat	µmhos/cm	7970	2.00	0.153
					EMXT	EPA 200.7	FET	10/24/2007	Jon Elliott	mg/L	ND (0.5)	0.50	0.04
					EMXT	EPA 200.8	ZND	10/31/2007	Jon Elliott	µg/L	ND (10)	10.0	5.00
					EMXT	EPA 200.8	MGD	10/31/2007	Jon Elliott	mg/L	8.13	1.00	0.05
					EMXT	EPA 200.8	MND	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	MOD	10/31/2007	Jon Elliott	µg/L	88.2	2.00	1.00
					EMXT	EPA 200.8	NAD	10/31/2007	Jon Elliott	mg/L	1820	10.0	0.50
					EMXT	EPA 200.8	NID	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.10
					EMXT	EPA 200.8	PBD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	SBD	10/31/2007	Jon Elliott	µg/L	ND (2.0)	2.00	0.50
					EMXT	EPA 200.8	SED	10/31/2007	Jon Elliott	µg/L	1.84	1.00	0.50

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
CW-03D	CW-03D-014	Barry Collom	10/18/2007	9:40:00	EMXT	EPA 200.8	KD	10/31/2007	Jon Elliott	mg/L	12.1	1.00	0.05
					EMXT	EPA 200.8	VD	10/31/2007	Jon Elliott	µg/L	2.75	1.00	0.50
					EMXT	EPA 200.8	CDD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	TLD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	FETD	10/31/2007	Jon Elliott	mg/L	ND (0.1)	0.10	0.05
					EMXT	EPA 200.8	CUD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	COBD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CAD	10/31/2007	Jon Elliott	mg/L	105	1.00	0.05
					EMXT	EPA 200.8	BED	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	BD	10/31/2007	Jon Elliott	mg/L	1.70	0.10	0.05
					EMXT	EPA 200.8	BAD	10/31/2007	Jon Elliott	µg/L	12.7	1.00	0.50
					EMXT	EPA 200.8	ASD	10/31/2007	Jon Elliott	µg/L	1.72	1.00	0.50
					EMXT	EPA 200.8	ALD	10/31/2007	Jon Elliott	µg/L	ND (50)	50.0	25.0
					EMXT	EPA 200.8	AGD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CRTD	10/31/2007	Jon Elliott	µg/L	2.63	1.00	0.50
					TLI	EPA 218.6	CR6	10/19/2007	Jean Paul Gleeson	µg/L	2.50	1.00	0.14
					TLI	EPA 300.0	SO4	10/25/2007	Giawad Ghenniwa	mg/L	546	12.5	0.60
					TLI	EPA 300.0	FL	10/25/2007	Giawad Ghenniwa	mg/L	5.84	0.50	0.025
					TLI	EPA 300.0	CL	10/25/2007	Giawad Ghenniwa	mg/L	2570	100	14.0
					EMXT	SM 2320B	ALKB	10/23/2007	Supakit Deesopha	mg/L	46.7	5.00	1.00
					EMXT	SM 2320B	ALKC	10/23/2007	Supakit Deesopha	mg/L	ND (5.0)	5.00	1.00
					EMXT	SM 2320B	ALKT	10/23/2007	Supakit Deesopha	mg/L	46.7	5.00	1.00
					TLI	SM2130B	TRB	10/19/2007	Gautam Savani	NTU	ND (0.1)	0.10	0.007
					TLI	SM2540C	TDS	10/24/2007	Tina Acquiat	mg/L	5170	250	50.4
					TLI	SM4500-HB	PH	10/19/2007	Tina Acquiat	pH Units	8.09 J	2.00	0.07
					EMXT	SM4500NH3F	NH3N	10/24/2007	Charles Swab	mg/L	ND (0.5)	0.50	0.03
					EMXT	SM4500NO3-E	NO3NO2N	10/24/2007	Tina Hoang	mg/L	2.62	0.50	0.10
CW-03M	CW-03M-014	Barry Collom	10/18/2007	10:40:00	EMXT	E245.2	HGD	10/25/2007	Noel Tan	µg/L	ND (0.2)	0.20	0.10

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-014	Barry Collom	10/18/2007	10:40:00	TLI	EPA 120.1	SC	10/23/2007	Tina Acquiat	µmhos/cm	7820	2.00	0.153
					EMXT	EPA 200.7	FET	10/24/2007	Jon Elliott	mg/L	ND (0.5)	0.50	0.04
					EMXT	EPA 200.8	BED	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	KD	10/31/2007	Jon Elliott	mg/L	13.3	1.00	0.05
					EMXT	EPA 200.8	TLD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	SED	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	SBD	10/31/2007	Jon Elliott	µg/L	ND (2.0)	2.00	0.50
					EMXT	EPA 200.8	PBD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	NID	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.10
					EMXT	EPA 200.8	NAD	10/31/2007	Jon Elliott	mg/L	1670	10.0	0.50
					EMXT	EPA 200.8	ZND	10/31/2007	Jon Elliott	µg/L	ND (10)	10.0	5.00
					EMXT	EPA 200.8	MOD	10/31/2007	Jon Elliott	µg/L	21.6	2.00	1.00
					EMXT	EPA 200.8	MND	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	MGD	10/31/2007	Jon Elliott	mg/L	17.5	1.00	0.05
					EMXT	EPA 200.8	VD	10/31/2007	Jon Elliott	µg/L	2.24	1.00	0.50
					EMXT	EPA 200.8	FETD	10/31/2007	Jon Elliott	mg/L	ND (0.1)	0.10	0.05
					EMXT	EPA 200.8	CUD	10/31/2007	Jon Elliott	µg/L	1.41	1.00	0.50
					EMXT	EPA 200.8	CRTD	10/31/2007	Jon Elliott	µg/L	11.9	1.00	0.50
					EMXT	EPA 200.8	COBD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CAD	10/31/2007	Jon Elliott	mg/L	207	1.00	0.05
					EMXT	EPA 200.8	BD	10/31/2007	Jon Elliott	mg/L	1.14	0.10	0.05
					EMXT	EPA 200.8	BAD	10/31/2007	Jon Elliott	µg/L	51.1	1.00	0.50
					EMXT	EPA 200.8	ASD	10/31/2007	Jon Elliott	µg/L	1.30	1.00	0.50
					EMXT	EPA 200.8	ALD	10/31/2007	Jon Elliott	µg/L	ND (50)	50.0	25.0
					EMXT	EPA 200.8	AGD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CDD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					TLI	EPA 218.6	CR6	10/19/2007	Jean Paul Gleeson	µg/L	11.8	1.00	0.14
					TLI	EPA 300.0	CL	10/25/2007	Giawad Ghenniwa	mg/L	2660	100	14.0

TABLE 11

Board Order No. R7-2006-0060 WDR Monitoring Information for Groundwater Samples, Third and Fourth Quarter 2007

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-014	Barry Collom	10/18/2007	10:40:00	TLI	EPA 300.0	FL	10/25/2007	Giawad Ghenniwa	mg/L	2.88	0.50	0.025
					TLI	EPA 300.0	SO4	10/25/2007	Giawad Ghenniwa	mg/L	400	12.5	0.60
					EMXT	SM 2320B	ALKB	10/23/2007	Supakit Deesopha	mg/L	46.7	5.00	1.00
					EMXT	SM 2320B	ALKC	10/23/2007	Supakit Deesopha	mg/L	ND (5.0)	5.00	1.00
					EMXT	SM 2320B	ALKT	10/23/2007	Supakit Deesopha	mg/L	46.7	5.00	1.00
					TLI	SM2130B	TRB	10/19/2007	Gautam Savani	NTU	0.19	0.10	0.007
					TLI	SM2540C	TDS	10/24/2007	Tina Acquiat	mg/L	5450	250	50.4
					TLI	SM4500-HB	PH	10/19/2007	Tina Acquiat	pH Units	7.75 J	2.00	0.07
					EMXT	SM4500NH3F	NH3N	10/24/2007	Charles Swab	mg/L	ND (0.5)	0.50	0.03
					EMXT	SM4500NO3-E	NO3NO2N	10/24/2007	Tina Hoang	mg/L	0.799	0.10	0.02
CW-04D	CW-04D-014	Barry Collom	10/18/2007	13:18:00	EMXT	E245.2	HGD	10/25/2007	Noel Tan	µg/L	ND (0.2)	0.20	0.10
					TLI	EPA 120.1	SC	10/23/2007	Tina Acquiat	µmhos/cm	9700	2.00	0.153
					EMXT	EPA 200.7	FET	10/24/2007	Jon Elliott	mg/L	ND (0.5)	0.50	0.04
					EMXT	EPA 200.8	BED	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	KD	10/31/2007	Jon Elliott	mg/L	13.3	1.00	0.05
					EMXT	EPA 200.8	TLD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	SED	10/31/2007	Jon Elliott	µg/L	1.34	1.00	0.50
					EMXT	EPA 200.8	SBD	10/31/2007	Jon Elliott	µg/L	ND (2.0)	2.00	0.50
					EMXT	EPA 200.8	PBD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	NID	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.10
					EMXT	EPA 200.8	NAD	10/31/2007	Jon Elliott	mg/L	2140	10.0	0.50
					EMXT	EPA 200.8	ZND	10/31/2007	Jon Elliott	µg/L	ND (10)	10.0	5.00
					EMXT	EPA 200.8	MOD	10/31/2007	Jon Elliott	µg/L	39.1	2.00	1.00
					EMXT	EPA 200.8	MND	10/31/2007	Jon Elliott	µg/L	4.02	1.00	0.50
					EMXT	EPA 200.8	MGD	10/31/2007	Jon Elliott	mg/L	12.6	1.00	0.05
					EMXT	EPA 200.8	VD	10/31/2007	Jon Elliott	µg/L	4.19	1.00	0.50
					EMXT	EPA 200.8	FETD	10/31/2007	Jon Elliott	mg/L	ND (0.1)	0.10	0.05
					EMXT	EPA 200.8	CUD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50

TABLE 11
Board Order No. R7-2006-0060 WDR Monitoring Information for Groundwater Samples, Third and Fourth Quarter 2007
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-04D	CW-04D-014	Barry Collom	10/18/2007	13:18:00	EMXT	EPA 200.8	CRTD	10/31/2007	Jon Elliott	µg/L	3.73	1.00	0.50
					EMXT	EPA 200.8	COBD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CAD	10/31/2007	Jon Elliott	mg/L	197	1.00	0.05
					EMXT	EPA 200.8	BD	10/31/2007	Jon Elliott	mg/L	1.56	0.10	0.05
					EMXT	EPA 200.8	BAD	10/31/2007	Jon Elliott	µg/L	30.1	1.00	0.50
					EMXT	EPA 200.8	ASD	10/31/2007	Jon Elliott	µg/L	3.89	1.00	0.50
					EMXT	EPA 200.8	ALD	10/31/2007	Jon Elliott	µg/L	ND (50)	50.0	25.0
					EMXT	EPA 200.8	AGD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CDD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					TLI	EPA 218.6	CR6	10/19/2007	Jean Paul Gleeson	µg/L	3.40	1.00	0.14
					TLI	EPA 300.0	SO4	10/25/2007	Giawad Ghenniwa	mg/L	549	12.5	0.60
					TLI	EPA 300.0	FL	10/25/2007	Giawad Ghenniwa	mg/L	5.01	0.50	0.025
					TLI	EPA 300.0	CL	10/25/2007	Giawad Ghenniwa	mg/L	3280	100	14.0
					EMXT	SM 2320B	ALKB	10/23/2007	Supakit Deesopha	mg/L	40.0	5.00	1.00
					EMXT	SM 2320B	ALKC	10/23/2007	Supakit Deesopha	mg/L	ND (5.0)	5.00	1.00
					EMXT	SM 2320B	ALKT	10/23/2007	Supakit Deesopha	mg/L	40.0	5.00	1.00
					TLI	SM2130B	TRB	10/19/2007	Gautam Savani	NTU	ND (0.1)	0.10	0.007
					TLI	SM2540C	TDS	10/24/2007	Tina Acquiat	mg/L	6310	250	50.4
					TLI	SM4500-HB	PH	10/19/2007	Tina Acquiat	pH Units	8.02 J	2.00	0.07
					EMXT	SM4500NH3F	NH3N	10/24/2007	Charles Swab	mg/L	ND (0.5)	0.50	0.03
					EMXT	SM4500NO3-E	NO3NO2N	10/24/2007	Tina Hoang	mg/L	1.24	0.10	0.02
CW-04M	CW-04M-014	Barry Collom	10/18/2007	12:10:00	EMXT	E245.2	HGD	10/25/2007	Noel Tan	µg/L	ND (0.2)	0.20	0.10
					TLI	EPA 120.1	SC	10/23/2007	Tina Acquiat	µmhos/cm	5560	2.00	0.153
					EMXT	EPA 200.7	FET	10/24/2007	Jon Elliott	mg/L	ND (0.5)	0.50	0.04
					EMXT	EPA 200.8	BD	10/31/2007	Jon Elliott	mg/L	0.809	0.10	0.05
					EMXT	EPA 200.8	KD	10/31/2007	Jon Elliott	mg/L	9.99	1.00	0.05
					EMXT	EPA 200.8	SED	10/31/2007	Jon Elliott	µg/L	1.02	1.00	0.50
					EMXT	EPA 200.8	SBD	10/31/2007	Jon Elliott	µg/L	ND (2.0)	2.00	0.50

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-04M	CW-04M-014	Barry Collom	10/18/2007	12:10:00	EMXT	EPA 200.8	PBD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	NID	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.10
					EMXT	EPA 200.8	TLD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	NAD	10/31/2007	Jon Elliott	mg/L	1120	10.0	0.50
					EMXT	EPA 200.8	VD	10/31/2007	Jon Elliott	µg/L	3.96	1.00	0.50
					EMXT	EPA 200.8	MOD	10/31/2007	Jon Elliott	µg/L	11.5	2.00	1.00
					EMXT	EPA 200.8	MND	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	MGD	10/31/2007	Jon Elliott	mg/L	11.2	1.00	0.05
					EMXT	EPA 200.8	FETD	10/31/2007	Jon Elliott	mg/L	ND (0.1)	0.10	0.05
					EMXT	EPA 200.8	CUD	10/31/2007	Jon Elliott	µg/L	3.48	1.00	0.50
					EMXT	EPA 200.8	CRTD	10/31/2007	Jon Elliott	µg/L	20.7	1.00	0.50
					EMXT	EPA 200.8	COBD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CDD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	BED	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	BAD	10/31/2007	Jon Elliott	µg/L	71.8	1.00	0.50
					EMXT	EPA 200.8	ASD	10/31/2007	Jon Elliott	µg/L	2.70	1.00	0.50
					EMXT	EPA 200.8	ALD	10/31/2007	Jon Elliott	µg/L	ND (50)	50.0	25.0
					EMXT	EPA 200.8	AGD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	ZND	10/31/2007	Jon Elliott	µg/L	ND (10)	10.0	5.00
					EMXT	EPA 200.8	CAD	10/31/2007	Jon Elliott	mg/L	123	1.00	0.05
					TLI	EPA 218.6	CR6	10/19/2007	Jean Paul Gleeson	µg/L	20.7	1.00	0.14
					TLI	EPA 300.0	CL	10/25/2007	Giawad Ghenniwa	mg/L	1760	100	14.0
					TLI	EPA 300.0	FL	10/25/2007	Giawad Ghenniwa	mg/L	2.19	0.50	0.025
					TLI	EPA 300.0	SO4	10/25/2007	Giawad Ghenniwa	mg/L	342	5.00	0.24
					EMXT	SM 2320B	ALKB	10/23/2007	Supakit Deesopha	mg/L	55.0	5.00	1.00
					EMXT	SM 2320B	ALKC	10/23/2007	Supakit Deesopha	mg/L	ND (5.0)	5.00	1.00
					EMXT	SM 2320B	ALKT	10/23/2007	Supakit Deesopha	mg/L	55.0	5.00	1.00
					TLI	SM2130B	TRB	10/19/2007	Gautam Savani	NTU	0.137	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
CW-04M	CW-04M-014	Barry Collom	10/18/2007	12:10:00	TLI	SM2540C	TDS	10/24/2007	Tina Acquiat	mg/L	3500	125	25.2
					TLI	SM4500-HB	PH	10/19/2007	Tina Acquiat	pH Units	7.86 J	2.00	0.07
					EMXT	SM4500NH3F	NH3N	10/24/2007	Charles Swab	mg/L	ND (0.5)	0.50	0.03
					EMXT	SM4500NO3-E	NO3NO2N	10/24/2007	Tina Hoang	mg/L	1.55	0.10	0.02
CW-04M	MW-91-014	Barry Collom	10/18/2007	12:25:00	EMXT	E245.2	HGD	10/25/2007	Noel Tan	µg/L	ND (0.2)	0.20	0.10
					TLI	EPA 120.1	SC	10/23/2007	Tina Acquiat	µmhos/cm	5500	2.00	0.153
					EMXT	EPA 200.7	FET	10/24/2007	Jon Elliott	mg/L	ND (0.5)	0.50	0.04
					EMXT	EPA 200.8	BD	10/31/2007	Jon Elliott	mg/L	0.848	0.10	0.05
					EMXT	EPA 200.8	MGD	10/31/2007	Jon Elliott	mg/L	11.4	1.00	0.05
					EMXT	EPA 200.8	VD	10/31/2007	Jon Elliott	µg/L	4.01	1.00	0.50
					EMXT	EPA 200.8	TLD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	SED	10/31/2007	Jon Elliott	µg/L	1.10	1.00	0.50
					EMXT	EPA 200.8	SBD	10/31/2007	Jon Elliott	µg/L	ND (2.0)	2.00	0.50
					EMXT	EPA 200.8	PBD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	NID	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.10
					EMXT	EPA 200.8	NAD	10/31/2007	Jon Elliott	mg/L	1160	10.0	0.50
					EMXT	EPA 200.8	MOD	10/31/2007	Jon Elliott	µg/L	12.1	2.00	1.00
					EMXT	EPA 200.8	MND	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	KD	10/31/2007	Jon Elliott	mg/L	10.3	1.00	0.05
					EMXT	EPA 200.8	FETD	10/31/2007	Jon Elliott	mg/L	ND (0.1)	0.10	0.05
					EMXT	EPA 200.8	CUD	10/31/2007	Jon Elliott	µg/L	3.89	1.00	0.50
					EMXT	EPA 200.8	CRTD	10/31/2007	Jon Elliott	µg/L	21.7	1.00	0.50
					EMXT	EPA 200.8	COBD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CDD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	ZND	10/31/2007	Jon Elliott	µg/L	ND (10)	10.0	5.00
					EMXT	EPA 200.8	BED	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	BAD	10/31/2007	Jon Elliott	µg/L	73.7	1.00	0.50
					EMXT	EPA 200.8	ASD	10/31/2007	Jon Elliott	µg/L	2.69	1.00	0.50

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-04M	MW-91-014	Barry Collom	10/18/2007	12:25:00	EMXT	EPA 200.8	AGD	10/31/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CAD	10/31/2007	Jon Elliott	mg/L	125	1.00	0.05
					EMXT	EPA 200.8	ALD	10/31/2007	Jon Elliott	µg/L	ND (50)	50.0	25.0
					TLI	EPA 218.6	CR6	10/19/2007	Jean Paul Gleeson	µg/L	21.0	1.00	0.14
					TLI	EPA 300.0	CL	10/25/2007	Giawad Ghenniwa	mg/L	1760	100	14.0
					TLI	EPA 300.0	FL	10/25/2007	Giawad Ghenniwa	mg/L	2.05	0.50	0.025
					TLI	EPA 300.0	SO4	10/25/2007	Giawad Ghenniwa	mg/L	338	5.00	0.24
					EMXT	SM 2320B	ALKB	10/23/2007	Supakit Deesopha	mg/L	55.0	5.00	1.00
					EMXT	SM 2320B	ALKC	10/23/2007	Supakit Deesopha	mg/L	ND (5.0)	5.00	1.00
					EMXT	SM 2320B	ALKT	10/23/2007	Supakit Deesopha	mg/L	55.0	5.00	1.00
					TLI	SM2130B	TRB	10/19/2007	Gautam Savani	NTU	0.165	0.10	0.007
					TLI	SM2540C	TDS	10/24/2007	Tina Acquiat	mg/L	3680	125	25.2
					TLI	SM4500-HB	PH	10/19/2007	Tina Acquiat	pH Units	7.83 J	2.00	0.07
					EMXT	SM4500NH3F	NH3N	10/24/2007	Charles Swab	mg/L	ND (0.5)	0.50	0.03
					EMXT	SM4500NO3-E	NO3NO2N	10/24/2007	Tina Hoang	mg/L	1.39	0.10	0.02
OW-01D	OW-01D-013	Aurora Hinckley	08/09/2007	15:35:00	TLI	EPA 120.1	SC	08/14/2007	Tina Acquiat	µS/cm	6540	2.00	0.153
					TLI	EPA 180.1	TRB	08/10/2007	Gautam Savani	NTU	0.144	0.10	0.016
					TLI	EPA 200.7	BD	08/27/2007	Daisy Duyan	mg/L	1.30	0.20	0.000084
					TLI	EPA 200.8	MOD	08/24/2007	Michel Mendoza	µg/L	16.8	5.00	0.47
					TLI	EPA 200.8	CRTD	08/28/2007	Michel Mendoza	µg/L	1.10	1.00	0.075
					TLI	EPA 218.6	CR6	08/10/2007	Jean Paul Gleeson	µg/L	0.50	0.20	0.018
					TLI	EPA 300.0	CL	08/10/2007	Giawad Ghenniwa	mg/L	2020	100	22.0
					TLI	EPA 300.0	SO4	08/10/2007	Giawad Ghenniwa	mg/L	428	250	15.4
					TLI	EPA 300.0	FL	08/10/2007	Giawad Ghenniwa	mg/L	1.86	0.50	0.0905
					TLI	EPA 300.0	NO3N	08/10/2007	Giawad Ghenniwa	mg/L	2.85	1.00	0.084
					TLI	SM2540C	TDS	08/14/2007	Tina Acquiat	mg/L	3990	250	64.0
					TLI	SM4500-HB	PH	08/10/2007	Tina Acquiat	pH Units	7.73 J	2.00	0.07
					TLI	SM4500NO2B	NO2N	08/10/2007	Tina Acquiat	mg/L	ND (0.005)	0.005	0.001

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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-01D	OW-01D-013	Aurora Hinckley	08/09/2007	15:35:00	TLI	SM4500NO2B/300	NO2NO3C	08/10/2007	Tina Acquiat/Giawad Ghenniw	mg/L	2.86	1.00	0.085
OW-01D	OW-01D-014	Barry Collom	10/16/2007	12:47:00	TLI	EPA 120.1	SC	10/17/2007	Tina Acquiat	µmhos/cm	6360	2.00	0.153
					EMXT	EPA 200.7	FET	10/24/2007	Jon Elliott	mg/L	ND (0.5)	0.50	0.04
					EMXT	EPA 200.8	CDD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	FETD	10/30/2007	Jon Elliott	mg/L	ND (0.1)	0.10	0.05
					EMXT	EPA 200.8	BED	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	AGD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	ALD	10/30/2007	Jon Elliott	µg/L	ND (50)	50.0	25.0
					EMXT	EPA 200.8	ASD	10/30/2007	Jon Elliott	µg/L	2.36	1.00	0.50
					EMXT	EPA 200.8	BAD	10/30/2007	Jon Elliott	µg/L	32.8	1.00	0.50
					EMXT	EPA 200.8	BD	10/30/2007	Jon Elliott	mg/L	1.32	0.01	0.005
					EMXT	EPA 200.8	CRTD	10/30/2007	Jon Elliott	µg/L	1.15	1.00	0.50
					EMXT	EPA 200.8	COBD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CUD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CAD	10/30/2007	Jon Elliott	mg/L	126	1.00	0.05
					EMXT	EPA 200.8	VD	10/30/2007	Jon Elliott	µg/L	5.11	1.00	0.50
					EMXT	EPA 200.8	ZND	10/30/2007	Jon Elliott	µg/L	ND (10)	10.0	5.00
					EMXT	EPA 200.8	MND	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	MGD	10/30/2007	Jon Elliott	mg/L	9.84	1.00	0.05
					EMXT	EPA 200.8	KD	10/30/2007	Jon Elliott	mg/L	10.4	1.00	0.05
					EMXT	EPA 200.8	NAD	10/30/2007	Jon Elliott	mg/L	1450	10.0	0.50
					EMXT	EPA 200.8	SED	10/30/2007	Jon Elliott	µg/L	2.23	1.00	0.50
					EMXT	EPA 200.8	SBD	10/30/2007	Jon Elliott	µg/L	ND (2.0)	2.00	0.50
					EMXT	EPA 200.8	TLD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	PBD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	NID	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.10
					EMXT	EPA 200.8	MOD	10/30/2007	Jon Elliott	µg/L	13.0	2.00	1.00
					TLI	EPA 218.6	CR6	10/17/2007	Jean Paul Gleeson	µg/L	1.00	1.00	0.14

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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-01D	OW-01D-014	Barry Collom	10/16/2007	12:47:00	EMXT	EPA 245.1	HGD	10/22/2007	Noel Tan	µg/L	ND (0.2)	0.20	0.10
					TLI	EPA 300.0	FL	10/17/2007	Giawad Ghenniwa	mg/L	2.12	0.50	0.025
					TLI	EPA 300.0	SO4	10/17/2007	Giawad Ghenniwa	mg/L	474	12.5	0.60
					TLI	EPA 300.0	CL	10/17/2007	Giawad Ghenniwa	mg/L	1980	100	14.0
					EMXT	SM 2320B	ALKT	10/23/2007	Romy Marasigan	mg/L	70.0	5.00	1.00
					EMXT	SM 2320B	ALKC	10/23/2007	Romy Marasigan	mg/L	ND (5.0)	5.00	1.00
					EMXT	SM 2320B	ALKB	10/23/2007	Romy Marasigan	mg/L	70.0	5.00	1.00
					TLI	SM2130B	TRB	10/17/2007	Gautam Savani	NTU	0.181	0.10	0.007
					TLI	SM2540C	TDS	10/18/2007	Tina Acquiat	mg/L	3940	125	25.2
					TLI	SM4500-HB	PH	10/17/2007	Kim Luck	pH Units	7.93 J	2.00	0.07
					EMXT	SM4500NH3F	NH3N	10/24/2007	Charles Swab	mg/L	ND (0.5)	0.50	0.03
					EMXT	SM4500NO3-E	NO3NO2N	10/20/2007	Tina Hoang	mg/L	2.47	0.40	0.08
OW-01M	OW-01M-013	Aurora Hinckley	08/09/2007	14:43:00	TLI	EPA 120.1	SC	08/14/2007	Tina Acquiat	µS/cm	6590	2.00	0.153
					TLI	EPA 180.1	TRB	08/10/2007	Gautam Savani	NTU	0.873	0.10	0.016
					TLI	EPA 200.7	BD	08/27/2007	Daisy Duyan	mg/L	1.15	0.20	0.000084
					TLI	EPA 200.8	MOD	08/24/2007	Michel Mendoza	µg/L	18.4	5.00	0.47
					TLI	EPA 200.8	CRTD	08/28/2007	Michel Mendoza	µg/L	ND (1.0)	1.00	0.075
					TLI	EPA 218.6	CR6	08/10/2007	Jean Paul Gleeson	µg/L	0.57	0.20	0.018
					TLI	EPA 300.0	CL	08/10/2007	Giawad Ghenniwa	mg/L	2000	100	22.0
					TLI	EPA 300.0	NO3N	08/10/2007	Giawad Ghenniwa	mg/L	2.77	1.00	0.084
					TLI	EPA 300.0	SO4	08/10/2007	Giawad Ghenniwa	mg/L	408	250	15.4
					TLI	EPA 300.0	FL	08/10/2007	Giawad Ghenniwa	mg/L	2.40	0.50	0.0905
					TLI	SM2540C	TDS	08/14/2007	Tina Acquiat	mg/L	3970	250	64.0
					TLI	SM4500-HB	PH	08/10/2007	Tina Acquiat	pH Units	7.90 J	2.00	0.07
					TLI	SM4500NO2B	NO2N	08/10/2007	Tina Acquiat	mg/L	ND (0.005)	0.005	0.001
					TLI	SM4500NO2B/300	NO2NO3C	08/10/2007	Tina Acquiat/Giawad Ghenniw	mg/L	2.78	1.00	0.085
OW-01M	OW-01M-014	Barry Collom	10/16/2007	13:45:00	TLI	EPA 120.1	SC	10/17/2007	Tina Acquiat	µmhos/cm	6710	2.00	0.153

TABLE 11

Board Order No. R7-2006-0060 WDR Monitoring Information for Groundwater Samples, Third and Fourth Quarter 2007

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-014	Barry Collom	10/16/2007	13:45:00	EMXT	EPA 200.7	FET	10/24/2007	Jon Elliott	mg/L	ND (0.5)	0.50	0.04
					EMXT	EPA 200.8	CAD	10/30/2007	Jon Elliott	mg/L	194	1.00	0.05
					EMXT	EPA 200.8	CRTD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CUD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	FETD	10/30/2007	Jon Elliott	mg/L	ND (0.1)	0.10	0.05
					EMXT	EPA 200.8	BED	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	MGD	10/30/2007	Jon Elliott	mg/L	17.2	1.00	0.05
					EMXT	EPA 200.8	MND	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	MOD	10/30/2007	Jon Elliott	µg/L	11.1	2.00	1.00
					EMXT	EPA 200.8	NAD	10/30/2007	Jon Elliott	mg/L	1440	10.0	0.50
					EMXT	EPA 200.8	NID	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.10
					EMXT	EPA 200.8	PBD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	SBD	10/30/2007	Jon Elliott	µg/L	ND (2.0)	2.00	0.50
					EMXT	EPA 200.8	SED	10/30/2007	Jon Elliott	µg/L	2.54	1.00	0.50
					EMXT	EPA 200.8	TLD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	VD	10/30/2007	Jon Elliott	µg/L	3.09	1.00	0.50
					EMXT	EPA 200.8	ZND	10/30/2007	Jon Elliott	µg/L	ND (10)	10.0	5.00
					EMXT	EPA 200.8	KD	10/30/2007	Jon Elliott	mg/L	12.9	1.00	0.05
					EMXT	EPA 200.8	BAD	10/30/2007	Jon Elliott	µg/L	96.2	1.00	0.50
					EMXT	EPA 200.8	ASD	10/30/2007	Jon Elliott	µg/L	1.41	1.00	0.50
					EMXT	EPA 200.8	ALD	10/30/2007	Jon Elliott	µg/L	ND (50)	50.0	25.0
					EMXT	EPA 200.8	AGD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	COBD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CDD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	BD	10/30/2007	Jon Elliott	mg/L	1.30	0.01	0.005
					TLI	EPA 218.6	CR6	10/16/2007	Jean Paul Gleeson	µg/L	1.10	1.00	0.14
					EMXT	EPA 245.1	HGD	10/22/2007	Noel Tan	µg/L	ND (0.2)	0.20	0.10
					TLI	EPA 300.0	SO4	10/17/2007	Giawad Ghenniwa	mg/L	497	12.5	0.60

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-014	Barry Collom	10/16/2007	13:45:00	TLI	EPA 300.0	FL	10/17/2007	Giawad Ghenniwa	mg/L	2.05	0.50	0.025
					TLI	EPA 300.0	CL	10/17/2007	Giawad Ghenniwa	mg/L	2100	100	14.0
					EMXT	SM 2320B	ALKT	10/23/2007	Romy Marasigan	mg/L	85.0	5.00	1.00
					EMXT	SM 2320B	ALKC	10/23/2007	Romy Marasigan	mg/L	ND (5.0)	5.00	1.00
					EMXT	SM 2320B	ALKB	10/23/2007	Romy Marasigan	mg/L	85.0	5.00	1.00
					TLI	SM2130B	TRB	10/17/2007	Gautam Savani	NTU	ND (0.1)	0.10	0.007
					TLI	SM2540C	TDS	10/18/2007	Tina Acquiat	mg/L	4350	250	50.4
					TLI	SM4500-HB	PH	10/17/2007	Kim Luck	pH Units	7.73 J	2.00	0.07
					EMXT	SM4500NH3F	NH3N	10/24/2007	Charles Swab	mg/L	ND (0.5)	0.50	0.03
					EMXT	SM4500NO3-E	NO3NO2N	10/20/2007	Tina Hoang	mg/L	2.56	0.40	0.08
OW-01S	OW-01S-013	Aurora Hinckley	08/09/2007	13:47:00	TLI	EPA 120.1	SC	08/14/2007	Tina Acquiat	µS/cm	2400	2.00	0.153
					TLI	EPA 180.1	TRB	08/10/2007	Gautam Savani	NTU	0.915	0.10	0.016
					TLI	EPA 200.7	BD	08/27/2007	Daisy Duyan	mg/L	0.319	0.20	0.000084
					TLI	EPA 200.8	MOD	08/24/2007	Michel Mendoza	µg/L	13.5	5.00	0.47
					TLI	EPA 200.8	CRTD	08/28/2007	Michel Mendoza	µg/L	19.4	1.00	0.075
					TLI	EPA 218.6	CR6	08/10/2007	Jean Paul Gleeson	µg/L	19.8	0.20	0.018
					TLI	EPA 300.0	FL	08/10/2007	Giawad Ghenniwa	mg/L	2.50	0.50	0.0905
					TLI	EPA 300.0	NO3N	08/10/2007	Giawad Ghenniwa	mg/L	3.06	1.00	0.084
					TLI	EPA 300.0	SO4	08/10/2007	Giawad Ghenniwa	mg/L	127	50.0	3.07
					TLI	EPA 300.0	CL	08/10/2007	Giawad Ghenniwa	mg/L	686	20.0	4.39
					TLI	SM2540C	TDS	08/14/2007	Tina Acquiat	mg/L	1450	50.0	12.8
					TLI	SM4500-HB	PH	08/10/2007	Tina Acquiat	pH Units	7.82 J	2.00	0.07
					TLI	SM4500NO2B	NO2N	08/10/2007	Tina Acquiat	mg/L	ND (0.005)	0.005	0.001
					TLI	SM4500NO2B/300	NO2NO3C	08/10/2007	Tina Acquiat/Giawad Ghenniw	mg/L	3.07	1.00	0.085
OW-01S	OW-01S-014	Barry Collom	10/16/2007	14:40:00	TLI	EPA 120.1	SC	10/17/2007	Tina Acquiat	µmhos/cm	2220	2.00	0.153
					EMXT	EPA 200.7	FET	10/24/2007	Jon Elliott	mg/L	ND (0.5)	0.50	0.04
					EMXT	EPA 200.8	VD	10/30/2007	Jon Elliott	µg/L	3.66	1.00	0.50

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-014	Barry Collom	10/16/2007	14:40:00	EMXT	EPA 200.8	MOD	10/30/2007	Jon Elliott	µg/L	10.6	2.00	1.00
					EMXT	EPA 200.8	NAD	10/30/2007	Jon Elliott	mg/L	353	1.00	0.05
					EMXT	EPA 200.8	NID	10/30/2007	Jon Elliott	µg/L	1.73	1.00	0.10
					EMXT	EPA 200.8	PBD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	SBD	10/30/2007	Jon Elliott	µg/L	ND (2.0)	2.00	0.50
					EMXT	EPA 200.8	TLD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	MND	10/30/2007	Jon Elliott	µg/L	1.21	1.00	0.50
					EMXT	EPA 200.8	ZND	10/30/2007	Jon Elliott	µg/L	ND (10)	10.0	5.00
					EMXT	EPA 200.8	ASD	10/30/2007	Jon Elliott	µg/L	1.32	1.00	0.50
					EMXT	EPA 200.8	SED	10/30/2007	Jon Elliott	µg/L	1.91	1.00	0.50
					EMXT	EPA 200.8	KD	10/30/2007	Jon Elliott	mg/L	7.59	1.00	0.05
					EMXT	EPA 200.8	FETD	10/30/2007	Jon Elliott	mg/L	ND (0.1)	0.10	0.05
					EMXT	EPA 200.8	CUD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CRTD	10/30/2007	Jon Elliott	µg/L	19.7	1.00	0.50
					EMXT	EPA 200.8	COBD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CDD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CAD	10/30/2007	Jon Elliott	mg/L	95.1	1.00	0.05
					EMXT	EPA 200.8	BED	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	AGD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	BAD	10/30/2007	Jon Elliott	µg/L	78.2	1.00	0.50
					EMXT	EPA 200.8	MGD	10/30/2007	Jon Elliott	mg/L	16.7	1.00	0.05
					EMXT	EPA 200.8	ALD	10/30/2007	Jon Elliott	µg/L	ND (50)	50.0	25.0
					EMXT	EPA 200.8	BD	10/30/2007	Jon Elliott	mg/L	0.327	0.01	0.005
					TLI	EPA 218.6	CR6	10/17/2007	Jean Paul Gleeson	µg/L	21.6	1.00	0.14
					EMXT	EPA 245.1	HGD	10/22/2007	Noel Tan	µg/L	ND (0.2)	0.20	0.10
					TLI	EPA 300.0	FL	10/17/2007	Giawad Ghenniwa	mg/L	2.74	0.50	0.025
					TLI	EPA 300.0	SO4	10/17/2007	Giawad Ghenniwa	mg/L	142	5.00	0.24
					TLI	EPA 300.0	CL	10/17/2007	Giawad Ghenniwa	mg/L	635	20.0	2.80

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-014	Barry Collom	10/16/2007	14:40:00	EMXT	SM 2320B	ALKB	10/23/2007	Romy Marasigan	mg/L	80.0	5.00	1.00
					EMXT	SM 2320B	ALKC	10/23/2007	Romy Marasigan	mg/L	ND (5.0)	5.00	1.00
					EMXT	SM 2320B	ALKT	10/23/2007	Romy Marasigan	mg/L	80.0	5.00	1.00
					TLI	SM2130B	TRB	10/17/2007	Gautam Savani	NTU	0.26	0.10	0.007
					TLI	SM2540C	TDS	10/18/2007	Tina Acquiat	mg/L	1430	50.0	10.1
					TLI	SM4500-HB	PH	10/17/2007	Kim Luck	pH Units	7.85 J	2.00	0.07
					EMXT	SM4500NH3F	NH3N	10/24/2007	Charles Swab	mg/L	ND (0.5)	0.50	0.03
					EMXT	SM4500NO3-E	NO3NO2N	10/20/2007	Tina Hoang	mg/L	3.09	0.40	0.08
OW-02D	OW-02D-013	Aurora Hinckley	08/09/2007	9:59:00	TLI	EPA 120.1	SC	08/14/2007	Tina Acquiat	µS/cm	6580	2.00	0.153
					TLI	EPA 180.1	TRB	08/10/2007	Gautam Savani	NTU	ND (0.1)	0.10	0.016
					TLI	EPA 200.7	BD	08/27/2007	Daisy Duyan	mg/L	1.07	0.20	0.000084
					TLI	EPA 200.8	CRTD	08/28/2007	Michel Mendoza	µg/L	ND (1.0)	1.00	0.075
					TLI	EPA 200.8	MOD	08/24/2007	Michel Mendoza	µg/L	15.9	5.00	0.47
					TLI	EPA 218.6	CR6	08/09/2007	Jean Paul Gleeson	µg/L	0.60	0.20	0.018
					TLI	EPA 300.0	FL	08/10/2007	Giawad Ghenniwa	mg/L	2.12	0.50	0.0905
					TLI	EPA 300.0	NO3N	08/10/2007	Giawad Ghenniwa	mg/L	2.58	1.00	0.084
					TLI	EPA 300.0	CL	08/10/2007	Giawad Ghenniwa	mg/L	2040	100	22.0
					TLI	EPA 300.0	SO4	08/10/2007	Giawad Ghenniwa	mg/L	432	250	15.4
					TLI	SM2540C	TDS	08/14/2007	Tina Acquiat	mg/L	3910	250	64.0
					TLI	SM4500-HB	PH	08/10/2007	Tina Acquiat	pH Units	7.83 J	2.00	0.07
					TLI	SM4500NO2B	NO2N	08/10/2007	Tina Acquiat	mg/L	ND (0.005)	0.005	0.001
					TLI	SM4500NO2B/300	NO2NO3C	08/10/2007	Tina Acquiat/Giawad Ghenniw	mg/L	2.59	1.00	0.085
OW-02D	OW-02D-014	Barry Collom	10/17/2007	9:42:00	EMXT	E245.2	HGD	10/22/2007	Noel Tan	µg/L	ND (0.2)	0.20	0.10
					TLI	EPA 120.1	SC	10/18/2007	Tina Acquiat	µmhos/cm	6860	2.00	0.153
					EMXT	EPA 200.7	FET	10/24/2007	Jon Elliott	mg/L	ND (0.5)	0.50	0.04
					EMXT	EPA 200.8	TLD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	ZND	10/22/2007	Jon Elliott	µg/L	ND (10)	10.0	5.00

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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-014	Barry Collom	10/17/2007	9:42:00	EMXT	EPA 200.8	SED	10/22/2007	Jon Elliott	µg/L	2.54	1.00	0.50
					EMXT	EPA 200.8	VD	10/22/2007	Jon Elliott	µg/L	1.81	1.00	0.50
					EMXT	EPA 200.8	BAD	10/22/2007	Jon Elliott	µg/L	22.1	1.00	0.50
					EMXT	EPA 200.8	CRTD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	BED	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CAD	10/22/2007	Jon Elliott	mg/L	209	1.00	0.05
					EMXT	EPA 200.8	CDD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	ALD	10/22/2007	Jon Elliott	µg/L	ND (50)	50.0	25.0
					EMXT	EPA 200.8	COBD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	ASD	10/22/2007	Jon Elliott	µg/L	2.21	1.00	0.50
					EMXT	EPA 200.8	MOD	10/22/2007	Jon Elliott	µg/L	14.3	2.00	1.00
					EMXT	EPA 200.8	MND	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	MGD	10/22/2007	Jon Elliott	mg/L	23.6	1.00	0.05
					EMXT	EPA 200.8	KD	10/22/2007	Jon Elliott	mg/L	13.6	1.00	0.05
					EMXT	EPA 200.8	FETD	10/22/2007	Jon Elliott	mg/L	ND (0.1)	0.10	0.05
					EMXT	EPA 200.8	CUD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	SBD	10/22/2007	Jon Elliott	µg/L	ND (2.0)	2.00	0.50
					EMXT	EPA 200.8	PBD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	NAD	10/25/2007	Jon Elliott	mg/L	1360	10.0	0.50
					EMXT	EPA 200.8	AGD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	BD	10/25/2007	Jon Elliott	mg/L	1.16	0.10	0.05
					EMXT	EPA 200.8	NID	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.10
					TLI	EPA 218.6	CR6	10/17/2007	Jean Paul Gleeson	µg/L	ND (0.2)	0.20	0.03
					TLI	EPA 300.0	CL	10/24/2007	Giawad Ghenniwa	mg/L	2280	100	14.0
					TLI	EPA 300.0	SO4	10/24/2007	Giawad Ghenniwa	mg/L	465	250	12.0
					TLI	EPA 300.0	FL	10/19/2007	Giawad Ghenniwa	mg/L	2.12	0.50	0.025
					EMXT	SM 2320B	ALKB	10/23/2007	Supakit Deesopha	mg/L	92.5	5.00	1.00
					EMXT	SM 2320B	ALKC	10/23/2007	Supakit Deesopha	mg/L	ND (5.0)	5.00	1.00

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Board Order No. R7-2006-0060 WDR Monitoring Information for Groundwater Samples, Third and Fourth Quarter 2007
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-014	Barry Collom	10/17/2007	9:42:00	EMXT	SM 2320B	ALKT	10/23/2007	Supakit Deesopha	mg/L	92.5	5.00	1.00
					TLI	SM2130B	TRB	10/18/2007	Gautam Savani	NTU	ND (0.1)	0.10	0.007
					TLI	SM2540C	TDS	10/18/2007	Tina Acquiat	mg/L	4470	250	50.4
					TLI	SM4500-HB	PH	10/18/2007	Tina Acquiat	pH Units	7.73 J	2.00	0.07
					EMXT	SM4500NH3F	NH3N	10/24/2007	Charles Swab	mg/L	ND (0.5)	0.50	0.03
					EMXT	SM4500NO3-E	NO3NO2N	10/20/2007	Tina Hoang	mg/L	2.81	0.40	0.08
OW-02M	OW-02M-013	Aurora Hinckley	08/09/2007	11:08:00	TLI	EPA 120.1	SC	08/14/2007	Tina Acquiat	µS/cm	6550	2.00	0.153
					TLI	EPA 180.1	TRB	08/10/2007	Gautam Savani	NTU	0.141	0.10	0.016
					TLI	EPA 200.7	BD	08/27/2007	Daisy Duyan	mg/L	1.22	0.20	0.000084
					TLI	EPA 200.8	MOD	08/24/2007	Michel Mendoza	µg/L	15.0	5.00	0.47
					TLI	EPA 200.8	CRTD	08/28/2007	Michel Mendoza	µg/L	ND (1.0)	1.00	0.075
					TLI	EPA 218.6	CR6	08/09/2007	Jean Paul Gleeson	µg/L	0.76	0.20	0.018
					TLI	EPA 300.0	FL	08/10/2007	Giawad Ghenniwa	mg/L	1.88	0.50	0.0905
					TLI	EPA 300.0	NO3N	08/10/2007	Giawad Ghenniwa	mg/L	2.54	1.00	0.084
					TLI	EPA 300.0	SO4	08/10/2007	Giawad Ghenniwa	mg/L	408	250	15.4
					TLI	EPA 300.0	CL	08/10/2007	Giawad Ghenniwa	mg/L	1990	100	22.0
					TLI	SM2540C	TDS	08/14/2007	Tina Acquiat	mg/L	3670	250	64.0
					TLI	SM4500-HB	PH	08/10/2007	Tina Acquiat	pH Units	7.80 J	2.00	0.07
					TLI	SM4500NO2B	NO2N	08/10/2007	Tina Acquiat	mg/L	ND (0.005)	0.005	0.001
					TLI	SM4500NO2B/300	NO2NO3C	08/10/2007	Tina Acquiat/Giawad Ghenniw	mg/L	2.55	1.00	0.085
OW-02M	OW-02M-014	Barry Collom	10/16/2007	15:28:00	TLI	EPA 120.1	SC	10/17/2007	Tina Acquiat	µmhos/cm	6750	2.00	0.153
					EMXT	EPA 200.7	FET	10/24/2007	Jon Elliott	mg/L	ND (0.5)	0.50	0.04
					EMXT	EPA 200.8	NAD	10/30/2007	Jon Elliott	mg/L	1430	10.0	0.50
					EMXT	EPA 200.8	CRTD	10/30/2007	Jon Elliott	µg/L	1.11	1.00	0.50
					EMXT	EPA 200.8	VD	10/30/2007	Jon Elliott	µg/L	2.38	1.00	0.50
					EMXT	EPA 200.8	SED	10/30/2007	Jon Elliott	µg/L	2.42	1.00	0.50
					EMXT	EPA 200.8	PBD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50

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-02M	OW-02M-014	Barry Collom	10/16/2007	15:28:00	EMXT	EPA 200.8	NID	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.10
					EMXT	EPA 200.8	MOD	10/30/2007	Jon Elliott	µg/L	11.8	2.00	1.00
					EMXT	EPA 200.8	MND	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	MGD	10/30/2007	Jon Elliott	mg/L	19.0	1.00	0.05
					EMXT	EPA 200.8	KD	10/30/2007	Jon Elliott	mg/L	13.1	1.00	0.05
					EMXT	EPA 200.8	ZND	10/30/2007	Jon Elliott	µg/L	ND (10)	10.0	5.00
					EMXT	EPA 200.8	CUD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	TLD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	COBD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CDD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CAD	10/30/2007	Jon Elliott	mg/L	191	1.00	0.05
					EMXT	EPA 200.8	BED	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	BD	10/30/2007	Jon Elliott	mg/L	1.26	0.01	0.005
					EMXT	EPA 200.8	BAD	10/30/2007	Jon Elliott	µg/L	67.2	1.00	0.50
					EMXT	EPA 200.8	ASD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	ALD	10/30/2007	Jon Elliott	µg/L	ND (50)	50.0	25.0
					EMXT	EPA 200.8	AGD	10/30/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	FETD	10/30/2007	Jon Elliott	mg/L	ND (0.1)	0.10	0.05
					EMXT	EPA 200.8	SBD	10/30/2007	Jon Elliott	µg/L	ND (2.0)	2.00	0.50
					TLI	EPA 218.6	CR6	10/17/2007	Jean Paul Gleeson	µg/L	1.20	1.00	0.14
					EMXT	EPA 245.1	HGD	10/22/2007	Noel Tan	µg/L	ND (0.2)	0.20	0.10
					TLI	EPA 300.0	SO4	10/17/2007	Giawad Ghenniwa	mg/L	496	12.5	0.60
					TLI	EPA 300.0	FL	10/17/2007	Giawad Ghenniwa	mg/L	1.95	0.50	0.025
					TLI	EPA 300.0	CL	10/17/2007	Giawad Ghenniwa	mg/L	2090	100	14.0
					EMXT	SM 2320B	ALKB	10/23/2007	Romy Marasigan	mg/L	85.0	5.00	1.00
					EMXT	SM 2320B	ALKC	10/23/2007	Romy Marasigan	mg/L	ND (5.0)	5.00	1.00
					EMXT	SM 2320B	ALKT	10/23/2007	Romy Marasigan	mg/L	85.0	5.00	1.00
					TLI	SM2130B	TRB	10/17/2007	Gautam Savani	NTU	ND (0.1)	0.10	0.007

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-02M	OW-02M-014	Barry Collom	10/16/2007	15:28:00	TLI	SM2540C	TDS	10/18/2007	Tina Acquiat	mg/L	4420	250	50.4
					TLI	SM4500-HB	PH	10/17/2007	Kim Luck	pH Units	7.72 J	2.00	0.07
					EMXT	SM4500NH3F	NH3N	10/24/2007	Charles Swab	mg/L	ND (0.5)	0.50	0.03
					EMXT	SM4500NO3-E	NO3NO2N	10/20/2007	Tina Hoang	mg/L	2.62	0.40	0.08
OW-02S	MW-90-CMP-013	Aurora Hinckley	08/09/2007	10:30:00	TLI	EPA 120.1	SC	08/14/2007	Tina Acquiat	µS/cm	1760	2.00	0.153
					TLI	EPA 180.1	TRB	08/10/2007	Gautam Savani	NTU	1.58	0.10	0.016
					TLI	EPA 200.7	BD	08/27/2007	Daisy Duyan	mg/L	0.682	0.20	0.000084
					TLI	EPA 200.8	MOD	08/24/2007	Michel Mendoza	µg/L	47.6	5.00	0.47
					TLI	EPA 200.8	CRTD	08/28/2007	Michel Mendoza	µg/L	31.4	1.00	0.075
					TLI	EPA 218.6	CR6	08/10/2007	Jean Paul Gleeson	µg/L	33.6	1.00	0.088
					TLI	EPA 300.0	SO4	08/10/2007	Giawad Ghenniwa	mg/L	107	50.0	3.07
					TLI	EPA 300.0	NO3N	08/10/2007	Giawad Ghenniwa	mg/L	4.03	1.00	0.084
					TLI	EPA 300.0	FL	08/10/2007	Giawad Ghenniwa	mg/L	4.82	0.50	0.0905
					TLI	EPA 300.0	CL	08/10/2007	Giawad Ghenniwa	mg/L	437	20.0	4.39
					TLI	SM2540C	TDS	08/14/2007	Tina Acquiat	mg/L	1020	50.0	12.8
					TLI	SM4500-HB	PH	08/10/2007	Tina Acquiat	pH Units	8.06 J	2.00	0.07
					TLI	SM4500NO2B	NO2N	08/10/2007	Tina Acquiat	mg/L	ND (0.005)	0.005	0.001
					TLI	SM4500NO2B/300	NO2NO3C	08/10/2007	Tina Acquiat/Giawad Ghenniw	mg/L	4.04	1.00	0.085
OW-02S	OW-02S-013	Aurora Hinckley	08/09/2007	11:56:00	TLI	EPA 120.1	SC	08/14/2007	Tina Acquiat	µS/cm	1780	2.00	0.153
					TLI	EPA 180.1	TRB	08/10/2007	Gautam Savani	NTU	1.36	0.10	0.016
					TLI	EPA 200.7	BD	08/27/2007	Daisy Duyan	mg/L	0.773	0.20	0.000084
					TLI	EPA 200.8	CRTD	08/28/2007	Michel Mendoza	µg/L	32.3	1.00	0.075
					TLI	EPA 200.8	MOD	08/24/2007	Michel Mendoza	µg/L	40.3	5.00	0.47
					TLI	EPA 218.6	CR6	08/10/2007	Jean Paul Gleeson	µg/L	35.1	1.00	0.088
					TLI	EPA 300.0	CL	08/10/2007	Giawad Ghenniwa	mg/L	435	20.0	4.39
					TLI	EPA 300.0	FL	08/10/2007	Giawad Ghenniwa	mg/L	4.92	0.50	0.0905
					TLI	EPA 300.0	NO3N	08/10/2007	Giawad Ghenniwa	mg/L	4.14	1.00	0.084

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-02S	OW-02S-013	Aurora Hinckley	08/09/2007	11:56:00	TLI	EPA 300.0	SO4	08/10/2007	Giawad Ghenniwa	mg/L	108	50.0	3.07
					TLI	SM2540C	TDS	08/14/2007	Tina Acquiat	mg/L	972	50.0	12.8
					TLI	SM4500-HB	PH	08/10/2007	Tina Acquiat	pH Units	8.07 J	2.00	0.07
					TLI	SM4500NO2B	NO2N	08/10/2007	Tina Acquiat	mg/L	ND (0.005)	0.005	0.001
					TLI	SM4500NO2B/300	NO2NO3C	08/10/2007	Tina Acquiat/Giawad Ghenniw	mg/L	4.14	1.00	0.085
OW-02S	OW-02S-014	Barry Collom	10/17/2007	8:26:00	EMXT	E245.2	HGD	10/22/2007	Noel Tan	µg/L	ND (0.2)	0.20	0.10
					TLI	EPA 120.1	SC	10/18/2007	Tina Acquiat	µmhos/cm	1680	2.00	0.153
					EMXT	EPA 200.7	FET	10/24/2007	Jon Elliott	mg/L	ND (0.5)	0.50	0.04
					EMXT	EPA 200.8	ALD	10/25/2007	Jon Elliott	µg/L	ND (50)	50.0	25.0
					EMXT	EPA 200.8	CUD	10/25/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	NID	10/25/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.10
					EMXT	EPA 200.8	BD	10/30/2007	Jon Elliott	mg/L	0.699	0.10	0.05
					EMXT	EPA 200.8	BED	10/25/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CAD	10/25/2007	Jon Elliott	mg/L	34.5	1.00	0.05
					EMXT	EPA 200.8	CDD	10/25/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	AGD	10/25/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CRTD	10/25/2007	Jon Elliott	µg/L	33.6	1.00	0.50
					EMXT	EPA 200.8	PBD	10/25/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	FETD	10/25/2007	Jon Elliott	mg/L	ND (0.1)	0.10	0.05
					EMXT	EPA 200.8	KD	10/25/2007	Jon Elliott	mg/L	5.63	1.00	0.05
					EMXT	EPA 200.8	MGD	10/25/2007	Jon Elliott	mg/L	4.62	1.00	0.05
					EMXT	EPA 200.8	MND	10/25/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	MOD	10/25/2007	Jon Elliott	µg/L	40.7	2.00	1.00
					EMXT	EPA 200.8	NAD	10/25/2007	Jon Elliott	mg/L	321	1.00	0.05
					EMXT	EPA 200.8	COBD	10/25/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	SBD	10/25/2007	Jon Elliott	µg/L	ND (2.0)	2.00	0.50
					EMXT	EPA 200.8	SED	10/25/2007	Jon Elliott	µg/L	2.66	1.00	0.50
					EMXT	EPA 200.8	TLD	10/25/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50

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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-02S	OW-02S-014	Barry Collom	10/17/2007	8:26:00	EMXT	EPA 200.8	VD	10/25/2007	Jon Elliott	µg/L	5.86	1.00	0.50
					EMXT	EPA 200.8	ZND	10/25/2007	Jon Elliott	µg/L	ND (10)	10.0	5.00
					EMXT	EPA 200.8	BAD	10/25/2007	Jon Elliott	µg/L	45.1	1.00	0.50
					EMXT	EPA 200.8	ASD	10/25/2007	Jon Elliott	µg/L	2.39	1.00	0.50
					TLI	EPA 218.6	CR6	10/17/2007	Jean Paul Gleeson	µg/L	34.1	1.00	0.14
					TLI	EPA 300.0	CL	10/24/2007	Giawad Ghenniwa	mg/L	423	20.0	2.80
					TLI	EPA 300.0	FL	10/19/2007	Giawad Ghenniwa	mg/L	4.86	0.50	0.025
					TLI	EPA 300.0	SO4	10/24/2007	Giawad Ghenniwa	mg/L	127	2.50	0.12
					EMXT	SM 2320B	ALKB	10/23/2007	Supakit Deesopha	mg/L	100	5.00	1.00
					EMXT	SM 2320B	ALKC	10/23/2007	Supakit Deesopha	mg/L	ND (5.0)	5.00	1.00
					EMXT	SM 2320B	ALKT	10/23/2007	Supakit Deesopha	mg/L	100	5.00	1.00
					TLI	SM2130B	TRB	10/18/2007	Gautam Savani	NTU	0.785	0.10	0.007
					TLI	SM2540C	TDS	10/18/2007	Tina Acquiat	mg/L	1010	50.0	10.1
					TLI	SM4500-HB	PH	10/18/2007	Tina Acquiat	pH Units	8.05 J	2.00	0.07
					EMXT	SM4500NH3F	NH3N	10/24/2007	Charles Swab	mg/L	ND (0.5)	0.50	0.03
					EMXT	SM4500NO3-E	NO3NO2N	10/20/2007	Tina Hoang	mg/L	3.74	0.40	0.08
OW-05D	OW-05D-013	Aurora Hinckley	08/09/2007	7:28:00	TLI	EPA 120.1	SC	08/14/2007	Tina Acquiat	µS/cm	6860	2.00	0.153
					TLI	EPA 180.1	TRB	08/10/2007	Gautam Savani	NTU	0.191	0.10	0.016
					TLI	EPA 200.7	BD	08/27/2007	Daisy Duyan	mg/L	1.26	0.20	0.000084
					TLI	EPA 200.8	MOD	08/24/2007	Michel Mendoza	µg/L	18.3	5.00	0.47
					TLI	EPA 200.8	CRTD	08/28/2007	Michel Mendoza	µg/L	ND (1.0)	1.00	0.075
					TLI	EPA 218.6	CR6	08/09/2007	Jean Paul Gleeson	µg/L	ND (0.2)	0.20	0.018
					TLI	EPA 300.0	SO4	08/10/2007	Giawad Ghenniwa	mg/L	458	250	15.4
					TLI	EPA 300.0	NO3N	08/10/2007	Giawad Ghenniwa	mg/L	2.61	1.00	0.084
					TLI	EPA 300.0	FL	08/10/2007	Giawad Ghenniwa	mg/L	2.13	0.50	0.0905
					TLI	EPA 300.0	CL	08/10/2007	Giawad Ghenniwa	mg/L	2070	100	22.0
					TLI	SM2540C	TDS	08/14/2007	Tina Acquiat	mg/L	3830	250	64.0
					TLI	SM4500-HB	PH	08/10/2007	Tina Acquiat	pH Units	7.69 J	2.00	0.07

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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-013	Aurora Hinckley	08/09/2007	7:28:00	TLI	SM4500NO2B	NO2N	08/10/2007	Tina Acquiat	mg/L	ND (0.005)	0.005	0.001
					TLI	SM4500NO2B/300	NO2NO3C	08/10/2007	Tina Acquiat/Giawad Ghenniw	mg/L	2.62	1.00	0.085
OW-05D	OW-05D-014	Barry Collom	10/17/2007	11:40:00	EMXT	E245.2	HGD	10/22/2007	Noel Tan	µg/L	ND (0.2)	0.20	0.10
					TLI	EPA 120.1	SC	10/18/2007	Tina Acquiat	µmhos/cm	6920	2.00	0.153
					EMXT	EPA 200.7	FET	10/24/2007	Jon Elliott	mg/L	ND (0.5)	0.50	0.04
					EMXT	EPA 200.8	COBD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	SBD	10/22/2007	Jon Elliott	µg/L	ND (2.0)	2.00	0.50
					EMXT	EPA 200.8	PBD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	NID	10/22/2007	Jon Elliott	µg/L	1.00	1.00	0.10
					EMXT	EPA 200.8	NAD	10/25/2007	Jon Elliott	mg/L	1440	10.0	0.50
					EMXT	EPA 200.8	MOD	10/22/2007	Jon Elliott	µg/L	14.9	2.00	1.00
					EMXT	EPA 200.8	MND	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	MGD	10/22/2007	Jon Elliott	mg/L	22.2	1.00	0.05
					EMXT	EPA 200.8	KD	10/22/2007	Jon Elliott	mg/L	14.2	1.00	0.05
					EMXT	EPA 200.8	FETD	10/22/2007	Jon Elliott	mg/L	ND (0.1)	0.10	0.05
					EMXT	EPA 200.8	TLD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CDD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CAD	10/22/2007	Jon Elliott	mg/L	197	1.00	0.05
					EMXT	EPA 200.8	BED	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	BD	10/25/2007	Jon Elliott	mg/L	1.18	0.10	0.05
					EMXT	EPA 200.8	BAD	10/22/2007	Jon Elliott	µg/L	24.6	1.00	0.50
					EMXT	EPA 200.8	ASD	10/22/2007	Jon Elliott	µg/L	1.33	1.00	0.50
					EMXT	EPA 200.8	ALD	10/22/2007	Jon Elliott	µg/L	138	50.0	25.0
					EMXT	EPA 200.8	AGD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	SED	10/22/2007	Jon Elliott	µg/L	2.46	1.00	0.50
					EMXT	EPA 200.8	VD	10/22/2007	Jon Elliott	µg/L	1.66	1.00	0.50
					EMXT	EPA 200.8	CUD	10/22/2007	Jon Elliott	µg/L	2.94	1.00	0.50
					EMXT	EPA 200.8	ZND	10/22/2007	Jon Elliott	µg/L	ND (10)	10.0	5.00

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-05D	OW-05D-014	Barry Collom	10/17/2007	11:40:00	EMXT	EPA 200.8	CRTD	10/22/2007	Jon Elliott	µg/L	1.38	1.00	0.50
					TLI	EPA 218.6	CR6	10/17/2007	Jean Paul Gleeson	µg/L	ND (0.2)	0.20	0.03
					TLI	EPA 300.0	SO4	10/24/2007	Giawad Ghenniwa	mg/L	466	250	12.0
					TLI	EPA 300.0	CL	10/24/2007	Giawad Ghenniwa	mg/L	2210	100	14.0
					TLI	EPA 300.0	FL	10/19/2007	Giawad Ghenniwa	mg/L	2.10	0.50	0.025
					EMXT	SM 2320B	ALKB	10/23/2007	Supakit Deesopha	mg/L	87.5	5.00	1.00
					EMXT	SM 2320B	ALKC	10/23/2007	Supakit Deesopha	mg/L	ND (5.0)	5.00	1.00
					EMXT	SM 2320B	ALKT	10/23/2007	Supakit Deesopha	mg/L	87.5	5.00	1.00
					TLI	SM2130B	TRB	10/18/2007	Gautam Savani	NTU	0.20	0.10	0.007
					TLI	SM2540C	TDS	10/18/2007	Tina Acquiat	mg/L	4230	250	50.4
					TLI	SM4500-HB	PH	10/18/2007	Tina Acquiat	pH Units	7.69 J	2.00	0.07
					EMXT	SM4500NH3F	NH3N	10/24/2007	Charles Swab	mg/L	ND (0.5)	0.50	0.03
					EMXT	SM4500NO3-E	NO3NO2N	10/20/2007	Tina Hoang	mg/L	2.83	0.40	0.08
OW-05M	OW-05M-013	Barry Collom	08/08/2007	15:10:00	TLI	EPA 120.1	SC	08/09/2007	Tina Acquiat	µS/cm	6800	2.00	0.153
					TLI	EPA 180.1	TRB	08/09/2007	Gautam Savani	NTU	ND (0.1)	0.10	0.016
					TLI	EPA 200.7	BD	08/27/2007	Daisy Duyan	mg/L	1.13	0.20	0.000084
					TLI	EPA 200.8	MOD	08/24/2007	Michel Mendoza	µg/L	9.80	5.00	0.47
					TLI	EPA 200.8	CRTD	08/28/2007	Michel Mendoza	µg/L	3.00	1.00	0.075
					TLI	EPA 218.6	CR6	08/09/2007	Jean Paul Gleeson	µg/L	2.50	1.00	0.088
					TLI	EPA 300.0	SO4	08/09/2007	Giawad Ghenniwa	mg/L	473	50.0	3.07
					TLI	EPA 300.0	CL	08/09/2007	Giawad Ghenniwa	mg/L	2020	200	43.9
					TLI	EPA 300.0	NO3N	08/09/2007	Giawad Ghenniwa	mg/L	8.15	1.00	0.084
					TLI	EPA 300.0	FL	08/09/2007	Giawad Ghenniwa	mg/L	2.71	0.50	0.0905
					TLI	SM2540C	TDS	08/09/2007	Tina Acquiat	mg/L	4060	250	64.0
					TLI	SM4500-HB	PH	08/09/2007	Tina Acquiat	pH Units	7.80 J	2.00	0.07
					TLI	SM4500NO2B	NO2N	08/10/2007	Tina Acquiat	mg/L	ND (0.005)	0.005	0.001
					TLI	SM4500NO2B/300	NO2NO3C	08/09/2007	Tina Acquiat/Giawad Ghenniw	mg/L	8.15	1.00	0.085

TABLE 11
Board Order No. R7-2006-0060 WDR Monitoring Information for Groundwater Samples, Third and Fourth Quarter 2007
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-05M	OW-05M-014	Barry Collom	10/17/2007	12:47:00	EMXT	E245.2	HGD	10/22/2007	Noel Tan	µg/L	ND (0.2)	0.20	0.10
					TLI	EPA 120.1	SC	10/18/2007	Tina Acquiat	µmhos/cm	6590	2.00	0.153
					EMXT	EPA 200.7	FET	10/24/2007	Jon Elliott	mg/L	ND (0.5)	0.50	0.04
					EMXT	EPA 200.8	SED	10/22/2007	Jon Elliott	µg/L	2.37	1.00	0.50
					EMXT	EPA 200.8	SBD	10/22/2007	Jon Elliott	µg/L	ND (2.0)	2.00	0.50
					EMXT	EPA 200.8	PBD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	NID	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.10
					EMXT	EPA 200.8	TLD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	KD	10/22/2007	Jon Elliott	mg/L	12.5	1.00	0.05
					EMXT	EPA 200.8	VD	10/22/2007	Jon Elliott	µg/L	1.85	1.00	0.50
					EMXT	EPA 200.8	ZND	10/22/2007	Jon Elliott	µg/L	278 J	10.0	5.00
					EMXT	EPA 200.8	MOD	10/22/2007	Jon Elliott	µg/L	12.2	2.00	1.00
					EMXT	EPA 200.8	MND	10/22/2007	Jon Elliott	µg/L	19.0 J	1.00	0.50
					EMXT	EPA 200.8	MGD	10/22/2007	Jon Elliott	mg/L	16.6 J	1.00	0.05
					EMXT	EPA 200.8	NAD	10/25/2007	Jon Elliott	mg/L	1460	10.0	0.50
					EMXT	EPA 200.8	FETD	10/22/2007	Jon Elliott	mg/L	ND (0.1)	0.10	0.05
					EMXT	EPA 200.8	CUD	10/22/2007	Jon Elliott	µg/L	3.31	1.00	0.50
					EMXT	EPA 200.8	AGD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CRTD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	COBD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CDD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CAD	10/22/2007	Jon Elliott	mg/L	149	1.00	0.05
					EMXT	EPA 200.8	BED	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	BD	10/25/2007	Jon Elliott	mg/L	1.28	0.10	0.05
					EMXT	EPA 200.8	BAD	10/22/2007	Jon Elliott	µg/L	41.1	1.00	0.50
					EMXT	EPA 200.8	ASD	10/22/2007	Jon Elliott	µg/L	1.05	1.00	0.50
					EMXT	EPA 200.8	ALD	10/22/2007	Jon Elliott	µg/L	749 J	50.0	25.0
					TLI	EPA 218.6	CR6	10/18/2007	Jean Paul Gleeson	µg/L	ND (1.0)	1.00	0.14

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-05M	OW-05M-014	Barry Collom	10/17/2007	12:47:00	TLI	EPA 300.0	FL	10/19/2007	Giawad Ghenniwa	mg/L	2.12	0.50	0.025
					TLI	EPA 300.0	SO4	10/24/2007	Giawad Ghenniwa	mg/L	457	250	12.0
					TLI	EPA 300.0	CL	10/24/2007	Giawad Ghenniwa	mg/L	2140	100	14.0
					EMXT	SM 2320B	ALKT	10/23/2007	Supakit Deesopha	mg/L	75.0	5.00	1.00
					EMXT	SM 2320B	ALKB	10/23/2007	Supakit Deesopha	mg/L	75.0	5.00	1.00
					EMXT	SM 2320B	ALKC	10/23/2007	Supakit Deesopha	mg/L	ND (5.0)	5.00	1.00
					TLI	SM2130B	TRB	10/18/2007	Gautam Savani	NTU	0.14	0.10	0.007
					TLI	SM2540C	TDS	10/18/2007	Tina Acquiat	mg/L	4500	250	50.4
					TLI	SM4500-HB	PH	10/18/2007	Tina Acquiat	pH Units	7.79 J	2.00	0.07
					EMXT	SM4500NH3F	NH3N	10/24/2007	Charles Swab	mg/L	ND (0.5)	0.50	0.03
					EMXT	SM4500NO3-E	NO3NO2N	10/20/2007	Tina Hoang	mg/L	2.72	0.40	0.08
OW-05M	MW-90-014	Barry Collom	10/17/2007	12:49:00	EMXT	E245.2	HGD	10/22/2007	Noel Tan	µg/L	ND (0.2)	0.20	0.10
					TLI	EPA 120.1	SC	10/18/2007	Tina Acquiat	µmhos/cm	6630	2.00	0.153
					EMXT	EPA 200.7	FET	10/24/2007	Jon Elliott	mg/L	ND (0.5)	0.50	0.04
					EMXT	EPA 200.8	CUD	10/22/2007	Jon Elliott	µg/L	3.16	1.00	0.50
					EMXT	EPA 200.8	MND	10/22/2007	Jon Elliott	µg/L	ND (1.0)J	1.00	0.50
					EMXT	EPA 200.8	MGD	10/22/2007	Jon Elliott	mg/L	10.8 J	1.00	0.05
					EMXT	EPA 200.8	FETD	10/22/2007	Jon Elliott	mg/L	ND (0.1)	0.10	0.05
					EMXT	EPA 200.8	CRTD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	COBD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CDD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CAD	10/22/2007	Jon Elliott	mg/L	149	1.00	0.05
					EMXT	EPA 200.8	BED	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	BD	10/25/2007	Jon Elliott	mg/L	1.25	0.10	0.05
					EMXT	EPA 200.8	BAD	10/22/2007	Jon Elliott	µg/L	40.3	1.00	0.50
					EMXT	EPA 200.8	ASD	10/22/2007	Jon Elliott	µg/L	1.01	1.00	0.50
					EMXT	EPA 200.8	KD	10/22/2007	Jon Elliott	mg/L	11.2	1.00	0.05
					EMXT	EPA 200.8	TLD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50

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-05M	MW-90-014	Barry Collom	10/17/2007	12:49:00	EMXT	EPA 200.8	AGD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	VD	10/22/2007	Jon Elliott	µg/L	1.65	1.00	0.50
					EMXT	EPA 200.8	ALD	10/22/2007	Jon Elliott	µg/L	ND (50)J	50.0	25.0
					EMXT	EPA 200.8	SED	10/22/2007	Jon Elliott	µg/L	2.35	1.00	0.50
					EMXT	EPA 200.8	SBD	10/22/2007	Jon Elliott	µg/L	ND (2.0)	2.00	0.50
					EMXT	EPA 200.8	PBD	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	NID	10/22/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.10
					EMXT	EPA 200.8	NAD	10/25/2007	Jon Elliott	mg/L	1420	10.0	0.50
					EMXT	EPA 200.8	MOD	10/22/2007	Jon Elliott	µg/L	12.2	2.00	1.00
					EMXT	EPA 200.8	ZND	10/22/2007	Jon Elliott	µg/L	ND (10)J	10.0	5.00
					TLI	EPA 218.6	CR6	10/18/2007	Jean Paul Gleeson	µg/L	ND (1.0)	1.00	0.14
					TLI	EPA 300.0	CL	10/24/2007	Giawad Ghenniwa	mg/L	2160	100	14.0
					TLI	EPA 300.0	FL	10/19/2007	Giawad Ghenniwa	mg/L	2.19	0.50	0.025
					TLI	EPA 300.0	SO4	10/24/2007	Giawad Ghenniwa	mg/L	472	250	12.0
					EMXT	SM 2320B	ALKB	10/23/2007	Supakit Deesopha	mg/L	77.5	5.00	1.00
					EMXT	SM 2320B	ALKC	10/23/2007	Supakit Deesopha	mg/L	ND (5.0)	5.00	1.00
					EMXT	SM 2320B	ALKT	10/23/2007	Supakit Deesopha	mg/L	77.5	5.00	1.00
					TLI	SM2130B	TRB	10/18/2007	Gautam Savani	NTU	ND (0.1)	0.10	0.007
					TLI	SM2540C	TDS	10/18/2007	Tina Acquiat	mg/L	4200	250	50.4
					TLI	SM4500-HB	PH	10/18/2007	Tina Acquiat	pH Units	7.70 J	2.00	0.07
					EMXT	SM4500NH3F	NH3N	10/24/2007	Charles Swab	mg/L	ND (0.5)	0.50	0.03
					EMXT	SM4500NO3-E	NO3NO2N	10/20/2007	Tina Hoang	mg/L	2.64	0.40	0.08
OW-05S	OW-05S-013	Aurora Hinckley	08/09/2007	8:23:00	TLI	EPA 120.1	SC	08/14/2007	Tina Acquiat	µS/cm	1660	2.00	0.153
					TLI	EPA 180.1	TRB	08/10/2007	Gautam Savani	NTU	1.87	0.10	0.016
					TLI	EPA 200.7	BD	08/27/2007	Daisy Duyan	mg/L	0.451	0.20	0.000084
					TLI	EPA 200.8	CRTD	08/28/2007	Michel Mendoza	µg/L	25.3	1.00	0.075
					TLI	EPA 200.8	MOD	08/24/2007	Michel Mendoza	µg/L	26.5	5.00	0.47
					TLI	EPA 218.6	CR6	08/09/2007	Jean Paul Gleeson	µg/L	26.5	1.00	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-05S	OW-05S-013	Aurora Hinckley	08/09/2007	8:23:00	TLI	EPA 300.0	CL	08/10/2007	Giawad Ghenniwa	mg/L	406	20.0	4.39
					TLI	EPA 300.0	FL	08/10/2007	Giawad Ghenniwa	mg/L	2.60	0.50	0.0905
					TLI	EPA 300.0	NO3N	08/10/2007	Giawad Ghenniwa	mg/L	4.00	1.00	0.084
					TLI	EPA 300.0	SO4	08/10/2007	Giawad Ghenniwa	mg/L	97.8	50.0	3.07
					TLI	SM2540C	TDS	08/14/2007	Tina Acquiat	mg/L	932	50.0	12.8
					TLI	SM4500-HB	PH	08/10/2007	Tina Acquiat	pH Units	7.87 J	2.00	0.07
					TLI	SM4500NO2B	NO2N	08/10/2007	Tina Acquiat	mg/L	ND (0.005)	0.005	0.001
					TLI	SM4500NO2B/300	NO2NO3C	08/10/2007	Tina Acquiat/Giawad Ghenniw	mg/L	4.01	1.00	0.085
OW-05S	OW-05S-014	Barry Collom	10/17/2007	13:35:00	EMXT	E245.2	HGD	10/22/2007	Noel Tan	µg/L	ND (0.2)	0.20	0.10
					TLI	EPA 120.1	SC	10/18/2007	Tina Acquiat	µmhos/cm	1580	2.00	0.153
					EMXT	EPA 200.7	FET	10/24/2007	Jon Elliott	mg/L	ND (0.5)	0.50	0.04
					EMXT	EPA 200.8	BD	10/25/2007	Jon Elliott	mg/L	0.466	0.01	0.005
					EMXT	EPA 200.8	ALD	10/25/2007	Jon Elliott	µg/L	ND (50)	50.0	25.0
					EMXT	EPA 200.8	CUD	10/25/2007	Jon Elliott	µg/L	2.30	1.00	0.50
					EMXT	EPA 200.8	ASD	10/25/2007	Jon Elliott	µg/L	1.54	1.00	0.50
					EMXT	EPA 200.8	BAD	10/25/2007	Jon Elliott	µg/L	54.3	1.00	0.50
					EMXT	EPA 200.8	AGD	10/25/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	BED	10/25/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CAD	10/25/2007	Jon Elliott	mg/L	53.9	1.00	0.05
					EMXT	EPA 200.8	CDD	10/25/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	CRTD	10/25/2007	Jon Elliott	µg/L	25.6	1.00	0.50
					EMXT	EPA 200.8	TLD	10/25/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	FETD	10/25/2007	Jon Elliott	mg/L	0.103	0.10	0.05
					EMXT	EPA 200.8	KD	10/25/2007	Jon Elliott	mg/L	6.71	1.00	0.05
					EMXT	EPA 200.8	MGD	10/25/2007	Jon Elliott	mg/L	8.54	1.00	0.05
					EMXT	EPA 200.8	MND	10/25/2007	Jon Elliott	µg/L	2.92	1.00	0.50
					EMXT	EPA 200.8	MOD	10/25/2007	Jon Elliott	µg/L	26.2	2.00	1.00
					EMXT	EPA 200.8	NAD	10/25/2007	Jon Elliott	mg/L	271	1.00	0.05

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-05S	OW-05S-014	Barry Collom	10/17/2007	13:35:00	EMXT	EPA 200.8	COBD	10/25/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	SED	10/25/2007	Jon Elliott	µg/L	2.94	1.00	0.50
					EMXT	EPA 200.8	VD	10/25/2007	Jon Elliott	µg/L	4.68	1.00	0.50
					EMXT	EPA 200.8	ZND	10/25/2007	Jon Elliott	µg/L	ND (10)	10.0	5.00
					EMXT	EPA 200.8	PBD	10/25/2007	Jon Elliott	µg/L	ND (1.0)	1.00	0.50
					EMXT	EPA 200.8	NID	10/25/2007	Jon Elliott	µg/L	5.29	1.00	0.10
					EMXT	EPA 200.8	SBD	10/25/2007	Jon Elliott	µg/L	ND (2.0)	2.00	0.50
					TLI	EPA 218.6	CR6	10/18/2007	Jean Paul Gleeson	µg/L	26.3	1.00	0.14
					TLI	EPA 300.0	CL	10/24/2007	Giawad Ghenniwa	mg/L	422	20.0	2.80
					TLI	EPA 300.0	FL	10/19/2007	Giawad Ghenniwa	mg/L	2.50	0.50	0.025
					TLI	EPA 300.0	SO4	10/24/2007	Giawad Ghenniwa	mg/L	102	50.0	2.40
					EMXT	SM 2320B	ALKB	10/23/2007	Supakit Deesopha	mg/L	87.5	5.00	1.00
					EMXT	SM 2320B	ALKC	10/23/2007	Supakit Deesopha	mg/L	ND (5.0)	5.00	1.00
					EMXT	SM 2320B	ALKT	10/23/2007	Supakit Deesopha	mg/L	87.5	5.00	1.00
					TLI	SM2130B	TRB	10/18/2007	Gautam Savani	NTU	0.622	0.10	0.007
					TLI	SM2540C	TDS	10/18/2007	Tina Acquiat	mg/L	948	50.0	10.1
					TLI	SM4500-HB	PH	10/18/2007	Tina Acquiat	pH Units	7.94 J	2.00	0.07
					EMXT	SM4500NH3F	NH3N	10/24/2007	Charles Swab	mg/L	ND (0.5)	0.50	0.03
					EMXT	SM4500NO3-E	NO3NO2N	10/20/2007	Tina Hoang	mg/L	3.66	0.40	0.08

TABLE 11

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PG&E Topock Compliance Monitoring Program

NOTES:

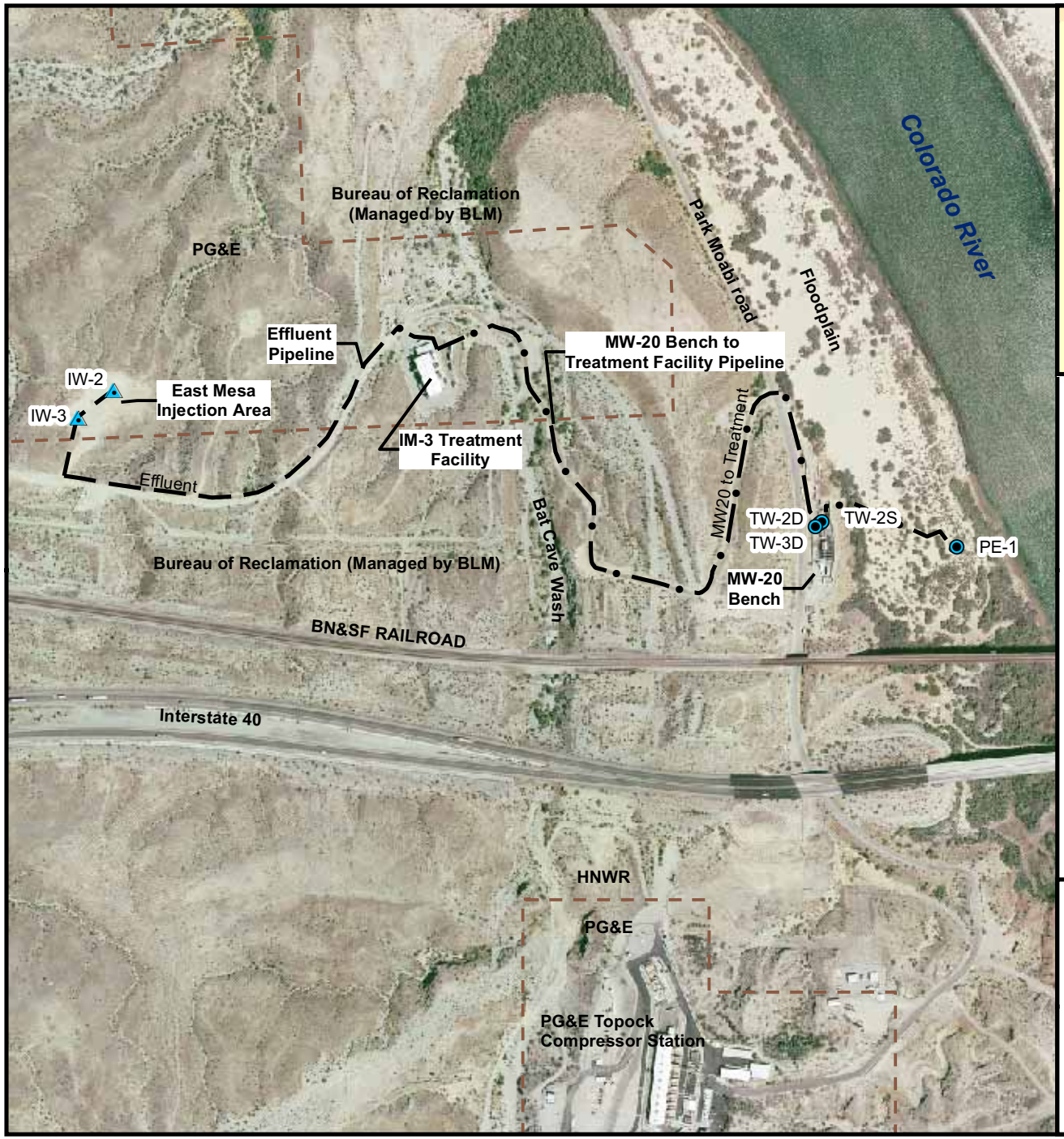
MDL	method detection limit corrected for sample dilution
RL	reporting limit
ND	parameter not detected at the listed reporting limit
J	concentration or RL estimated by laboratory or data validation
R	result exceeded analytical criteria for precision and accuracy; should not be used for project decision making
µmhos/cm	micro-mhos per centimeter
NTU	Nephelometric Turbidity Unit
mg/L	milligrams per liter
µg/L	micrograms per liter

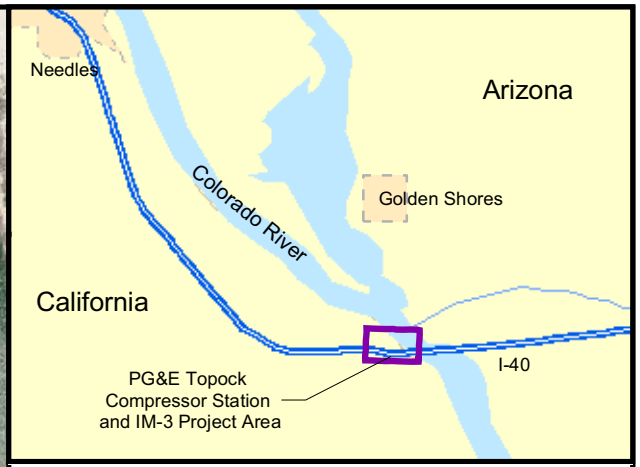
TLI	Truesdail Laboratories, Inc.
WDR	Waste Discharge Requirements

SC	specific conductance	CAD	calcium, dissolved
PH	pH	MOD	molybdenum, dissolved
TDS	total dissolved solids	NID	nickel, dissolved
TRB	turbidity	PBD	lead, dissolved
CRTD	chromium, dissolved	HGD	mercury, dissolved
CR6	hexavalent chromium	SED	selenium, dissolved
CL	chloride	TLD	thallium, dissolved
FL	fluoride	COBD	cobalt, dissolved
ALD	aluminum, dissolved	CDD	cadmium, dissolved
BD	boron, dissolved	BED	beryllium, dissolved
FED	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, bicarb.as CACO3
MGD	magnesium, dissolved	ALKC	alkalinity, as carbonate
NAD	sodium, dissolved	ALKT	alkalinity, total as CACO3
KD	potassium, dissolved		

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

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

Notes:
Aerial photography taken May 2005.

FIGURE 1
SITE LOCATION AND LAYOUT

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

CH2MHILL

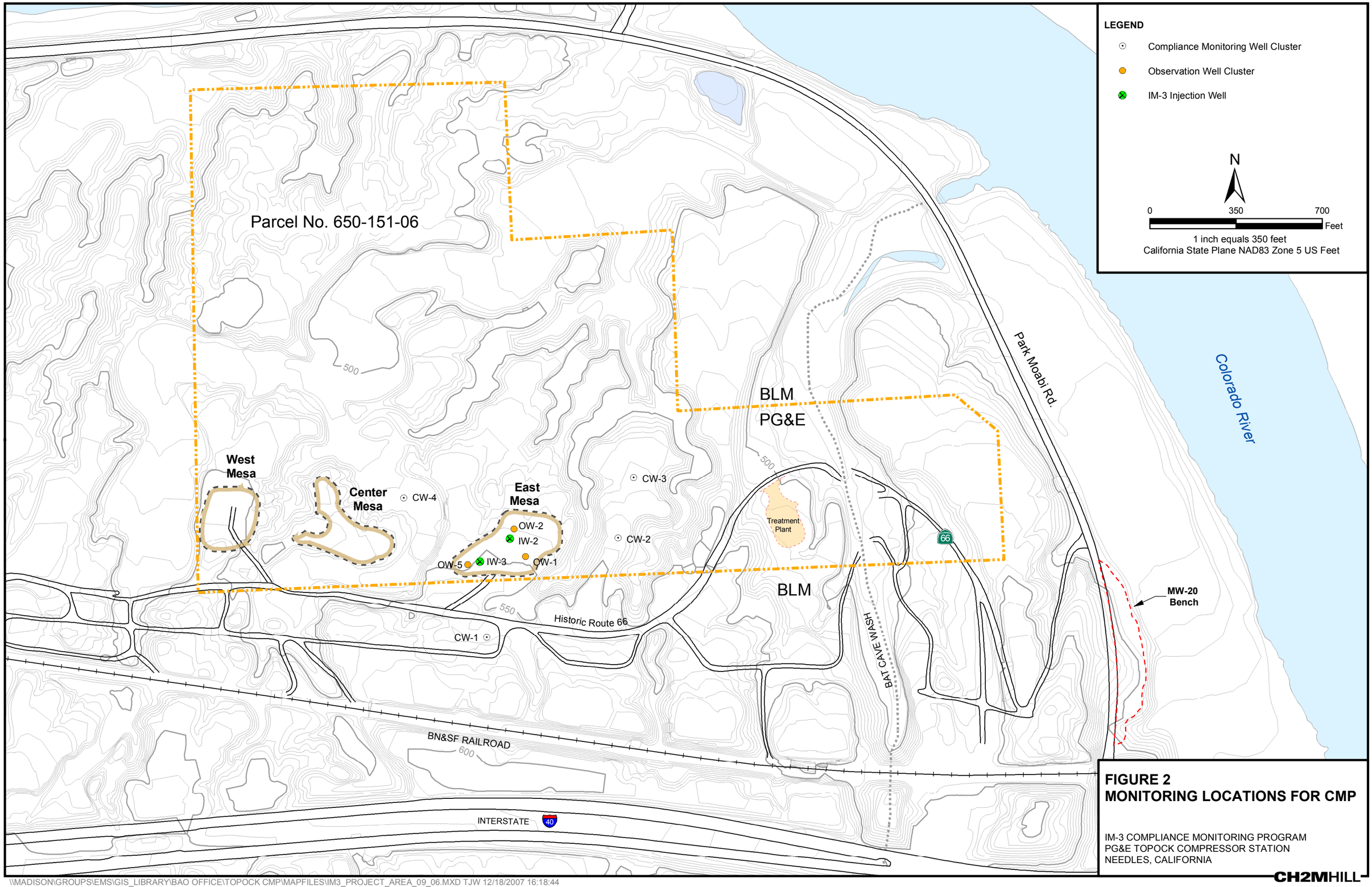
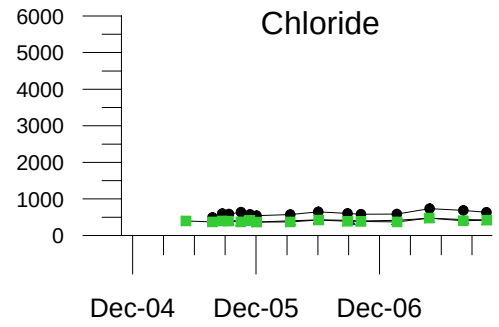


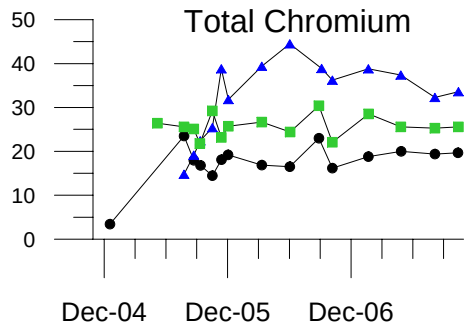
FIGURE 2
MONITORING LOCATIONS FOR CMP

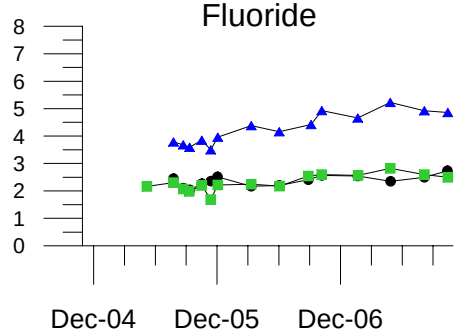
IM-3 COMPLIANCE MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

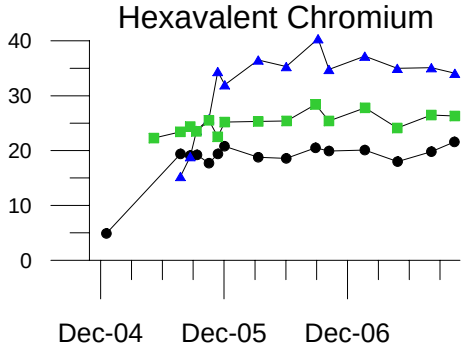
CH2MHILL

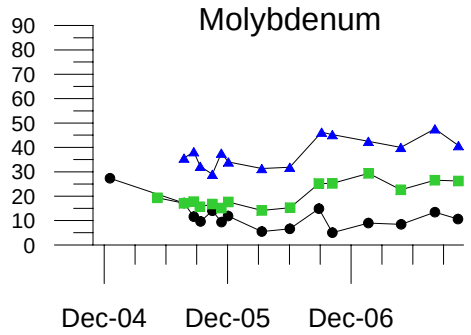
\\MADISON\GROUPS\EMS\GIS_LIBRARY\BAO OFFICE\TOPOCK CMP\MAPFILES\IM3_PROJECT_AREA_09_06.MXD TJW 12/18/2007 16:18:44

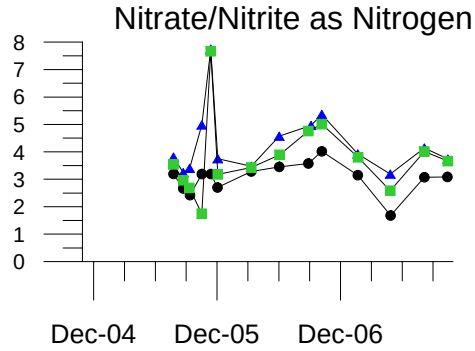


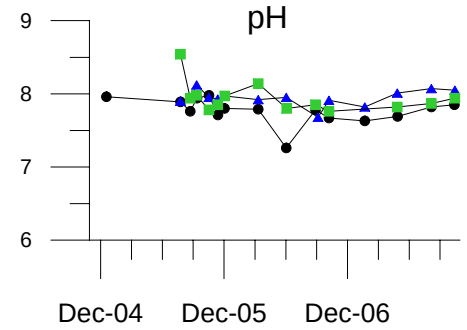


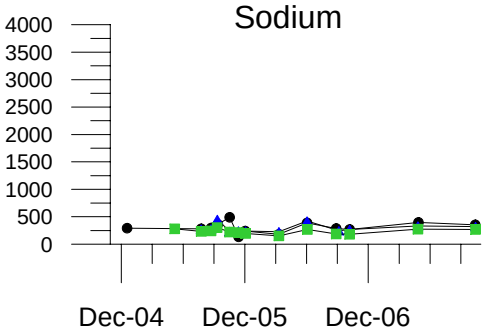


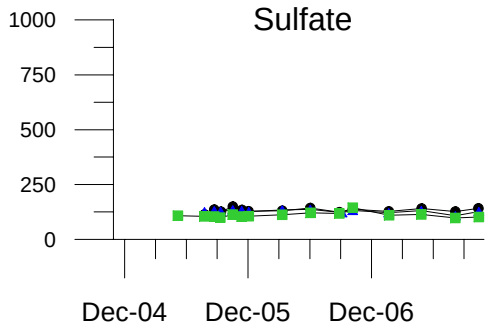


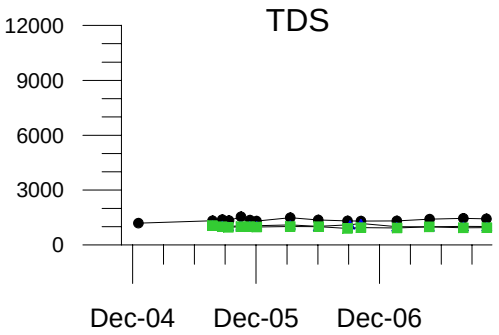


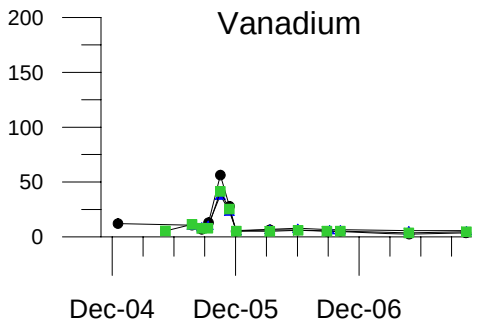


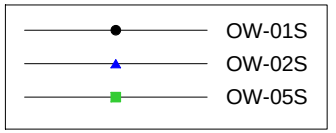












Cr(T), Cr(VI), molybdenum, and vanadium concentration units in µg/L. Other analyte concentration units in mg/L. pH in pH units.

FIGURE 3A
OW-01S, OW-02S, OW-05S
WATER QUALITY HYDROGRAPHS
IM3 COMPLIANCE MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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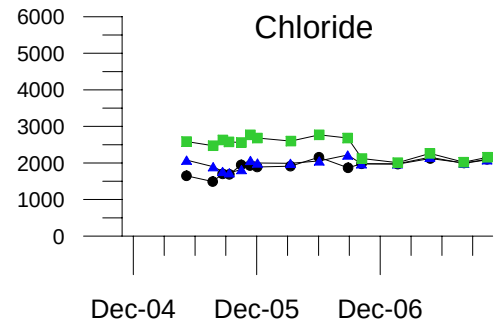

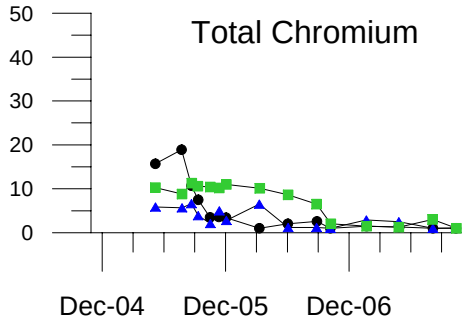

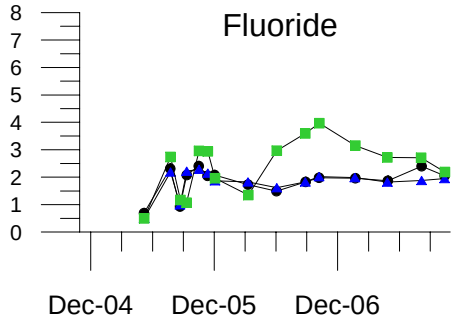

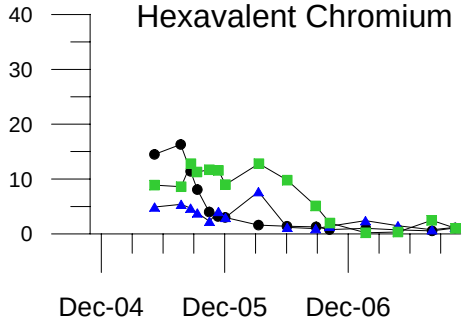

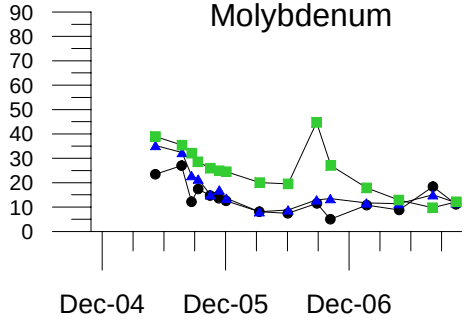

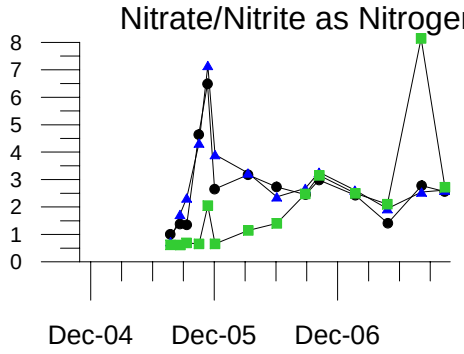

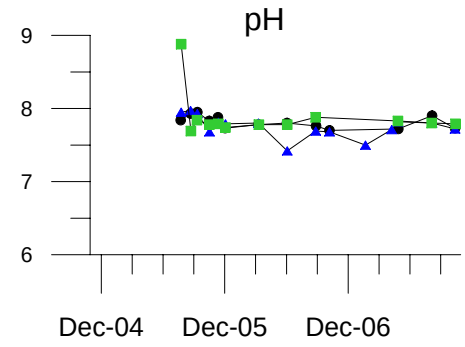

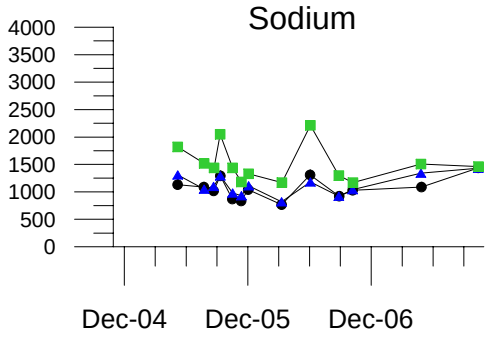

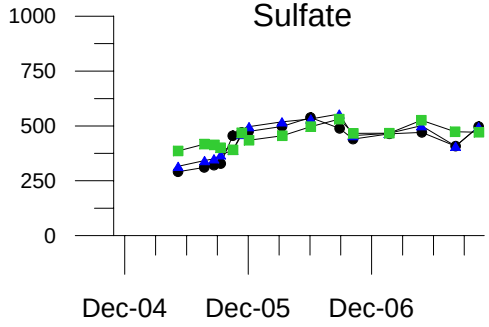

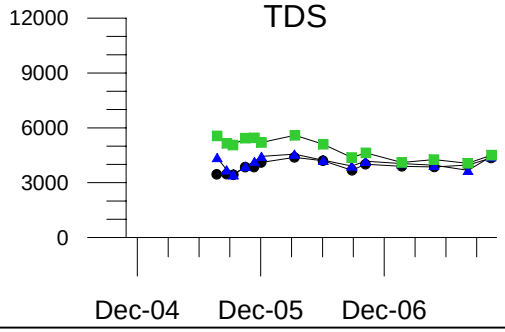

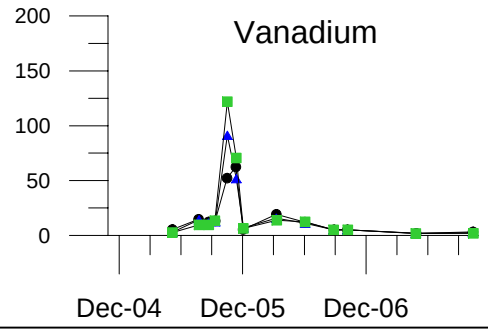

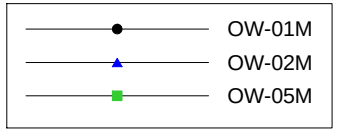

Cr(T), Cr(VI), molybdenum, and vanadium concentration units in µg/L. Other analyte concentration units in mg/L. pH in pH units.

FIGURE 3B
OW-01M, OW-02M, OW-05M
WATER QUALITY HYDROGRAPHS
IM3 COMPLIANCE MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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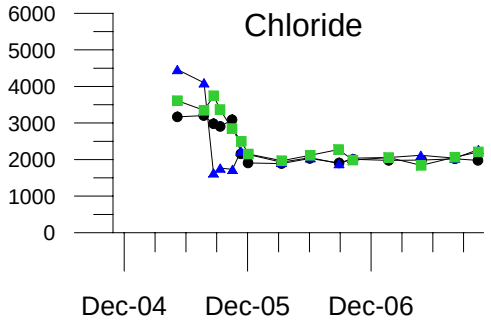
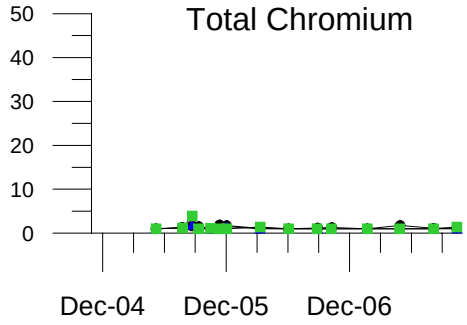
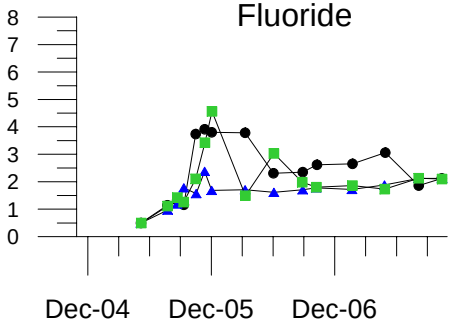
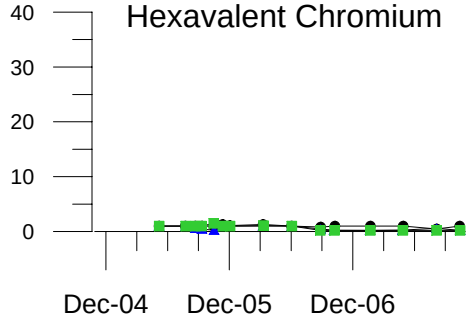
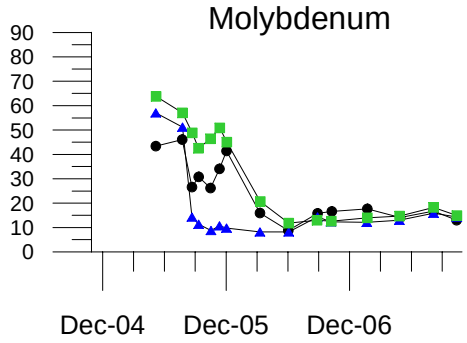
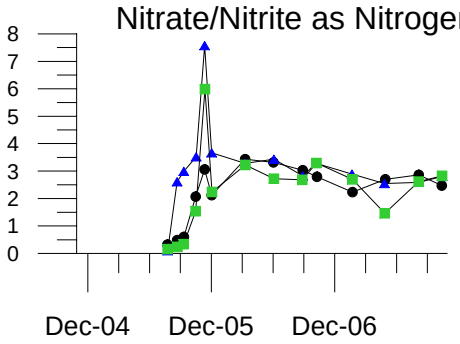


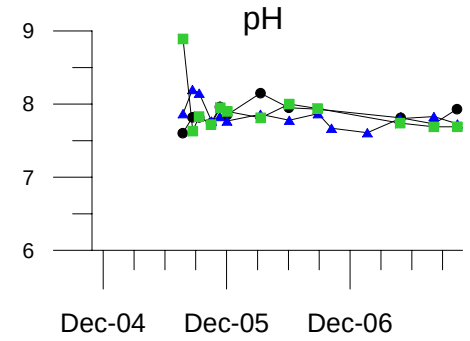


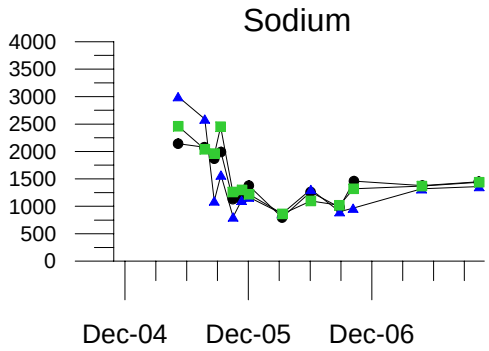


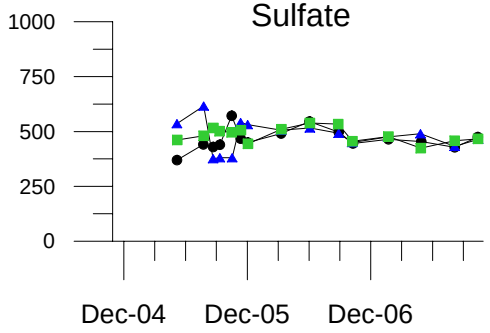


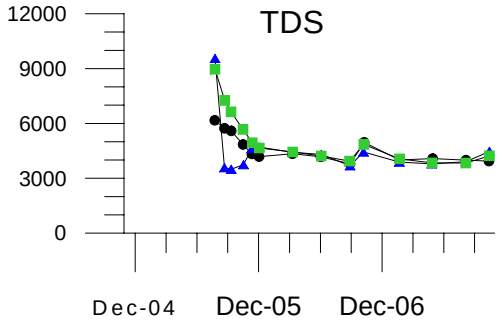


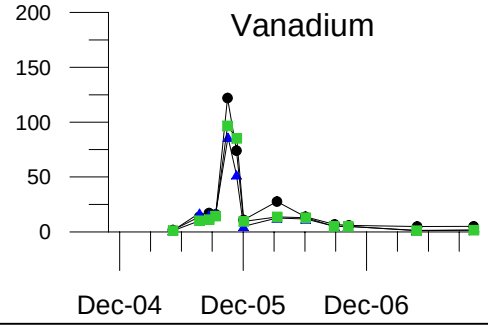


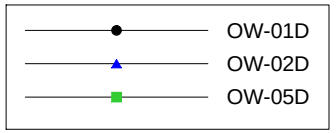








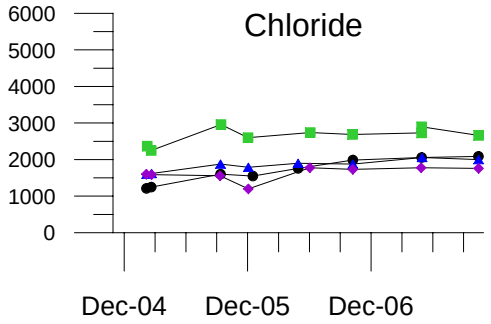


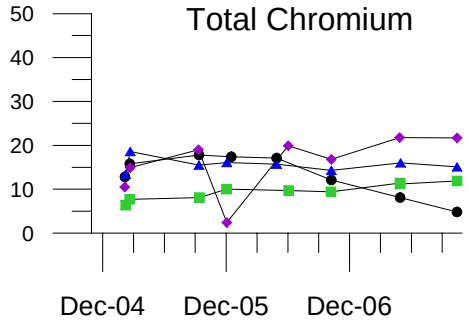


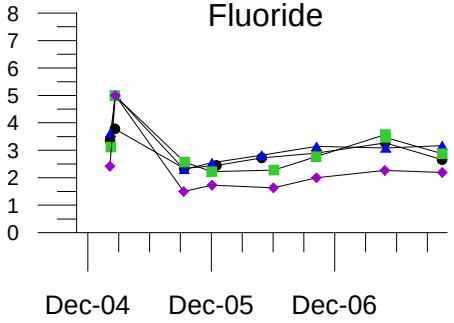
Cr(T), Cr(VI), molybdenum, and vanadium concentration units in µg/L. Other analyte concentration units in mg/L. pH in pH units.

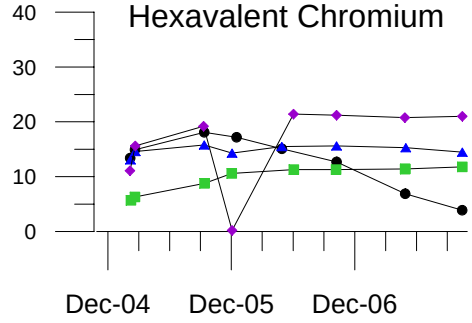
FIGURE 3C
OW-01D, OW-02D, OW-05D
WATER QUALITY HYDROGRAPHS
IM3 COMPLIANCE MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

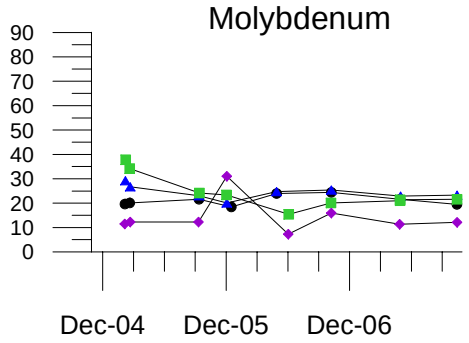
CH2MHILL

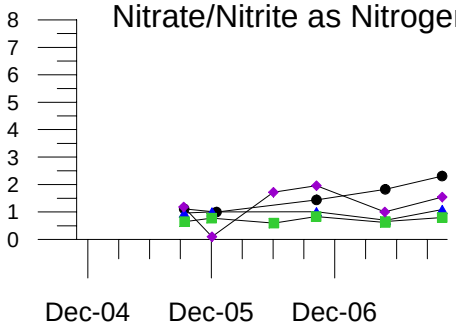


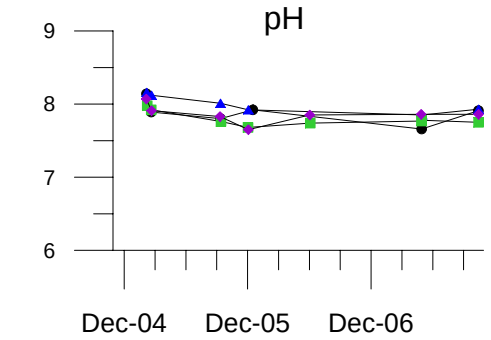


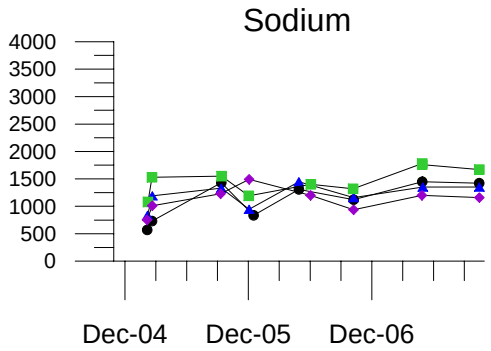


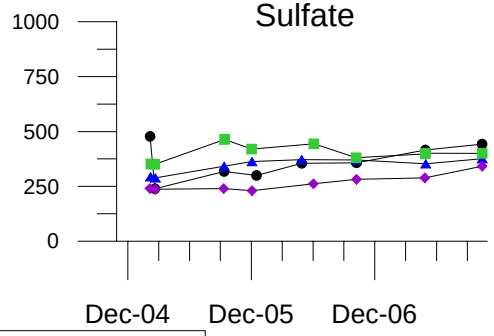


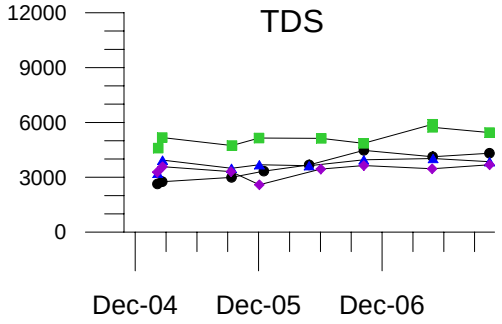


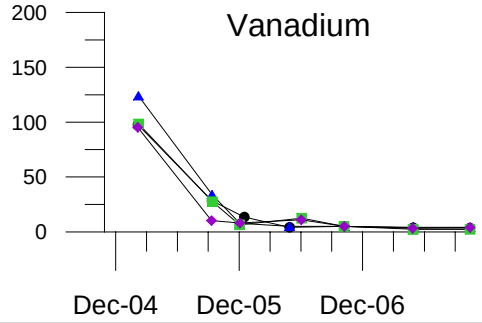


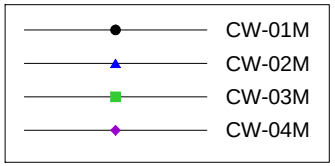












Cr(T), Cr(VI), molybdenum, and vanadium concentration units in µg/L. Other analyte concentration units in mg/L. pH in pH units.

FIGURE 3D
CW-01M, CW-02M, CW-03M, CW-04M
WATER QUALITY HYDROGRAPHS
IM3 COMPLIANCE MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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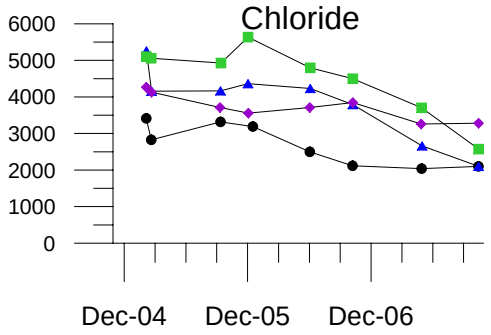
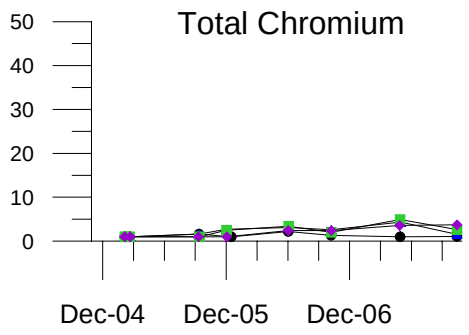
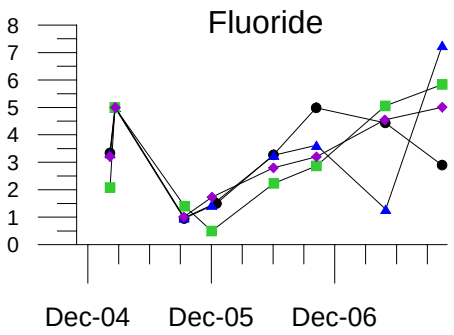
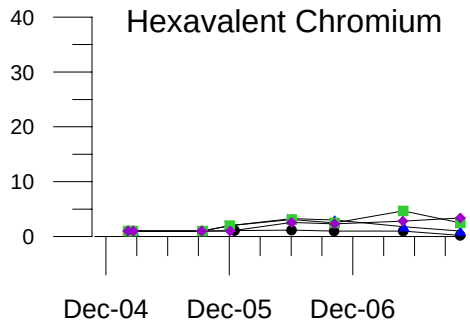
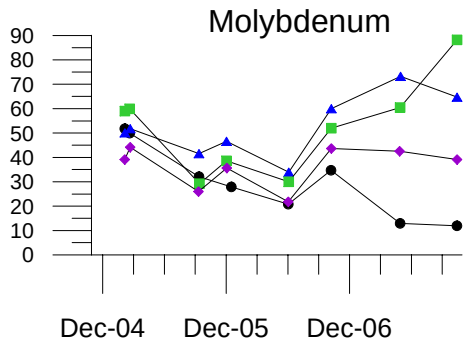
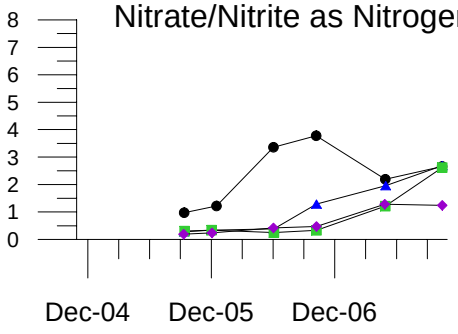


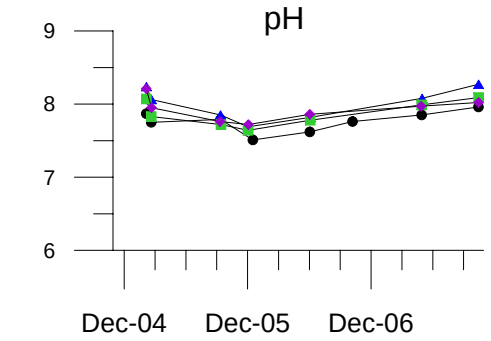


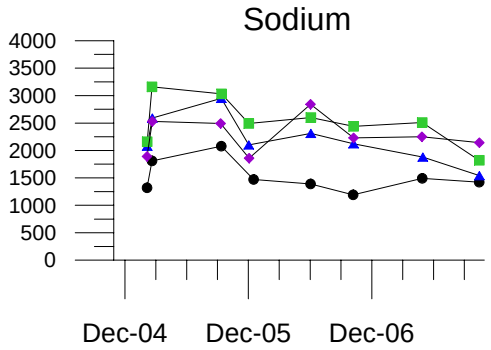


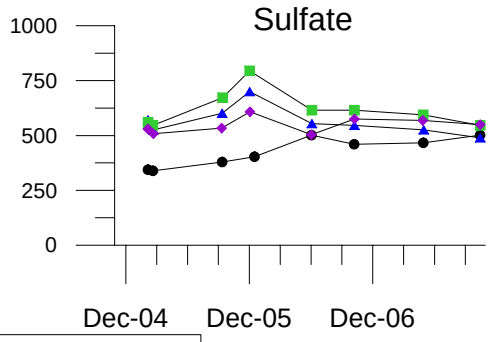


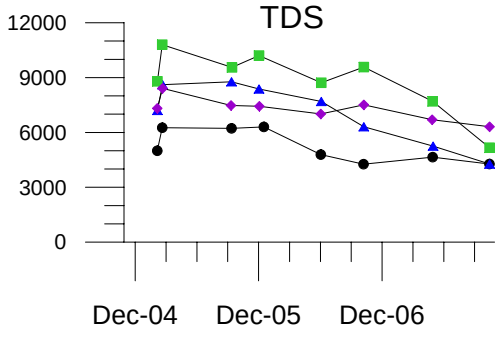


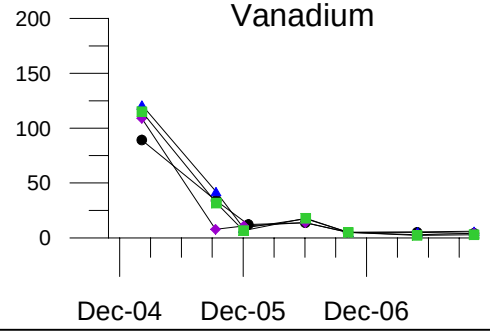


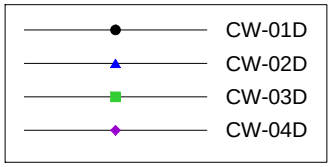








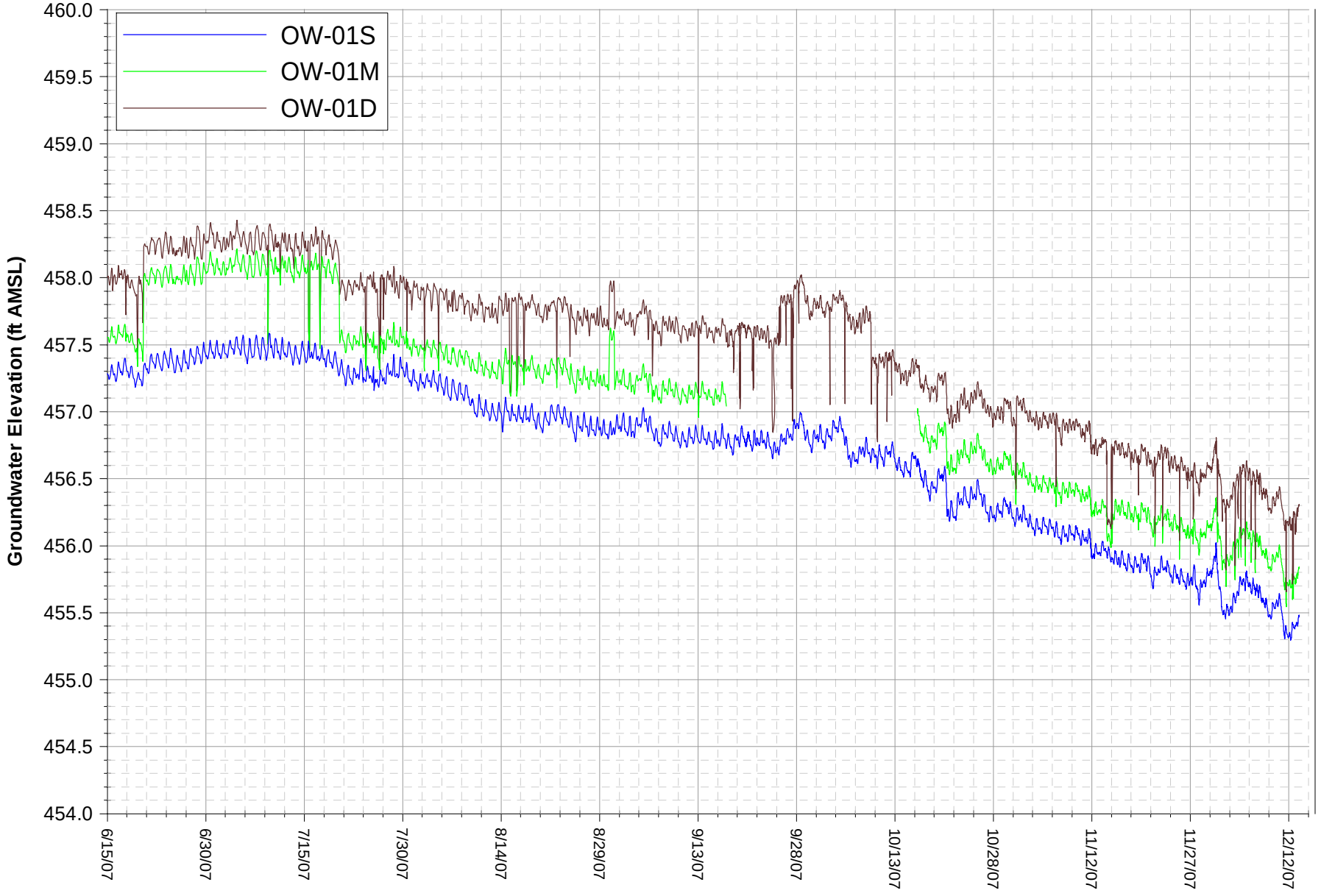




Cr(T), Cr(VI), molybdenum, and vanadium concentration units in µg/L. Other analyte concentration units in mg/L. pH in pH units.

FIGURE 3E
CW-01D, CW-02D, CW-03D, CW-04D
WATER QUALITY HYDROGRAPHS
IM3 COMPLIANCE MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

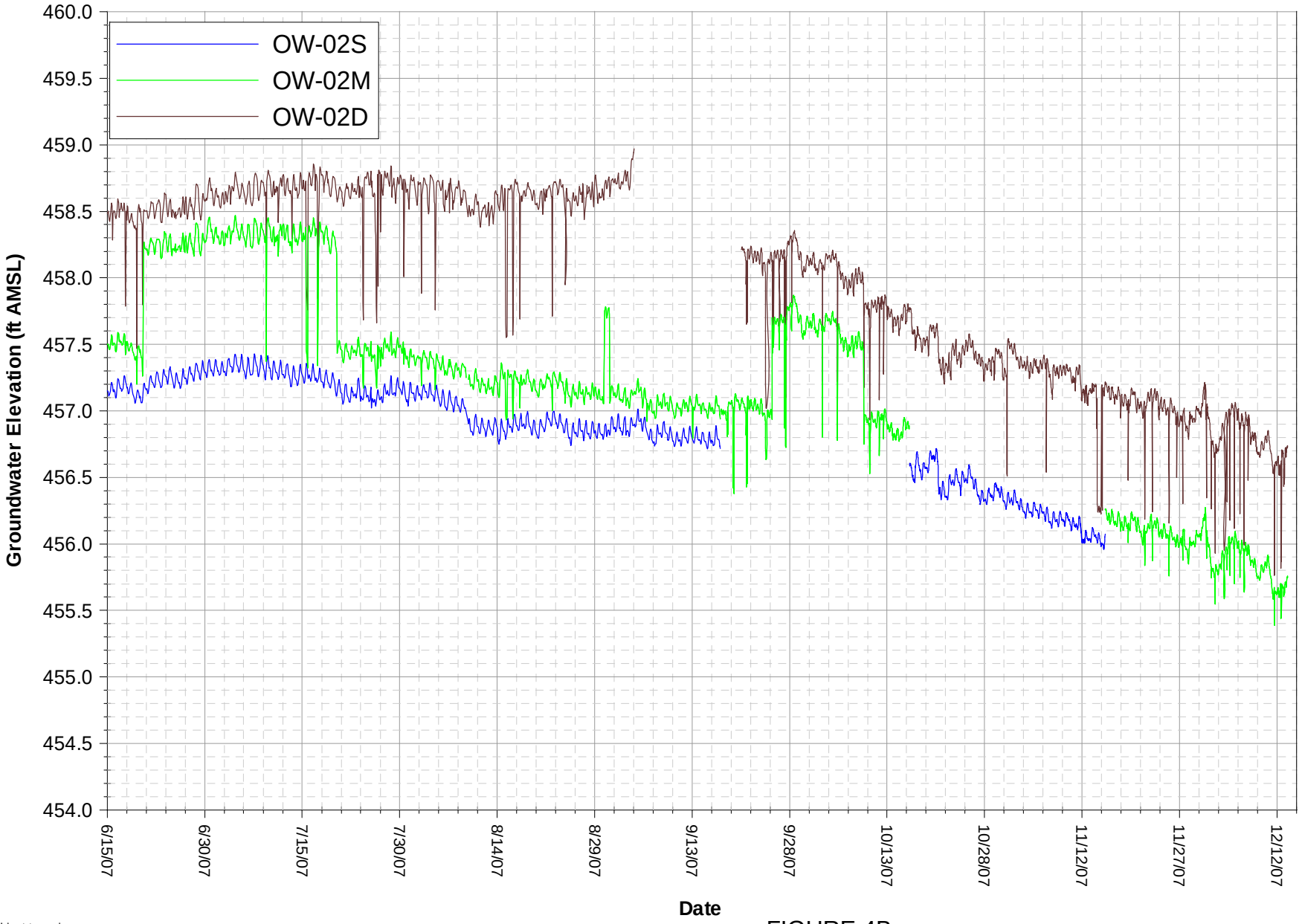
CH2MHILL



Note:
Data subject to review.
Injection in IW-2 occurred June 20 through July 20, 2007, August 30 through August 31, 2007 and September 25 through October 9, 2007.
OW-01M data unavailable September 17, 2007 through October 16, 2007 due to transducer malfunction.

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

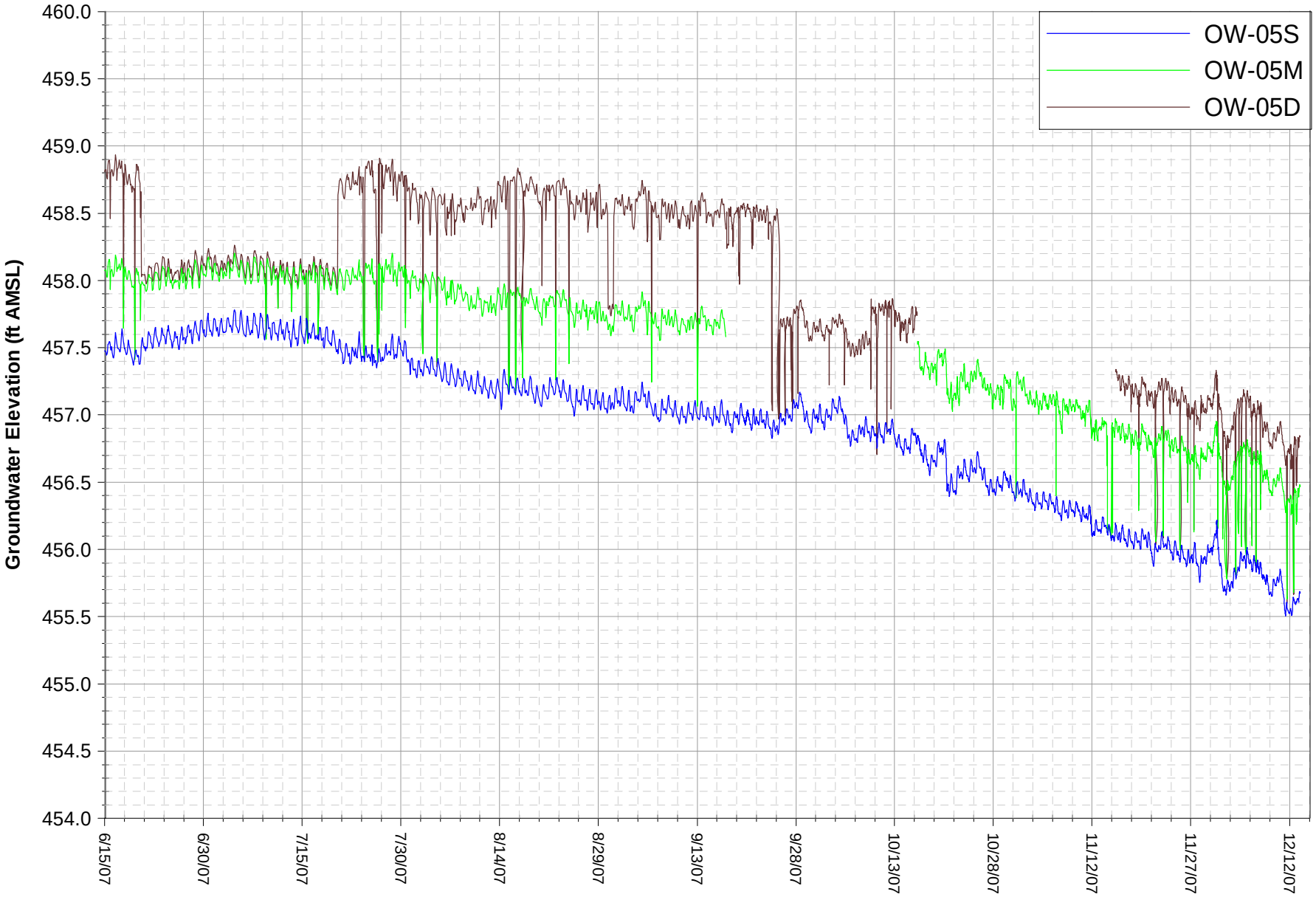
CH2MHILL



Note:
Data subject to review.
Injection in IW-2 occurred June 20 through July 20, 2007, August 30 through August 31, 2007 and September 25 through October 9, 2007.
OW-02D data not available between September 4, 2007 and September 20, 2007 due to transducer malfunction.
OW-02S data not available September 17 through October 16, 2007 and after November 15, 2007 due to transducer malfunction.
OW-02M data not available October 16, 2007 through November 15, 2007 due to transducer malfunction.

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

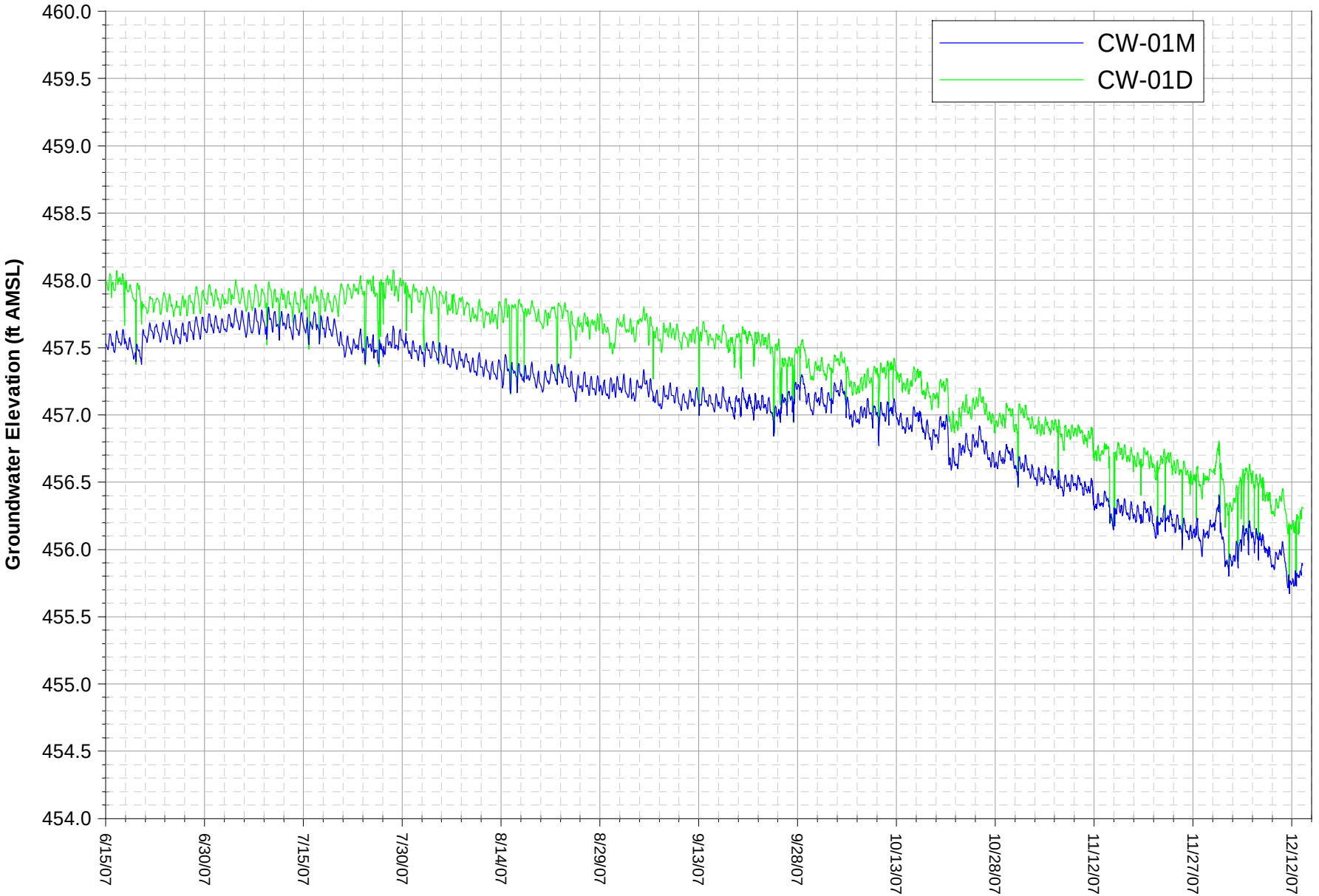
CH2MHILL



Note:
Data subject to review.
Injection in IW-2 occurred June 20 through July 20, 2007, August 30 through August 31, 2007 and September 25 through October 9, 2007.
OW-05M data not available September 17, 2007 through October 16, 2007 due to transducer malfunction.
OW-05D data not available October 16, 2007 through November 16, 2007 due to transducer malfunction.

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

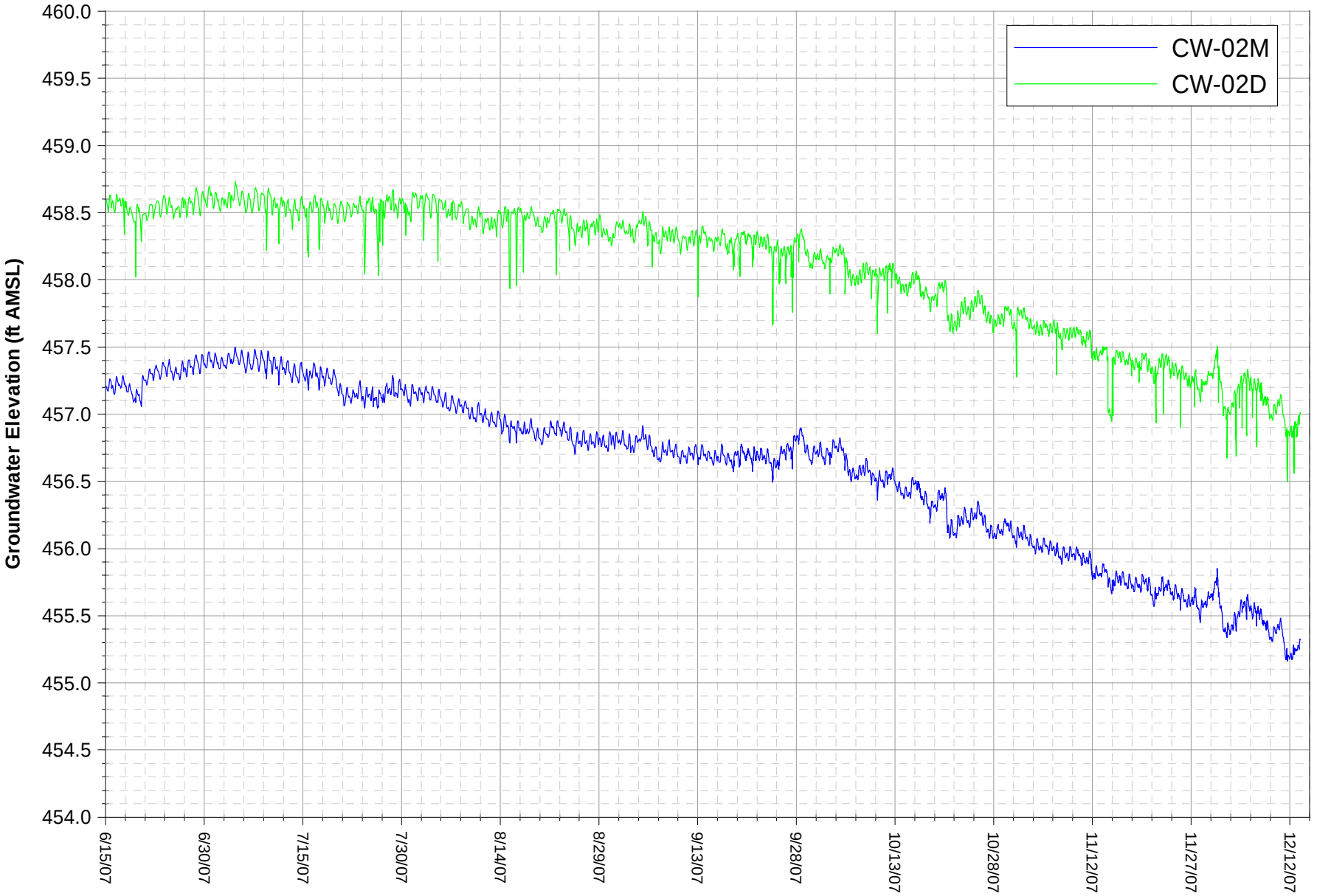
CH2MHILL



Note:
Data subject to review.
Injection in IW-2 occurred June 20 through July 20, 2007, August 30 through August 31, 2007 and September 25 through October 9, 2007.

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

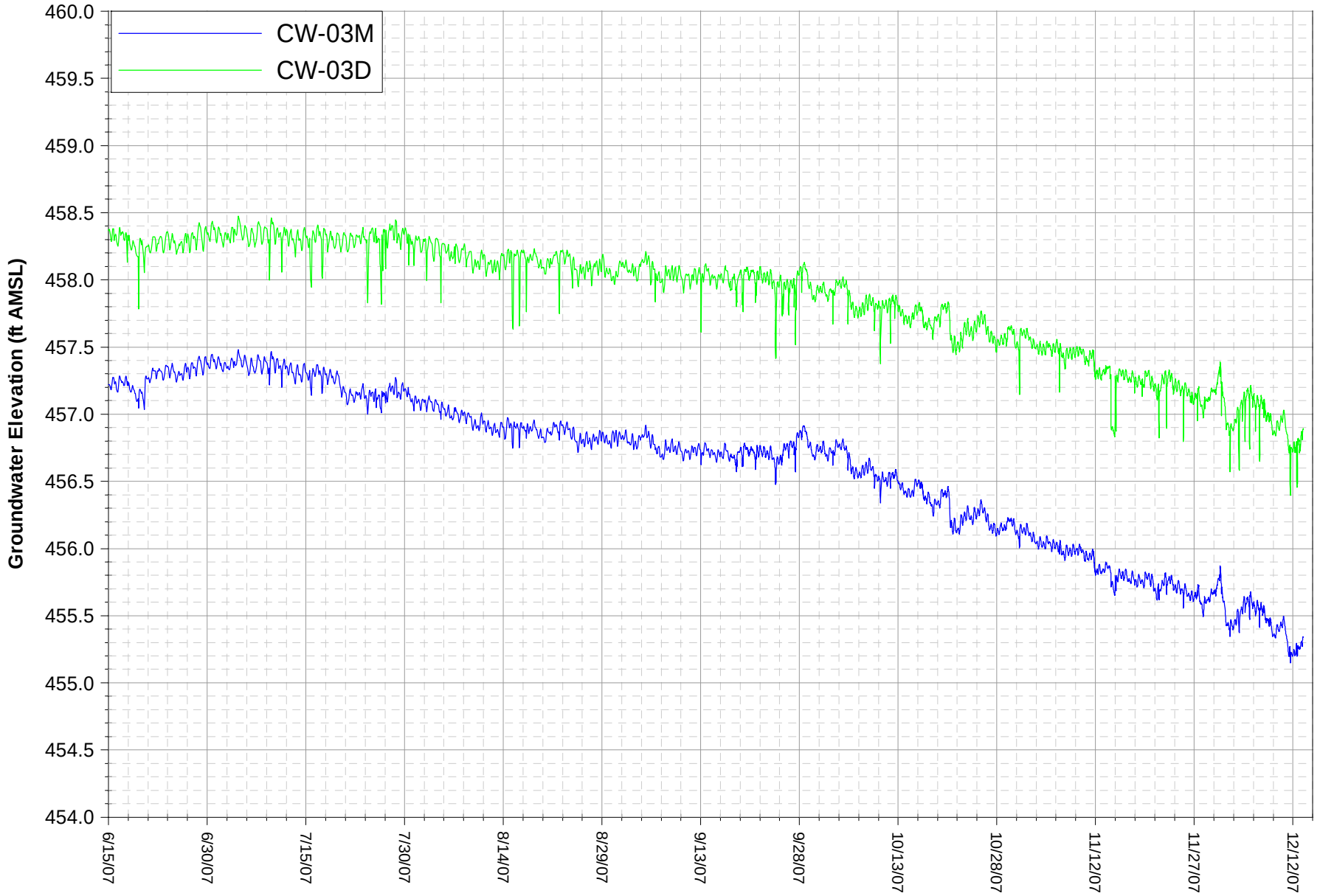
CH2MHILL



Note:
Data subject to review.
Injection in IW-2 occurred June 20 through July 20, 2007, August 30 through August 31, 2007 and September 25 through October 9, 2007.

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

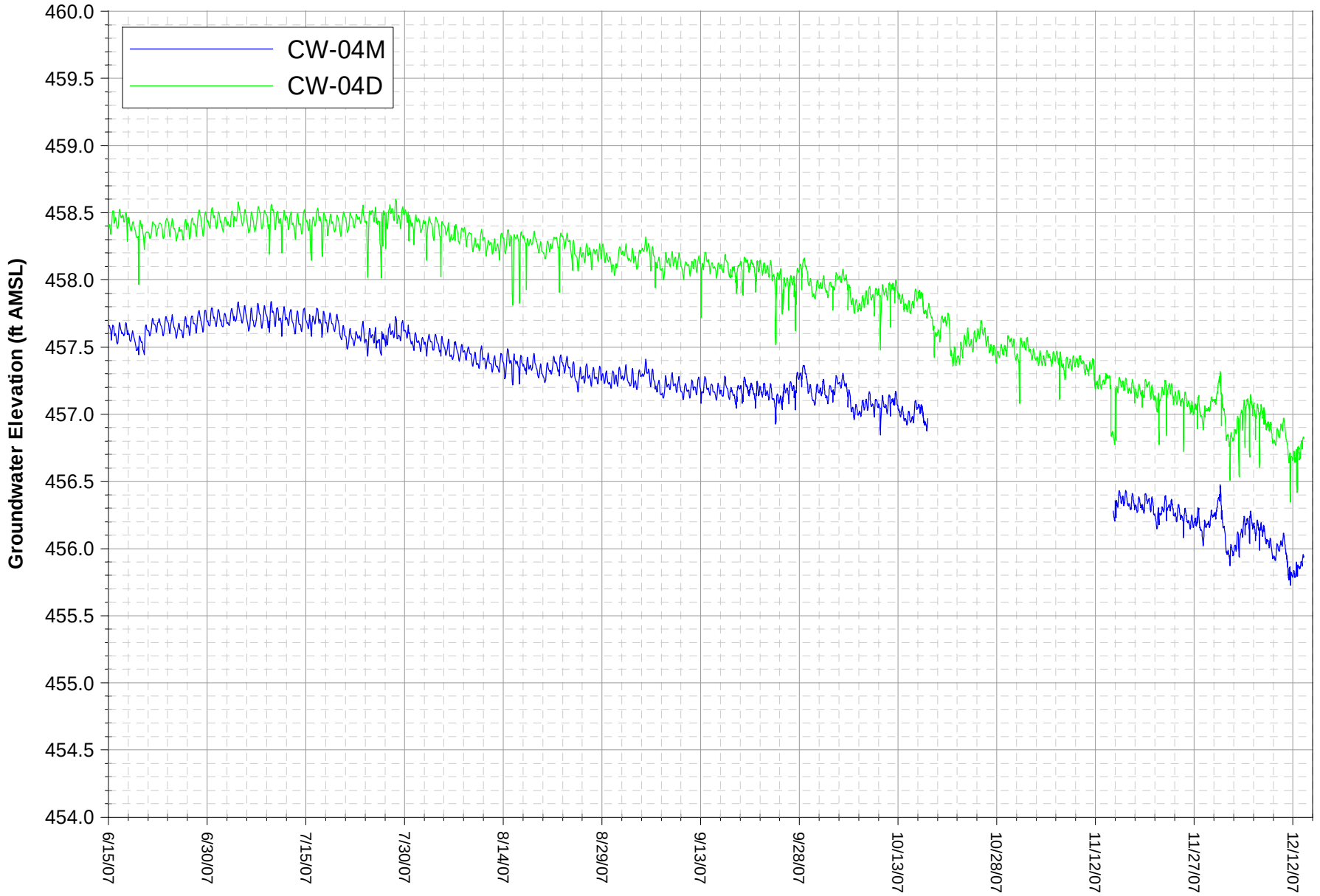
CH2MHILL



Note:
Data subject to review.
Injection in IW-2 occurred June 20 through July 20, 2007, August 30 through August 31, 2007 and September 25 through October 9, 2007.

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

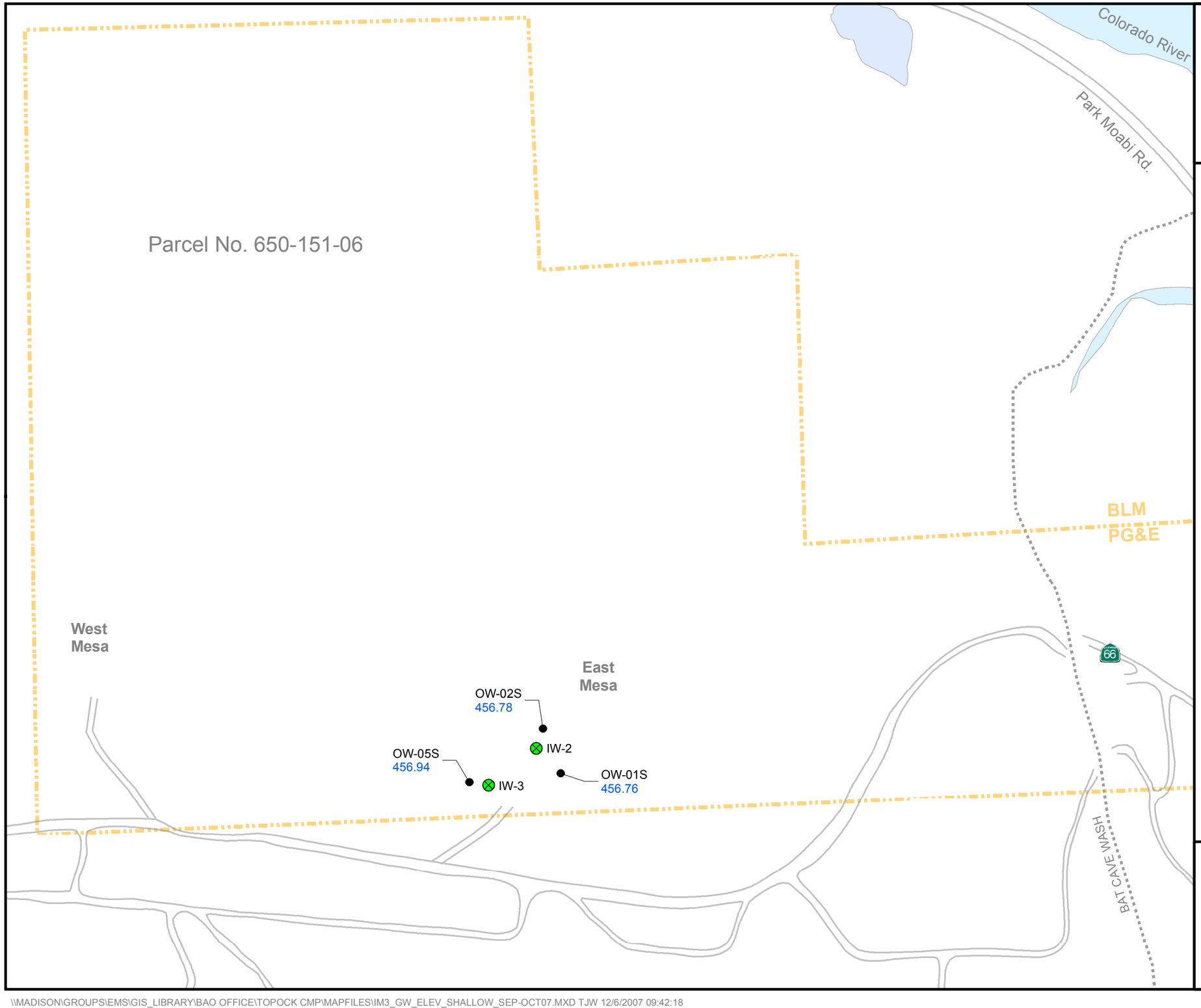
CH2MHILL



Note:
Data subject to review.
Injection in IW-2 occurred June 20 through July 20, 2007, August 30 through August 31, 2007 and September 25 through October 9, 2007.
CW-04M data unavailable from October 17, 2007 through November 15, 2007 due to transducer malfunction.

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 456.78 — Salinity and temperature adjusted groundwater head elevation in feet above mean sea level (MSL)

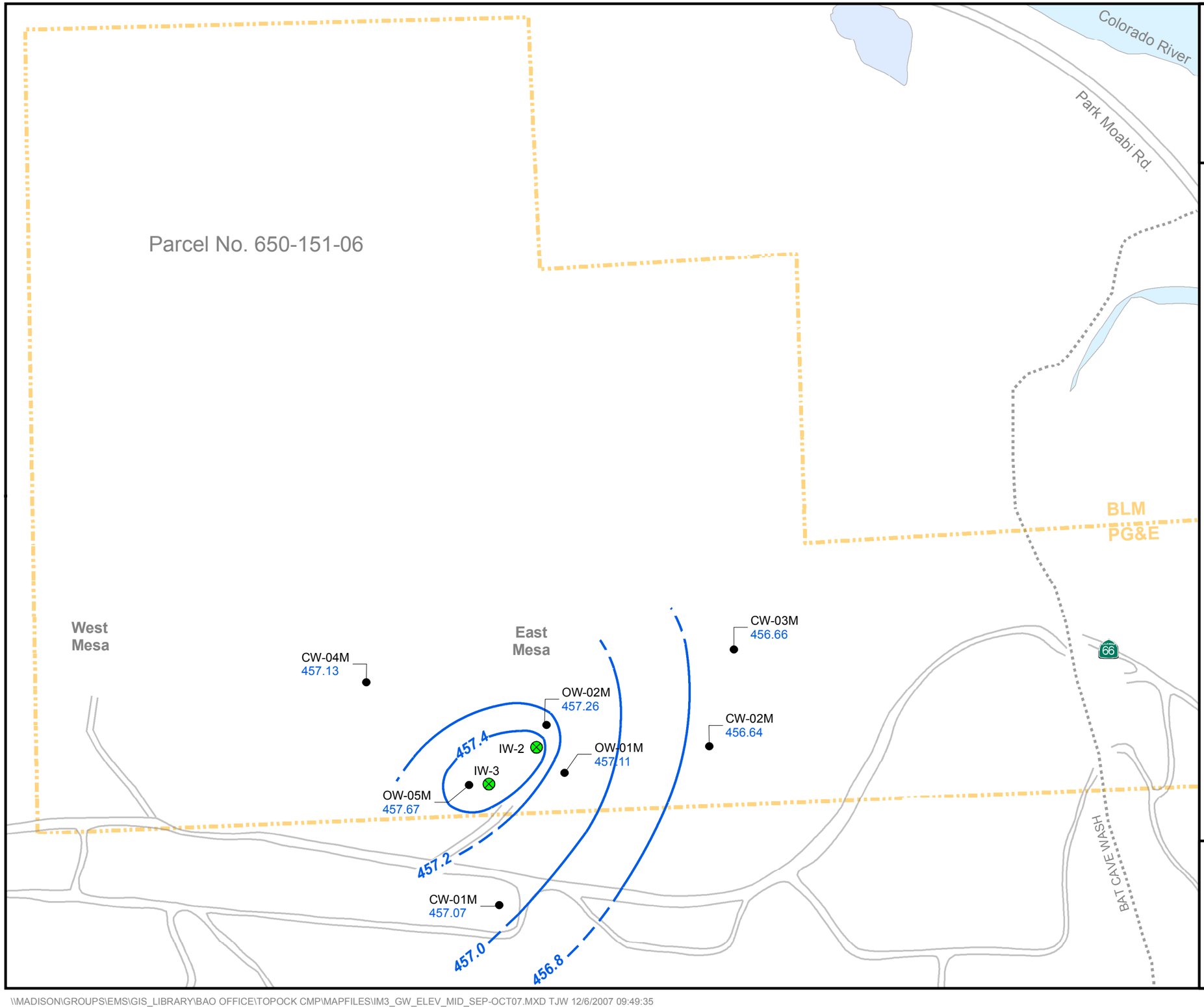
Notes:
Data posted and contoured from monthly average heads measured with transducers at 30 minute intervals.

FIGURE 5A
AVERAGE GROUNDWATER ELEVATIONS FOR SHALLOW WELLS SEPTEMBER 15 TO OCTOBER 15, 2007

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

CH2MHILL

\\MADISON\GROUPS\EMS\GIS_LIBRARY\BAO OFFICE\TOPOCK CMP\MAPFILES\IM3_GW_ELEV_SHALLOW_SEP-OCT07.MXD TJW 12/6/2007 09:42:18



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 457.26 — 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

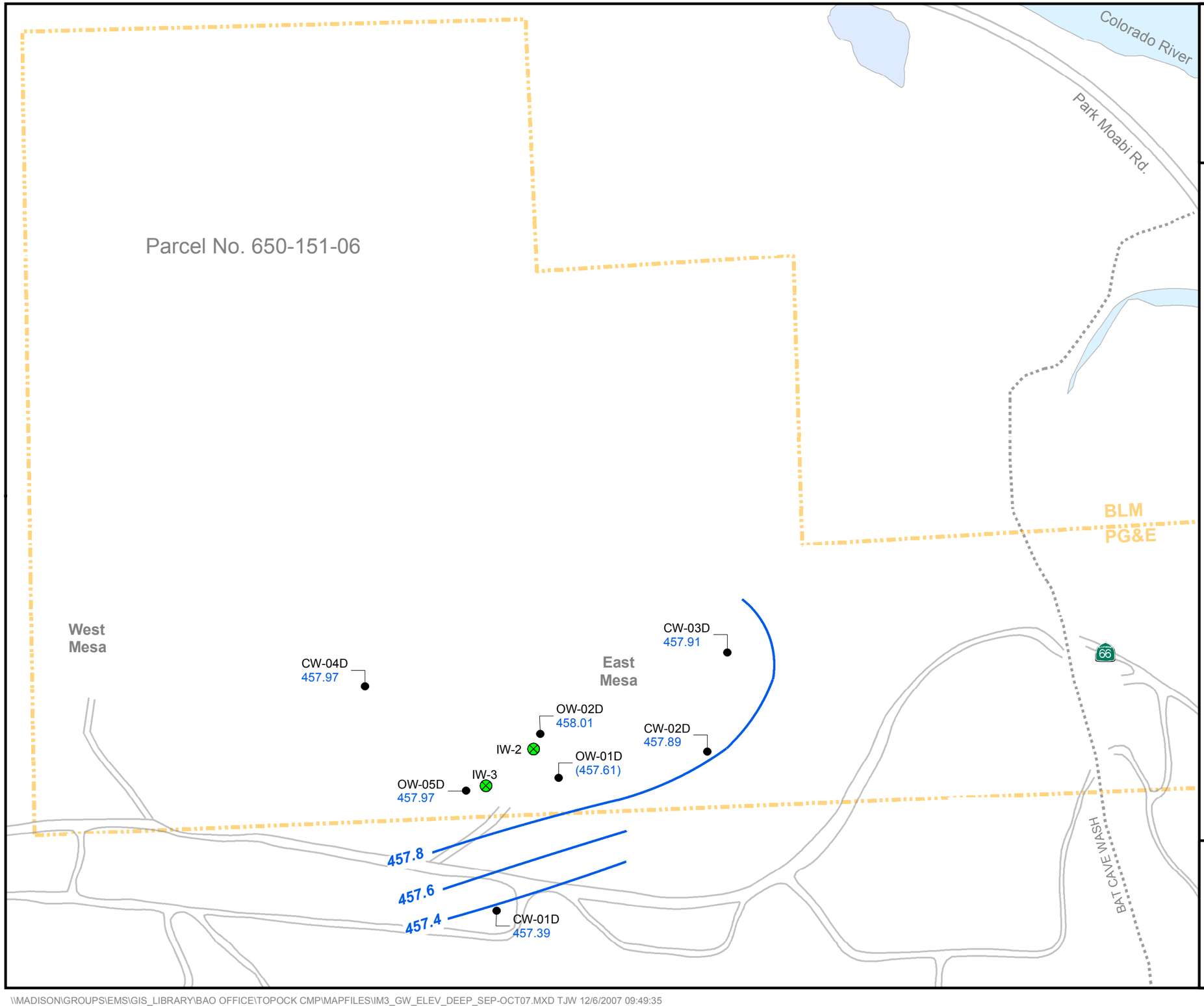
Notes:
Data posted and contoured from monthly average heads measured with transducers at 30 minute intervals.

FIGURE 5B
AVERAGE GROUNDWATER ELEVATION CONTOURS FOR MID-DEPTH WELLS SEPTEMBER 15 TO OCTOBER 15, 2007

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

CH2MHILL

\\MADISON\GROUPS\EMS\GIS_LIBRARY\BAO OFFICE\TOPOCK CMP\MAPFILES\IM3_GW_ELEV_MID_SEP-OCT07.MXD TJW 12/6/2007 09:49:35



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 457.97 — 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-1D) excluded from contouring

FIGURE 5C
AVERAGE GROUNDWATER ELEVATION CONTOURS FOR DEEP WELLS SEPTEMBER 15 TO OCTOBER 15, 2007

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

CH2MHILL

\\MADISON\GROUPS\EMS\GIS_LIBRARY\BAO OFFICE\TOPOCK CMP\MAPFILES\IM3_GW_ELEV_DEEP_SEP-OCT07.MXD TJW 12/6/2007 09:49:35

Appendix A
Laboratory Reports, Fourth Quarter 2007

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

Established 1931

14201 FRANKLIN AVENUE
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www.truesdail.com

December 4, 2007

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

Dear Mr. Duffy:

SUBJECT: REVISED CASE NARRATIVE PG&E TOPOCK 2007-CMP-014, GROUNDWATER MONITORING PROJECT, TLI NO.: 970435

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock 2007-CMP-014 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 October 16, 2007, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

A result for sample OW-01D-014 for Hexavalent Chromium by EPA 218.6 is reported in the matrix spike calculations although it is below the reporting limit due to the small amount of Hexavalent Chromium detected in the sample.

Due to an error during log-in, samples OW-01S-014 and OW-02M-014 were switched. The raw data was reflected the mistake but the report was showed the correction. The chain of custody, results summary, and final results pages have been revised to correspond with the appropriate sample results.

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.

Sean Conlan

for Mona Nassimi
Manager, Analytical Services

K. R. P. Iyer

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

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

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Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Five (5) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM

Laboratory No.: 970435
Date: November 1, 2007
Collected: October 16, 2007
Received: October 16, 2007

ANALYST LIST

EPA 120.1	Specific Conductivity	Tina Acquiat
SM 4500-H B	pH	Kim Luck
SM 2540C	Total Dissolved Solids	Tina Acquiat
SM 2130B	Turbidity	Gautam Savani
EPA 300.0	Anions	Giawad Ghenniwa
EPA 218.6	Hexavalent Chromium	Jean Paul Gleeson

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

Laboratory No.: 970435
Date Received: October 16, 2007
Revision 3

Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Analytical Results Summary

Lab I.D.	Sample I.D.	Sample Time	EPA 120.1 *EC*	SM 4500-H B *pH*	SM 2540C *TDS*	SM 2130B *Turbidity*	EPA 218.6 *Chromium Hexavalent*
			µmhos/cm	*Units*	*mg/L*	*NTU*	*mg/L*
970435-1	OW-01D-014	12:47	6360	7.93	3940	0.181	0.0010
970435-2	OW-01M-014	13:45	6710	7.73	4350	ND	0.0011
970435-3	OW-02M-014	15:28	6750	7.72	4420	ND	0.0012
970435-4	OW-01S-014	14:40	2220	7.85	1430	0.260	0.0216
970435-5	EB-CMP-014-01	15:40	---	---	---	---	ND

Lab I.D.	Sample I.D.	Sample Time	EPA 300.0 *Fluoride*	EPA 300.0 *Sulfate*	EPA 300.0 *Chloride*
			mg/L	*mg/L*	*mg/L*
970435-1	OW-01D-014	12:47	2.12	474	1980
970435-2	OW-01M-014	13:45	2.05	497	2100
970435-3	OW-02M-014	15:28	1.95	496	2090
970435-4	OW-01S-014	14:40	2.74	142	635

ND: Non Detected (below reporting limit)
mg/L: Milligrams per liter.
Note: The following "Significant Figures" rule has been applied to all results:
Results below 0.01ppm will have two (2) significant figures.
Result above or equal to 0.01ppm will have three (3) significant figures.
Quality Control data will always have three (3) significant figures.

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: Five (5) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Laboratory No.: 970435

Date: December 4, 2007
Collected: October 16, 2007
Received: October 16, 2007
Prep/ Analyzed: October 16 - 17, 2007
Analytical Batch: 10CrH07S
Revision 3

Investigation: **Hexavalent Chromium by EPA 218.6**

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
970435-1	OW-01D-014	12:47	10/17/07; 00:35	mg/L	5.00	0.0010	0.0010
970435-2	OW-01M-014	13:45	10/16/07; 23:04	mg/L	5.00	0.0010	0.0011
970435-3	OW-02M-014	15:28	10/17/07; 00:45	mg/L	5.00	0.0010	0.0012
970435-4	OW-01S-014	14:40	10/17/07; 00:02	mg/L	5.00	0.0010	0.0216
970435-5	EB-CMP-014-01	15:40	10/16/07; 22:09	mg/L	1.05	0.00020	ND

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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TUSTIN, CALIFORNIA 92780-7008
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www.truesdail.com

REPORT

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

Laboratory No.: 970435

Sample: Five (5) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Date: December 4, 2007
Collected: October 16, 2007
Received: October 16, 2007
Prep/ Analyzed: October 16 - 17, 2007
Analytical Batch: 10CrH07S
Revision 3

Investigation: **Hexavalent Chromium by EPA 218.6**

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	970435-4	0.0216	0.0214	0.93%	< 20%	Yes

QC Std I.D.	Lab Number	Conc.of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	970435-1	0.0010	5.00	0.00100	0.00500	0.00605	0.00600	101%	90-110%	Yes
MS	970435-2	0.0011	5.00	0.00100	0.00500	0.00602	0.00610	98.4%	90-110%	Yes
MS	970435-3	0.0012	5.00	0.00100	0.00500	0.00633	0.00620	103%	90-110%	Yes
MS	970435-4	0.0216	5.00	0.00500	0.0250	0.0468	0.0466	101%	90-110%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00533	0.00500	107%	90% - 110%	Yes
MRCVS#1	0.0102	0.0100	102%	90% - 110%	Yes
MRCVS#2	0.0103	0.0100	103%	90% - 110%	Yes
MRCVS#3	0.0103	0.0100	103%	90% - 110%	Yes
LCS	0.00538	0.00500	108%	90% - 110%	Yes
LCSD	0.00537	0.00500	107%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sam Conlon

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Five (5) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Laboratory No.: 970435
Date: December 4, 2007
Collected: October 16, 2007
Received: October 16, 2007
Prep/ Analyzed: October 17, 2007
Analytical Batch: 10TUC07N
Revision 3

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

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
970435-1	OW-01D-014	12:47	NTU	1.00	0.100	0.181
970435-2	OW-01M-014	13:45	NTU	1.00	0.100	ND
970435-3	OW-02M-014	15:28	NTU	1.00	0.100	ND
970435-4	OW-01S-014	14:40	NTU	1.00	0.100	0.260

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	970410-10	ND	ND	0.00%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	7.95	8.00	99.4%	90% - 110%	Yes
LCS	7.90	8.00	98.8%	90% - 110%	Yes
LCS	7.82	8.00	97.8%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

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

Sample: Five (5) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Laboratory No.: 970435
Date: December 4, 2007
Collected: October 16, 2007
Received: October 16, 2007
Prep/ Analyzed: October 17, 2007
Analytical Batch: 10EC07J
Revision 3

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	MDL	DF	RL	Results
970435-1	OW-01D-014	µmhos/cm	EPA 120.1	0.153	1.00	2.00	6360
970435-2	OW-01M-014	µmhos/cm	EPA 120.1	0.153	1.00	2.00	6710
970435-3	OW-02M-014	µmhos/cm	EPA 120.1	0.153	1.00	2.00	6750
970435-4	OW-01S-014	µmhos/cm	EPA 120.1	0.153	1.00	2.00	2220

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	970435-4	2220	2220	0.00%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
CCS	692	706	98.0%	90% - 110%	Yes
CVS#1	959	998	96.1%	90% - 110%	Yes
LCS	692	706	98.0%	90% - 110%	Yes

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: Five (5) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Laboratory No.: 970435

Date: December 4, 2007
Collected: October 16, 2007
Received: October 16, 2007
Prep/ Analyzed: October 18, 2007
Analytical Batch: 10TDS07H
Revision 3

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

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
970435-1	OW-01D-014	mg/L	SM 2540C	125	3940
970435-2	OW-01M-014	mg/L	SM 2540C	250	4350
970435-3	OW-02M-014	mg/L	SM 2540C	250	4420
970435-4	OW-01S-014	mg/L	SM 2540C	50.0	1430

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	970486-3	4230	4160	0.83%	≤ 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS 1	501	500	100%	90% - 110%	Yes
LCS 2	497	500	99.4%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon
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: Five (5) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Laboratory No.: 970435

Date: December 4, 2007
Collected: October 16, 2007
Received: October 16, 2007
Prep/ Analyzed: October 17, 2007
Analytical Batch: 10PH07W
Revision 3

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

Analytical Results pH

TLI I.D.	Field I.D.	Run Time	Units	MDL	RL	Results
970435-1	OW-01D-014	09:03	pH	0.0700	2.00	7.93
970435-2	OW-01M-014	09:08	pH	0.0700	2.00	7.73
970435-3	OW-02M-014	09:15	pH	0.0700	2.00	7.72
970435-4	OW-01S-014	09:20	pH	0.0700	2.00	7.85

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	970435-4	7.85	7.87	0.02	+ 0.100 Units	Yes

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

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conlan
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

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Oakland, CA 94612
Attention: Shawn Duffy
Sample: Five (5) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Laboratory No.: 970435
Date: December 4, 2007
Collected: October 16, 2007
Received: October 16, 2007
Prep/ Analyzed: October 17, 2007
Analytical Batch: 10AN07P
Revision 3

Investigation: **Sulfate by Method EPA 300.0**

Analytical Results Sulfate

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
970435-1	OW-01D-014	12:47	16:57	mg/L	25.0	12.5	474
970435-2	OW-01M-014	13:45	17:09	mg/L	25.0	12.5	497
970435-3	OW-02M-014	15:28	17:20	mg/L	25.0	12.5	496
970435-4	OW-01S-014	14:40	17:32	mg/L	10.0	5.00	142

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	970420-1	249	248	0.40%	≤ 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	970420-1	249	100	4.00	400	642	649	98.3%	85-115%	Yes

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

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

Respectfully submitted,
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for Mona Nassimi, Manager
Analytical Services

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Five (5) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Laboratory No.: 970435
Date: December 4, 2007
Collected: October 16, 2007
Received: October 16, 2007
Prep/ Analyzed: October 17, 2007
Analytical Batch: 10AN07P
Revision 3

Investigation: **Chloride by Method EPA 300.0**

Analytical Results Chloride

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
970435-1	OW-01D-014	12:47	14:46	mg/L	500	100	1980
970435-2	OW-01M-014	13:45	16:23	mg/L	500	100	2100
970435-3	OW-02M-014	15:28	16:35	mg/L	500	100	2090
970435-4	OW-01S-014	14:40	16:46	mg/L	100	20.0	635

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	970420-1	222	220	0.90%	≤ 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	970420-1	222	100.0	4.00	400	623	622	100%	85-115%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	3.96	4.00	99.0%	90% - 110%	Yes
MRCVS#1	2.98	3.00	99.3%	90% - 110%	Yes
MRCVS#2	2.98	3.00	99.3%	90% - 110%	Yes
MRCVS#3	3.00	3.00	100%	90% - 110%	Yes
MRCVS#4	2.95	3.00	98.3%	90% - 110%	Yes
LCS	3.96	4.00	99.0%	90% - 110%	Yes
LCSD	3.95	4.00	98.8%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sam Condon

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Five (5) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Laboratory No.: 970435
Date: December 4, 2007
Collected: October 16, 2007
Received: October 16, 2007
Prep/ Analyzed: October 17, 2007
Analytical Batch: 10AN07P
Revision 3

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
970435-1	OW-01D-014	12:47	11:21	mg/L	5.00	0.500	2.12
970435-2	OW-01M-014	13:45	11:32	mg/L	5.00	0.500	2.05
970435-3	OW-02M-014	15:28	11:44	mg/L	5.00	0.500	1.95
970435-4	OW-01S-014	14:40	11:55	mg/L	5.00	0.500	2.74

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	970422-6	1.71	1.68	1.77%	≤ 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	970422-6	1.71	1.00	4.00	4.00	5.59	5.71	97.0%	85-115%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	4.16	4.00	104%	90% - 110%	Yes
MRCVS#1	3.13	3.00	104%	90% - 110%	Yes
MRCVS#2	3.12	3.00	104%	90% - 110%	Yes
MRCVS#3	3.12	3.00	104%	90% - 110%	Yes
LCS	4.16	4.00	104%	90% - 110%	Yes
LCSD	4.16	4.00	104%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sam Condon
for Mona Nassimi, Manager
Analytical Services

970435

Rec'd 10/16/07
Lab. 970435

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CHAIN OF CUSTODY RECORD

[2007-CMP-014]

COC Number
TURNAROUND TIME 10 Days
DATE 10-16-07 PAGE 1 OF 1

COMPANY E2
PROJECT NAME PG&E Topock
PHONE (530) 229-3303 FAX (530) 339-3303
ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612
P.O. NUMBER 354631.MP.02.CM.00 TEAM 1
SAMPLERS (SIGNATURE

	SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Specific Conductance (120.1)	PH (SM4500HB)	TDS (SM2540C)	Anions (300) Cl, F, SO4	Turbidity (SM2130)	NUMBER OF CONTAINERS	COMMENTS
-1	OW-01D-014	10-16-07	1247	groundwater	X	X	X	X	X	X	2	
10/16/07 -2	OW-01M-014		1345		X	X	X	X	X	X	2	
-4 -3	OW-01S-014		1440		X	X	X	X	X	X	2	
-3 -4	OW-02M-014		1528		X	X	X	X	X	X	2	
10/16/07 -5	EB-CMP-014-01		1540		X						1	

ALERT II
Level III QC

For Sample Conditions See Form Attached

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Barry Gibson	CH2M Hill	10-16-07 1600
Signature (Received) Rafael Davila	T. Rafa	T.L.I	10-16-07 16:00
Signature (Relinquished) Rafael Davila	Rafael	T.L.I	10-16-07 21:00
Signature (Received)	David S	T L I	10/16/07 2100
Signature (Relinquished)			
Signature (Received)			

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

044

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November 6, 2007

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

Dear Mr. Duffy:

SUBJECT: CASE NARRATIVE PG&E TOPOCK 2007-CMP-014, GROUNDWATER MONITORING PROJECT, TLI NO.: 970486

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock 2007-CMP-014 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 October 17, 2007, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

The recovery for MRCVS#5 for Hexavalent Chromium by EPA 218.6 exceeds the acceptance limits. The result for the re-analysis of sample 970486-9 at a dilution of 5x, which was analyzed prior to MRCVS#5, agrees with the earlier straight run of that sample. Therefor, the elevated MRCVS recovery did not affect the sample results and the data is accepted.

Results for Hexavalent Chromium by EPA 218.6 are reported in the matrix spike calculations although they are below the reporting limit due to the small amount of Hexavalent Chromium detected in the samples.

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.

Sean Condon

for Mona Nassimi
Manager, Analytical Services

K. R. P. Iyer

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

TRUESDAIL LABORATORIES, INC.

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Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Nine (9) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM

Laboratory No.: 970486
Date: November 6, 2007
Collected: October 17, 2007
Received: October 17, 2007

ANALYST LIST

METHOD	[illegible]	ANALYST
EPA 120.1	Specific Conductivity	Tina Acquiat
SM 4500-H B	pH	Tina Acquiat
SM 2540C	Total Dissolved Solids	Tina Acquiat
SM 2130B	Turbidity	Gautam Savani
EPA 300.0	Anions	Giawad Ghenniwa
EPA 218.6	Hexavalent Chromium	Jean Paul Gleeson

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REPORT

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Laboratory No.: 970486

Sample: Nine (9) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Date: November 6, 2007
Collected: October 17, 2007
Received: October 17, 2007
Prep/ Analyzed: October 17 - 18, 2007
Analytical Batch: 10CrH07U

Investigation: **Hexavalent Chromium by EPA 218.6**

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
970486-1	OW-02S-014	08:26	10/17/07; 23:29	mg/L	5.00	0.0010	0.0341
970486-2	OW-02D-014	09:42	10/17/07; 22:06	mg/L	1.05	0.00020	ND
970486-3	OW-05D-014	11:40	10/17/07; 22:17	mg/L	1.05	0.00020	ND
970486-4	OW-05M-014	12:47	10/18/07; 00:52	mg/L	5.00	0.0010	ND
970486-5	MW-90-014	12:49	10/18/07; 01:03	mg/L	5.00	0.0010	ND
970486-6	OW-05S-014	13:35	10/18/07; 02:05	mg/L	5.00	0.0010	0.0263
970486-7	CW-01D-014	14:42	10/17/07; 22:58	mg/L	1.05	0.00020	ND
970486-8	EB-CMP-014-2	14:50	10/17/07; 23:09	mg/L	1.05	0.00020	ND
970486-9	CW-01M-014	15:15	10/18/07; 04:10	mg/L	5.00	0.0010	0.0039

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon for
Mona Nassimi, Manager
Analytical Services

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Prep/ Analyzed: October 17 - 18, 2007
Analytical Batch: 10CrH07U

Investigation: **Hexavalent Chromium by EPA 218.6**

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	970486-1	0.0341	0.0345	1.17%	< 20%	Yes

QC Std I.D.	Lab Number	Conc.of unspiked sample	Dilution Factor	Added Spike Conc.	MS Amount	Measured Conc. of spiked sample	Theoretical Conc. of spiked sample	MS% Recovery	Acceptance limits	QC Within Control
MS	970486-1	0.0341	5.00	0.0100	0.0500	0.0854	0.0841	103%	90-110%	Yes
MS	970486-2	0.00018	1.06	0.00100	0.00106	0.00119	0.00124	95.3%	90-110%	Yes
MS	970486-3	0.00013	1.06	0.00100	0.00106	0.00117	0.00119	98.1%	90-110%	Yes
MS	970486-4	0.00047	5.00	0.00100	0.00500	0.00539	0.00547	98.4%	90-110%	Yes
MS	970486-5	0.00094	5.00	0.00100	0.00500	0.00545	0.00594	90.2%	90-110%	Yes
MS	970486-6	0.0263	5.00	0.0100	0.0500	0.0779	0.0763	103%	90-110%	Yes
MS	970486-7	0.00019	1.06	0.00100	0.00106	0.00127	0.00125	102%	90-110%	Yes
MS	970486-9	0.0039	5.00	0.00100	0.00500	0.00894	0.00890	101%	90-110%	Yes

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

Respectfully submitted,
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Sean Condon

Mona Nassimi, Manager
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Date: November 6, 2007
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Received: October 17, 2007
Prep/ Analyzed: October 17 - 18, 2007
Analytical Batch: 10CrH07U

Investigation: **Hexavalent Chromium by EPA 218.6**

QA/QC Summary

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00537	0.00500	107%	90% - 110%	Yes
MRCVS#1	0.0102	0.0100	102%	95% - 105%	Yes
MRCVS#2	0.0103	0.0100	103%	95% - 105%	Yes
MRCVS#3	0.0104	0.0100	104%	95% - 105%	Yes
MRCVS#4	0.0104	0.0100	104%	95% - 105%	Yes
MRCVS#5	0.0107	0.0100	107%	95% - 105%	No
MRCVS#6	0.0105	0.0100	105%	95% - 105%	Yes
LCS	0.00540	0.00500	108%	90% - 110%	Yes
LCSD	0.00540	0.00500	108%	90% - 110%	Yes

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

Respectfully submitted,
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Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Laboratory No.: 970486
Date: November 6, 2007
Collected: October 17, 2007
Received: October 17, 2007
Prep/ Analyzed: October 18, 2007
Analytical Batch: 10TUC07P

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

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
970486-1	OW-02S-014	08:26	NTU	1.00	0.100	0.785
970486-2	OW-02D-014	09:42	NTU	1.00	0.100	ND
970486-3	OW-05D-014	11:40	NTU	1.00	0.100	0.200
970486-4	OW-05M-014	12:47	NTU	1.00	0.100	0.140
970486-5	MW-90-014	12:49	NTU	1.00	0.100	ND
970486-6	OW-05S-014	13:35	NTU	1.00	0.100	0.622
970486-7	CW-01D-014	14:42	NTU	1.00	0.100	0.100
970486-9	CW-01M-014	15:15	NTU	1.00	0.100	0.220

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	970483-20	ND	ND	0.00%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	7.40	8.00	92.5%	90% - 110%	Yes
LCS	7.38	8.00	92.3%	90% - 110%	Yes
LCS	7.30	8.00	91.3%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conlon

for Mona Nassimi, Manager
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Attention: Shawn Duffy

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Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Laboratory No.: 970486

Date: November 6, 2007
Collected: October 17, 2007
Received: October 17, 2007
Prep/ Analyzed: October 18, 2007
Analytical Batch: 10EC07K

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	MDL	DF	RL	Results
970486-1	OW-02S-014	µmhos/cm	EPA 120.1	0.153	1.00	2.00	1680
970486-2	OW-02D-014	µmhos/cm	EPA 120.1	0.153	1.00	2.00	6860
970486-3	OW-05D-014	µmhos/cm	EPA 120.1	0.153	1.00	2.00	6920
970486-4	OW-05M-014	µmhos/cm	EPA 120.1	0.153	1.00	2.00	6590
970486-5	MW-90-014	µmhos/cm	EPA 120.1	0.153	1.00	2.00	6630
970486-6	OW-05S-014	µmhos/cm	EPA 120.1	0.153	1.00	2.00	1580
970486-7	CW-01D-014	µmhos/cm	EPA 120.1	0.153	1.00	2.00	6470
970486-9	CW-01M-014	µmhos/cm	EPA 120.1	0.153	1.00	2.00	6450

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	970486-3	6920	6930	0.14%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
CCS	690	706	97.7%	90% - 110%	Yes
CVS#1	960	998	96.2%	90% - 110%	Yes
CVS#2	958	998	96.0%	90% - 110%	Yes
LCS	690	706	97.7%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conlon
for - Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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: Nine (9) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Laboratory No.: 970486
Date: November 6, 2007
Collected: October 17, 2007
Received: October 17, 2007
Prep/ Analyzed: October 18, 2007
Analytical Batch: 10TDS07H

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

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
970486-1	OW-02S-014	mg/L	SM 2540C	50.0	1010
970486-2	OW-02D-014	mg/L	SM 2540C	250	4470
970486-3	OW-05D-014	mg/L	SM 2540C	250	4230
970486-4	OW-05M-014	mg/L	SM 2540C	250	4500
970486-5	MW-90-014	mg/L	SM 2540C	250	4200
970486-6	OW-05S-014	mg/L	SM 2540C	50.0	948
970486-7	CW-01D-014	mg/L	SM 2540C	250	4270
970486-9	CW-01M-014	mg/L	SM 2540C	250	4310

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	970486-3	4230	4160	0.83%	< 5%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS 1	501	500	100%	90% - 110%	Yes
LCS 2	497	500	99.4%	90% - 110%	Yes

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

Respectfully submitted,
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Sean Conlan

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Attention: Shawn Duffy

Sample: Nine (9) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Laboratory No.: 970486

Date: November 6, 2007
Collected: October 17, 2007
Received: October 17, 2007
Prep/ Analyzed: October 18, 2007
Analytical Batch: 10PH07X

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

Analytical Results pH

TLI I.D.	Field I.D.	Run Time	Units	MDL	RL	Results
970486-1	OW-02S-014	07:50	pH	0.0700	2.00	8.05
970486-2	OW-02D-014	09:10	pH	0.0700	2.00	7.73
970486-3	OW-05D-014	10:05	pH	0.0700	2.00	7.69
970486-4	OW-05M-014	10:09	pH	0.0700	2.00	7.79
970486-5	MW-90-014	10:15	pH	0.0700	2.00	7.70
970486-6	OW-05S-014	10:19	pH	0.0700	2.00	7.94
970486-7	CW-01D-014	10:23	pH	0.0700	2.00	7.96
970486-9	CW-01M-014	10:27	pH	0.0700	2.00	7.91

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	970486-9	7.91	7.91	0.00	± 0.100 Units	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Difference (Units)	Acceptance Limits	QC Within Control
LCS	7.06	7.00	0.06	± 0.100 Units	Yes
LCS #1	7.08	7.00	0.08	± 0.100 Units	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sam Condon
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Sample: Nine (9) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Laboratory No.: 970486
Date: November 6, 2007
Collected: October 17, 2007
Received: October 17, 2007
Prep/ Analyzed: October 24, 2007
Analytical Batch: 10AN07X

Investigation: **Sulfate by Method EPA 300.0**

Analytical Results Sulfate

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
970486-1	OW-02S-014	08:26	18:52	mg/L	5.00	2.50	127
970486-2	OW-02D-014	09:42	15:38	mg/L	500	250	465
970486-3	OW-05D-014	11:40	15:50	mg/L	500	250	466
970486-4	OW-05M-014	12:47	16:01	mg/L	500	250	457
970486-5	MW-90-014	12:49	16:12	mg/L	500	250	472
970486-6	OW-05S-014	13:35	16:24	mg/L	100	50.0	102
970486-7	CW-01D-014	14:42	16:47	mg/L	25.0	12.5	501

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

Respectfully submitted,
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Sample: Nine (9) Groundwater Samples
Project Name: PG&E Topock Project
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P.O. No.: 345631.MP.02.CM

Laboratory No.: 970486
Date: November 6, 2007
Collected: October 17, 2007
Received: October 17, 2007
Prep/ Analyzed: October 24, 2007
Analytical Batch: 10AN07X

Investigation: **Sulfate by Method EPA 300.0**

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	970560-2	36.9	37.0	0.27%	≤ 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	970560-2	36.9	10.0	4.00	40.0	76.9	76.9	100%	85-115%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	20.0	20.0	100%	90% - 110%	Yes
MRCVS#1	15.3	15.0	102%	90% - 110%	Yes
MRCVS#2	15.4	15.0	103%	90% - 110%	Yes
MRCVS#3	15.4	15.0	103%	90% - 110%	Yes
MRCVS#4	15.4	15.0	103%	90% - 110%	Yes
LCS	20.0	20.0	100%	90% - 110%	Yes
LCSD	20.2	20.0	101%	90% - 110%	Yes

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DF: Dilution Factor.

Respectfully submitted,
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Sean Conlan

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REPORT

Client: E2 Consulting Engineers, Inc.
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Attention: Shawn Duffy
Sample: Nine (9) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Laboratory No.: 970486
Date: November 6, 2007
Collected: October 17, 2007
Received: October 17, 2007
Prep/ Analyzed: October 25, 2007
Analytical Batch: 10AN07Y

Investigation: **Sulfate by Method EPA 300.0**

Analytical Results Sulfate

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
970486-9	CW-01M-014	15:15	10:29	mg/L	100	50.0	443

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	970615-2	37.4	37.3	0.27%	≤ 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	970615-2	37.4	10.0	4.00	40.0	77.4	77.4	100%	85-115%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	20.0	20.0	100%	90% - 110%	Yes
MRCVS#1	15.2	15.0	101%	90% - 110%	Yes
MRCVS#2	15.2	15.0	101%	90% - 110%	Yes
MRCVS#3	15.2	15.0	101%	90% - 110%	Yes
MRCVS#4	15.2	15.0	101%	90% - 110%	Yes
MRCVS#5	15.2	15.0	101%	90% - 110%	Yes
LCS	20.1	20.0	101%	90% - 110%	Yes
LCSD	20.0	20.0	100%	90% - 110%	Yes

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Respectfully submitted,
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Attention: Shawn Duffy
Sample: Nine (9) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Laboratory No.: 970486
Date: November 6, 2007
Collected: October 17, 2007
Received: October 17, 2007
Prep/ Analyzed: October 24, 2007
Analytical Batch: 10AN07X

Investigation: **Chloride by Method EPA 300.0**

Analytical Results Chloride

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
970486-1	OW-02S-014	08:26	18:41	mg/L	100	20.0	423
970486-2	OW-02D-014	09:42	15:38	mg/L	500	100	2280
970486-3	OW-05D-014	11:40	15:50	mg/L	500	100	2210
970486-4	OW-05M-014	12:47	16:01	mg/L	500	100	2140
970486-5	MW-90-014	12:49	16:12	mg/L	500	100	2160
970486-6	OW-05S-014	13:35	16:24	mg/L	100	20.0	422
970486-7	CW-01D-014	14:42	16:35	mg/L	500	100	2100

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conlon

f/ Mona Nassimi, Manager
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REPORT

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Oakland, CA 94612
Attention: Shawn Duffy
Sample: Nine (9) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Laboratory No.: 970486
Date: November 6, 2007
Collected: October 17, 2007
Received: October 17, 2007
Prep/ Analyzed: October 24, 2007
Analytical Batch: 10AN07X

Investigation: **Chloride by Method EPA 300.0**

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	970560-2	35.2	35.2	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	970560-2	35.2	10.0	4.00	40.0	77.0	75.2	105%	85-115%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	3.98	4.00	99.5%	90% - 110%	Yes
MRCVS#1	3.07	3.00	102%	90% - 110%	Yes
MRCVS#2	3.04	3.00	101%	90% - 110%	Yes
MRCVS#3	3.06	3.00	102%	90% - 110%	Yes
MRCVS#4	3.07	3.00	102%	90% - 110%	Yes
LCS	4.01	4.00	100%	90% - 110%	Yes
LCSD	4.02	4.00	101%	90% - 110%	Yes

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Sean Condon

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REPORT

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Attention: Shawn Duffy
Sample: Nine (9) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Laboratory No.: 970486
Date: November 6, 2007
Collected: October 17, 2007
Received: October 17, 2007
Prep/ Analyzed: October 25, 2007
Analytical Batch: 10AN07Y

Investigation: **Chloride by Method EPA 300.0**

Analytical Results Chloride

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
970486-9	CW-01M-014	15:15	10:18	mg/L	500	100	2090

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	970615-2	14.9	14.8	0.67%	≤ 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	970615-2	14.9	10.0	2.00	20.0	34.7	34.9	99.0%	85-115%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	3.94	4.00	98.5%	90% - 110%	Yes
MRCVS#1	2.96	3.00	98.7%	90% - 110%	Yes
MRCVS#2	2.97	3.00	99.0%	90% - 110%	Yes
MRCVS#3	2.97	3.00	99.0%	90% - 110%	Yes
MRCVS#4	2.94	3.00	98.0%	90% - 110%	Yes
LCS	3.95	4.00	98.8%	90% - 110%	Yes
LCSD	3.94	4.00	98.5%	90% - 110%	Yes

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

Respectfully submitted,
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for Mona Nassimi, Manager
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REPORT

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Attention: Shawn Duffy
Sample: Nine (9) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Laboratory No.: 970486
Date: November 6, 2007
Collected: October 17, 2007
Received: October 17, 2007
Prep/ Analyzed: October 19, 2007
Analytical Batch: 10AN07U

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
970486-1	OW-02S-014	08:26	17:05	mg/L	5.00	0.500	4.86
970486-2	OW-02D-014	09:42	15:45	mg/L	5.00	0.500	2.12
970486-3	OW-05D-014	11:40	15:57	mg/L	5.00	0.500	2.10
970486-4	OW-05M-014	12:47	16:08	mg/L	5.00	0.500	2.12
970486-5	MW-90-014	12:49	16:19	mg/L	5.00	0.500	2.19
970486-6	OW-05S-014	13:35	16:31	mg/L	5.00	0.500	2.50
970486-7	CW-01D-014	14:42	16:42	mg/L	5.00	0.500	2.90
970486-9	CW-01M-014	15:15	16:54	mg/L	5.00	0.500	2.66

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	970486-6	2.50	2.59	3.54%	≤ 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	970486-6	2.50	5.00	4.00	20.0	23.0	22.5	103%	85-115%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	4.15	4.00	104%	90% - 110%	Yes
MRCVS#1	3.10	3.00	103%	90% - 110%	Yes
LCS	4.15	4.00	104%	90% - 110%	Yes
LCSD	4.15	4.00	104%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sam Conlon

for Mona Nassimi, Manager
Analytical Services

970486

Rec'd 10/17/07
Lab.# 970486

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

[2007-CMP-014]

COC Number

TURNAROUND TIME 10 Days

DATE 10-17-07 PAGE 1 OF 2

ALERT !!
Level III QC

For Sample Conditions See Form Attached

COMPANY E2

PROJECT NAME PG&E Topock

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

ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612

P.O. NUMBER 354631.MP.02.CM.00 TEAM 1

SAMPLERS (SIGNATURE

	SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Specific Conductance (120.1)	PH (SM4500HB)	TDS (SM2540C)	Anions (300) Cl, Fl, SO4	Turbidity (SM2130)	NUMBER OF CONTAINERS	COMMENTS
-1	OW-02S-014	10-17-07	0826	groundwater	X	X	X	X	X	X	2	
-2	OW-02D-014		0942		X	X	X	X	X	X	2	
-3	OW-05D-014		1140		X	X	X	X	X	X	2	
-4	OW-05M-014		1247		X	X	X	X	X	X	2	
-5	~~MW~~ MW-90-014		1249		X	X	X	X	X	X	2	
-6	OW-05S-014		1335		X	X	X	X	X	X	2	
-7	CW-01D-014		1442		X	X	X	X	X	X	2	
-8	EB-CMP-014-2		1450		X						1	

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Barry Colborn	CH2M Hill	10-17-07 1600
Signature (Received)	Rafael Davila	T.L.I	10-17-07 16:00
Signature (Relinquished)	Rafael Davila	T.L.I	10-17-07 21:00
Signature (Received)	David S	TLI	10/17/07 2100
Signature (Relinquished)		Company/ Agency	Date/ Time
Signature (Received)		Company/ Agency	Date/ Time

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

057

970486

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

[2007-CMP-014]

Rec'd 10/17/07
Lab.# 970486

COC Number
TURNAROUND TIME 10 Days
DATE 10-17-07 PAGE 2 OF 2

COMPANY E2
PROJECT NAME PG&E Topock
PHONE (530) 229-3303 FAX (530) 339-3303
ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612
P.O. NUMBER 354631.MP.02.CM.00 TEAM 1
SAMPLERS (SIGNATURE

SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Specific Conductance (120.1)	PH (SM4500HB)	TDS (SM2540C)	Anions (300) Cl, Fl, SO4	Turbidity (SM2130)	NUMBER OF CONTAINERS	COMMENTS
-9 CW-01M-014	10-17-07	1515	groundwater	X	X	X	X	X	X	2	

For Sample Conditions
See Form Attached

ALERT !!
Level III QC

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Barry Collom	CH2M Hill	10-17-07 1600
Signature (Received) Rafael Davila	Rafael	T.L.I	10-17-07 16:00
Signature (Relinquished) Rafael Davila	Rafael	T.L.I	10-17-07 21:00
Signature (Received) X	David S	TLI	10/17/07 2100
Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time
Signature (Received)	Printed Name	Company/ Agency	Date/ Time

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

SPECIAL REQUIREMENTS:

058

TRUESDAIL LABORATORIES, INC.

INDEPENDENT TESTING, FORENSIC SCIENCE, AND ENVIRONMENTAL ANALYSES

Established 1931

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

November 6, 2007

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

Dear Mr. Duffy:

SUBJECT: CASE NARRATIVE PG&E TOPOCK 2007-CMP-014, GROUNDWATER MONITORING PROJECT, TLI NO.: 970522

Truesdail Laboratories, Inc. is pleased to submit this report summarizing the Topock 2007-CMP-014 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 October 18, 2007, intact and in chilled condition. The samples will be kept in a locked refrigerator for 30 days; thereafter it will be kept in warm storage for an additional 2 months before disposal.

A result for Hexavalent Chromium by EPA 218.6, for sample CW-02D-014, is reported in the matrix spike calculations although it is below the reporting limit due to the small amount of Hexavalent Chromium detected in the sample.

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.

Sean Condon

for Mona Nassimi
Manager, Analytical Services

K. R. P. Iyer

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

TRUESDAIL LABORATORIES, INC.

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Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Eight (8) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM

Laboratory No.: 970522
Date: November 6, 2007
Collected: October 18, 2007
Received: October 18, 2007

ANALYST LIST

[redacted]	[redacted]	[redacted]
EPA 120.1	Specific Conductivity	Tina Acquiat
SM 4500-H B	pH	Tina Acquiat
SM 2540C	Total Dissolved Solids	Tina Acquiat
SM 2130B	Turbidity	Gautam Savani
EPA 300.0	Anions	Glawad Ghenniwa
EPA 218.6	Hexavalent Chromium	Jean Paul Gleeson

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REPORT

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

Laboratory No.: 970522

Sample: Eight (8) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Date: November 6, 2007
Collected: October 18, 2007
Received: October 18, 2007
Prep/ Analyzed: October 18 - 19, 2007
Analytical Batch: 10CrH07W

Investigation: **Hexavalent Chromium by EPA 218.6**

Analytical Results Hexavalent Chromium

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
970522-1	CW-02D-014	07:38	10/18/07; 22:35	mg/L	5.00	0.0010	ND
970522-2	CW-02M-014	08:25	10/18/07; 23:37	mg/L	5.00	0.0010	0.0145
970522-3	CW-03D-014	09:40	10/19/07; 00:08	mg/L	5.00	0.0010	0.0025
970522-4	CW-03M-014	10:40	10/19/07; 00:19	mg/L	5.00	0.0010	0.0118
970522-5	CW-04M-014	12:10	10/19/07; 00:29	mg/L	5.00	0.0010	0.0207
970522-6	CW-04D-014	13:18	10/19/07; 00:39	mg/L	5.00	0.0010	0.0034
970522-7	MW-91-014	12:25	10/19/07; 00:50	mg/L	5.00	0.0010	0.0210
970522-8	EB-CMP-014-03	13:25	10/18/07; 22:24	mg/L	1.05	0.00020	ND

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon
fo - Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Laboratory No.: 970522

Date: November 6, 2007
Collected: October 18, 2007
Received: October 18, 2007
Prep/ Analyzed: October 18 - 19, 2007
Analytical Batch: 10CrH07W

Investigation: **Hexavalent Chromium by EPA 218.6**

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	970522-2	0.0145	0.0145	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	970522-1	0.00082	5.00	0.00100	0.00500	0.00572	0.00582	98.0%	90-110%	Yes
MS	970522-2	0.0145	5.00	0.00500	0.0250	0.0391	0.0395	98.4%	90-110%	Yes
MS	970522-3	0.0025	5.00	0.00100	0.00500	0.00749	0.00750	99.8%	90-110%	Yes
MS	970522-4	0.0118	5.00	0.00500	0.0250	0.0373	0.0368	102%	90-110%	Yes
MS	970522-5	0.0207	5.00	0.00500	0.0250	0.0459	0.0457	101%	90-110%	Yes
MS	970522-6	0.0034	5.00	0.00100	0.00500	0.00835	0.00840	99.0%	90-110%	Yes
MS	970522-7	0.0210	5.00	0.00500	0.0250	0.0458	0.0460	99.2%	90-110%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	0.00535	0.00500	107%	90% - 110%	Yes
MRCVS#1	0.00998	0.0100	99.8%	95% - 105%	Yes
MRCVS#2	0.0101	0.0100	101%	95% - 105%	Yes
MRCVS#3	0.0101	0.0100	101%	95% - 105%	Yes
MRCVS#4	0.0104	0.0100	104%	95% - 105%	Yes
LCS	0.00536	0.00500	107%	90% - 110%	Yes
LCSD	0.00534	0.00500	107%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Carlson
for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Eight (8) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Laboratory No.: 970522
Date: November 6, 2007
Collected: October 18, 2007
Received: October 18, 2007
Prep/ Analyzed: October 19, 2007
Analytical Batch: 10TUC07Q

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

Analytical Results Turbidity

TLI I.D.	Field I.D.	Sample Time	Units	DF	RL	Results
970522-1	CW-02D-014	07:38	NTU	1.00	0.100	0.198
970522-2	CW-02M-014	08:25	NTU	1.00	0.100	0.135
970522-3	CW-03D-014	09:40	NTU	1.00	0.100	ND
970522-4	CW-03M-014	10:40	NTU	1.00	0.100	0.190
970522-5	CW-04M-014	12:10	NTU	1.00	0.100	0.137
970522-6	CW-04D-014	13:18	NTU	1.00	0.100	ND
970522-7	MW-91-014	12:25	NTU	1.00	0.100	0.165

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	970503-2	0.135	0.136	0.74%	≤ 20%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
LCS	7.84	8.00	98.0%	90% - 110%	Yes
LCS	7.73	8.00	96.6%	90% - 110%	Yes
LCS	7.70	8.00	96.3%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sam Condon

For Mona Nassimi, Manager
Analytical Services

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REPORT

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

Sample: Eight (8) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Laboratory No.: 970522

Date: November 6, 2007
Collected: October 18, 2007
Received: October 18, 2007
Prep/ Analyzed: October 23, 2007
Analytical Batch: 10EC07M

Investigation:

Specific Conductivity by EPA 120.1

Analytical Results Specific Conductivity

TLI I.D.	Field I.D.	Units	Method	MDL	DF	RL	Results
970522-1	CW-02D-014	µmhos/cm	EPA 120.1	0.153	1.00	2.00	6760
970522-2	CW-02M-014	µmhos/cm	EPA 120.1	0.153	1.00	2.00	6340
970522-3	CW-03D-014	µmhos/cm	EPA 120.1	0.153	1.00	2.00	7970
970522-4	CW-03M-014	µmhos/cm	EPA 120.1	0.153	1.00	2.00	7820
970522-5	CW-04M-014	µmhos/cm	EPA 120.1	0.153	1.00	2.00	5560
970522-6	CW-04D-014	µmhos/cm	EPA 120.1	0.153	1.00	2.00	9700
970522-7	MW-91-014	µmhos/cm	EPA 120.1	0.153	1.00	2.00	5500

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	970522-6	9700	9700	0.00%	≤ 10%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
CCS	692	706	98.0%	90% - 110%	Yes
CVS#1	959	998	96.1%	90% - 110%	Yes
LCS	692	706	98.0%	90% - 110%	Yes

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Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon

for Mona Nassimi, Manager
Analytical Services

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Attention: Shawn Duffy

Sample: Eight (8) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Laboratory No.: 970522
Date: November 6, 2007
Collected: October 18, 2007
Received: October 18, 2007
Prep/ Analyzed: October 24, 2007
Analytical Batch: 10TDS07J

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

Analytical Results Total Dissolved Solids

TLI I.D.	Field I.D.	Units	Method	RL	Results
970522-1	CW-02D-014	mg/L	SM 2540C	250	4270
970522-2	CW-02M-014	mg/L	SM 2540C	250	3850
970522-3	CW-03D-014	mg/L	SM 2540C	250	5170
970522-4	CW-03M-014	mg/L	SM 2540C	250	5450
970522-5	CW-04M-014	mg/L	SM 2540C	125	3500
970522-6	CW-04D-014	mg/L	SM 2540C	250	6310
970522-7	MW-91-014	mg/L	SM 2540C	125	3685

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Percent Difference	Acceptance limits	QC Within Control
Duplicate	970522-7	3680	3620	0.82%	< 5%	Yes

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

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Carlton

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

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REPORT

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155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy

Sample: Eight (8) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Laboratory No.: 970522
Date: November 6, 2007
Collected: October 18, 2007
Received: October 18, 2007
Prep/ Analyzed: October 19, 2007
Analytical Batch: 10PH07Y

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

Analytical Results pH

TLI I.D.	Field I.D.	Run Time	Units	MDL	RL	Results
970522-1	CW-02D-014	07:05	pH	0.0700	2.00	8.27
970522-2	CW-02M-014	07:15	pH	0.0700	2.00	7.93
970522-3	CW-03D-014	08:35	pH	0.0700	2.00	8.09
970522-4	CW-03M-014	08:39	pH	0.0700	2.00	7.75
970522-5	CW-04M-014	08:45	pH	0.0700	2.00	7.86
970522-6	CW-04D-014	08:49	pH	0.0700	2.00	8.02
970522-7	MW-91-014	08:54	pH	0.0700	2.00	7.83

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Difference (Units)	Acceptance limits	QC Within Control
Duplicate	970522-7	7.83	7.84	0.01	± 0.100 Units	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Difference (Units)	Acceptance Limits	QC Within Control
LCS	7.05	7.00	0.05	± 0.100 Units	Yes
LCS #1	7.05	7.00	0.05	± 0.100 Units	Yes
LCS #2	7.02	7.00	0.02	± 0.100 Units	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sam Conlan
for Mona Nassimi, Manager
Analytical Services

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Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Laboratory No.: 970522
Date: November 6, 2007
Collected: October 18, 2007
Received: October 18, 2007
Prep/ Analyzed: October 25, 2007
Analytical Batch: 10AN07Y

Investigation: **Sulfate by Method EPA 300.0**

Analytical Results Sulfate

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
970522-1	CW-02D-014	07:38	19:07	mg/L	25.0	12.5	489
970522-2	CW-02M-014	08:25	19:18	mg/L	10.0	5.00	376
970522-3	CW-03D-014	09:40	19:29	mg/L	25.0	12.5	546
970522-4	CW-03M-014	10:40	19:41	mg/L	25.0	12.5	400
970522-5	CW-04M-014	12:10	20:15	mg/L	10.0	5.00	342
970522-6	CW-04D-014	13:18	20:26	mg/L	25.0	12.5	549
970522-7	MW-91-014	12:25	20:38	mg/L	10.0	5.00	338

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon
fo - Mona Nassimi, Manager
Analytical Services

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Attention: Shawn Duffy
Sample: Eight (8) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Laboratory No.: 970522
Date: November 6, 2007
Collected: October 18, 2007
Received: October 18, 2007
Prep/ Analyzed: October 25, 2007
Analytical Batch: 10AN07Y

Investigation: **Sulfate by Method EPA 300.0**

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	970615-2	37.4	37.3	0.27%	≤ 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	970615-2	37.4	10.0	4.00	40.0	77.4	77.4	100%	85-115%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	20.0	20.0	100%	90% - 110%	Yes
MRCVS#1	15.2	15.0	101%	90% - 110%	Yes
MRCVS#2	15.2	15.0	101%	90% - 110%	Yes
MRCVS#3	15.2	15.0	101%	90% - 110%	Yes
MRCVS#4	15.2	15.0	101%	90% - 110%	Yes
MRCVS#5	15.2	15.0	101%	90% - 110%	Yes
LCS	20.1	20.0	101%	90% - 110%	Yes
LCSD	20.0	20.0	100%	90% - 110%	Yes

ND: Below the reporting limit (Not Detected).
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Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon
for Mona Nassimi, Manager
Analytical Services

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Sample: Eight (8) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Laboratory No.: 970522
Date: November 6, 2007
Collected: October 18, 2007
Received: October 18, 2007
Prep/ Analyzed: October 25, 2007
Analytical Batch: 10AN07Y

Investigation: **Chloride by Method EPA 300.0**

Analytical Results Chloride

TLI I.D.	Field I.D.	Sample Time	Run Time	Units	DF	RL	Results
970522-1	CW-02D-014	07:38	17:24	mg/L	500	100	2100
970522-2	CW-02M-014	08:25	17:58	mg/L	500	100	2000
970522-3	CW-03D-014	09:40	18:10	mg/L	500	100	2570
970522-4	CW-03M-014	10:40	18:21	mg/L	500	100	2660
970522-5	CW-04M-014	12:10	18:32	mg/L	500	100	1760
970522-6	CW-04D-014	13:18	18:44	mg/L	500	100	3280
970522-7	MW-91-014	12:25	18:55	mg/L	500	100	1760

ND: Below the reporting limit (Not Detected).
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Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Conlan
for Mona Nassimi, Manager
Analytical Services

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Laboratory No.: 970522
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Collected: October 18, 2007
Received: October 18, 2007
Prep/ Analyzed: October 25, 2007
Analytical Batch: 10AN07Y

Investigation: **Chloride by Method EPA 300.0**

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	970615-2	14.9	14.8	0.67%	≤ 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	970615-2	14.9	10.0	2.00	20.0	34.7	34.9	99.0%	85-115%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	3.94	4.00	98.5%	90% - 110%	Yes
MRCVS#1	2.96	3.00	98.7%	90% - 110%	Yes
MRCVS#2	2.97	3.00	99.0%	90% - 110%	Yes
MRCVS#3	2.97	3.00	99.0%	90% - 110%	Yes
MRCVS#4	2.94	3.00	98.0%	90% - 110%	Yes
LCS	3.95	4.00	98.8%	90% - 110%	Yes
LCSD	3.94	4.00	98.5%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Condon

for Mona Nassimi, Manager
Analytical Services

TRUESDAIL LABORATORIES, INC.

EXCELLENCE IN INDEPENDENT TESTING

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REPORT

Client: E2 Consulting Engineers, Inc.
155 Grand Ave. Suite 1000
Oakland, CA 94612
Attention: Shawn Duffy
Sample: Eight (8) Groundwater Samples
Project Name: PG&E Topock Project
Project No.: 345631.MP.02.CM
P.O. No.: 345631.MP.02.CM

Laboratory No.: 970522
Date: November 6, 2007
Collected: October 18, 2007
Received: October 18, 2007
Prep/ Analyzed: October 25, 2007
Analytical Batch: 10AN07Y

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
970522-1	CW-02D-014	07:38	10:41	mg/L	5.00	0.500	7.26
970522-2	CW-02M-014	08:25	10:52	mg/L	5.00	0.500	3.17
970522-3	CW-03D-014	09:40	11:03	mg/L	5.00	0.500	5.84
970522-4	CW-03M-014	10:40	11:15	mg/L	5.00	0.500	2.88
970522-5	CW-04M-014	12:10	11:26	mg/L	5.00	0.500	2.19
970522-6	CW-04D-014	13:18	11:38	mg/L	5.00	0.500	5.01
970522-7	MW-91-014	12:25	11:49	mg/L	5.00	0.500	2.05

QA/QC Summary

QC STD I.D.	Laboratory Number	Concentration	Duplicate Concentration	Relative Percent Difference	Acceptance limits	QC Within Control
Duplicate	970615-1	2.31	2.32	0.43%	≤ 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	970615-1	2.31	1.00	4.00	4.00	6.19	6.31	97.0%	85-115%	Yes

QC Std I.D.	Measured Concentration	Theoretical Concentration	Percent Recovery	Acceptance Limits	QC Within Control
MRCCS	4.15	4.00	104%	90% - 110%	Yes
MRCVS#1	3.13	3.00	104%	90% - 110%	Yes
MRCVS#2	3.14	3.00	105%	90% - 110%	Yes
LCS	4.16	4.00	104%	90% - 110%	Yes
LCSD	4.15	4.00	104%	90% - 110%	Yes

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

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Sean Carlson
for Mona Nassimi, Manager
Analytical Services

970522

Rec'd 10/18/07
Lab# 970522

TRUESDAIL LABORATORIES, INC.
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CHAIN OF CUSTODY RECORD

[2007-CMP-014]

COC Number
TURNAROUND TIME 10 Days
DATE 10-18-07 PAGE 1 OF 1

COMPANY E2
PROJECT NAME PG&E Topock
PHONE (530) 229-3303 FAX (530) 339-3303
ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612
P.O. NUMBER 354631.MP.02.CM.00 TEAM 1
SAMPLERS (SIGNATURE

For Sample Conditions See Form Attached

ALERT !!
Level III QC

	SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Specific Conductance (120.1)	PH (SM4500HB)	TDS (SM2540C)	Anions (300) Cl, Fl, SO4	Turbidity (SM2130)	NUMBER OF CONTAINERS	COMMENTS
-1	CW-02D-014	10-18-07	0738	groundwater	X	X	X	X	X	X	2	
-2	CW-02M-014		0825		X	X	X	X	X	X	2	
-3	CW-03D-014		0940		X	X	X	X	X	X	2	
-4	CW-03M-014		1040		X	X	X	X	X	X	2	
-5	CW-04M-014		1210		X	X	X	X	X	X	2	
-6	CW-04D-014		1318		X	X	X	X	X	X	2	
-7	MW-91-014		1225		X	X	X	X	X	X	2	
-8	EB-CMP-014-03		1325		X						1	

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Barry Cellon	CH2M Hill	10-18-07 1520
Signature (Received)	Rafael Davila	T.L.I	10-18-07 15:20
Signature (Relinquished)	Rafael Davila	T.L.I	10-18-07 21:00
Signature (Received)	David S	T.L.I	10/18/07 2100
Signature (Relinquished)			
Signature (Received)			

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

CASE NARRATIVE

CLIENT: CH2M HILL

PROJECT: PG&E'S TOPOCK GAS COMPRESSOR STAT

SDG: 07J221

METHOD 245.2
DISSOLVED MERCURY BY COLD VAPOR

Four (4) water samples were received on 10/17/07 for Dissolved Mercury analysis by Method 245.2 in accordance with Methods for Chemical Analysis of Water and Wastes EPA/600/4-79-020.

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. **Serial Dilution/Post-Analytical Spike**

   Sample J212-03 from another SDG was analyzed for serial dilution and post-analytical spike. All QC requirements were met.

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

   MS/MSD sample was not designated in this SDG.

6. **Sample Analysis**

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

Revised Report

7/17

METHOD 245.2
DISSOLVED MERCURY BY COLD VAPOR

Client : CH2M HILL
Project : PG&E'S TOPOCK GAS COMPRESSOR STAT
Batch No. : 07J221
Matrix : WATER
Instrument ID : TI047

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	HGJ038WB	ND	1	NA	0.000200	0.000100	10/22/0719:04	10/22/0714:30	M47J025010	M47J025008	HGJ038W	NA	10/22/07
LCS1W	HGJ038WL	0.00488	1	NA	0.000200	0.000100	10/22/0719:06	10/22/0714:30	M47J025011	M47J025008	HGJ038W	NA	10/22/07
LCD1W	HGJ038WC	0.00487	1	NA	0.000200	0.000100	10/22/0719:08	10/22/0714:30	M47J025012	M47J025008	HGJ038W	NA	10/22/07
OW-01D-014	J221-01	ND	1	NA	0.000200	0.000100	10/22/0719:53	10/22/0714:30	M47J025034	M47J025032	HGJ038W	10/16/07	10/17/07
OW-01M-014	J221-02	ND	1	NA	0.000200	0.000100	10/22/0719:55	10/22/0714:30	M47J025035	M47J025032	HGJ038W	10/16/07	10/17/07
OW-01S-014	J221-03	ND	1	NA	0.000200	0.000100	10/22/0719:57	10/22/0714:30	M47J025036	M47J025032	HGJ038W	10/16/07	10/17/07
OW-02M-014	J221-04	ND	1	NA	0.000200	0.000100	10/22/0719:59	10/22/0714:30	M47J025037	M47J025032	HGJ038W	10/16/07	10/17/07

Revised Report

7/19

CASE NARRATIVE

CLIENT: CH2M HILL

PROJECT: PG&E'S TOPOCK GAS COMPRESSOR STAT

SDG: 07J221

METHOD 200.8
DISSOLVED METALS BY ICP-MS

Four (4) water sample was received on 10/17/07 for Dissolved Metals analysis by Method 200.8 in accordance with "Methods for Chemical Analysis of Water and Wastes", EPA 600/R-94-111-May 1994.

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. **Serial Dilution / Post-Analytical Spike**

   Sample J221-03 was analyzed for serial dilution and post-analytical spike. All QC requirements were met.

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

   No sample was spiked in this SDG.

6. **Sample Analysis**

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

Revised Report 7001

METHOD 200.8
DISSOLVED METALS BY ICP-MS

Client	: CH2M HILL	Date Collected:	10/16/07
Project	: PG&E'S TOPOCK GAS COMPRESSOR STAT	Date Received:	10/17/07
SDG NO.	: 07J221	Date Extracted:	10/19/07 11:30
Sample ID:	OW-01D-014	Date Analyzed:	10/30/07 12:36
Lab Samp ID:	J221-01	Dilution Factor:	1
Lab File ID:	98J23039	Matrix :	WATER
Ext Btch ID:	IMJ024W	% Moisture :	NA
Calib. Ref.:	98J23037	Instrument ID :	EMAXTI98

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Aluminum	ND	0.0500	0.0250
Antimony	ND	0.00200	0.000500
Arsenic	0.00236	0.00100	0.000500
Barium	0.0328	0.00100	0.000500
Beryllium	ND	0.00100	0.000500
Boron	1.32	0.0100	0.00500
Cadmium	ND	0.00100	0.000500
Calcium	126	1.00	0.0500
Chromium	0.00115	0.00100	0.000500
Cobalt	ND	0.00100	0.000500
Copper	ND	0.00100	0.000500
Iron	ND	0.100	0.0500
Lead	ND	0.00100	0.000500
Magnesium	9.84	1.00	0.0500
Manganese	ND	0.00100	0.000500
Molybdenum	0.0130	0.00200	0.00100
Nickel	ND	0.00100	0.000100
Potassium	10.4	1.00	0.0500
Selenium	0.00223	0.00100	0.000500
Silver	ND	0.00100	0.000500
Sodium^	1450	10.0	0.500
Thallium	ND	0.00100	0.000500
Vanadium	0.00511	0.00100	0.000500
Zinc	ND	0.0100	0.00500

^Analyzed at DF 10 on 10/30/07 11:47 | File ID 98J23030

METHOD 200.8
DISSOLVED METALS BY ICP-MS

Client	: CH2M HILL	Date Collected:	10/16/07
Project	: PG&E'S TOPOCK GAS COMPRESSOR STAT	Date Received:	10/17/07
SDG NO.	: 07J221	Date Extracted:	10/19/07 11:30
Sample ID	: OW-01M-014	Date Analyzed:	10/30/07 12:41
Lab Samp ID	: J221-02	Dilution Factor:	1
Lab File ID	: 98J23040	Matrix :	WATER
Ext Btch ID	: IMJ024W	% Moisture :	NA
Calib. Ref.:	98J23037	Instrument ID :	EMAXTI98

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Aluminum	ND	0.0500	0.0250
Antimony	ND	0.00200	0.000500
Arsenic	0.00141	0.00100	0.000500
Barium	0.0962	0.00100	0.000500
Beryllium	ND	0.00100	0.000500
Boron	1.30	0.0100	0.00500
Cadmium	ND	0.00100	0.000500
Calcium	194	1.00	0.0500
Chromium	ND	0.00100	0.000500
Cobalt	ND	0.00100	0.000500
Copper	ND	0.00100	0.000500
Iron	ND	0.100	0.0500
Lead	ND	0.00100	0.000500
Magnesium	17.2	1.00	0.0500
Manganese	ND	0.00100	0.000500
Molybdenum	0.0111	0.00200	0.00100
Nickel	ND	0.00100	0.000100
Potassium	12.9	1.00	0.0500
Selenium	0.00254	0.00100	0.000500
Silver	ND	0.00100	0.000500
Sodium^	1440	10.0	0.500
Thallium	ND	0.00100	0.000500
Vanadium	0.00309	0.00100	0.000500
Zinc	ND	0.0100	0.00500

^Analyzed at DF 10 on 10/30/07 11:52 | File ID 98J23031

METHOD 200.8
DISSOLVED METALS BY ICP-MS

Client	: CH2M HILL	Date Collected:	10/16/07
Project	: PG&E'S TOPOCK GAS COMPRESSOR STAT	Date Received:	10/17/07
SDG NO.	: 07J221	Date Extracted:	10/19/07 11:30
Sample ID:	OW-01S-014	Date Analyzed:	10/30/07 11:09
Lab Samp ID:	J221-03	Dilution Factor:	1
Lab File ID:	98J23023	Matrix :	WATER
Ext Btch ID:	IMJ024W	% Moisture :	NA
Calib. Ref.:	98J23017	Instrument ID :	EMAXTI98

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Aluminum	ND	0.0500	0.0250
Antimony	ND	0.00200	0.000500
Arsenic	0.00132	0.00100	0.000500
Barium	0.0782	0.00100	0.000500
Beryllium	ND	0.00100	0.000500
Boron	0.327	0.0100	0.00500
Cadmium	ND	0.00100	0.000500
Calcium	95.1	1.00	0.0500
Chromium	0.0197	0.00100	0.000500
Cobalt	ND	0.00100	0.000500
Copper	ND	0.00100	0.000500
Iron	ND	0.100	0.0500
Lead	ND	0.00100	0.000500
Magnesium	16.7	1.00	0.0500
Manganese	0.00121	0.00100	0.000500
Molybdenum	0.0106	0.00200	0.00100
Nickel	0.00173	0.00100	0.000100
Potassium	7.59	1.00	0.0500
Selenium	0.00191	0.00100	0.000500
Silver	ND	0.00100	0.000500
Sodium	353	1.00	0.0500
Thallium	ND	0.00100	0.000500
Vanadium	0.00366	0.00100	0.000500
Zinc	ND	0.0100	0.00500

METHOD 200.8
DISSOLVED METALS BY ICP-MS

Client	: CH2M HILL	Date Collected:	10/16/07
Project	: PG&E'S TOPOCK GAS COMPRESSOR STAT	Date Received:	10/17/07
SDG NO.	: 07J221	Date Extracted:	10/19/07 11:30
Sample ID	: OW-02M-014	Date Analyzed:	10/30/07 12:46
Lab Samp ID	: J221-04	Dilution Factor:	1
Lab File ID	: 98J23041	Matrix :	WATER
Ext Btch ID	: IMJ024W	% Moisture :	NA
Calib. Ref.	: 98J23037	Instrument ID :	EMAXTI98

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Aluminum	ND	0.0500	0.0250
Antimony	ND	0.00200	0.000500
Arsenic	ND	0.00100	0.000500
Barium	0.0672	0.00100	0.000500
Beryllium	ND	0.00100	0.000500
Boron	1.26	0.0100	0.00500
Cadmium	ND	0.00100	0.000500
Calcium	191	1.00	0.0500
Chromium	0.00111	0.00100	0.000500
Cobalt	ND	0.00100	0.000500
Copper	ND	0.00100	0.000500
Iron	ND	0.100	0.0500
Lead	ND	0.00100	0.000500
Magnesium	19.0	1.00	0.0500
Manganese	ND	0.00100	0.000500
Molybdenum	0.0118	0.00200	0.00100
Nickel	ND	0.00100	0.000100
Potassium	13.1	1.00	0.0500
Selenium	0.00242	0.00100	0.000500
Silver	ND	0.00100	0.000500
Sodium^	1430	10.0	0.500
Thallium	ND	0.00100	0.000500
Vanadium	0.00238	0.00100	0.000500
Zinc	ND	0.0100	0.00500

^Analyzed at DF 10 on 10/30/07 11:58 | File ID 98J23032

CASE NARRATIVE

CLIENT: CH2M HILL

PROJECT: PG&E'S TOPOCK GAS COMPRESSOR STAT

SDG: 07J221

METHOD 200.7
TOTAL IRON BY ICP

Four (4) water samples were received on 10/17/07 for Iron analysis by Method 200.7 in accordance with "Methods for Chemical Analysis of Water and Wastes", EPA 600/R-94-111-May 1994.

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. **Serial Dilution/Post-Analytical Spike**

   Sample from another SDG, J457-01, was analyzed for serial dilution and post-analytical spike. All QC requirements were met.

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

   No MS/MSD sample was designated in this SDG.

6. **Sample Analysis**

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

Revised Report 7063

METHOD 200.7
TOTAL IRON BY ICP

Client : CH2M HILL
Project : PG&E'S TOPOCK GAS COMPRESSOR STAT
Batch No. : 07J221

Matrix : WATER
Instrument ID : T-I07

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	IPJ039WB	ND	1	NA	0.500	0.0400	10/23/0723:42	10/18/0715:30	I07J014012	I07J014010	IPJ039W	NA	10/18/07
LCS1W	IPJ039WL	9.89	1	NA	0.500	0.0400	10/23/0723:46	10/18/0715:30	I07J014013	I07J014010	IPJ039W	NA	10/18/07
LCD1W	IPJ039WC	9.89	1	NA	0.500	0.0400	10/23/0723:50	10/18/0715:30	I07J014014	I07J014010	IPJ039W	NA	10/18/07
OW-01D-014	J221-01	ND	1	NA	0.500	0.0400	10/24/0700:10	10/18/0715:30	I07J014019	I07J014010	IPJ039W	10/16/07	10/17/07
OW-01M-014	J221-02	ND	1	NA	0.500	0.0400	10/24/0700:14	10/18/0715:30	I07J014020	I07J014010	IPJ039W	10/16/07	10/17/07
OW-01S-014	J221-03	ND	1	NA	0.500	0.0400	10/24/0700:19	10/18/0715:30	I07J014021	I07J014010	IPJ039W	10/16/07	10/17/07
OW-02M-014	J221-04	ND	1	NA	0.500	0.0400	10/24/0700:36	10/18/0715:30	I07J014024	I07J014022	IPJ039W	10/16/07	10/17/07

7665

CASE NARRATIVE

CLIENT: CH2M HILL

PROJECT: PG&E'S TOPOCK GAS COMPRESSOR STAT

SDG: 07J221

METHOD SM2320B
ALKALINITY

Four (4) water samples were received on 10/17/07 for Bicarbonate, Carbonate, and Total Alkalinity analyses by Method SM2320B in accordance with "Standard Method for the Examination of water and Wastewater".

1. **Holding Time**

   Analyses 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 J221-04 was analyzed for duplicate. %RPD was within QC limit.

5. **Matrix Spike**

   Sample J221-04 was spiked. Recovery was within QC limit.

6. **Sample Analysis**

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

METHOD SM2320B
BICARBONATE ALKALINITY

Client : CH2M HILL
Project : PG&E'S TOPOCK GAS COMPRESSOR STAT
Batch No. : 07J221
Matrix : WATER
Instrument ID : I53

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	ALJ027WB	ND	1	NA	5.00	1.00	10/23/0713:45	NA	ALJ02702	ALJ02701	ALJ027W	NA	NA
OW-01D-014	J221-01	70.0	1	NA	5.00	1.00	10/23/0714:00	NA	ALJ02705	ALJ02701	ALJ027W	10/16/0712:47	10/17/07
OW-01M-014	J221-02	85.0	1	NA	5.00	1.00	10/23/0714:07	NA	ALJ02706	ALJ02701	ALJ027W	10/16/0713:45	10/17/07
OW-01S-014	J221-03	80.0	1	NA	5.00	1.00	10/23/0714:11	NA	ALJ02707	ALJ02701	ALJ027W	10/16/0714:40	10/17/07
OW-02M-014	J221-04	85.0	1	NA	5.00	1.00	10/23/0714:16	NA	ALJ02708	ALJ02701	ALJ027W	10/16/0715:28	10/17/07
OW-02M-014DUP	J221-04D	85.0	1	NA	5.00	1.00	10/23/0714:20	NA	ALJ02709	ALJ02701	ALJ027W	10/16/0715:28	10/17/07

METHOD SM2320B
CARBONATE ALKALINITY

Client : CH2M HILL
Project : PG&E'S TOPOCK GAS COMPRESSOR STAT
Batch No. : 07J221

Matrix : WATER
Instrument ID : I53

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	ALJ027WB	ND	1	NA	5.00	1.00	10/23/0713:45	NA	ALJ02702	ALJ02701	ALJ027W	NA	NA
OW-01D-014	J221-01	ND	1	NA	5.00	1.00	10/23/0714:00	NA	ALJ02705	ALJ02701	ALJ027W	10/16/0712:47	10/17/07
OW-01M-014	J221-02	ND	1	NA	5.00	1.00	10/23/0714:07	NA	ALJ02706	ALJ02701	ALJ027W	10/16/0713:45	10/17/07
OW-01S-014	J221-03	ND	1	NA	5.00	1.00	10/23/0714:11	NA	ALJ02707	ALJ02701	ALJ027W	10/16/0714:40	10/17/07
OW-02M-014	J221-04	ND	1	NA	5.00	1.00	10/23/0714:16	NA	ALJ02708	ALJ02701	ALJ027W	10/16/0715:28	10/17/07
OW-02M-014DUP	J221-04D	ND	1	NA	5.00	1.00	10/23/0714:20	NA	ALJ02709	ALJ02701	ALJ027W	10/16/0715:28	10/17/07

METHOD SM2320B
TOTAL ALKALINITY

Client : CH2M HILL
Project : PG&E'S TOPOCK GAS COMPRESSOR STAT
Batch No. : 07J221

Matrix : WATER
Instrument ID : I53

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	ALJ027WB	ND	1	NA	5.00	1.00	10/23/0713:45	NA	ALJ02702	ALJ02701	ALJ027W	NA	NA
LCS1W	ALJ027WL	43.3	1	NA	5.00	1.00	10/23/0713:51	NA	ALJ02703	ALJ02701	ALJ027W	NA	NA
LCD1W	ALJ027WC	43.3	1	NA	5.00	1.00	10/23/0713:55	NA	ALJ02704	ALJ02701	ALJ027W	NA	NA
OW-01D-014	J221-01	70.0	1	NA	5.00	1.00	10/23/0714:00	NA	ALJ02705	ALJ02701	ALJ027W	10/16/0712:47	10/17/07
OW-01M-014	J221-02	85.0	1	NA	5.00	1.00	10/23/0714:07	NA	ALJ02706	ALJ02701	ALJ027W	10/16/0713:45	10/17/07
OW-01S-014	J221-03	80.0	1	NA	5.00	1.00	10/23/0714:11	NA	ALJ02707	ALJ02701	ALJ027W	10/16/0714:40	10/17/07
OW-02M-014	J221-04	85.0	1	NA	5.00	1.00	10/23/0714:16	NA	ALJ02708	ALJ02701	ALJ027W	10/16/0715:28	10/17/07
OW-02M-014DUP	J221-04D	85.0	1	NA	5.00	1.00	10/23/0714:20	NA	ALJ02709	ALJ02701	ALJ027W	10/16/0715:28	10/17/07
OW-02M-014MS	J221-04M	155	1	NA	5.00	1.00	10/23/0714:32	NA	ALJ02710	ALJ02701	ALJ027W	10/16/0715:28	10/17/07

CASE NARRATIVE

CLIENT: CH2M HILL

PROJECT: PG&E'S TOPOCK GAS COMPRESSOR STAT

SDG: 07J221

METHOD SM4500NO3-E
NITRATE/NITRITE-N

Four (4) water samples were received on 10/17/07 for Nitrate/Nitrite-N analysis by Method SM4500NO3-E in accordance with "Standard Method for the Examination of water and Wastewater".

1. **Holding Time**

   Analyses 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 J221-04 was analyzed for duplicate. %RPD was within QC limit.

5. **Matrix Spike**

   Sample J221-04 was spiked. Recovery was within QC limit.

6. **Sample Analysis**

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

   All results were reported as Nitrogen concentration.

METHOD SM4500NO3
NITRATE/NITRITE-N

Client : CH2M HILL
Project : PG&E'S TOPOCK GAS COMPRESSOR STAT
Batch No. : 07J221

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	NAJ003WB	ND	1	NA	0.100	0.0200	10/20/0714:09	NA	NAJ00311	NAJ00308	NAJ003W	NA	NA
LCS1W	NAJ003WL	0.549	1	NA	0.100	0.0200	10/20/0714:09	NA	NAJ00312	NAJ00308	NAJ003W	NA	NA
LCD1W	NAJ003WC	0.533	1	NA	0.100	0.0200	10/20/0714:09	NA	NAJ00313	NAJ00308	NAJ003W	NA	NA
OW-01D-014	J221-01	2.47	4	NA	0.400	0.0800	10/20/0714:18	NA	NAJ00315	NAJ00308	NAJ003W	10/16/0712:47	10/17/07
OW-01M-014	J221-02	2.56	4	NA	0.400	0.0800	10/20/0714:18	NA	NAJ00316	NAJ00308	NAJ003W	10/16/0713:45	10/17/07
OW-01S-014	J221-03	3.09	4	NA	0.400	0.0800	10/20/0714:18	NA	NAJ00317	NAJ00308	NAJ003W	10/16/0714:40	10/17/07
OW-02M-014	J221-04	2.62	4	NA	0.400	0.0800	10/20/0714:18	NA	NAJ00318	NAJ00308	NAJ003W	10/16/0715:28	10/17/07
OW-02M-014DUP	J221-04D	2.59	4	NA	0.400	0.0800	10/20/0714:18	NA	NAJ00319	NAJ00308	NAJ003W	10/16/0715:28	10/17/07
OW-02M-014MS	J221-04M	4.74	4	NA	0.400	0.0800	10/20/0714:18	NA	NAJ00322	NAJ00320	NAJ003W	10/16/0715:28	10/17/07

CASE NARRATIVE

CLIENT: CH2M HILL

PROJECT: PG&E'S TOPOCK GAS COMPRESSOR STAT

SDG: 07J221

METHOD SM4500NH3-F
AMMONIA (NH3-N)

Four (4) water samples were received on 10/17/07 for Ammonia analysis by Method SM4500NH3-F 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**

   Duplicate sample was not designated in this SDG.

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

   MS/MSD sample was not designated in this SDG.

6. **Sample Analysis**

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

METHOD SM4500NH3-F
AMMONIA (NH3-N)

Client : CH2M HILL
Project : PG&E'S TOPOCK GAS COMPRESSOR STAT
Batch No. : 07J221

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	NHJ006WB	ND	1	NA	0.500	0.0300	10/24/0718:36	10/24/0711:05	NHJ00612	NHJ00608	NHJ006W	NA	10/24/07
LCS1W	NHJ006WL	0.608	1	NA	0.500	0.0300	10/24/0718:37	10/24/0711:05	NHJ00613	NHJ00608	NHJ006W	NA	10/24/07
LCD1W	NHJ006WC	0.594	1	NA	0.500	0.0300	10/24/0718:37	10/24/0711:05	NHJ00614	NHJ00608	NHJ006W	NA	10/24/07
OW-01D-014	J221-01	ND	1	NA	0.500	0.0300	10/24/0718:37	10/24/0711:05	NHJ00615	NHJ00608	NHJ006W	10/16/0712:47	10/17/07
OW-01M-014	J221-02	ND	1	NA	0.500	0.0300	10/24/0718:38	10/24/0711:05	NHJ00616	NHJ00608	NHJ006W	10/16/0713:45	10/17/07
OW-01S-014	J221-03	ND	1	NA	0.500	0.0300	10/24/0718:38	10/24/0711:05	NHJ00617	NHJ00608	NHJ006W	10/16/0714:40	10/17/07
OW-02M-014	J221-04	ND	1	NA	0.500	0.0300	10/24/0718:39	10/24/0711:05	NHJ00618	NHJ00608	NHJ006W	10/16/0715:28	10/17/07

8021 8092

CH.0408

07J221

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

[2007-CMP-014]

COC Number

TURNAROUND TIME 12 Days

DATE 10-16-07 PAGE 1 OF 1

COMPANY E2

PROJECT NAME PG&E Topock GWM

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

ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612

P.O. NUMBER 354631.MP.02.CM.00

SAMPLERS (SIGNATURE

	SAMPLE I.D.	DATE	TIME	DESCRIPTION	Total Metals (200.7) Field Filtered Title 22 Al,B,Ca,Mg,K,Na,Mn,Fe	Total Metals (200.7) Total Iron, unfiltered	Alkalinity (SM2320B)	Nitrate/Nitrite (SM4500NO3-E)	Ammonia (SM4500NH3)	NUMBER OF CONTAINERS	COMMENTS
1	OW-01D-014	10-16-07	1247	groundwater	X	X	X	X	X	4	
2	OW-01M-014		1345		X	X	X	X	X	4	
3	OW-01S-014		1440		X	X	X	X	X	4	
4	OW-02M-014		1528		X	X	X	X	X	4	

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Barry Collom	CH2M Hill	10-16-07 1600
Signature (Received) Rafael Davila	Rafael	T.L.I	10-16-07 16:00
Signature (Relinquished)			
Signature (Received)	Phil Hatcher	EMAX	10/17/07 9:20
Signature (Relinquished)	Phil Hatcher	EMAX	10/17/07 1320
Signature (Received)	INDRA PATEL	EMAX	10-17-07 1320

SAMPLE CONDITIONS T=3.7°C

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

CASE NARRATIVE

CLIENT: CH2M HILL

PROJECT: PG&E'S TOPOCK GAS COMPRESSOR STAT

SDG: 07J239

METHOD 200.8
DISSOLVED METALS BY ICP-MS

Eight (8) water sample was received on 10/18/07 for Dissolved Metals analysis by Method 200.8 accordance with "Methods for Chemical Analysis of Water and Wastes", EPA 600/R-94-111-May 1994.

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. **Serial Dilution / Post-Analytical Spike**

   Sample J239-01 was analyzed for serial dilution and post-analytical spike. All QC requirements were met.

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

   No sample was spiked in this SDG.

6. **Sample Analysis**

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

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METHOD 200.8
DISSOLVED METALS BY ICP-MS

Client	: CH2M HILL	Date Collected:	10/17/07
Project	: PG&E'S TOPOCK GAS COMPRESSOR STAT	Date Received:	10/18/07
SDG NO.	: 07J239	Date Extracted:	10/22/07 11:50
Sample ID:	OW-02S-014	Date Analyzed:	10/25/07 17:25
Lab Samp ID:	J239-01	Dilution Factor:	1
Lab File ID:	98J20021	Matrix :	WATER
Ext Btch ID:	IMJ027W	% Moisture :	NA
Calib. Ref.:	98J20015	Instrument ID :	EMAXTI98

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Aluminum	ND	0.0500	0.0250
Antimony	ND	0.00200	0.000500
Arsenic	0.00239	0.00100	0.000500
Barium	0.0451	0.00100	0.000500
Beryllium	ND	0.00100	0.000500
Boron^	0.699	0.100	0.0500
Cadmium	ND	0.00100	0.000500
Calcium	34.5	1.00	0.0500
Chromium	0.0336	0.00100	0.000500
Cobalt	ND	0.00100	0.000500
Copper	ND	0.00100	0.000500
Iron	ND	0.100	0.0500
Lead	ND	0.00100	0.000500
Magnesium	4.62	1.00	0.0500
Manganese	ND	0.00100	0.000500
Molybdenum	0.0407	0.00200	0.00100
Nickel	ND	0.00100	0.000100
Potassium	5.63	1.00	0.0500
Selenium	0.00266	0.00100	0.000500
Silver	ND	0.00100	0.000500
Sodium	321	1.00	0.0500
Thallium	ND	0.00100	0.000500
Vanadium	0.00586	0.00100	0.000500
Zinc	ND	0.0100	0.00500

^Analyzed at DF 10 on 10/30/07 11:25 | File ID 98J23026

METHOD 200.8
DISSOLVED METALS BY ICP-MS

Client	: CH2M HILL	Date Collected:	10/17/07
Project	: PG&E'S TOPOCK GAS COMPRESSOR STAT	Date Received:	10/18/07
SDG NO.	: 07J239	Date Extracted:	10/22/07 11:50
Sample ID:	OW-02D-014	Date Analyzed:	10/22/07 19:44
Lab Samp ID:	J239-02	Dilution Factor:	1
Lab File ID:	98J19064	Matrix :	WATER
Ext Btch ID:	IMJ027W	% Moisture :	NA
Calib. Ref.:	98J19054	Instrument ID :	EMAXTI98

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Aluminum	ND	0.0500	0.0250
Antimony	ND	0.00200	0.000500
Arsenic	0.00221	0.00100	0.000500
Barium	0.0221	0.00100	0.000500
Beryllium	ND	0.00100	0.000500
Boron^	1.16	0.100	0.0500
Cadmium	ND	0.00100	0.000500
Calcium	209	1.00	0.0500
Chromium	ND	0.00100	0.000500
Cobalt	ND	0.00100	0.000500
Copper	ND	0.00100	0.000500
Iron	ND	0.100	0.0500
Lead	ND	0.00100	0.000500
Magnesium	23.6	1.00	0.0500
Manganese	ND	0.00100	0.000500
Molybdenum	0.0143	0.00200	0.00100
Nickel	ND	0.00100	0.000100
Potassium	13.6	1.00	0.0500
Selenium	0.00254	0.00100	0.000500
Silver	ND	0.00100	0.000500
Sodium^	1360	10.0	0.500
Thallium	ND	0.00100	0.000500
Vanadium	0.00181	0.00100	0.000500
Zinc	ND	0.0100	0.00500

^Analyzed at DF 10 on 10/25/07 17:41 | File ID 98J20024

METHOD 200.8
DISSOLVED METALS BY ICP-MS

Client : CH2M HILL	Date Collected: 10/17/07
Project : PG&E'S TOPOCK GAS COMPRESSOR STAT	Date Received: 10/18/07
SDG NO. : 07J239	Date Extracted: 10/22/07 11:50
Sample ID: OW-05D-014	Date Analyzed: 10/22/07 19:49
Lab Samp ID: J239-03	Dilution Factor: 1
Lab File ID: 98J19065	Matrix : WATER
Ext Btch ID: IMJ027W	% Moisture : NA
Calib. Ref.: 98J19054	Instrument ID : EMAXTI98

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Aluminum	0.138	0.0500	0.0250
Antimony	ND	0.00200	0.000500
Arsenic	0.00133	0.00100	0.000500
Barium	0.0246	0.00100	0.000500
Beryllium	ND	0.00100	0.000500
Boron^	1.18	0.100	0.0500
Cadmium	ND	0.00100	0.000500
Calcium	197	1.00	0.0500
Chromium	0.00138	0.00100	0.000500
Cobalt	ND	0.00100	0.000500
Copper	0.00294	0.00100	0.000500
Iron	ND	0.100	0.0500
Lead	ND	0.00100	0.000500
Magnesium	22.2	1.00	0.0500
Manganese	ND	0.00100	0.000500
Molybdenum	0.0149	0.00200	0.00100
Nickel	0.00100	0.00100	0.000100
Potassium	14.2	1.00	0.0500
Selenium	0.00246	0.00100	0.000500
Silver	ND	0.00100	0.000500
Sodium^	1440	10.0	0.500
Thallium	ND	0.00100	0.000500
Vanadium	0.00166	0.00100	0.000500
Zinc	ND	0.0100	0.00500

^Analyzed at DF 10 on 10/25/07 17:46 | File ID 98J20025

METHOD 200.8
DISSOLVED METALS BY ICP-MS

Client	: CH2M HILL	Date Collected:	10/17/07
Project	: PG&E'S TOPOCK GAS COMPRESSOR STAT	Date Received:	10/18/07
SDG NO.	: 07J239	Date Extracted:	10/22/07 11:50
Sample ID:	OW-05M-014	Date Analyzed:	10/22/07 20:06
Lab Samp ID:	J239-04	Dilution Factor:	1
Lab File ID:	98J19068	Matrix :	WATER
Ext Btch ID:	IMJ027W	% Moisture :	NA
Calib. Ref.:	98J19066	Instrument ID :	EMAXTI98

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Aluminum	0.749	0.0500	0.0250
Antimony	ND	0.00200	0.000500
Arsenic	0.00105	0.00100	0.000500
Barium	0.0411	0.00100	0.000500
Beryllium	ND	0.00100	0.000500
Boron^	1.28	0.100	0.0500
Cadmium	ND	0.00100	0.000500
Calcium	149	1.00	0.0500
Chromium	ND	0.00100	0.000500
Cobalt	ND	0.00100	0.000500
Copper	0.00331	0.00100	0.000500
Iron	ND	0.100	0.0500
Lead	ND	0.00100	0.000500
Magnesium	16.6	1.00	0.0500
Manganese	0.0190	0.00100	0.000500
Molybdenum	0.0122	0.00200	0.00100
Nickel	ND	0.00100	0.000100
Potassium	12.5	1.00	0.0500
Selenium	0.00237	0.00100	0.000500
Silver	ND	0.00100	0.000500
Sodium^	1460	10.0	0.500
Thallium	ND	0.00100	0.000500
Vanadium	0.00185	0.00100	0.000500
Zinc	0.278	0.0100	0.00500

^Analyzed at DF 10 on 10/25/07 17:52 | File ID 98J20026

METHOD 200.8
DISSOLVED METALS BY ICP-MS

Client	: CH2M HILL	Date Collected:	10/17/07
Project	: PG&E'S TOPOCK GAS COMPRESSOR STAT	Date Received:	10/18/07
SDG NO.	: 07J239	Date Extracted:	10/22/07 11:50
Sample ID:	MW-90-014	Date Analyzed:	10/22/07 20:11
Lab Samp ID:	J239-05	Dilution Factor:	1
Lab File ID:	98J19069	Matrix :	WATER
Ext Btch ID:	IMJ027W	% Moisture :	NA
Calib. Ref.:	98J19066	Instrument ID :	EMAXTI98

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Aluminum	ND	0.0500	0.0250
Antimony	ND	0.00200	0.000500
Arsenic	0.00101	0.00100	0.000500
Barium	0.0403	0.00100	0.000500
Beryllium	ND	0.00100	0.000500
Boron^	1.25	0.100	0.0500
Cadmium	ND	0.00100	0.000500
Calcium	149	1.00	0.0500
Chromium	ND	0.00100	0.000500
Cobalt	ND	0.00100	0.000500
Copper	0.00316	0.00100	0.000500
Iron	ND	0.100	0.0500
Lead	ND	0.00100	0.000500
Magnesium	10.8	1.00	0.0500
Manganese	ND	0.00100	0.000500
Molybdenum	0.0122	0.00200	0.00100
Nickel	ND	0.00100	0.000100
Potassium	11.2	1.00	0.0500
Selenium	0.00235	0.00100	0.000500
Silver	ND	0.00100	0.000500
Sodium^	1420	10.0	0.500
Thallium	ND	0.00100	0.000500
Vanadium	0.00165	0.00100	0.000500
Zinc	ND	0.0100	0.00500

^:Analyzed at DF 10 on 10/25/07 18:08 | File ID 98J20029

Revised Report

7007

METHOD 200.8
DISSOLVED METALS BY ICP-MS

Client	: CH2M HILL	Date Collected:	10/17/07
Project	: PG&E'S TOPOCK GAS COMPRESSOR STAT	Date Received:	10/18/07
SDG NO.	: 07J239	Date Extracted:	10/22/07 11:50
Sample ID:	OW-05S-014	Date Analyzed:	10/25/07 17:36
Lab Samp ID:	J239-06	Dilution Factor:	1
Lab File ID:	98J20023	Matrix :	WATER
Ext Btch ID:	IMJ027W	% Moisture :	NA
Calib. Ref.:	98J20015	Instrument ID :	EMAXTI98

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Aluminum	ND	0.0500	0.0250
Antimony	ND	0.00200	0.000500
Arsenic	0.00154	0.00100	0.000500
Barium	0.0543	0.00100	0.000500
Beryllium	ND	0.00100	0.000500
Boron	0.466	0.0100	0.00500
Cadmium	ND	0.00100	0.000500
Calcium	53.9	1.00	0.0500
Chromium	0.0256	0.00100	0.000500
Cobalt	ND	0.00100	0.000500
Copper	0.00230	0.00100	0.000500
Iron	0.103	0.100	0.0500
Lead	ND	0.00100	0.000500
Magnesium	8.54	1.00	0.0500
Manganese	0.00292	0.00100	0.000500
Molybdenum	0.0262	0.00200	0.00100
Nickel	0.00529	0.00100	0.000100
Potassium	6.71	1.00	0.0500
Selenium	0.00294	0.00100	0.000500
Silver	ND	0.00100	0.000500
Sodium	271	1.00	0.0500
Thallium	ND	0.00100	0.000500
Vanadium	0.00468	0.00100	0.000500
Zinc	ND	0.0100	0.00500

METHOD 200.8
DISSOLVED METALS BY ICP-MS

Client	: CH2M HILL	Date Collected:	10/17/07
Project	: PG&E'S TOPOCK GAS COMPRESSOR STAT	Date Received:	10/18/07
SDG NO.	: 07J239	Date Extracted:	10/22/07 11:50
Sample ID:	CW-01D-014	Date Analyzed:	10/22/07 20:22
Lab Samp ID:	J239-07	Dilution Factor:	1
Lab File ID:	98J19071	Matrix :	WATER
Ext Btch ID:	IMJ027W	% Moisture :	NA
Calib. Ref.:	98J19066	Instrument ID :	EMAXTI98

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Aluminum	0.118	0.0500	0.0250
Antimony	ND	0.00200	0.000500
Arsenic	0.00232	0.00100	0.000500
Barium	0.0203	0.00100	0.000500
Beryllium	ND	0.00100	0.000500
Boron^	1.26	0.100	0.0500
Cadmium	ND	0.00100	0.000500
Calcium	112	1.00	0.0500
Chromium	0.00105	0.00100	0.000500
Cobalt	ND	0.00100	0.000500
Copper	ND	0.00100	0.000500
Iron	ND	0.100	0.0500
Lead	ND	0.00100	0.000500
Magnesium	9.76	1.00	0.0500
Manganese	ND	0.00100	0.000500
Molybdenum	0.0120	0.00200	0.00100
Nickel	ND	0.00100	0.000100
Potassium	9.01	1.00	0.0500
Selenium	0.00217	0.00100	0.000500
Silver	ND	0.00100	0.000500
Sodium^	1420	10.0	0.500
Thallium	ND	0.00100	0.000500
Vanadium	0.00416	0.00100	0.000500
Zinc	0.113	0.0100	0.00500

^Analyzed at DF 10 on 10/25/07 18:14 | File ID 98J20030

METHOD 200.8
DISSOLVED METALS BY ICP-MS

Client : CH2M HILL	Date Collected: 10/17/07
Project : PG&E'S TOPOCK GAS COMPRESSOR STAT	Date Received: 10/18/07
SDG NO. : 07J239	Date Extracted: 10/22/07 11:50
Sample ID: CW-01M-014	Date Analyzed: 10/22/07 20:27
Lab Samp ID: J239-08	Dilution Factor: 1
Lab File ID: 98J19072	Matrix : WATER
Ext Btch ID: IMJ027W	% Moisture : NA
Calib. Ref.: 98J19066	Instrument ID : EMAXTI98

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Aluminum	ND	0.0500	0.0250
Antimony	ND	0.00200	0.000500
Arsenic	0.00206	0.00100	0.000500
Barium	0.0861	0.00100	0.000500
Beryllium	ND	0.00100	0.000500
Boron^	1.18	0.100	0.0500
Cadmium	ND	0.00100	0.000500
Calcium	138	1.00	0.0500
Chromium	0.00481	0.00100	0.000500
Cobalt	ND	0.00100	0.000500
Copper	0.00303	0.00100	0.000500
Iron	ND	0.100	0.0500
Lead	ND	0.00100	0.000500
Magnesium	10.9	1.00	0.0500
Manganese	ND	0.00100	0.000500
Molybdenum	0.0195	0.00200	0.00100
Nickel	ND	0.00100	0.000100
Potassium	10.9	1.00	0.0500
Selenium	0.00193	0.00100	0.000500
Silver	ND	0.00100	0.000500
Sodium^	1420	10.0	0.500
Thallium	ND	0.00100	0.000500
Vanadium	0.00357	0.00100	0.000500
Zinc	0.0190	0.0100	0.00500

^Analyzed at DF 10 on 10/25/07 18:19 | File ID 98J20031

CASE NARRATIVE

CLIENT: CH2M HILL

PROJECT: PG&E'S TOPOCK GAS COMPRESSOR STAT

SDG: 07J239

METHOD 200.7
TOTAL IRON BY ICP

Eight (8) water samples were received on 10/18/07 for Iron analysis by Method 200.7 in accordance with "Methods for Chemical Analysis of Water and Wastes", EPA 600/R-94-111-May 1994.

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. **Serial Dilution/Post-Analytical Spike**

   Sample from another SDG, J842-01, was analyzed for serial dilution and post-analytical spike. All QC requirements were met.

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

   No MS/MSD sample was designated in this SDG.

6. **Sample Analysis**

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

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METHOD 200.7
TOTAL IRON BY ICP

Client : CH2M HILL
Project : PG&E'S TOPOCK GAS COMPRESSOR STAT
Batch No. : 07J239
Matrix : WATER
Instrument ID : T-107

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	IPJ042WB	ND	1	NA	0.500	0.0400	10/24/0720:46	10/22/0710:10	I07J016023	I07J016021	IPJ042W	NA	10/22/07
LCS1W	IPJ042WL	9.35	1	NA	0.500	0.0400	10/24/0720:50	10/22/0710:10	I07J016024	I07J016021	IPJ042W	NA	10/22/07
LCD1W	IPJ042WC	9.41	1	NA	0.500	0.0400	10/24/0720:54	10/22/0710:10	I07J016025	I07J016021	IPJ042W	NA	10/22/07
OW-02S-014	J239-01	ND	1	NA	0.500	0.0400	10/24/0721:40	10/22/0710:10	I07J016035	I07J016033	IPJ042W	10/17/07	10/18/07
OW-02D-014	J239-02	ND	1	NA	0.500	0.0400	10/24/0721:44	10/22/0710:10	I07J016036	I07J016033	IPJ042W	10/17/07	10/18/07
OW-05D-014	J239-03	ND	1	NA	0.500	0.0400	10/24/0721:48	10/22/0710:10	I07J016037	I07J016033	IPJ042W	10/17/07	10/18/07
OW-05M-014	J239-04	ND	1	NA	0.500	0.0400	10/24/0721:52	10/22/0710:10	I07J016038	I07J016033	IPJ042W	10/17/07	10/18/07
MW-90-014	J239-05	ND	1	NA	0.500	0.0400	10/24/0721:56	10/22/0710:10	I07J016039	I07J016033	IPJ042W	10/17/07	10/18/07
OW-05S-014	J239-06	ND	1	NA	0.500	0.0400	10/24/0722:00	10/22/0710:10	I07J016040	I07J016033	IPJ042W	10/17/07	10/18/07
CW-01D-014	J239-07	ND	1	NA	0.500	0.0400	10/24/0722:04	10/22/0710:10	I07J016041	I07J016033	IPJ042W	10/17/07	10/18/07
CW-01M-014	J239-08	ND	1	NA	0.500	0.0400	10/24/0722:08	10/22/0710:10	I07J016042	I07J016033	IPJ042W	10/17/07	10/18/07

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CASE NARRATIVE

CLIENT: CH2M HILL

PROJECT: PG&E'S TOPOCK GAS COMPRESSOR STAT

SDG: 07J239

METHOD 245.2
DISSOLVED MERCURY BY COLD VAPOR

Eight (8) water samples were received on 10/18/07 for Dissolved Mercury analysis by Method 245.2 in accordance with Methods for Chemical Analysis of Water and Wastes EPA/600/4-79-020.

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. **Serial Dilution/Post-Analytical Spike**

   Sample J239-01 was analyzed for serial dilution and post-analytical spike. All QC requirements were met.

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

   MS/MSD sample was not designated in this SDG.

6. **Sample Analysis**

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

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METHOD 245.2
DISSOLVED MERCURY BY COLD VAPOR

Client : CH2M HILL
Project : PG&E'S TOPOCK GAS COMPRESSOR STAT
Batch No. : 07J239

Matrix : WATER
Instrument ID : TI047

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	HGJ039WB	ND	1	NA	0.000200	0.000100	10/22/0720:09	10/22/0715:00	M47J025042	M47J025032	HGJ039W	NA	10/22/07
LCS1W	HGJ039WL	0.00477	1	NA	0.000200	0.000100	10/22/0720:11	10/22/0715:00	M47J025043	M47J025032	HGJ039W	NA	10/22/07
LCD1W	HGJ039WC	0.00483	1	NA	0.000200	0.000100	10/22/0720:17	10/22/0715:00	M47J025046	M47J025044	HGJ039W	NA	10/22/07
OW-02S-014	J239-01	ND	1	NA	0.000200	0.000100	10/22/0720:32	10/22/0715:00	M47J025053	M47J025044	HGJ039W	10/17/07	10/18/07
OW-02D-014	J239-02	ND	1	NA	0.000200	0.000100	10/22/0720:34	10/22/0715:00	M47J025054	M47J025044	HGJ039W	10/17/07	10/18/07
OW-05D-014	J239-03	ND	1	NA	0.000200	0.000100	10/22/0720:36	10/22/0715:00	M47J025055	M47J025044	HGJ039W	10/17/07	10/18/07
OW-05M-014	J239-04	ND	1	NA	0.000200	0.000100	10/22/0720:42	10/22/0715:00	M47J025058	M47J025056	HGJ039W	10/17/07	10/18/07
MW-90-014	J239-05	ND	1	NA	0.000200	0.000100	10/22/0720:45	10/22/0715:00	M47J025059	M47J025056	HGJ039W	10/17/07	10/18/07
OW-05S-014	J239-06	ND	1	NA	0.000200	0.000100	10/22/0720:47	10/22/0715:00	M47J025060	M47J025056	HGJ039W	10/17/07	10/18/07
CW-01D-014	J239-07	ND	1	NA	0.000200	0.000100	10/22/0720:49	10/22/0715:00	M47J025061	M47J025056	HGJ039W	10/17/07	10/18/07
CW-01M-014	J239-08	ND	1	NA	0.000200	0.000100	10/22/0720:51	10/22/0715:00	M47J025062	M47J025056	HGJ039W	10/17/07	10/18/07
OW-02S-014AS	J239-01A	0.00223	1	NA	0.000200	0.000100	10/23/0712:28	10/22/0715:00	M47J026010	M47J026008	HGJ039W	10/17/07	10/18/07
OW-02S-014DL	J239-01J	ND	5	NA	0.00100	0.000500	10/23/0712:30	10/22/0715:00	M47J026011	M47J026008	HGJ039W	10/17/07	10/18/07

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CASE NARRATIVE

CLIENT: CH2M HILL

PROJECT: PG&E'S TOPOCK GAS COMPRESSOR STAT

SDG: 07J239

METHOD SM2320B
ALKALINITY

Eight (8) water samples were received on 10/18/07 for Bicarbonate, Carbonate, and Total Alkalinity analyses by Method SM2320B in accordance with "Standard Method for the Examination of water and Wastewater".

1. **Holding Time**

   Analyses 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 J239-01 was analyzed for duplicate. %RPD was within QC limit.

5. **Matrix Spike**

   Sample J239-01 was spiked. Recovery was within QC limit.

6. **Sample Analysis**

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

METHOD SM2320B
BICARBONATE ALKALINITY

Client : CH2M HILL
Project : PG&E'S TOPOCK GAS COMPRESSOR STAT
Batch No. : 07J239

Matrix : WATER
Instrument ID : I53

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	ALJ028WB	ND	1	NA	5.00	1.00	10/23/0716:20	NA	ALJ02802	ALJ02801	ALJ028W	NA	NA
OW-02S-014	J239-01	100	1	NA	5.00	1.00	10/23/0716:31	NA	ALJ02805	ALJ02801	ALJ028W	10/17/0708:26	10/18/07
OW-02S-014DUP	J239-01D	97.5	1	NA	5.00	1.00	10/23/0716:34	NA	ALJ02806	ALJ02801	ALJ028W	10/17/0708:26	10/18/07
OW-02D-014	J239-02	92.5	1	NA	5.00	1.00	10/23/0716:41	NA	ALJ02808	ALJ02801	ALJ028W	10/17/0709:42	10/18/07
OW-05D-014	J239-03	87.5	1	NA	5.00	1.00	10/23/0716:44	NA	ALJ02809	ALJ02801	ALJ028W	10/17/0711:40	10/18/07
OW-05M-014	J239-04	75.0	1	NA	5.00	1.00	10/23/0716:46	NA	ALJ02810	ALJ02801	ALJ028W	10/17/0712:47	10/18/07
MW-90-014	J239-05	77.5	1	NA	5.00	1.00	10/23/0716:49	NA	ALJ02811	ALJ02801	ALJ028W	10/17/0712:49	10/18/07
OW-05S-014	J239-06	87.5	1	NA	5.00	1.00	10/23/0716:56	NA	ALJ02813	ALJ02812	ALJ028W	10/17/0713:35	10/18/07
CW-01D-014	J239-07	72.5	1	NA	5.00	1.00	10/23/0717:00	NA	ALJ02814	ALJ02812	ALJ028W	10/17/0714:42	10/18/07
CW-01M-014	J239-08	50.0	1	NA	5.00	1.00	10/23/0717:03	NA	ALJ02815	ALJ02812	ALJ028W	10/17/0715:15	10/18/07

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METHOD SM2320B
CARBONATE ALKALINITY

Client : CH2M HILL
Project : PG&E'S TOPOCK GAS COMPRESSOR STAT
Batch No. : 07J239
Matrix : WATER
Instrument ID : I53

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	ALJ028WB	ND	1	NA	5.00	1.00	10/23/0716:20	NA	ALJ02802	ALJ02801	ALJ028W	NA	NA
OW-02S-014	J239-01	ND	1	NA	5.00	1.00	10/23/0716:31	NA	ALJ02805	ALJ02801	ALJ028W	10/17/0708:26	10/18/07
OW-02S-014DUP	J239-01D	ND	1	NA	5.00	1.00	10/23/0716:34	NA	ALJ02806	ALJ02801	ALJ028W	10/17/0708:26	10/18/07
OW-02D-014	J239-02	ND	1	NA	5.00	1.00	10/23/0716:41	NA	ALJ02808	ALJ02801	ALJ028W	10/17/0709:42	10/18/07
OW-05D-014	J239-03	ND	1	NA	5.00	1.00	10/23/0716:44	NA	ALJ02809	ALJ02801	ALJ028W	10/17/0711:40	10/18/07
OW-05M-014	J239-04	ND	1	NA	5.00	1.00	10/23/0716:46	NA	ALJ02810	ALJ02801	ALJ028W	10/17/0712:47	10/18/07
MW-90-014	J239-05	ND	1	NA	5.00	1.00	10/23/0716:49	NA	ALJ02811	ALJ02801	ALJ028W	10/17/0712:49	10/18/07
OW-05S-014	J239-06	ND	1	NA	5.00	1.00	10/23/0716:56	NA	ALJ02813	ALJ02812	ALJ028W	10/17/0713:35	10/18/07
CW-01D-014	J239-07	ND	1	NA	5.00	1.00	10/23/0717:00	NA	ALJ02814	ALJ02812	ALJ028W	10/17/0714:42	10/18/07
CW-01M-014	J239-08	ND	1	NA	5.00	1.00	10/23/0717:03	NA	ALJ02815	ALJ02812	ALJ028W	10/17/0715:15	10/18/07

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METHOD SM2320B
TOTAL ALKALINITY

Client : CH2M HILL
Project : PG&E'S TOPOCK GAS COMPRESSOR STAT
Batch No. : 07J239

Matrix : WATER
Instrument ID : I53

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	ALJ028WB	ND	1	NA	5.00	1.00	10/23/0716:20	NA	ALJ02802	ALJ02801	ALJ028W	NA	NA
LCS1W	ALJ028WL	45.0	1	NA	5.00	1.00	10/23/0716:23	NA	ALJ02803	ALJ02801	ALJ028W	NA	NA
LCD1W	ALJ028WC	45.0	1	NA	5.00	1.00	10/23/0716:26	NA	ALJ02804	ALJ02801	ALJ028W	NA	NA
OW-02S-014	J239-01	100	1	NA	5.00	1.00	10/23/0716:31	NA	ALJ02805	ALJ02801	ALJ028W	10/17/0708:26	10/18/07
OW-02S-014DUP	J239-01D	97.5	1	NA	5.00	1.00	10/23/0716:34	NA	ALJ02806	ALJ02801	ALJ028W	10/17/0708:26	10/18/07
OW-02S-014MS	J239-01M	163	1	NA	5.00	1.00	10/23/0716:38	NA	ALJ02807	ALJ02801	ALJ028W	10/17/0708:26	10/18/07
OW-02D-014	J239-02	92.5	1	NA	5.00	1.00	10/23/0716:41	NA	ALJ02808	ALJ02801	ALJ028W	10/17/0709:42	10/18/07
OW-05D-014	J239-03	87.5	1	NA	5.00	1.00	10/23/0716:44	NA	ALJ02809	ALJ02801	ALJ028W	10/17/0711:40	10/18/07
OW-05M-014	J239-04	75.0	1	NA	5.00	1.00	10/23/0716:46	NA	ALJ02810	ALJ02801	ALJ028W	10/17/0712:47	10/18/07
MW-90-014	J239-05	77.5	1	NA	5.00	1.00	10/23/0716:49	NA	ALJ02811	ALJ02801	ALJ028W	10/17/0712:49	10/18/07
OW-05S-014	J239-06	87.5	1	NA	5.00	1.00	10/23/0716:56	NA	ALJ02813	ALJ02812	ALJ028W	10/17/0713:35	10/18/07
CW-01D-014	J239-07	72.5	1	NA	5.00	1.00	10/23/0717:00	NA	ALJ02814	ALJ02812	ALJ028W	10/17/0714:42	10/18/07
CW-01M-014	J239-08	50.0	1	NA	5.00	1.00	10/23/0717:03	NA	ALJ02815	ALJ02812	ALJ028W	10/17/0715:15	10/18/07

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CASE NARRATIVE

CLIENT: CH2M HILL

PROJECT: PG&E'S TOPOCK GAS COMPRESSOR STAT

SDG: 07J239

METHOD SM4500NH3-F
AMMONIA (NH3-N)

Eight (8) water samples were received on 10/18/07 for Ammonia analysis by Method SM4500NH3-F 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. **Matrix Spike/Matrix Spike Duplicate**

   Sample J239-01 was spiked. Recovery was within QC limit.

5. **Sample Analysis**

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

METHOD SM4500NH3-F
AMMONIA (NH3-N)

Client : CH2M HILL
Project : PG&E'S TOPOCK GAS COMPRESSOR STAT
Batch No. : 07J239

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	NHJ006WB	ND	1	NA	0.500	0.0300	10/24/0718:36	10/24/0711:05	NHJ00612	NHJ00608	NHJ006W	NA	10/24/07
LCS1W	NHJ006WL	0.608	1	NA	0.500	0.0300	10/24/0718:37	10/24/0711:05	NHJ00613	NHJ00608	NHJ006W	NA	10/24/07
LCD1W	NHJ006WC	0.594	1	NA	0.500	0.0300	10/24/0718:37	10/24/0711:05	NHJ00614	NHJ00608	NHJ006W	NA	10/24/07
OW-02S-014	J239-01	ND	1	NA	0.500	0.0300	10/24/0718:40	10/24/0711:05	NHJ00619	NHJ00608	NHJ006W	10/17/0708:26	10/18/07
OW-02S-014MS	J239-01M	0.584	1	NA	0.500	0.0300	10/24/0718:40	10/24/0711:05	NHJ00622	NHJ00620	NHJ006W	10/17/0708:26	10/18/07
OW-02S-014MSD	J239-01S	0.645	1	NA	0.500	0.0300	10/24/0718:41	10/24/0711:05	NHJ00623	NHJ00620	NHJ006W	10/17/0708:26	10/18/07
OW-02D-014	J239-02	ND	1	NA	0.500	0.0300	10/24/0718:41	10/24/0711:05	NHJ00624	NHJ00620	NHJ006W	10/17/0709:42	10/18/07
OW-05D-014	J239-03	ND	1	NA	0.500	0.0300	10/24/0718:42	10/24/0711:05	NHJ00625	NHJ00620	NHJ006W	10/17/0711:40	10/18/07
OW-05M-014	J239-04	ND	1	NA	0.500	0.0300	10/24/0718:42	10/24/0711:05	NHJ00626	NHJ00620	NHJ006W	10/17/0712:47	10/18/07
MW-90-014	J239-05	ND	1	NA	0.500	0.0300	10/24/0718:42	10/24/0711:05	NHJ00627	NHJ00620	NHJ006W	10/17/0712:49	10/18/07
OW-05S-014	J239-06	ND	1	NA	0.500	0.0300	10/24/0718:43	10/24/0711:05	NHJ00628	NHJ00620	NHJ006W	10/17/0713:35	10/18/07
CW-01D-014	J239-07	ND	1	NA	0.500	0.0300	10/24/0718:43	10/24/0711:05	NHJ00629	NHJ00620	NHJ006W	10/17/0714:42	10/18/07
CW-01M-014	J239-08	ND	1	NA	0.500	0.0300	10/24/0718:43	10/24/0711:05	NHJ00630	NHJ00620	NHJ006W	10/17/0715:15	10/18/07

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CASE NARRATIVE

CLIENT: CH2M HILL

PROJECT: PG&E'S TOPOCK GAS COMPRESSOR STAT

SDG: 07J239

METHOD SM4500NO3-E
NITRATE/NITRITE-N

Eight (8) water samples were received on 10/18/07 for Nitrate/Nitrite-N analysis by Method SM4500NO3-E 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**

   No sample was analyzed for duplicate in this SDG.

5. **Matrix Spike**

   No sample was spiked in this SDG.

6. **Sample Analysis**

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

   All results were reported as Nitrogen concentration.

METHOD SM4500NO3
NITRATE/NITRITE-N

Client : CH2M HILL
Project : PG&E'S TOPOCK GAS COMPRESSOR STAT
Batch No. : 07J239

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	NAJ003WB	ND	1	NA	0.100	0.0200	10/20/0714:09	NA	NAJ00311	NAJ00308	NAJ003W	NA	NA
LCS1W	NAJ003WL	0.549	1	NA	0.100	0.0200	10/20/0714:09	NA	NAJ00312	NAJ00308	NAJ003W	NA	NA
LCD1W	NAJ003WC	0.533	1	NA	0.100	0.0200	10/20/0714:09	NA	NAJ00313	NAJ00308	NAJ003W	NA	NA
OW-02S-014	J239-01	3.74	4	NA	0.400	0.0800	10/20/0714:22	NA	NAJ00323	NAJ00320	NAJ003W	10/17/0708:26	10/18/07
OW-02D-014	J239-02	2.81	4	NA	0.400	0.0800	10/20/0714:23	NA	NAJ00324	NAJ00320	NAJ003W	10/17/0709:42	10/18/07
OW-05D-014	J239-03	2.83	4	NA	0.400	0.0800	10/20/0714:23	NA	NAJ00325	NAJ00320	NAJ003W	10/17/0711:40	10/18/07
OW-05M-014	J239-04	2.72	4	NA	0.400	0.0800	10/20/0714:24	NA	NAJ00326	NAJ00320	NAJ003W	10/17/0712:47	10/18/07
MW-90-014	J239-05	2.64	4	NA	0.400	0.0800	10/20/0714:24	NA	NAJ00327	NAJ00320	NAJ003W	10/17/0712:49	10/18/07
OW-05S-014	J239-06	3.66	4	NA	0.400	0.0800	10/20/0714:24	NA	NAJ00328	NAJ00320	NAJ003W	10/17/0713:35	10/18/07
CW-01D-014	J239-07	2.66	4	NA	0.400	0.0800	10/20/0714:24	NA	NAJ00329	NAJ00320	NAJ003W	10/17/0714:42	10/18/07
CW-01M-014	J239-08	2.31	4	NA	0.400	0.0800	10/20/0714:24	NA	NAJ00330	NAJ00320	NAJ003W	10/17/0715:15	10/18/07

Revised Report
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07J239

CH-0418-

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

[2007-CMP-014]

COC Number
TURNAROUND TIME 12 Days
DATE 10-17-07 PAGE 1 OF 1

COMPANY E2
PROJECT NAME PG&E Topock GWM
PHONE (530) 229-3303 FAX (530) 339-3303
ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612
P.O. NUMBER 354631.MP.02.CM.00
SAMPLERS (SIGNATURE

	SAMPLE I.D.	DATE	TIME	DESCRIPTION	Total Metals (200.7) Field Filtered Trip	22 Al,B,Ca,Mg,K,Na,Mn,Fe	Total Metals (200.7)	Alkalinity (SM2320B)	Nitrate/Nitrite (SM4500NO3-E)	Ammonia (SM4500NH3)	NUMBER OF CONTAINERS	COMMENTS
1	OW-02S-014	10-17-07	0826	groundwater	X	X	X	X	X		4	
2	OW-02D-014		0942		X	X	X	X	X		4	
3	OW-05D-014		1140		X	X	X	X	X		4	
4	OW-05M-014		1247		X	X	X	X	X		4	
5	MW-90-014		1249		X	X	X	X	X		4	
6	OW-05S-014		1335		X	X	X	X	X		4	
7	CW-01D-014		1442		X	X	X	X	X		4	
8	CW-01M-014		1515		X	X	X	X	X		4	

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Barry Collom	CH2M Hill	10-17-07 1600
Signature (Received) Rafael Davila	Rafael	T.H.I	10-17-07 16:00
Signature (Relinquished)			
Signature (Received) Phil Hatcher	Phil Hatcher	EMAX	10/18/07 9:10
Signature (Relinquished) Phil Hatcher	Phil Hatcher	EMAX	10/18/07 1500
Signature (Received)	J-LUNA	EMAX	10/18/07 1500

SAMPLE CONDITIONS 2.7 °C
RECEIVED COOL ☑ WARM ☐ 2.4 °C
CUSTODY SEALED YES ☑ NO ☐

SPECIAL REQUIREMENTS:

CASE NARRATIVE

CLIENT: **CH2M HILL**

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

SDG: **07J262**

METHOD 200.8
DISSOLVED METALS BY ICP-MS

Seven (7) water samples were received on 10/19/07 for Dissolved Metals analysis by Method 200.8 accordance with "Methods for Chemical Analysis of Water and Wastes", EPA 600/R-94-111-May 1994.

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. Serial Dilution / Post-Analytical Spike

Sample J262-01 was analyzed for serial dilution and post-analytical spike. All QC requirements were met.

5. Matrix Spike/Matrix Spike Duplicate

No sample was spiked in this SDG.

6. Sample Analysis

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

METHOD 200.8
DISSOLVED METALS BY ICP-MS

Client	: CH2M HILL	Date Collected:	10/18/07
Project	: PG&E'S TOPOCK GAS COMPRESSOR STAT	Date Received:	10/19/07
SDG NO.	: 07J262	Date Extracted:	10/22/07 10:30
Sample ID:	CW-02D-014	Date Analyzed:	10/30/07 23:54
Lab Samp ID:	J262-01	Dilution Factor:	1
Lab File ID:	98J24023	Matrix :	WATER
Ext Btch ID:	IMJ031W	% Moisture :	NA
Calib. Ref.:	98J24017	Instrument ID :	EMAXTI98

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Aluminum	ND	0.0500	0.0250
Antimony	ND	0.00200	0.000500
Arsenic	0.00491	0.00100	0.000500
Barium	0.0106	0.00100	0.000500
Beryllium	ND	0.00100	0.000500
Boron^	1.73	0.100	0.0500
Cadmium	ND	0.00100	0.000500
Calcium	77.2	1.00	0.0500
Chromium	0.00155	0.00100	0.000500
Cobalt	ND	0.00100	0.000500
Copper	0.00184	0.00100	0.000500
Iron	ND	0.100	0.0500
Lead	ND	0.00100	0.000500
Magnesium	4.28	1.00	0.0500
Manganese	ND	0.00100	0.000500
Molybdenum	0.0647	0.00200	0.00100
Nickel	ND	0.00100	0.000100
Potassium	9.86	1.00	0.0500
Selenium	0.00229	0.00100	0.000500
Silver	ND	0.00100	0.000500
Sodium^	1540	10.0	0.500
Thallium	ND	0.00100	0.000500
Vanadium	0.00618	0.00100	0.000500
Zinc	ND	0.0100	0.00500

^Analyzed at DF 10 on 10/31/07 20:52 | File ID 98J25023

METHOD 200.8
DISSOLVED METALS BY ICP-MS

Client	: CH2M HILL	Date Collected:	10/18/07
Project	: PG&E'S TOPOCK GAS COMPRESSOR STAT	Date Received:	10/19/07
SDG NO.	: 07J262	Date Extracted:	10/22/07 10:30
Sample ID	: CW-02M-014	Date Analyzed:	10/31/07 00:05
Lab Samp ID	: J262-02	Dilution Factor:	1
Lab File ID	: 98J24025	Matrix :	WATER
Ext Btch ID	: IMJ031W	% Moisture :	NA
Calib. Ref.	: 98J24017	Instrument ID :	EMAXTI98

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Aluminum	ND	0.0500	0.0250
Antimony	ND	0.00200	0.000500
Arsenic	0.00235	0.00100	0.000500
Barium	0.0609	0.00100	0.000500
Beryllium	ND	0.00100	0.000500
Boron^	1.14	0.100	0.0500
Cadmium	ND	0.00100	0.000500
Calcium	118	1.00	0.0500
Chromium	0.0151	0.00100	0.000500
Cobalt	ND	0.00100	0.000500
Copper	0.00261	0.00100	0.000500
Iron	ND	0.100	0.0500
Lead	ND	0.00100	0.000500
Magnesium	9.37	1.00	0.0500
Manganese	ND	0.00100	0.000500
Molybdenum	0.0233	0.00200	0.00100
Nickel	0.00150	0.00100	0.000100
Potassium	10.3	1.00	0.0500
Selenium	ND	0.00100	0.000500
Silver	ND	0.00100	0.000500
Sodium^	1350	10.0	0.500
Thallium	ND	0.00100	0.000500
Vanadium	0.00417	0.00100	0.000500
Zinc	ND	0.0100	0.00500

^Analyzed at DF 10 on 10/31/07 21:03 | File ID 98J25025

METHOD 200.8
DISSOLVED METALS BY ICP-MS

Client	: CH2M HILL	Date Collected:	10/18/07
Project	: PG&E'S TOPOCK GAS COMPRESSOR STAT	Date Received:	10/19/07
SDG NO.	: 07J262	Date Extracted:	10/22/07 10:30
Sample ID:	CW-03D-014	Date Analyzed:	10/31/07 00:10
Lab Samp ID:	J262-03	Dilution Factor:	1
Lab File ID:	98J24026	Matrix :	WATER
Ext Btch ID:	IMJ031W	% Moisture :	NA
Calib. Ref.:	98J24017	Instrument ID :	EMAXTI98

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Aluminum	ND	0.0500	0.0250
Antimony	ND	0.00200	0.000500
Arsenic	0.00172	0.00100	0.000500
Barium	0.0127	0.00100	0.000500
Beryllium	ND	0.00100	0.000500
Boron^	1.70	0.100	0.0500
Cadmium	ND	0.00100	0.000500
Calcium	105	1.00	0.0500
Chromium	0.00263	0.00100	0.000500
Cobalt	ND	0.00100	0.000500
Copper	ND	0.00100	0.000500
Iron	ND	0.100	0.0500
Lead	ND	0.00100	0.000500
Magnesium	8.13	1.00	0.0500
Manganese	ND	0.00100	0.000500
Molybdenum	0.0882	0.00200	0.00100
Nickel	ND	0.00100	0.000100
Potassium	12.1	1.00	0.0500
Selenium	0.00184	0.00100	0.000500
Silver	ND	0.00100	0.000500
Sodium^	1820	10.0	0.500
Thallium	ND	0.00100	0.000500
Vanadium	0.00275	0.00100	0.000500
Zinc	ND	0.0100	0.00500

^Analyzed at DF 10 on 10/31/07 21:08 | File ID 98J25026

METHOD 200.8
DISSOLVED METALS BY ICP-MS

Client : CH2M HILL	Date Collected: 10/18/07
Project : PG&E'S TOPOCK GAS COMPRESSOR STAT	Date Received: 10/19/07
SDG NO. : 07J262	Date Extracted: 10/22/07 10:30
Sample ID: CW-03M-014	Date Analyzed: 10/31/07 00:15
Lab Samp ID: J262-04	Dilution Factor: 1
Lab File ID: 98J24027	Matrix : WATER
Ext Btch ID: IMJ031W	% Moisture : NA
Calib. Ref.: 98J24017	Instrument ID : EMAXTI98

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Aluminum	ND	0.0500	0.0250
Antimony	ND	0.00200	0.000500
Arsenic	0.00130	0.00100	0.000500
Barium	0.0511	0.00100	0.000500
Beryllium	ND	0.00100	0.000500
Boron^	1.14	0.100	0.0500
Cadmium	ND	0.00100	0.000500
Calcium	207	1.00	0.0500
Chromium	0.0119	0.00100	0.000500
Cobalt	ND	0.00100	0.000500
Copper	0.00141	0.00100	0.000500
Iron	ND	0.100	0.0500
Lead	ND	0.00100	0.000500
Magnesium	17.5	1.00	0.0500
Manganese	ND	0.00100	0.000500
Molybdenum	0.0216	0.00200	0.00100
Nickel	ND	0.00100	0.000100
Potassium	13.3	1.00	0.0500
Selenium	ND	0.00100	0.000500
Silver	ND	0.00100	0.000500
Sodium^	1670	10.0	0.500
Thallium	ND	0.00100	0.000500
Vanadium	0.00224	0.00100	0.000500
Zinc	ND	0.0100	0.00500

^Analyzed at DF 10 on 10/31/07 21:14 | File ID 98J25027

METHOD 200.8
DISSOLVED METALS BY ICP-MS

Client	: CH2M HILL	Date Collected:	10/18/07
Project	: PG&E'S TOPOCK GAS COMPRESSOR STAT	Date Received:	10/19/07
SDG NO.	: 07J262	Date Extracted:	10/22/07 10:30
Sample ID:	CW-04M-014	Date Analyzed:	10/31/07 00:21
Lab Samp ID:	J262-05	Dilution Factor:	1
Lab File ID:	98J24028	Matrix :	WATER
Ext Btch ID:	IMJ031W	% Moisture :	NA
Calib. Ref.:	98J24017	Instrument ID :	EMAXTI98

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Aluminum	ND	0.0500	0.0250
Antimony	ND	0.00200	0.000500
Arsenic	0.00270	0.00100	0.000500
Barium	0.0718	0.00100	0.000500
Beryllium	ND	0.00100	0.000500
Boron^	0.809	0.100	0.0500
Cadmium	ND	0.00100	0.000500
Calcium	123	1.00	0.0500
Chromium	0.0207	0.00100	0.000500
Cobalt	ND	0.00100	0.000500
Copper	0.00348	0.00100	0.000500
Iron	ND	0.100	0.0500
Lead	ND	0.00100	0.000500
Magnesium	11.2	1.00	0.0500
Manganese	ND	0.00100	0.000500
Molybdenum	0.0115	0.00200	0.00100
Nickel	ND	0.00100	0.000100
Potassium	9.99	1.00	0.0500
Selenium	0.00102	0.00100	0.000500
Silver	ND	0.00100	0.000500
Sodium^	1120	10.0	0.500
Thallium	ND	0.00100	0.000500
Vanadium	0.00396	0.00100	0.000500
Zinc	ND	0.0100	0.00500

^Analyzed at DF 10 on 10/31/07 21:19 | File ID 98J25028

METHOD 200.8
DISSOLVED METALS BY ICP-MS

Client	: CH2M HILL	Date Collected:	10/18/07
Project	: PG&E'S TOPOCK GAS COMPRESSOR STAT	Date Received:	10/19/07
SDG NO.	: 07J262	Date Extracted:	10/22/07 10:30
Sample ID:	CW-04D-014	Date Analyzed:	10/31/07 00:53
Lab Samp ID:	J262-06	Dilution Factor:	1
Lab File ID:	98J24034	Matrix :	WATER
Ext Btch ID:	IMJ031W	% Moisture :	NA
Calib. Ref.:	98J24029	Instrument ID :	EMAXTI98

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Aluminum	ND	0.0500	0.0250
Antimony	ND	0.00200	0.000500
Arsenic	0.00389	0.00100	0.000500
Barium	0.0301	0.00100	0.000500
Beryllium	ND	0.00100	0.000500
Boron^	1.56	0.100	0.0500
Cadmium	ND	0.00100	0.000500
Calcium	197	1.00	0.0500
Chromium	0.00373	0.00100	0.000500
Cobalt	ND	0.00100	0.000500
Copper	ND	0.00100	0.000500
Iron	ND	0.100	0.0500
Lead	ND	0.00100	0.000500
Magnesium	12.6	1.00	0.0500
Manganese	0.00402	0.00100	0.000500
Molybdenum	0.0391	0.00200	0.00100
Nickel	ND	0.00100	0.000100
Potassium	13.3	1.00	0.0500
Selenium	0.00134	0.00100	0.000500
Silver	ND	0.00100	0.000500
Sodium^	2140	10.0	0.500
Thallium	ND	0.00100	0.000500
Vanadium	0.00419	0.00100	0.000500
Zinc	ND	0.0100	0.00500

^Analyzed at DF 10 on 10/31/07 21:35 | File ID 98J25031

METHOD 200.8
DISSOLVED METALS BY ICP-MS

Client	: CH2M HILL	Date Collected:	10/18/07
Project	: PG&E'S TOPOCK GAS COMPRESSOR STAT	Date Received:	10/19/07
SDG NO.	: 07J262	Date Extracted:	10/22/07 10:30
Sample ID:	MW-91-014	Date Analyzed:	10/31/07 00:59
Lab Samp ID:	J262-07	Dilution Factor:	1
Lab File ID:	98J24035	Matrix :	WATER
Ext Btch ID:	IMJ031W	% Moisture :	NA
Calib. Ref.:	98J24029	Instrument ID :	EMAXTI98

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Aluminum	ND	0.0500	0.0250
Antimony	ND	0.00200	0.000500
Arsenic	0.00269	0.00100	0.000500
Barium	0.0737	0.00100	0.000500
Beryllium	ND	0.00100	0.000500
Boron^	0.848	0.100	0.0500
Cadmium	ND	0.00100	0.000500
Calcium	125	1.00	0.0500
Chromium	0.0217	0.00100	0.000500
Cobalt	ND	0.00100	0.000500
Copper	0.00389	0.00100	0.000500
Iron	ND	0.100	0.0500
Lead	ND	0.00100	0.000500
Magnesium	11.4	1.00	0.0500
Manganese	ND	0.00100	0.000500
Molybdenum	0.0121	0.00200	0.00100
Nickel	ND	0.00100	0.000100
Potassium	10.3	1.00	0.0500
Selenium	0.00110	0.00100	0.000500
Silver	ND	0.00100	0.000500
Sodium^	1160	10.0	0.500
Thallium	ND	0.00100	0.000500
Vanadium	0.00401	0.00100	0.000500
Zinc	ND	0.0100	0.00500

^Analyzed at DF 10 on 10/31/07 21:41 | File ID 98J25032

CASE NARRATIVE

CLIENT: CH2M HILL

PROJECT: PG&E'S TOPOCK GAS COMPRESSOR STAT

SDG: 07J262

METHOD 200.7
TOTAL IRON BY ICP

Seven (7) water samples were received on 10/19/07 for Iron analysis by Method 200.7 in accordance with "Methods for Chemical Analysis of Water and Wastes", EPA 600/R-94-111-May 1994.

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. **Serial Dilution/Post-Analytical Spike**

   Sample J262-01, was analyzed for serial dilution and post-analytical spike. All QC requirements were met.

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

   Sample J262-01 was spiked. Recoveries were within QC limit.

6. **Sample Analysis**

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

METHOD 200.7
TOTAL IRON BY ICP

Client : CH2M HILL
Project : PG&E'S TOPOCK GAS COMPRESSOR STAT
Batch No. : 07J262

Matrix : WATER
Instrument ID : T-I07

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	IPJ042WB	ND	1	NA	0.500	0.0400	10/24/0701:04	10/22/0710:10	I07J014029	I07J014027	IPJ042W	NA	10/22/07
LCS1W	IPJ042WL	11.1	1	NA	0.500	0.0400	10/24/0701:08	10/22/0710:10	I07J014030	I07J014027	IPJ042W	NA	10/22/07
LCD1W	IPJ042WC	11.1	1	NA	0.500	0.0400	10/24/0701:12	10/22/0710:10	I07J014031	I07J014027	IPJ042W	NA	10/22/07
CW-02D-014AS	J262-01A	9.91	1	NA	0.500	0.0400	10/24/0701:16	10/22/0710:10	I07J014032	I07J014027	IPJ042W	10/18/07	10/19/07
CW-02D-014	J262-01	ND	1	NA	0.500	0.0400	10/24/0701:20	10/22/0710:10	I07J014033	I07J014027	IPJ042W	10/18/07	10/19/07
CW-02D-014DL	J262-01J	ND	5	NA	2.50	0.200	10/24/0701:24	10/22/0710:10	I07J014034	I07J014027	IPJ042W	10/18/07	10/19/07
CW-02D-014MS	J262-01M	10.6	1	NA	0.500	0.0400	10/24/0701:28	10/22/0710:10	I07J014035	I07J014027	IPJ042W	10/18/07	10/19/07
CW-02D-014MSD	J262-01S	10.9	1	NA	0.500	0.0400	10/24/0701:32	10/22/0710:10	I07J014036	I07J014027	IPJ042W	10/18/07	10/19/07
CW-02M-014	J262-02	ND	1	NA	0.500	0.0400	10/24/0701:36	10/22/0710:10	I07J014037	I07J014027	IPJ042W	10/18/07	10/19/07
CW-03D-014	J262-03	ND	1	NA	0.500	0.0400	10/24/0701:41	10/22/0710:10	I07J014038	I07J014027	IPJ042W	10/18/07	10/19/07
CW-03M-014	J262-04	ND	1	NA	0.500	0.0400	10/24/0721:10	10/22/0710:10	I07J016029	I07J016021	IPJ042W	10/18/07	10/19/07
CW-04M-014	J262-05	ND	1	NA	0.500	0.0400	10/24/0721:14	10/22/0710:10	I07J016030	I07J016021	IPJ042W	10/18/07	10/19/07
CW-04D-014	J262-06	ND	1	NA	0.500	0.0400	10/24/0721:18	10/22/0710:10	I07J016031	I07J016021	IPJ042W	10/18/07	10/19/07
MW-91-014	J262-07	ND	1	NA	0.500	0.0400	10/24/0721:22	10/22/0710:10	I07J016032	I07J016021	IPJ042W	10/18/07	10/19/07

7434

CASE NARRATIVE

CLIENT: CH2M HILL

PROJECT: PG&E'S TOPOCK GAS COMPRESSOR STAT

SDG: 07J262

METHOD 245.2
DISSOLVED MERCURY BY COLD VAPOR

Seven (7) water samples were received on 10/19/07 for Dissolved Mercury analysis by Method 245.2 in accordance with Methods for Chemical Analysis of Water and Wastes EPA/600/4-79-020.

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. **Serial Dilution/Post-Analytical Spike**

   Sample from another SDG, J264-22, was analyzed for serial dilution and post-analytical spike. All QC requirements were met.

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

   MS/MSD sample was not designated in this SDG.

6. **Sample Analysis**

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

METHOD 245.2
DISSOLVED MERCURY BY COLD VAPOR

Client : CH2M HILL
Project : PG&E'S TOPOCK GAS COMPRESSOR STAT
Batch No. : 07J262
Matrix : WATER
Instrument ID : TI047

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	HGJ042WB	ND	1	NA	0.000200	0.000100	10/25/0710:49	10/24/0715:00	M47J028010	M47J028008	HGJ042W	NA	10/24/07
LCS1W	HGJ042WL	0.00489	1	NA	0.000200	0.000100	10/25/0710:51	10/24/0715:00	M47J028011	M47J028008	HGJ042W	NA	10/24/07
LCD1W	HGJ042WC	0.00492	1	NA	0.000200	0.000100	10/25/0710:54	10/24/0715:00	M47J028012	M47J028008	HGJ042W	NA	10/24/07
CW-02D-014	J262-01	ND	1	NA	0.000200	0.000100	10/25/0711:28	10/24/0715:00	M47J028029	M47J028020	HGJ042W	10/18/07	10/19/07
CW-02M-014	J262-02	ND	1	NA	0.000200	0.000100	10/25/0711:30	10/24/0715:00	M47J028030	M47J028020	HGJ042W	10/18/07	10/19/07
CW-03D-014	J262-03	ND	1	NA	0.000200	0.000100	10/25/0711:32	10/24/0715:00	M47J028031	M47J028020	HGJ042W	10/18/07	10/19/07
CW-03M-014	J262-04	ND	1	NA	0.000200	0.000100	10/25/0711:39	10/24/0715:00	M47J028034	M47J028032	HGJ042W	10/18/07	10/19/07
CW-04M-014	J262-05	ND	1	NA	0.000200	0.000100	10/25/0711:41	10/24/0715:00	M47J028035	M47J028032	HGJ042W	10/18/07	10/19/07
CW-04D-014	J262-06	ND	1	NA	0.000200	0.000100	10/25/0711:43	10/24/0715:00	M47J028036	M47J028032	HGJ042W	10/18/07	10/19/07
MW-91-014	J262-07	ND	1	NA	0.000200	0.000100	10/25/0711:45	10/24/0715:00	M47J028037	M47J028032	HGJ042W	10/18/07	10/19/07

7236

CASE NARRATIVE

CLIENT: CH2M HILL

PROJECT: PG&E'S TOPOCK GAS COMPRESSOR STAT

SDG: 07J262

METHOD SM2320B
ALKALINITY

Seven (7) water samples were received on 10/19/07 for Bicarbonate, Carbonate, and Total Alkalinity analyses by Method SM2320B in accordance with "Standard Method for the Examination of water and Wastewater".

1. **Holding Time**

   Analyses 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**

   No sample was analyzed for duplicate in this SDG.

5. **Matrix Spike**

   No sample was spiked in this SDG.

6. **Sample Analysis**

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

METHOD SM2320B
BICARBONATE ALKALINITY

Client : CH2M HILL
Project : PG&E'S TOPOCK GAS COMPRESSOR STAT
Batch No. : 07J262

Matrix : WATER
Instrument ID : I53

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	ALJ028WB	ND	1	NA	5.00	1.00	10/23/0716:20	NA	ALJ02802	ALJ02801	ALJ028W	NA	NA
CW-02D-014	J262-01	46.7	1	NA	5.00	1.00	10/23/0717:07	NA	ALJ02816	ALJ02812	ALJ028W	10/18/0707:38	10/19/07
CW-02M-014	J262-02	50.0	1	NA	5.00	1.00	10/23/0717:11	NA	ALJ02817	ALJ02812	ALJ028W	10/18/0708:25	10/19/07
CW-03D-014	J262-03	46.7	1	NA	5.00	1.00	10/23/0717:14	NA	ALJ02818	ALJ02812	ALJ028W	10/18/0709:40	10/19/07
CW-03M-014	J262-04	46.7	1	NA	5.00	1.00	10/23/0717:17	NA	ALJ02819	ALJ02812	ALJ028W	10/18/0710:40	10/19/07
CW-04M-014	J262-05	55.0	1	NA	5.00	1.00	10/23/0717:20	NA	ALJ02820	ALJ02812	ALJ028W	10/18/0712:10	10/19/07
CW-04D-014	J262-06	40.0	1	NA	5.00	1.00	10/23/0717:24	NA	ALJ02821	ALJ02812	ALJ028W	10/18/0713:18	10/19/07
MW-91-014	J262-07	55.0	1	NA	5.00	1.00	10/23/0717:27	NA	ALJ02822	ALJ02812	ALJ028W	10/18/0712:25	10/19/07

8602

METHOD SM2320B
CARBONATE ALKALINITY

Client : CH2M HILL
Project : PG&E'S TOPOCK GAS COMPRESSOR STAT
Batch No. : 07J262

Matrix : WATER
Instrument ID : 153

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	ALJ028WB	ND	1	NA	5.00	1.00	10/23/0716:20	NA	ALJ02802	ALJ02801	ALJ028W	NA	NA
CW-02D-014	J262-01	ND	1	NA	5.00	1.00	10/23/0717:07	NA	ALJ02816	ALJ02812	ALJ028W	10/18/0707:38	10/19/07
CW-02M-014	J262-02	ND	1	NA	5.00	1.00	10/23/0717:11	NA	ALJ02817	ALJ02812	ALJ028W	10/18/0708:25	10/19/07
CW-03D-014	J262-03	ND	1	NA	5.00	1.00	10/23/0717:14	NA	ALJ02818	ALJ02812	ALJ028W	10/18/0709:40	10/19/07
CW-03M-014	J262-04	ND	1	NA	5.00	1.00	10/23/0717:17	NA	ALJ02819	ALJ02812	ALJ028W	10/18/0710:40	10/19/07
CW-04M-014	J262-05	ND	1	NA	5.00	1.00	10/23/0717:20	NA	ALJ02820	ALJ02812	ALJ028W	10/18/0712:10	10/19/07
CW-04D-014	J262-06	ND	1	NA	5.00	1.00	10/23/0717:24	NA	ALJ02821	ALJ02812	ALJ028W	10/18/0713:18	10/19/07
MW-91-014	J262-07	ND	1	NA	5.00	1.00	10/23/0717:27	NA	ALJ02822	ALJ02812	ALJ028W	10/18/0712:25	10/19/07

METHOD SM2320B
TOTAL ALKALINITY

Client : CH2M HILL
Project : PG&E'S TOPOCK GAS COMPRESSOR STAT
Batch No. : 07J262

Matrix : WATER
Instrument ID : I53

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	ALJ028WB	ND	1	NA	5.00	1.00	10/23/0716:20	NA	ALJ02802	ALJ02801	ALJ028W	NA	NA
LCS1W	ALJ028WL	45.0	1	NA	5.00	1.00	10/23/0716:23	NA	ALJ02803	ALJ02801	ALJ028W	NA	NA
LCD1W	ALJ028WC	45.0	1	NA	5.00	1.00	10/23/0716:26	NA	ALJ02804	ALJ02801	ALJ028W	NA	NA
CW-02D-014	J262-01	46.7	1	NA	5.00	1.00	10/23/0717:07	NA	ALJ02816	ALJ02812	ALJ028W	10/18/0707:38	10/19/07
CW-02M-014	J262-02	50.0	1	NA	5.00	1.00	10/23/0717:11	NA	ALJ02817	ALJ02812	ALJ028W	10/18/0708:25	10/19/07
CW-03D-014	J262-03	46.7	1	NA	5.00	1.00	10/23/0717:14	NA	ALJ02818	ALJ02812	ALJ028W	10/18/0709:40	10/19/07
CW-03M-014	J262-04	46.7	1	NA	5.00	1.00	10/23/0717:17	NA	ALJ02819	ALJ02812	ALJ028W	10/18/0710:40	10/19/07
CW-04M-014	J262-05	55.0	1	NA	5.00	1.00	10/23/0717:20	NA	ALJ02820	ALJ02812	ALJ028W	10/18/0712:10	10/19/07
CW-04D-014	J262-06	40.0	1	NA	5.00	1.00	10/23/0717:24	NA	ALJ02821	ALJ02812	ALJ028W	10/18/0713:18	10/19/07
MW-91-014	J262-07	55.0	1	NA	5.00	1.00	10/23/0717:27	NA	ALJ02822	ALJ02812	ALJ028W	10/18/0712:25	10/19/07

CASE NARRATIVE

CLIENT: CH2M HILL

PROJECT: PG&E'S TOPOCK GAS COMPRESSOR STAT

SDG: 07J262

METHOD SM4500NH3-F
AMMONIA (NH3-N)

Seven (7) water samples were received on 10/17/07 for Ammonia analysis by Method SM4500NH3-F 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. **Matrix Spike/Matrix Spike Duplicate**

   No sample was spiked in this SDG.

5. **Sample Analysis**

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

METHOD SM4500NH3-F
AMMONIA (NH3-N)

Client : CH2M HILL
Project : PG&E'S TOPOCK GAS COMPRESSOR STAT
Batch No. : 07J262

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	NHJ006WB	ND	1	NA	0.500	0.0300	10/24/0718:36	10/24/0711:05	NHJ00612	NHJ00608	NHJ006W	NA	10/24/07
LCS1W	NHJ006WL	0.608	1	NA	0.500	0.0300	10/24/0718:37	10/24/0711:05	NHJ00613	NHJ00608	NHJ006W	NA	10/24/07
LCD1W	NHJ006WC	0.594	1	NA	0.500	0.0300	10/24/0718:37	10/24/0711:05	NHJ00614	NHJ00608	NHJ006W	NA	10/24/07
CW-02D-014	J262-01	ND	1	NA	0.500	0.0300	10/24/0718:44	10/24/0711:05	NHJ00631	NHJ00620	NHJ006W	10/18/0707:38	10/19/07
CW-02M-014	J262-02	ND	1	NA	0.500	0.0300	10/24/0718:45	10/24/0711:05	NHJ00634	NHJ00632	NHJ006W	10/18/0708:25	10/19/07
CW-03D-014	J262-03	ND	1	NA	0.500	0.0300	10/24/0718:45	10/24/0711:05	NHJ00635	NHJ00632	NHJ006W	10/18/0709:40	10/19/07
CW-03M-014	J262-04	ND	1	NA	0.500	0.0300	10/24/0718:45	10/24/0711:05	NHJ00636	NHJ00632	NHJ006W	10/18/0710:40	10/19/07
CW-04M-014	J262-05	ND	1	NA	0.500	0.0300	10/24/0718:46	10/24/0711:05	NHJ00637	NHJ00632	NHJ006W	10/18/0712:10	10/19/07
CW-04D-014	J262-06	ND	1	NA	0.500	0.0300	10/24/0718:46	10/24/0711:05	NHJ00638	NHJ00632	NHJ006W	10/18/0713:18	10/19/07
MW-91-014	J262-07	ND	1	NA	0.500	0.0300	10/24/0718:46	10/24/0711:05	NHJ00639	NHJ00632	NHJ006W	10/18/0712:25	10/19/07

8010

CASE NARRATIVE

CLIENT: **CH2M HILL**

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

SDG: **07J262**

METHOD SM4500NO3-E
NITRATE/NITRITE-N

Seven (7) water samples were received on 10/19/07 for Nitrate/Nitrite-N analysis by Method SM4500NO3-E 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 J262-01 was analyzed for duplicate. %RPD was within QC limit.

5. **Matrix Spike**

   Sample J262-01 was spiked. Recovery was within QC limit.

6. **Sample Analysis**

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

   All results were reported as Nitrogen concentration.

METHOD SM4500NO3
NITRATE/NITRITE-N

Client : CH2M HILL
Project : PG&E'S TOPOCK GAS COMPRESSOR STAT
Batch No. : 07J262

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	NAJ004WB	ND	1	NA	0.100	0.0200	10/24/0717:34	NA	NAJ00411	NAJ00408	NAJ004W	NA	NA
LCS1W	NAJ004WL	0.510	1	NA	0.100	0.0200	10/24/0717:34	NA	NAJ00412	NAJ00408	NAJ004W	NA	NA
LCD1W	NAJ004WC	0.507	1	NA	0.100	0.0200	10/24/0717:34	NA	NAJ00413	NAJ00408	NAJ004W	NA	NA
CW-02D-014	J262-01	2.69	5	NA	0.500	0.100	10/24/0717:35	NA	NAJ00414	NAJ00408	NAJ004W	10/18/0707:38	10/19/07
CW-02D-014DUP	J262-01D	2.70	5	NA	0.500	0.100	10/24/0717:35	NA	NAJ00415	NAJ00408	NAJ004W	10/18/0707:38	10/19/07
CW-02D-014MS	J262-01M	5.15	5	NA	0.500	0.100	10/24/0717:35	NA	NAJ00416	NAJ00408	NAJ004W	10/18/0707:38	10/19/07
CW-02M-014	J262-02	1.09	1	NA	0.100	0.0200	10/24/0717:35	NA	NAJ00417	NAJ00408	NAJ004W	10/18/0708:25	10/19/07
CW-03D-014	J262-03	2.62	5	NA	0.500	0.100	10/24/0717:36	NA	NAJ00418	NAJ00408	NAJ004W	10/18/0709:40	10/19/07
CW-03M-014	J262-04	0.799	1	NA	0.100	0.0200	10/24/0717:36	NA	NAJ00419	NAJ00408	NAJ004W	10/18/0710:40	10/19/07
CW-04M-014	J262-05	1.55	1	NA	0.100	0.0200	10/24/0717:36	NA	NAJ00422	NAJ00420	NAJ004W	10/18/0712:10	10/19/07
CW-04D-014	J262-06	1.24	1	NA	0.100	0.0200	10/24/0717:36	NA	NAJ00423	NAJ00420	NAJ004W	10/18/0713:18	10/19/07
MW-91-014	J262-07	1.39	1	NA	0.100	0.0200	10/24/0717:36	NA	NAJ00424	NAJ00420	NAJ004W	10/18/0712:25	10/19/07

8017

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07J262

COC Number

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

CH-0408-

CHAIN OF CUSTODY RECORD

[2007-CMP-014]

TURNAROUND TIME 12 Days

DATE 10-18-07 PAGE 1 OF 1

COMPANY E2

PROJECT NAME PG&E Topock GWM

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

ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612

P.O. NUMBER 354631.MP.02.CM.00

SAMPLERS (SIGNATURE

	SAMPLE I.D.	DATE	TIME	DESCRIPTION	Total Metals (200.7) Field Filtered This 22.Al,B,Ca,Mg,K,Na,Mn,Fe	Total Metals (200.7) Total Iron, unfiltered	Alkalinity (SM2320B)	Nitrate/Nitrite (SM4500NO3-E)	Ammonia (SM4500NH3)	NUMBER OF CONTAINERS	COMMENTS
1	CW-02D-014	10-18-07	0738	groundwater	X	X	X	X	X	4	
2	CW-02M-014	"	0825	"	X	X	X	X	X	4	
3	CW-03D-014	"	0940	"	X	X	X	X	X	4	
4	CW-03M-014	"	1040	"	X	X	X	X	X	4	
5	CW-04M-014	"	1210	"	X	X	X	X	X	4	
6	CW-04D-014	"	1318	"	X	X	X	X	X	4	
7	MW-91-014	"	1225	"	X	X	X	X	X	4	

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Barry Collom	CH2M Hill	10-18-07 1520
Signature (Received)	Rafael Davila	T.L.I	10-18-07 15:20
Signature (Relinquished)			
Signature (Received)		EMAX	10/19/07 900
Signature (Relinquished)		EMAX	10/19/07 1500
Signature (Received)	J LUNA	emax	10/19/07 1500

SAMPLE CONDITIONS

RECEIVED COOL ☒ WARM ☐ 3.0°C

CUSTODY SEALED YES ☒ NO ☐

SPECIAL REQUIREMENTS:

1952

Appendix B
Field Data Sheets, Fourth Quarter 2007

Project Name PGE Topock CMP
Job Number 354631.MP.02.CM.00
Field Team 1 Field Conditions sunny, windy, clear

Sampling Event 2007-CMP-014
Date 10/17/07
Page 1 of 1

Well/Sample Number CW-01D-014 **QC Sample ID** NA QC Sample Time NA
Purge Start Time 1405 Purge Method Redi-Flo Ded. Pump No - Used
Flow Cell: Y / N Min. Purge Volume (gal)/(L) 98 Purge Rate (gpm)/(mLpm) 3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below
109.25	1411	18	7.58	6.738	7	5.70	29.70	3.66	4.380	46.0	
109.25	1417	36	7.59	6.740	7	5.70	29.71	3.66	4.381	45.4	
109.26	1423	54	7.64	6.740	6	6.01	30.12	3.66	4.380	43.8	
109.26	1429	72	7.68	6.742	6	6.18	29.89	3.66	4.382	42.6	
109.28	1435	90	7.70	6.747	6	6.29	29.87	3.66	4.385	44.0	
109.27	1438	99	7.71	6.747	6	6.33	29.87	3.66	4.385	44.5	

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 Stablize prior to sampling?		Y	Y	Y	Y	NA	Y	Y	Y	
Previous Field measurement	(5/2/2007)	7.82	8630	0.1	7.5	30.7	0.5		61	
Are measurements consistent with previous?						NA				

Sample Time 1442 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____
Comments: Equipment blank EB-CMP-014-2 collected @ 1450 using TLI supplied water

Initial Depth to Water (ft BTOC): 109.24
Field measured confirmation of Well Depth (ft btoc): ND
WD (Well Depth - from database) ft btoc (300.2)
SWH (Standing Water Height) = WD-Initial Depth 190.96
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 32.5
Three Casing Volumes = 97.5

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 27812

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 1357
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1445
1355	109.24	1450 ~~1445~~	~~1450~~ 109.25	
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 354631.MP.02.CM.00
Field Team 1 Field Conditions Sunny, ~90°F

Sampling Event 2007-CMP-014
Date 10/17/07
Page 1 of 1

Well/Sample Number CW-01M-014 **QC Sample ID** NA QC Sample Time NA

Purge Start Time 1457 Purge Method Redi-Flo Ded. Pump NO

Flow Cell: Y / N Min. Purge Volume (gal)/(L) 42 Purge Rate (gpm)/(mLpm) 3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below
109.05	1500	9	7.75	6.934	8	7.40	29.64	3.78	4.512	44.8	
109.07	1503	18	7.78	6.927	7	7.48	29.66	3.77	4.502	44.6	
109.07	1506	27	7.78	6.904	5	7.66	29.78	3.69	4.488	41.5	
109.08	1509	36	7.79	6.902	5	7.63	29.79	3.76	4.485	43.1	
109.08	1511	42	7.75	6.899	6	7.66	29.80	3.76	4.486	45.2	
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 (5/2/2007)			7.87	8770	0.1	6.44	29.9	0.5		80	
Are measurements consistent with previous?							NA				

Sample Time 1515 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC): 109.00
Field measured confirmation of Well Depth (ft btoc): ~~109.00~~ ND
WD (Well Depth - from database) ft btoc (190)
SWH (Standing Water Height) = WD-Initial Depth 81.00
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 = 41.4

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 27812

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal ~~1447~~ 1450
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1522
~~1440~~ 1448	~~93.02~~ 109.00	1527	109.00	

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 354631.MP.02.CM.00
Field Team 1 Field Conditions clear, dawn

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Well/Sample Number CW-02D-014 **QC Sample ID** NA QC Sample Time NA
Purge Start Time 0647 Purge Method Redi-flo Ded. Pump NO
Flow Cell: Y / N Min. Purge Volume (gal)/(L) 135 Purge Rate (gpm)/(mLpm)

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below
92.61	0654	21	8.07	7.208	7	5.80	28.36	3.94	4.684	101.1	
92.61	0701	42	8.10	7.145	6	6.33	29.85	3.90	4.643	88.6	
92.58	0708	63	8.13	7.068	5	6.83	30.41	3.84	4.588	80.3	
92.59	0715	84	8.11	7.049	7	6.84	30.50	3.84	4.583	73.2	
92.60	0722	105	8.10	7.056	5	6.83	30.57	3.84	4.586	68.2	
92.58	0729	126	8.10	7.058	5	6.83	30.60	3.84	4.587	66.2	
92.57	0732	135	8.10	7.058	5	6.81	30.60	3.84	4.588	66.0	

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	(5/4/2007)	7.93	17100	0.6	5.6	30.73	1		44	
Are measurements consistent with previous?						NA				

Sample Time 0738 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____
Comments: ____

Initial Depth to Water (ft BTOC): 92.52
Field measured confirmation of Well Depth (ft btoc): ND
WD (Well Depth - from database) ft btoc (355)
SWH (Standing Water Height) = WD-Initial Depth 262.48
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 44.7
Three Casing Volumes = 134.1

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 27812

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 0635
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 0745
0633	92.52	0743	92.53	
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 354631.MP.02.CM.00
Field Team 1 Field Conditions sunny, clear

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Well/Sample Number CW-02M-014 **QC Sample ID** NA QC Sample Time NA

Purge Start Time 0753 Purge Method Ref-Flo Ded. Pump NO

Flow Cell: Y / N Min. Purge Volume (gal)/(L) 56 Purge Rate (gpm)/(mLpm) 2

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below
93.04	0757	8	7.46	6.518	6	~~6.48~~ WB 1.93	29.12	3.50	4.211	67.4	
93.03	0801	16	7.67	6.569	5	~~1.20~~ WB ~~5.67~~	29.59	3.56	4.267	55.3	
93.03	0805	24	7.80	6.535	5	0.92	29.75	3.54	4.239	46.4	
93.03	0809	32	7.82	6.521	4	0.92	29.75	3.53	4.238	45.8	
93.03	0813	40	7.82	6.514	4	0.92	29.73	3.53	4.234	43.0	
93.02	0817	48	7.82	6.510	4	0.90	29.73	3.53	4.231	40.9	
93.03	0821	56	7.82	6.510	4	0.91	29.79	3.53	4.231	39.2	

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 (5/4/2007)	7.73	16800	0.1	2.46	29.66	1.1		12
Are measurements consistent with previous?					NA			

Sample Time 0825 Sample Location: pump tubing X well port _____ spigot _____ bailer _____ other _____

Comments: _____

Initial Depth to Water (ft BTOC): 92.84
Field measured confirmation of Well Depth (ft btoc): ND
WD (Well Depth - from database) ft btoc (202)
SWH (Standing Water Height) = WD-Initial Depth 109.16
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 18.6
Three Casing Volumes = 55.8

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 27812

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 0747
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 0831
0746	92.84	0836	9.88	
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 354631.MP.02.CM.00
Field Team 1 Field Conditions clear, sunny

Sampling Event 2007-CMP-014
Date 10/18/07
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Well/Sample Number CW-03D-014 **QC Sample ID** NA QC Sample Time ND

Purge Start Time 0850 Purge Method Redi-Flo Ded. Pump NO

Flow Cell: Y / N Min. Purge Volume (gal)/(L) 135 Purge Rate (gpm)/(mLpm) 3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below
77.43	0857	21	8.03	9.423	4	0.49	29.38	5.22	6.092	35.9	
77.37	0904	42	7.98	8.742	5	3.60	30.12	4.74	5.568	35.3	
77.39	0911	63	7.99	8.343	4	4.99	30.46	4.60	5.422	40.9	
77.35	0918	84	7.97	8.342	4	5.03	30.50	4.60	5.422	37.8	
77.37	0925	105	7.97	8.341	5	5.04	30.55	4.60	5.422	36.0	
77.37	0932	126	7.97	8.339	5	5.02	30.56	4.59	5.423	38.8	
77.37	0935	135	7.97	8.341	4	5.03	30.61	4.59	5.421	40.1	

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 (5/2/2007)	7.91	14400	0.1	4.09	30.6	0.8		-15	
Are measurements consistent with previous?					NA				

Sample Time 0940 Sample Location: pump tubing X well port _____ spigot _____ bailer _____ other _____

Comments: _____

Initial Depth to Water (ft BTOC): 77.36
Field measured confirmation of Well Depth (ft btoc): ND
WD (Well Depth - from database) ft btoc (340)
SWH (Standing Water Height) = WD-Initial Depth 262.64
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 44.7
Three Casing Volumes = 134.1

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 27812

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 0843
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 0946
0841	77.50	0951	77.37	

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 354631.MP.02.CM.00
Field Team 1 Field Conditions sunny, clear, windy

Sampling Event 2007-CMP-014
Date 10/18/07
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Well/Sample Number CW-03M-014 **QC Sample ID** ~~MW-01-014~~ NA QC Sample Time NA

Purge Start Time 0959 Purge Method Redi-Flo Ded. Pump No

Flow Cell: (Y) / N Min. Purge Volume (gal)/(L) 74 Purge Rate (gpm)/(mLpm) 2

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below
78.00	1005	12	7.61	8.477	29	0.14	29.35	4.75	5.577	-27.8	
78.00	1011	24	7.62	8.444	9	0.37	29.72	4.67	5.480	14.7	
77.97	1017	36	7.67	8.311	6	0.36	29.79	4.59	5.406	9.9	
77.97	1023	48	7.61	8.286	6	0.36	29.81	4.57	5.386	14.4	
77.98	1029	60	7.66	8.269	7	0.36	29.80	4.56	5.375	8.1	
77.98	1036	74	7.68	8.258	6	0.35	29.82	4.55	5.367	7.6	
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	NA	Y	Y	Y	
Previous Field measurement (5/2/2007)			7.7	11200	0.1	2.79	30	0.6		-54	
Are measurements consistent with previous?							NA				

Sample Time 1040 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC): 77.95
Field measured confirmation of Well Depth (ft btoc): ND
WD (Well Depth - from database) ft btoc (222)
SWH (Standing Water Height) = WD-Initial Depth 144.05
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 24.49
Three Casing Volumes = 73.47

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 27812

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 0953
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1044
0951	77.95	1049	77.95	
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 354631.MP.02.CM.00
Field Team 1 Field Conditions windy, sunny, clear

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Well/Sample Number CW-04D-014 **QC Sample ID** NA QC Sample Time NA

Purge Start Time 1233 Purge Method Rect. flo Ded. Pump NO

Flow Cell: (Y) / N Min. Purge Volume (gal)/(L) 124 Purge Rate (gpm)/(mLpm) 3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below
62.01	1240	21	7.77	8.052	6	4.03	29.55	4.43	5.232	30.1	
62.13	1247	42	7.85	8.101	5	4.81	30.19	4.57	5.426	36.7	
62.17	1254	63	7.84	10.04	5	2.72	30.34	5.61	6.525	19.7	
62.15	1301	84	7.85	~~10.52~~ 10.08 WD	5	2.65	30.39	5.64	6.552	14.4	
62.17	1308	105	7.84	10.11	6	2.62	30.44	5.66	6.577	13.8	
62.17	1315	126	7.84	10.14	5	2.59	30.42	5.67	6.589	19.8	

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	Y	Y	
Previous Field measurement (5/1/2007)	7.65	12300	0.1	4.21	30.46	0.7		-13	
Are measurements consistent with previous?					NA				

Sample Time 1318 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC): 61.70
Field measured confirmation of Well Depth (ft btoc): ND
WD (Well Depth - from database) ft btoc (303)
SWH (Standing Water Height) = WD-Initial Depth 241.3
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 41.1
Three Casing Volumes = 123.3

Measure Point: (Well TOC) Steel Casing WATER LEVEL METER SERIAL NUMBER: 27812

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 1230
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1323
1228	61.70	1328	61.75	
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 354631.MP.02.CM.00
Field Team 1 Field Conditions windy, sunny, clear

Sampling Event 2007-CMP-014
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Well/Sample Number CW-04M-014 **QC Sample ID** ~~NA~~ MW-91-014 QC Sample Time ~~NA~~ Blk 1225

Purge Start Time 1138 Purge Method Redi-flo Ded. Pump No

Flow Cell: (Y) / N Min. Purge Volume (gal)/(L) 56 Purge Rate (gpm)/(mLpm) 2

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below
61.92	1142	8	7.67	5.845	14	0.86	28.94	3.15	3.801	22.1	
61.92	1146	16	7.72	5.814	6	0.82	29.39	3.12	3.766	23.8	
61.92	1150	24	7.71	5.750	8	0.83	29.41	3.09	3.737	28.0	
61.91	1154	32	7.73	5.743	9	0.83	29.42	3.09	3.734	32.9	
61.91	1158	40	7.69	5.740	5	0.81	29.44	3.09	3.733	30.2	
61.90	1202	48	7.70	5.743	5	0.81	29.46	3.09	3.735	31.9	
61.90	1206	56	7.70	5.744	5	0.81	29.49	3.09	3.734	32.5	

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 Stablize prior to sampling?	Y	Y	Y	Y	NA	Y	Y	Y	
Previous Field measurement (5/1/2007)	7.5	5540	0.1	3.79	29.76	0.3		17	
Are measurements consistent with previous?					NA				

Sample Time 1210 Sample Location: pump tubing X well port _____ spigot _____ bailer _____ other _____

Comments: _____

Initial Depth to Water (ft BTOC): 61.73
Field measured confirmation of Well Depth (ft btoc): ND
WD (Well Depth - from database) ft btoc (169.8)
SWH (Standing Water Height) = WD-Initial Depth 108.07
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 18.4
Three Casing Volumes = 55.2

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 27812

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 1134
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1222
1132	61.73	1227	61.74	
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 354631.MP.02.CM.00
Field Team 1 Field Conditions Sunny ~85°F

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Well/Sample Number OW-01D-014 **QC Sample ID** NA QC Sample Time NA
Purge Start Time 1207 Purge Method Redi-Flo Ded. Pump No, ded. tubing
Flow Cell: Y / N Min. Purge Volume (gal)/(L) 94 Purge Rate (gpm)/(mLpm) 3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below
95.50	1214	21	7.66	6.215	5	5.25	30.11	3.36	4.040	59.4	
95.45	1221	42	7.64	6.282	8	5.57	30.16	3.39	4.077	54.4	
95.57	1228	63	7.68	6.279	6	6.17	30.16	3.39	4.081	47.5	
95.52	1236	84	7.69	6.268	6	6.28	30.17	3.39	4.074	44.7	
95.43	1243	105	7.69	6.261	4	6.38	30.15	3.38	4.069	46.0	

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 (8/9/2007)	7.12	6440	1.8	7.13	29.99	0.349		55	
Are measurements consistent with previous?					NA				

Sample Time 1247 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____
Comments: ____

Initial Depth to Water (ft BTOC): 93.02
Field measured confirmation of Well Depth (ft btoc): ____
WD (Well Depth - from database) ft btoc (277)
SWH (Standing Water Height) = WD-Initial Depth 183.98
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 = 93.9

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 51690030

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 1141
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1302
1140	93.02	1307	93.05	
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 354631.MP.02.CM.00
Field Team 1 Field Conditions Sunny ~85°F

Sampling Event 2007-CMP-014
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Well/Sample Number OW-01M-014 **QC Sample ID** NA QC Sample Time NA
Purge Start Time 1325 Purge Method Redi-Flo Ded. Pump NO, ded. tubing
Flow Cell: Y / N Min. Purge Volume (gal)/(L) 47.16 Purge Rate (gpm)/(mLpm) 3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below
93.65	1329	12	7.52	6.395	4	6.97	29.43	3.38	4.091	46.3	
93.62	1333	24	7.54	6.591	4	7.34	29.97	3.57	4.281	26.9	
93.42	1337	36	7.55	6.594	4	7.34	30.02	3.58	4.290	25.1	
93.45	1341	48	7.59	*6.599	4	7.33	30.02	3.57	4.284	24.6	
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?			yes	yes	yes	yes	NA	yes	yes	yes	
Previous Field measurement (8/9/2007)			7.77	6445	2.2	5.99	30.51	0.349		55.3	
Are measurements consistent with previous?							NA				

Sample Time 1345 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____
Comments: * measured unpreserved aliquot in lab @ IM-3 = ~~6.62~~ pH 7.62

Initial Depth to Water (ft BTOC): 93.36
Field measured confirmation of Well Depth (ft btoc): ND
WD (Well Depth - from database) ft btoc (185.8)
SWH (Standing Water Height) = WD-Initial Depth 92.44
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 15.72
Three Casing Volumes = 47.16

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 51690030

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 1317
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1355
1316	93.36	1400	93.38	
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 354631.MP.02.CM.00
Field Team 1 Field Conditions Sunny ~85°F

Sampling Event 2007-CMP-014
Date 10/16/07
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Well/Sample Number OW-01S-014 **QC Sample ID** NA QC Sample Time NA

Purge Start Time 1412 Purge Method Redi-Flo Ded. Pump NO, dal. tubing

Flow Cell: (Y) / N Min. Purge Volume (gal)/(L) 10.5 Purge Rate (gpm)/(mLpm) 0.5

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below
93.50	1418	3	7.70	2.307	5	5.31	29.50	1.17	1.498	3.1	
93.33	1424	6	7.67	2.237	6	5.34	29.50	1.14	1.452	4.9	
93.36	1430	9	7.67	2.216	6	5.41	29.51	1.12	1.443	5.3	
93.38	1436	12	7.67	2.192	6	5.53	29.52	1.11	1.421	5.4	

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 Stablize prior to sampling?	Y	Y	Y	Y	NA	Y	Y	Y	
Previous Field measurement (8/9/2007)	7.69	2337	3.1	4.29	30.81	0.119		65.6	
Are measurements consistent with previous?					NA				

Sample Time 1440 Sample Location: pump tubing X well port _____ spigot _____ bailer _____ other _____

Comments: _____

Initial Depth to Water (ft BTOC): 93.46
Field measured confirmation of Well Depth (ft btoc): N.D
WD (Well Depth - from database) ft btoc (113.5)
SWH (Standing Water Height) = WD-Initial Depth _____
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 3.5
Three Casing Volumes = 10.5

Measure Point: (Well TOC) Steel Casing WATER LEVEL METER SERIAL NUMBER: 51690030

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 1400
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1441
	93.46	1446	93.46	

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 354631.MP.02.CM.00
Field Team 1 Field Conditions sunny, windy

Sampling Event 2007-CMP-014
Date ~~10/16/07~~ 10/17/07
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Well/Sample Number OW-02D-014 **QC Sample ID** NA QC Sample Time
Purge Start Time 0854 Purge Method Redi-flo Ded. Pump NO
Flow Cell: Y / N Min. Purge Volume (gal)/(L) 127 Purge Rate (gpm)/(mLpm) 3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below
91.64	0901	21	7.53	6.617	7	6.78	30.02	3.59	4.302	86.1	
91.69	0908	42	7.58	6.629	6	6.86	30.58	3.59	4.309	81.9	
91.70	0915	63	7.64	7.170	5	7.71	30.50	3.91	4.662	75.5	
91.69	0922	84	7.64	7.183	5	7.76	30.51	3.92	4.669	69.3	
91.68	0929	105	7.63	7.182	6	7.75	30.53	3.91	4.668	72.0	
91.70	0937	127	* 7.58	7.181	7	7.77	30.54	3.91	4.668	71.7	
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 (8/9/2007)			7.65	6463	1.9	6.17	31.34	0.349		113.5	
Are measurements consistent with previous?							NA				

Sample Time 0942 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____
Comments: Measured unpreserved aliquot at IM-3 lab, measures 7.61 pH

Initial Depth to Water (ft BTOC): 91.48
Field measured confirmation of Well Depth (ft btoc):
WD (Well Depth - from database) ft btoc (340)
SWH (Standing Water Height) = WD-Initial Depth 248.52
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 42.3
Three Casing Volumes = 126.9

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 27812

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 0844
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 0951
0843	91.48	0956	91.52	
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 354631.MP.02.CM.00
Field Team 1 Field Conditions Sunny ~85°F

Sampling Event 2007-CMP-014
Date 10/16/07
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Well/Sample Number OW-02M-014 **QC Sample ID** NA QC Sample Time NA
Purge Start Time 1502 Purge Method Redi-Flo Ded. Pump NO, ded. tubing
Flow Cell (Y) / N Min. Purge Volume (gal)/(L) 61 Purge Rate (gpm)/(mLpm) 3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below
91.65	1506	12	7.46	6.601	5	6.94	30.40	3.58	4.291	45.2	
91.67	1510	24	7.56	6.606	5	7.08	30.59	3.58	4.295	44.6	
90.82	1514	36	7.60	6.607	5	7.11	30.80	3.58	4.296	44.9	
91.68	1518	48	7.61	6.607	6	7.12	30.80	3.58	4.294	45.0	
91.78	1523	61	7.61	6.605	6	7.12	30.79	3.58	4.294	45.9	

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	(8/9/2007)	7.6	6432	2.1	6.46	30.37	0.348		74.6	
Are measurements consistent with previous?						NA				

Sample Time 1528 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____
Comments: Equipment blank @ 1540 EB-CMP-014-01 collected using TLI supplied water

Initial Depth to Water (ft BTOC): 91.50
Field measured confirmation of Well Depth (ft btoc):
WD (Well Depth - from database) ft btoc (210.3)
SWH (Standing Water Height) = WD-Initial Depth 118.8
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 20.1
Three Casing Volumes = 60.3

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 57690030

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 1452
Time	Initial DTW	Time	Final DTW	Time of Reinstallation
1450	91.50			
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 354631.MP.02.CM.00
Field Team 1 Field Conditions Sunny ~70°F

Sampling Event 2007-CMP-014
Date ~~10/16/07~~ 10/17/07
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Well/Sample Number OW-02S-014 **QC Sample ID** NA QC Sample Time NA
Purge Start Time 0812 Purge Method Redi-Flo Ded. Pump No
Flow Cell: (Y) N Min. Purge Volume (gal)/(L) 15 Purge Rate (gpm)/(mLpm) 2.0

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below
92.79	0813	2	7.85	1.748	10	9.52	28.38	0.88	1.135	131.7	
92.80	0814	4	7.86	1.745	9	9.51	28.56	0.88	1.134	117.6	
92.82	0815	6	7.86	1.745	9	9.52	28.66	0.88	1.134	103.6	
92.82	0816	8	7.86	1.745	9	9.51	28.70	0.88	1.134	99.5	
92.82	0817	10	7.86	1.745	9	9.50	28.73	0.88	1.134	94.1	
92.83	0818	12	7.86	1.744	8	9.52	28.74	0.88	1.134	92.0	
92.83	0819	14	7.86	1.744	8	9.52	28.76	0.88	1.134	89.5	
92.82	0820	16	7.85	1.744	8	9.51	28.77	0.88	1.134	89.2	
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 (8/9/2007)			7.95	1703	4.1	7.67	29.47	0.85		52.8	
Are measurements consistent with previous?							NA				

Sample Time 0826 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____
Comments: ____

Initial Depth to Water (ft BTOC): 92.32
Field measured confirmation of Well Depth (ft btoc): ND
WD (Well Depth - from database) ft btoc (121)
SWH (Standing Water Height) = WD-Initial Depth 28.68
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 4.9
Three Casing Volumes = 14.7

Measure Point: (Well TOC) Steel Casing WATER LEVEL METER SERIAL NUMBER: 27812

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 0752
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 0835
0750	92.32	0840	92.35	
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 354631.MP.02.CM.00
Field Team 1 Field Conditions sunny, clear

Sampling Event 2007-CMP-014
Date ~~10/16/07~~ 10/17/07
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Well/Sample Number OW-05D-014 **QC Sample ID** NA QC Sample Time NA

Purge Start Time 1049 Purge Method Redi-Flo Ded. Pump NO

Flow Cell: Y / N Min. Purge Volume (gal)/(L) 131 Purge Rate (gpm)/(mLpm) 3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below
94.98	1056	21	7.53	6.805	5	4.75	29.49	3.70	4.424	72.9	
94.90	1103	42	7.58	6.874	7	6.55	29.46	3.75	4.481	66.0	
94.92	1110	63	7.58	7.169	7	7.54	30.54	3.91	4.661	72.5	
95.03	1117	84	7.59	7.175	7	7.54	30.63	3.91	4.664	72.1	
95.05	1124	105	7.61	7.178	6	7.55	30.68	3.91	4.666	66.4	
95.05	1131	126	7.62	7.175	6	7.54	30.68	3.91	4.665	66.5	
95.05	1133	132	7.62	7.175	6	7.55	30.67	3.91	4.664	66.4	

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 Stablize prior to sampling?	X	Y	Y	Y	NA	Y	Y	Y
Previous Field measurement (8/9/2007)	7.53	6593	1.7	6.01	30.45	0.357		78.8
Are measurements consistent with previous?					NA			

Sample Time 1140 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC): 94.69
Field measured confirmation of Well Depth (ft btoc): ND
WD (Well Depth - from database) ft btoc (350)
SWH (Standing Water Height) = WD-Initial Depth 255.31
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 43.5
Three Casing Volumes = 130.5

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 27812

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 1041
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1154
1039	94.69	1159	94.75	

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 354631.MP.02.CM.00
Field Team 1 Field Conditions clear, sunny, windy

Sampling Event 2007-CMP-014
Date 10/17/07
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Well/Sample Number OW-05M-014 **QC Sample ID** MW-90-014 QC Sample Time 1249

Purge Start Time 1215 Purge Method Redi-Flo Ded. Pump No

Flow Cell: (Y) / N Min. Purge Volume (gal)/(L) 80 Purge Rate (gpm)/(mLpm) 3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below
94.71	1220	15	7.52	6.701	6	4.67	29.26	3.64	4.355	63.8	
94.72	1225	30	7.57	6.903	5	8.41	29.11	3.76	4.487	54.1	
94.80	1230	45	7.61	6.901	6	8.76	29.10	3.76	4.486	50.7	
94.84	1235	60	7.61	6.901	6	8.81	29.08	3.76	4.486	49.4	
94.79	1240	75	7.61	6.900	6	8.82	29.09	3.76	4.485	50.1	
94.78	1242	81	7.60	6.900	6	8.82	29.10	3.76	4.485	49.9	

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 (8/8/2007)	7.63	6613	Y 2	7.62	29.05	0.359	Y	112.5	
Are measurements consistent with previous?					NA				

Sample Time 1247 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC): 94.33
Field measured confirmation of Well Depth (ft btoc): ND
WD (Well Depth - from database) ft btoc (250.3)
SWH (Standing Water Height) = WD-Initial Depth 155.97
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 26.6
Three Casing Volumes = 79.8

Measure Point: (Well TOC) Steel Casing WATER LEVEL METER SERIAL NUMBER: 27812

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 1205
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1305
1203	94.33	1310	94.39	

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 354631.MP.02.CM.00
Field Team 1 Field Conditions Sunny ~90 °F

Sampling Event 2007-CMP-014
Date 10/17/07
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Well/Sample Number OW-05S-014 **QC Sample ID** NA QC Sample Time NA

Purge Start Time 1321 Purge Method Redi-Flo Ded. Pump No

Flow Cell: Y / N Min. Purge Volume (gal)/(L) 8 Purge Rate (gpm)/(mLpm) 1

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below
95.08	1322	1	7.77	1.715	12	8.36	28.80	0.86	1.114	48.7	
95.08	1323	2	7.73	1.716	17	8.25	29.01	0.86	1.111	40.5	
95.09	1325	4	7.74	1.691	12	8.20	29.27	0.85	1.102	32.9	
95.10	1326	5	7.75	1.679	10	8.17	29.37	0.84	1.093	29.9	
95.10	1327	6	7.75	1.672	9	8.23	29.41	0.83	1.083	32.2	
95.05	1329	8	7.75	1.656	9	8.25	29.41	0.83	1.078	32.4	
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 Stablize prior to sampling?			Y	Y	Y	Y	NA	Y	Y	Y	
Previous Field measurement (8/9/2007)			7.86	1602	4.2	6.47	29.42	0.8		119.9	
Are measurements consistent with previous?							NA				

Sample Time 1335 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC): 95.05

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

WD (Well Depth - from database) ft btoc (110.3)

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

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

One Casing Volume = D*SWH 2.6

Three Casing Volumes = 7.8

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 27812

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 1315
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1342
1312	95.05	~~1334~~ 1347	95.05	

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