Topock Project Executive Abstract

Document Title: Groundwater and Surface Water Monitoring Report, Fourth Quarter 2008 and Annual Summary, PG&E Topock Compressor Station, Needles, California

Submitting Agency: DTSC

Final Document? **X** Yes No

Date of Document: March 9, 2008

Who Created this Document?: (i.e. PG&E, DTSC, DOI, Other)

PG&E

Priority Status: **HIGH** ☐ **MED** **X LOW**
Is this time critical? ☐ Yes ☒ No

Type of Document:
☐ Draft **X** Report ☐ Letter ☐ Memo

☐ Other / Explain:

Action Required:
X Information Only Review & Comment
Return to: _____

By Date:_____
☐ Other / Explain:

What does this information pertain to?
☐ Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA)/Preliminary Assessment (PA)
X RCRA Facility Investigation (RFI)/Remedial Investigation (RI) (including Risk Assessment)
☐ Corrective Measures Study (CMS)/Feasibility Study (FS)
☐ Corrective Measures Implementation (CMI)/Remedial Action
☐ California Environmental Quality Act (CEQA)/Environmental Impact Report (EIR)
☐ Interim Measures
☐ Other / Explain:

Is this a Regulatory Requirement?
X Yes
☐ No
If no, why is the document needed?

What is the consequence of NOT doing this item? What is the consequence of DOING this item?

This report is a requirement by DTSC.

Other Justification/s:
☐ Permit ☐ Other / Explain:

Brief Summary of attached document:

The Groundwater and Surface Water Monitoring (GMP) Report presents results of groundwater and surface water monitoring activities conducted at the Topock site. During the fourth quarter 2008, the GMP monitoring activities included: 1) a quarterly sampling event on December 8-12, 2008, 2) one monthly sampling event on November 6-7, and 3) a low-river-level river sampling event on December 3-4, during which unfiltered Cr(VI) and Cr(T) samples were collected to provide data for possible risk assessment use. In addition to reporting fourth quarter results, this document summarizes data from all of 2008. Key results and observations are:

1. Overall, the fourth quarter 2008 chromium results are in the range of concentrations observed during the prior 2007 and 2008 sampling events.
2. Concentrations are generally decreasing or stable in floodplain monitoring wells.

Written by: PG&E

Recommendations include:

1. It is recommended that an analyte and sampling frequency evaluation be completed to determine if additional optimizations in the plume monitoring network are timely, given the completion of the Groundwater RFI/RI and the transitioning into the CMS/FS stage.
2. Based on the results of unfiltered Cr(VI) and Cr(T) samples and the conclusions of the Draft Groundwater Risk Assessment, it is recommended that collection and analysis of the unfiltered surface water samples be discontinued after the January 2009 RMP sampling event.

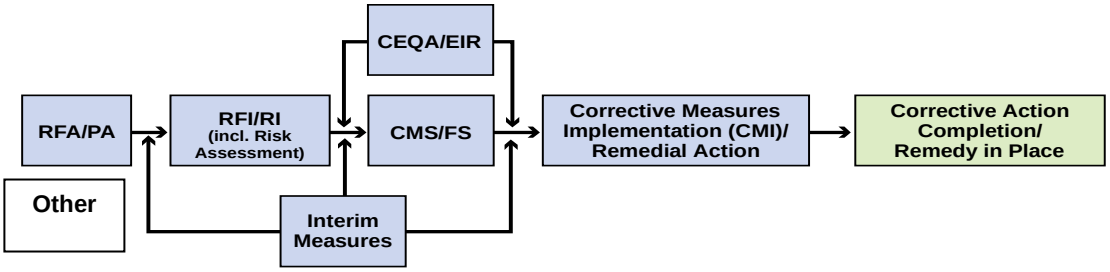
How is this information related to the Final Remedy or Regulatory Requirements:

Data collected from the GMP supported the groundwater RFI/RI, which in turn provided information for the CMS/FS.

Other requirements of this information?
None

Related Reports and Documents:

Click any boxes in the Regulatory Road Map (below) to be linked to the Documents Library on the DTSC Topock Web Site (www.dtsc-topock.com). **The link to the Documents Library is currently UNDER CONSTRUCTION.**



Legend
RFA/PA – RCRA Facility Assessment/Preliminary Assessment
RFI/RI – RCRA Facility Investigation/CERCLA Remedial Investigation (including Risk Assessment)
CMS/FS – RCRA Corrective Measure Study/CERCLA Feasibility Study
CEQA/EIR – California Environmental Quality Act/Environmental Impact Report

Pacific Gas and Electric Company

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March 9, 2009

Mr. Aaron Yue
Project Manager
California Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, CA 90630

Subject: Groundwater and Surface Water Monitoring Report, Fourth Quarter 2008 and Annual Summary
PG&E Topock Compressor Station, Needles, California

Dear Mr. Yue:

Enclosed is the Groundwater and Surface Water Monitoring Report, Fourth Quarter 2008 and Annual Summary for the Pacific Gas And Electric Company (PG&E) Topock Compressor Station. This report provides results for the quarterly monitoring event conducted from December 8 through December 12, 2008 at 40 groundwater monitoring wells and two extraction wells, as well as results from the monthly sampling event performed in November 2008. This report also presents results for the shoreline and in-channel Colorado River sampling conducted during December 2008.

In addition to presenting the quarterly data from the fourth quarter 2008, this report also summarizes results from the 2008 calendar year.

If you have any questions on the groundwater and surface water monitoring report, please call me at (805) 234-2257.

Sincerely,

Yvonne Meeks

Enclosure

cc: Chris Guerre/DTSC
Kathie Shievelbein/DTSC
Pam Innis/DOI
Karen Baker/DTSC

Susan Young/CA-SLC
Nancy Garcia/AZ-SLD

Report

Groundwater and Surface Water Monitoring Report, Fourth Quarter 2008 and Annual Summary

PG&E Topock Compressor Station Needles, California

Prepared for

California Department of Toxic Substances Control

On Behalf of

Pacific Gas and Electric Company

March 2009

CH2MHILL
155 Grand Avenue, Suite 1000
Oakland, CA 94612

Groundwater and Surface Water Monitoring Report
Fourth Quarter 2008 and Annual Summary

PG&E Topock Compressor Station
Needles, California

Prepared for

California Department of Toxic Substances Control

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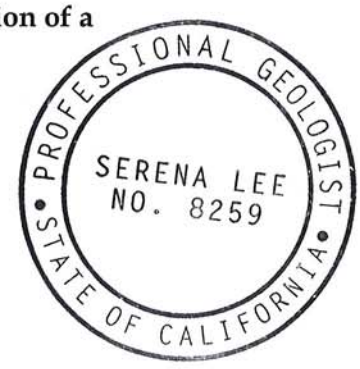
Pacific Gas and Electric Company

This report was prepared under the supervision of a

California Professional Geologist



Serena Lee
Professional Geologist, PG No. 8259

Jay Piper
Project Manager

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Acronyms and Abbreviations

µg/L	micrograms per liter
ADEQ	Arizona Department of Environmental Quality
CCR	California Code of Regulations
Cr(T)	total dissolved chromium
Cr(VI)	hexavalent chromium
DOI	United States Department of the Interior
DTSC	California Department of Toxic Substances Control
GMP	Groundwater and Surface Water Monitoring Program
IM	Interim Measure
MCL	maximum contaminant level
mg/L	milligrams per liter
PG&E	Pacific Gas and Electric Company
RCRA	Resource Conservation and Recovery Act
RFI/RI	RCRA facility investigation/remedial investigation
USEPA	United States Environmental Protection Agency

1.0 Introduction

This report presents the results of the fourth quarter 2008 groundwater and surface water monitoring activities conducted at Pacific Gas and Electric Company's (PG&E) Topock Compressor Station under the Topock Groundwater and Surface Water Monitoring Program (GMP). In addition, this report also serves as an annual report and provides a summary of groundwater and surface water monitoring results for samples collected in 2008 under the Topock GMP. Further, this report provides recommended changes to the GMP for future monitoring activities.

The Topock GMP is part of a Resource Conversation and Recovery Act (RCRA) facility investigation (RFI) being performed under a Corrective Action Consent Agreement issued by the California Department of Toxic Substances Control (DTSC) in 1996 for the Topock site (United States Environmental Protection Agency [USEPA] ID No. CAT080011729). The Topock Compressor Station is located in eastern San Bernardino County, 15 miles southeast of the city of Needles, California, as shown in Figure 1.

2.0 Overview of Monitoring Program

This section provides a brief history of the monitoring program at the Topock Compressor Station, as well as an overview of the current monitoring and reporting activities.

2.1 Objectives of the GMP

The Topock GMP was initiated in 1998 as a continuation of the RFI groundwater investigations. The purpose of the Topock RFI is to identify and evaluate the nature and extent of hazardous waste and constituent releases at the compressor station. Since 1996, there have been six phases of investigation at the Topock site to collect data for the RFI; these phases have included well installation, pore water and sediment sampling, and ongoing groundwater and surface water sampling. Groundwater monitoring data collected between July 1997 and October 2007 are presented in the approved *Revised Final RCRA Facility Investigation and Remedial Investigation Report, Volume 2 – Hydrogeological Characterization and Results of Groundwater and Surface Water Investigation*, dated February 10, 2009 (Groundwater RFI/RI Report) (CH2M HILL, 2009a). The Groundwater RFI/RI Report was approved by DTSC on February 4, 2009 and by the United States Department of the Interior (DOI) on February 9, 2009.

Currently, PG&E is implementing an Interim Measure (IM) at the Topock site that consists of groundwater extraction for hydraulic control of the groundwater plume boundaries in the Colorado River floodplain and management of extracted groundwater. The IM facilities include a groundwater extraction system, conveyance piping, a groundwater treatment plant, and an injection well field for discharge of the treated groundwater. Concurrent with the GMP, PG&E also maintains three separate monitoring programs to monitor the effectiveness and regulatory compliance of the IM operations. These programs include:

- The Performance Monitoring Program in the floodplain area near the active extraction system.
- The Compliance Monitoring Program in the injection area near the active injection system.
- Process monitoring within the treatment plant.

Data from the IM monitoring programs are reported separately from the GMP. PG&E is also currently implementing two in-situ pilot studies at the Topock site. Separate monitoring programs have been established to evaluate the performance of the in-situ pilot studies.

2.2 Changes to the Groundwater and Surface Water Monitoring Program in 2008

This section describes the changes to the GMP in calendar year 2008.

2.2.1 DTSC letter dated January 19, 2008

In a letter dated January 19, 2008 (DTSC, 2008a), DTSC addressed the hexavalent chromium [Cr(VI)] analysis method change request proposed in the technical memorandum titled *Hexavalent Chromium Holding Time Study Results*, which was prepared by CH2M HILL for PG&E. DTSC approved the method change for the analysis of Cr(VI) in groundwater, surface water, and pore water samples precipitated by the adoption and promulgation of a final rule by the USEPA that modified the maximum holding time for the analytical testing procedures from 24 hours to 28 days.

2.2.2 DTSC letter dated July 28, 2008

In a letter dated July 28, 2008 (DTSC, 2008b), DTSC authorized a number of changes to the surface water monitoring of the Colorado River. These changes include:

- Sampling Frequency:
  - Maintained quarterly sampling with three events during high river level.
  - Eliminated one of the three low river level (winter) events.
- Mid-depth sample collection from in-channel river locations was discontinued.
- Shoreline sampling locations:
  - Eliminated seven of the nine locations due to data overlap with the shallow in-channel locations. Shoreline location R-19, which had not been sampled since 2004, was added back into the sampling program. Shoreline locations R-23, R-28, and RRB were retained.
  - Moved in-channel station C-R22 to near the middle pier of the former Red Rock Bridge and renamed the station C-R22-A, as shown in Figure 2.

2.2.3 DTSC letter dated September 17, 2008 and DOI letter dated September 17, 2008

In response to DTSC (DTSC, 2008c) and DOI (DOI, 2008) letters dated September 17, 2008, a new in-channel surface water location C-BNS was added to the river monitoring program. The new location is presented in Figure 2 and was sampled for the first time on December 3, 2008.

2.2.4 DTSC Letter Dated October 30, 2008

As directed by DTSC in an October 30, 2008 letter (DTSC, 2008d), three quarters of unfiltered samples for Cr(VI) and total chromium [Cr(T)] were added to shallow in-channel and shoreline river locations for the potential use in the risk assessment. In addition, samples were collected from two new locations in the Topock Marsh: TM-1 and TM-2, as shown in Figure 2.

2.2.4.1 Arizona Department of Environmental Quality letter dated November 4, 2008

In a letter dated November 4, 2008, the Arizona Department of Environmental Quality (ADEQ) approved a quarterly sampling frequency for the eight Arizona wells (MW-54,

MW-55, and MW-56 clusters) per PG&E's request. Analytes would include Cr(T), Cr(VI), and specific conductivity, with field measurement of pH, temperature, turbidity, and oxidation-reduction potential. Laboratory results will be transmitted to ADEQ via email (ADEQ, 2008) and will be included in the quarterly GMP reports.

2.3 Current Groundwater and Surface Water Monitoring Program Monitoring Activity

Figure 2 shows the locations and sampling frequencies of the monitoring wells and surface water sampling locations in the GMP as of December 2008. Table 1 summarizes information on well construction and sampling methods for all wells in the GMP and other monitoring wells at the site. There are a total of 108 monitoring wells and two active extraction wells that fall under the GMP sampling schedule.

As of December 2008, the GMP consists of sample collection at groundwater monitoring wells and surface water sampling stations according to the following schedule:

- One hundred and eight of the site monitoring wells are sampled during biennial sampling events (once every 2 years).
- Ninety-two of the monitoring wells are sampled during annual sampling events.
- Sixty-two of the monitoring wells are sampled during semiannual sampling events (twice a year).
- Thirty-eight monitoring wells are sampled during quarterly sampling events.
- Four shoreline surface water stations (R-19, R-23, R-28, and RRB) and 12 in-channel surface water stations (C-BNS, C-CON, C-I-3, C-MAR, C-NR1, C-NR3, C-NR4, C-R22A, C-R27, C-TAZ, C-TM-1, and C-TM-2) are sampled quarterly during the year and twice during low-river stages. These locations are sampled once during each of the first, second, and third quarters and sampled twice during low-river stages (approximately November through February).
- Five monitoring wells (MW-34-80, MW-34-100, MW-44-115, MW-44-125, and MW-46-175) on the floodplain and two active extraction wells (PE-1 and TW-3D) are sampled monthly.

2.4 Reporting

The data from the Topock GMP are reported quarterly. Beginning with the second quarter 2008 report, with DTSC's approval, these reports were modified to be letter reports, which provide a succinct summary of quarterly activities and a data summary, without discussion of observations or data trends. A summary and discussion for the year are consolidated in an annual report that is included with the fourth quarter report. In addition to this 2008 annual report, data from the 2008 reporting period have been reported in the following documents:

- *Groundwater and Surface Water Monitoring Report, First Quarter 2008* reports field activities and data from the first quarter sampling period from January through March 2008 (CH2M HILL, 2008a).
- *Groundwater and Surface Water Monitoring Report, Second Quarter 2008* reports field activities and data from the second quarter sampling period from April through June 2008 (CH2M HILL, 2008b).
- *Groundwater and Surface Water Monitoring Report, Third Quarter 2008* reports field activities and data from the third quarter sampling period from July through September 2008, including the third quarter monitoring event that occurred in early October (CH2M HILL, 2009b).

3.0 Fourth Quarter 2008 Monitoring Activities

This section provides a summary of the monitoring and sampling activities completed during the fourth quarter 2008 reporting period and the specific groundwater and surface water analyses performed.

The sampling procedures, field documentation of sampling, water level measurements, and field water quality monitoring were performed in accordance with the *Sampling, Analysis, and Field Procedures Manual, Revision 1*, dated March 31, 2005 (CH2M HILL, 2005a). Field data sheets and chain-of-custody records are included as Appendix A

The monitoring data presented in this report (Tables 2 through 7) include the results December 2007 through December 2008.

Samples collected from monitoring wells and surface water stations during fourth quarter 2008 were analyzed for Cr(VI), Cr(T), specific conductance, and pH. The analyses were performed by Truesdail Laboratories, Inc., a California-certified analytical laboratory in Tustin, California. Analyses for the monitoring wells in Arizona were performed by Emax Laboratories Inc., an Arizona-certified analytical laboratory in Torrance, California. In accordance with the *Sampling, Analysis, and Field Procedures Manual, Revision 1* (CH2M HILL, 2005a) and subsequent agreements with the DTSC, Cr(VI) and Cr(T) were analyzed using the following analytical methods:

- Method SM 3500 was used for samples collected from monitoring wells where prior monitoring has detected Cr(VI) concentrations above 20 micrograms per liter (µg/L). The minimum reporting limit for Method SM 3500 for undiluted samples is 10 µg/L. This analytical method allows for a 28-day holding time.
- USEPA Method 218.6 was used for all surface water samples and all groundwater samples collected from monitoring wells where prior monitoring did not detect Cr(VI) concentrations above 20 µg/L. However, monthly samples from wells MW-34-80, MW-34-100, MW-44-115, MW-44-125, and MW-46-175 are analyzed using USEPA Method 218.6, even though prior detections exceeded 100 µg/L. The minimum reporting limit for Cr(VI) using USEPA Method 218.6 is 0.2 µg/L for undiluted samples. This analytical method allows for a 28-day holding time.
- Dissolved Cr(T) was analyzed using USEPA Method SW 6010B or Method SW 6020A. Both methods have a reporting limit of 1 µg/L for undiluted samples.

3.1 Summary of Groundwater Monitoring

GMP monitoring activities in fourth quarter 2008 consisted of:

- The fourth quarter GMP monitoring event was conducted from December 8 through 12 and included sampling 38 monitoring wells and two active extraction wells for analysis of Cr(VI), Cr(T), and specific conductance. Arizona wells (MW-54, MW-55, and MW-56 series) were sampled for Cr(VI) and Cr(T) as part of the GMP monitoring beginning in

fourth quarter. Previously, the Arizona wells were sampled monthly as part of the Arizona Field Activities Program.

- A monthly groundwater sampling event was conducted on November 6, 2008 and included sampling of five monitoring wells (MW-34-80, MW-34-100, MW-44-115, MW44-125, and MW-46-175) for Cr(VI) and Cr(T). In addition two extraction wells (PE-1 and TW-3D) were sampled on the same monthly schedule for Cr(VI), Cr(T), and specific conductance.
- The annual monitoring event (third quarter) was conducted in October 2008. While technically held during the fourth quarter, it was considered a third quarter event and was reported in the previous quarterly groundwater monitoring report (CH2M HILL, 2009b). During the October annual event, samples from 86 monitoring wells were analyzed for an extended list of water quality analytes (Appendix B). These analytes are not mandated by regulatory directive but are used to support detailed hydraulic modeling.
- Fifty-four wells are equipped with pressure transducers for the evaluation of groundwater elevations at the site. These transducers are downloaded monthly and the data are presented in the quarterly performance monitoring reports (CH2M HILL, 2008a-d).

3.2 Summary of Surface Water monitoring

Quarterly river sampling was conducted on December 3 and 4, 2008. During this fourth quarter river event, samples were collected from 12 in-channel and four shoreline water sampling locations. Samples were analyzed for Cr(VI), Cr(T), and specific conductance. The 12 in-channel locations were generally sampled at two depths. Samples from C-MAR, C-BNS, C-TM1, and C-TM2 were collected at only one depth.

3.3 Summary of Non-routine Monitoring Activities

There were three activities performed during the fourth quarter 2008 that fall outside the general GMP activities:

- During the August 2, 2007, Technical Workgroup meeting, DTSC requested long-term transducer monitoring at MW-23 and the surrounding area. MW-23 and several wells in the vicinity of MW-23 were equipped with pressure transducers in September 2007. Hydraulic data have been updated through December 2008 and are included as part of a complete summary of results for MW-23, which is presented in Appendix C.
- From October 2007 through October 2008, a subset of 10 wells were sampled for California Code of Regulations (CCR) Title 22 metals, as requested by DTSC. After October 2008, per discussion with DTSC on November 25, 2008, Title 22 metals analysis was discontinued, with the exception of well locations MW-22 and MW-12, pending further evaluation of the metals data by DTSC. During the fourth quarter, only two monitoring wells, MW-12 and MW-22, were sampled.

- Although not part of the quarterly sampling schedule, monitoring wells MW-27-60 and MW-29 were sampled for Cr(VI) and Cr(T). This additional sampling was performed to resolve anomalous data from the October 2008 sampling.
- Beginning in the third quarter (September) 2008 river sampling event, unfiltered samples were also collected in addition to the normal field filtered procedures. The unfiltered surface water analyses from third quarter 2008, fourth quarter 2008, and upcoming first quarter 2009 river sampling will provide an unfiltered data set that may be used for risk assessment. These unfiltered samples were collected at the four shoreline water sampling locations and in-channel locations at the shallow depths only.
- As stated in the Groundwater Background Study, Steps 3 and 4: Final Report of Results (CH2M HILL, 2008e), monitoring wells MW-16 and MW-17 were sampled semiannually in 2008 to monitor for any trends in natural trace metal concentrations. These wells were sampled as part of the second and third quarter sampling events, and the data are included in Appendix D.

4.0 Fourth Quarter 2008 Monitoring Results

This section summarizes the results of the groundwater and surface water sampling completed for the Topock GMP during fourth quarter 2008. Figure 2 shows the locations of the GMP monitoring wells and surface water monitoring locations as of December 2008.

The monitoring results and data presented include Cr(VI), Cr(T), specific conductance, CCR Title 22 metals, and field parameters. Laboratory data quality review, water level measurements, and water quality field parameter data are also presented in this section. Complete laboratory reports and analytical documentation are maintained in the project file and are available upon request.

4.1 Groundwater Results

This section presents all field measurement and analytical groundwater results from samples collected during the fourth quarter 2008 monitoring event.

4.1.1 Groundwater Chromium

Table 2 presents the results for Cr(VI), Cr(T), specific conductance, and field pH in groundwater samples collected from December 2007 to December 2008. In the fourth quarter 2008, the maximum detected Cr(VI) concentration was 8,040 µg/L at well MW-50-200. Overall, the fourth quarter 2008 chromium results are consistent with the prior third quarter 2008 sampling results.

Figures 3 through 5 present the Cr(VI) results for wells monitoring the shallow, mid-depth, and deep intervals of the Alluvial Aquifer, respectively, from the October 2008 annual sampling event. Where applicable, December 2008 data are posted on those figures and are identified in bold. Figures 3 through 5 also show the approximate outline of the areas where Cr(VI) was detected in samples at concentrations greater than 32 µg/L during the October 2008 monitoring event. The value of 32 µg/L is based on the calculated natural background upper tolerance limit for Cr(VI) in groundwater from the Background Study (CH2M HILL, 2008e).

The approximate outlines of monitoring wells with Cr(VI) concentrations greater than 32 µg/L in the shallow, mid-depth, and deep intervals of the Alluvial Aquifer are similar to the previous quarterly monitoring events (CH2M HILL, 2008a-d, 2009b).

Relative to October 2008 monitoring, increasing Cr(VI) concentrations were detected in the December 2008 samples at MW-46-175 (178 µg/L), MW-47-55 (71.8 µg/L). In addition, MW-21 had a detection of 1.86 µg/L Cr(VI) in the fourth quarter sample, which was the first detection of the year in that well. Declining or stable chromium concentration trends continue to be observed in other wells sampled in December 2008, as shown in Table 2.

During the fourth quarter event, Cr(VI) and Cr(T) were not detected in samples from the Arizona monitoring wells, with the exception of MW-55-120, which had concentrations of Cr(VI) of 3.45 µg/L and Cr(T) of 4.38 µg/L.

4.1.2 Groundwater Title 22 Metals Results

Table 3 presents the CCR Title 22 metals results for the GMP monitoring wells sampled from October 2007 through December 2008. In December 2008, samples from monitoring wells MW-12, and MW-22 were analyzed for Title 22 metals. In addition to Cr(T), the trace metals detected during the December 2008 groundwater sampling event were arsenic, barium, cobalt, copper, molybdenum, and vanadium. Other than chromium and arsenic in MW-12, the dissolved concentrations of the trace metals detected during the December 2008 monitoring event are below the respective federal and California drinking water standards.

4.1.3 Additional Water Quality Analytes

To supplement the water quality site characterization, groundwater samples were collected from monitoring wells and were analyzed for additional parameters during the October 2008 monitoring event. The samples were analyzed by ATL Laboratories for additional parameters that are not part of the routine GMP. These include total dissolved solids (USEPA Method 160.1); chloride, sulfate, nitrate, and bromide (anions; USEPA Method 300.0); calcium, magnesium potassium, sodium, and boron (cations; USEPA Method SW 6010B or SW 6020A); alkalinity (USEPA Method 310.1), stable isotopes oxygen 18 and deuterium (CF-IRMS methods); total organic carbon (USEPA Method 415.2); dissolved silica (USEPA Method 370.1); iron (USEPA Method 6010B or 6020A); and manganese (USEPA Method 6010B or 6020A). The results of these additional analyte results are presented in Appendix B.

4.2 Surface Water

Table 4 presents the results of Cr(VI), Cr(T), specific conductance, and field pH in the surface water sampling events performed from December 2007 through December 2008. Cr(VI) and Cr(T) were not detected in any of the water samples collected at the four shoreline surface water stations and 12 in-channel surface water stations during the fourth quarter. The Cr(VI) results of the shoreline surface water sampling during fourth quarter 2008 are shown in Figure 3. Table 5 presents the results of unfiltered Cr(VI) and Cr(T) from the surface water sampling events in September 2008 and December 2008. Cr(VI) was not detected in any of the unfiltered water samples collected during the fourth quarter. Cr(T) was not detected in any of the unfiltered water samples during the fourth quarter, with the exception of a 1.27 µg/L detection at in-channel location C-TM-1.

4.3 Analytical Data Quality Review

The laboratory analytical data from GMP monitoring in the fourth quarter 2008 were reviewed by project chemists to assess data quality and to identify deviations from analytical requirements. The quality assurance and quality control requirements are outlined in the *Draft PG&E Program Quality Assurance Project Plan* (CH2M HILL, 2005b). A detailed discussion of data quality for the GMP sampling data is presented in the data validation reports, which are kept in the project file and are available upon request.

As discussed below, the completeness objectives were met for all method and analyte combinations. No significant analytical deficiencies were identified in the fourth quarter

2008 monitoring data. With minor exceptions (noted below), the analyses and data quality met the laboratory method quality control acceptance criteria. Overall, the analytical data collected in fourth quarter 2008 are considered acceptable for the purpose of monitoring groundwater and surface water conditions at the site, as described below.

Matrix Interference: Matrix interference was encountered in groundwater samples from some of the monitoring wells, which affected the sensitivity for Cr(VI) when using USEPA Method 218.6. Results from 20 wells reflect adjusted reporting limits as a result of serial dilutions that were required to overcome the matrix interference and provide acceptable matrix spike recoveries. In most cases, the reporting limit was only raised to 1 or 2 µg/L, which is more than an order of magnitude below the California drinking water standard for chromium (50 µg/L).

Quantitation and Sensitivity: In addition to the chromium matrix interference issue explained above, samples for other analytes from wells MW-22 (SW6020A), MW-27-060 (E300.0), and MW-34-080 (E300.0) had analytes reported as non-detect at elevated reporting limits due to dilutions required to analyze the samples. All other method and analyte combinations met the project reporting limit objectives.

Holding Time Data Qualification: Two non-detect samples were analyzed outside the recommended holding time for mercury (SW7470A) and were qualified as estimated and flagged "J." All other hold times were met.

Method Blanks: All method blank criteria were met.

Field Blanks: All field blank criteria were met.

Calibration: All initial and continuing instrument calibration criteria were met.

Matrix Spike Sample: All matrix spike acceptance criteria were met.

Chain of Custody: Each sample was documented in a completed chain-of-custody form and received at the laboratory in good condition. Any discrepancies identified in laboratory custody were promptly resolved.

Field Duplicates: One field duplicate pair analyzed for Cr(VI) had a relative percent difference greater than the upper control limit (20 percent). These results were qualified as estimated and flagged "J." All other field duplicate acceptance criteria were met.

Laboratory Control and Duplicate Samples: All laboratory duplicate and laboratory control sample criteria were met.

4.4 Water Level Monitoring

Table 6 presents the water level measurements from December 2007 through December 2008 from wells for the construction of a groundwater elevation contour map for the shallow, upper depth interval of the Alluvial Aquifer. Table 6 also lists salinity data for the wells where water levels were measured. Groundwater salinity during fourth quarter 2008 ranged from 0.18 percent (MW-29) to 2.25 percent (well MW-22)—a range that is consistent with results of prior monitoring. Due to the variation in groundwater salinity at the site, the

groundwater elevations measured in the monitoring wells have been adjusted (normalized) to an equivalent freshwater head (Fetter, 1994).

Beginning in June 2005, at DTSC's direction (DTSC, 2005b), a sitewide water level data set has been collected quarterly as part of the GMP to construct a groundwater elevation contour map for the shallow, upper depth interval of the Alluvial Aquifer. That requirement was changed to annually in the September 28, 2007 letter from DTSC (DTSC, 2007). A sitewide water level survey was conducted on September 30, 2008 that involved the manual collection of groundwater level data at 32 shallow wells within a 4-hour period. Figure 6 presents the groundwater elevation contours for the shallow depth interval of the Alluvial Aquifer (shallow monitoring wells). Because groundwater levels at the site fluctuate continuously in response to changes in the river stage, these groundwater elevation contours reflect transient conditions at the time of measurement and may not be representative of the average groundwater flow directions.

Since inception of the IM activities at the site in March 2004, a network of pressure transducers has been used to collect continuous records of water elevation data in the Alluvial Aquifer (floodplain and IM No. 3 injection areas) and the Colorado River for the analysis and assessment of hydraulic data in the active extraction and injection areas of the site. This network currently includes over 50 transducers. This monitoring is ongoing and is reported as part of the IM activities, rather than in GMP reports. The groundwater elevation data and hydraulic gradients measured in the floodplain area are evaluated monthly and presented in the IM performance monitoring program reports (CH2M HILL, 2008a-d). Water level contours for the floodplain are not shown in Figure 6. The groundwater elevation data in the injection area are evaluated and are presented in the IM compliance monitoring program reports (CH2M HILL, 2009c). Additional water level monitoring was performed at MW-23 and surrounding wells, as directed by DTSC (Appendix C).

4.5 Field Parameter Data

A field water quality meter and flow-through cell were used to measure parameters during well purging and groundwater sampling (CH2M HILL, 2005b). Water quality field measurements were also recorded during surface water sampling. Table 7 summarizes the field water quality data collected (specific conductance, temperature, pH, oxidation-reduction potential, and dissolved oxygen) from December 2007 through December 2008. Field data sheets and chain-of-custody records for the December quarterly event are presented in Appendix A.

5.0 Discussion and Conclusions of 2008 GMP Monitoring Results

This section summarizes the results of the monitoring events completed for the Topock GMP in 2008. Key observations and data trends for the 2008 monitoring period are presented.

During 2008, the quarterly events occurred in March, May, October, and December. Quarterly events in May and October were timed to occur before and after summer bird nesting season to minimize biological impacts to potential nesting habitat from the field activities during these larger-scale sampling events.

Discussion of IM monitoring activities and assessment of trends in the floodplain area are not repeated in this report and are reported separately under IM performance monitoring program (CH2M HILL, 2008a-d). Discussion of IM monitoring activities in the IM injection area are reported separately under the IM compliance monitoring program (CH2M HILL, 2009c).

5.1 Groundwater Monitoring Results

This section discusses the groundwater results for the 2008 monitoring period, including chromium, additional analytes, and water level data.

5.1.1 Chromium

Table 2 presents the results for Cr(VI), Cr(T), specific conductance, and field pH in groundwater samples collected from December 2007 to December 2008. The maximum detected Cr(T) concentration in GMP monitoring events in 2008 was 11,700 µg/L at well MW-20-130 (third quarter), and the maximum detected Cr(VI) concentration was 13,300 µg/L at well MW-20-130 (first quarter). The Cr(VI) groundwater plume limits (delineated by the 32 µg/L isoconcentration line) have remained generally stable over the course of 2008. The October and December 2008 results are shown in Figures 3, 4, and 5. Figure 7 is a generalized site cross-section that presents the groundwater sampling results from the October 2008 annual monitoring event. This hydrogeologic section illustrates the elevations of the upper, middle, and lower depth intervals of the Alluvial Aquifer; the screened intervals of monitoring wells cluster and other key wells; and the Cr(VI) results from the October 2008 monitoring event. The cross-section view shows that Cr(VI) concentrations vary laterally and vertically for the sampling locations and depths within the Alluvial Aquifer. More detailed cross-sections showing Cr(VI) sampling results from monitoring wells in the floodplain area are presented in the IM performance monitoring program report (CH2M HILL, 2008a-d).

Analytical results for Cr(VI) near the active pumping system of TW-3D and PE-1 are also addressed in detail in quarterly monitoring reports under the IM performance monitoring program (CH2M HILL, 2008a-d). Wells with notable decreases in Cr(VI) concentrations over

2008 were MW-20-70, MW-20-100, MW-20-130, MW-39-80, MW-39-100, MW-44-115, MW-44-125, and TW-4, as shown in Table 2. The majority of the wells with decreasing Cr(VI) concentration trends are located in the floodplain, and the decreasing trend is likely a result of the groundwater extraction for the Interim Measures. The concentration trend for MW-34-100 has shown both short-term declines and increases in concentrations since PE-1 pumping commenced on January 25, 2006. However, Cr(VI) sampling results between December 2007 and July 2008 have generally trended downwards and have reached a low of 234 µg/L in May 2008. The concentration increased to 519 µg/L between October and December 2008. Concentrations in MW-36-90 steadily decreased in 2007 (CH2M HILL, 2008h) and have stabilized to less than 1 µg/L in 2008, as shown in Table 2. Concentrations have decreased in MW-36-100 during 2008, from 146 µg/L in March to 88.4 µg/L in October 2008. Cr(VI) concentrations in the shallow wells in the MW-39 cluster (MW-39-50, MW-39-60, and MW-39-70) have decreased to non-detect. Cr(VI) concentrations in the deeper wells in the MW-39 cluster (MW-39-80 and MW-39-100) have decreased though 2008.

Samples from the Arizona monitoring wells did not have detections of Cr(VI) in 2008, with the exception of third and fourth quarter samples from MW-55-120, which had detections of 0.614 µg/L and 3.45 µg/L. Samples from the Arizona monitoring wells did not have detections of Cr(T) in 2008, with the exception of samples from MW-54-140, MW-54-195, and MW-55-120. The third and fourth quarter samples from MW-55-120 were 1.17 µg/L and 4.38 µg/L, and the third quarter samples from MW-54-195, and MW-55-120 had trace detections Cr(T) of 1.36 µg/L and 1.27 µg/L, barely above the reporting limit.

The Park Moabi drinking water production wells, Park Moabi-3 and Park Moabi-4, had maximum detections of 8.74 and 20.6 µg/L for Cr(VI) and 8.35 and 18.5 µg/L for unfiltered Cr(T), respectively, in October 2008. The Cr(VI) and Cr(T) detections were below the California drinking water standard of 50 µg/L for chromium (Title 22, CCR, Division 4, Chapter 15) and the calculated site background concentration of 32 µg/L.

5.1.2 Title 22 Metals Analysis

Besides Cr(T), the trace Title 22 metals detected in the GMP monitoring wells in 2008 were arsenic, barium, beryllium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, vanadium, and zinc. With the exception of Cr(T), arsenic, and selenium, all of the trace metal detections in 2008 were below the respective California drinking water standards (Title 22, CCR, Division 4, Chapter 15). In 2008, arsenic was detected above the maximum contaminant level (MCL) in five wells, MW-12, MW-22, MW-24A, MW-32-35, and MW-43-25. Selenium was detected above the MCL in two wells MW-24A and TW-1. The concentrations of Title 22 metals that were consistently detected in monitoring wells remained fairly stable overall during the annual monitoring period. The one-time detection of selenium in MW-24A above the MCL may be indicative of colloidal breakthrough, since sampling results before and after in 2007 and 2008 were well below the MCL (CH2M HILL, 2009a).

5.2 Surface Water

Cr(VI) and Cr(T) were not detected in any of the water samples collected at any of the in-channel surface water stations during 2008, as shown in Table 4. Cr(VI) and Cr(T) were not detected in any of the samples from the shoreline surface water locations. A single trace detection of 0.23 µg/L Cr(VI) at surface water location R-23 was detected on September 18, 2008. This sample was located in the open pond to the southeast of monitoring well MW-23, as shown in Figure 2. Due to this detection, a subset of surface water locations were resampled in October 2008. These locations included nine in-channel (C-CON, C-I-3, C-MAR, C-NR1, C-NR3, C-NR4, C-R22A, C-R27, and C-TAZ) and four shoreline (R-19, R-23, R-28, and RRB) surface water sampling locations. Cr(VI) and Cr(T) were not detected in any of the surface water samples collected in October 2008, as shown in Table 4.

Unfiltered Cr(VI) and Cr(T) were analyzed for a subset of 11 in-channel (C-CON, C-I-3, C-MAR, C-NR1, C-NR3, C-NR4, C-R22A, C-R27, C-TAZ, C-TM-1, and C-TM-2) and four shoreline (R-19, R-23, R-28, and RRB) surface water locations for potential use in the risk assessment. There were two in-channel trace Cr(T) detections at sampling stations C-R27 (1.04 µg/L, September 2008) and C-TM-1 (1.27 µg/L, December 2008). Unfiltered Cr(VI) and Cr(T) were not detected in the shoreline sampling locations in 2008, as shown in Table 5.

6.0 Recommendations

As discussed in Section 2.0, the GMP was implemented as a continuation of the RFI groundwater investigation for the purpose of defining the nature and extent of groundwater contamination at the site. The approved Groundwater RFI/RI Report, dated February 11, 2009 (CH2M HILL, 2009a), presented groundwater data from July 1997 through October 2007. With the goal of the groundwater characterization and investigation near complete for Solid Waste Management Unit 1/Area of Concern 1 and the project moving forward into the corrective measures study/feasibility study, it is recommended that the objective of the GMP be modified from characterization to plume boundary monitoring in conjunction with the other Topock site programs.

These new objectives would be implemented with modifications of the GMP. Specifically, PG&E will review the existing GMP activities and will present proposed modifications in separate technical memoranda as follows:

- GMP sampling frequency and analyte modifications will be recommended for the interim between RFI/RI completion and implementation of the final remedy.
- Review the potential to combine the GMP and Performance Monitoring Program monitoring reports into a single report deliverable.

7.0 Monitoring and Reporting for 2009

This section summarizes upcoming 2009 monitoring and reporting activities for the Topock GMP. The schedule presented below is an estimate and is subject to change.

7.1 Monitoring Events

- The monitoring schedule for the 2009 monitoring program is as follows:
- The first quarter 2009 monitoring event is scheduled to be conducted during March 2008. This quarterly event will also serve as a semiannual event and will include 62 monitoring wells.
- The second quarter monitoring event is planned for May 2009. This quarterly sampling event will include 38 monitoring wells.
- The third quarter monitoring event is planned for October 2008. This event will serve as the biennial event and will include 108 monitoring wells.
- The fourth quarter sampling event is planned for December 2009. This quarterly sampling event will include 38 monitoring wells.
- Quarterly surface water sampling, including four shoreline and 12 in-channel locations, are scheduled to coincide with quarterly GMP events during the first, second, and third quarters.
- One low-river-stage sampling event occurred on January 20 and 21, 2009. The remaining low-river-stage sampling event is scheduled for December 2009 pending review of river level forecast data.
- Monthly sampling events, including five monitoring wells and two active extraction wells, will occur during the first two weeks of April, June, July, August, September, and November. The first two monthly events of 2009 occurred on January 5- 6 and February 2-3, 2009.

7.2 Reporting

The reporting schedule for the 2009 monitoring program is as follows:

- Quarterly reports will be submitted to DTSC 10 to 12 weeks after the last sampling event of the quarter is complete. The fourth quarter report will also serve as an annual summary.
- Approximately 4 to 5 weeks after each monthly sampling event, chemical plots for wells MW-34-100, MW-44-115, MW-44-125, and MW-46-175 will be e-mailed to DTSC.

8.0 References

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Tables

TABLE 1
Well Construction and Sampling Summary, December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Well ID	Site Area	Measuring Point Elevation (ft MSL)	Screen Interval (ft bgs)	Well Casing (inches)	Well Depth (ft bgs)	Depth to Water (ft btoc)	Sampling System	Typical Purge Rate (gpm)	Typical Purge Volume (gallons)	Remarks
GMP Monitoring Wells										
MW-9	Bat Cave Wash	536.56	77 - 87	4 in PVC	89.4	80.0	Temp. pump	2	11	
MW-10	Bat Cave Wash	530.65	74 - 94	4 in PVC	96.9	74.3	CD pump	5	40	
MW-11	Bat Cave Wash	522.61	62.5 - 82.5	4 in PVC	86.1	3.7	CD pump	5	30	
MW-12	East of Station	484.01	27.5 - 47.5	4 in PVC	50.4	28.4	Temp. pump	3	40	
MW-13	Bat Cave Wash	488.64	28.5 - 48.5	4 in PVC	52.0	32.5	CD pump	4	30	
MW-14	East Mesa	570.99	111 - 131	4 in PVC	133.8	114.3	CD pump	4	30	
MW-15	East of New Ponds	641.52	180.5 - 200.5	4 in PVC	203.0	184.6	CD pump	5	30	
MW-16	Near New Ponds	657.31	198 - 218	4 in PVC	218.1	199.7	Temp. pump	2	35	
MW-17	West of Mesa Area	589.96	130 - 150	4 in PVC	153.6	132.4	CD pump	7	32	
MW-18	West Mesa	545.32	85 - 105	4 in PVC	106.7	88.1	Temp. pump	2	30	
MW-19	Route 66	499.92	46 - 66	4 in PVC	65.8	49.9	CD pump	7	41	
MW-20-70	MW-20 bench	500.15	50 - 70	4 in PVC	69.6	46.3	Temp. pump	4	53	
MW-20-100	MW-20 bench	500.58	89.5 - 99.5	4 in PVC	101.4	47.2	Temp. pump	5	110	
MW-20-130	MW-20 bench	500.66	121 - 131	4 in PVC	132.3	48.0	Temp. pump	5	180	
MW-21	Route 66	505.55	39 - 59	4 in PVC	58.5	54.5	Temp. pump	2	10	low recharge well; typically purges dry at 1 casing volume
MW-22	Floodplain	460.72	5.5 - 10.5	2 in PVC	12.4	5.9	Peristaltic	0.2	4	
MW-23	East of Station	507.33	60 - 80	4 in PVC	81.4	53.5	Temp. pump	5	20	low recharge well; typically purges dry at 1 casing volume
MW-24A	MW-24 Bench	567.16	104 - 124	4 in PVC	127.5	111.1	CD pump	3	30	
MW-24B	MW-24 Bench	564.76	193 - 213	4 in PVC	214.8	109.5	CD pump	7	210	
MW-24BR	MW-24 Bench	563.95	378 - 437	4 in PVC	441.0	119.1	Temp. pump	5	185	low recharge well; typically purges dry at 1 casing volume
MW-25	Near Bat Cave Wash	542.90	84.5 - 104.5	4 in PVC	106.5	87.3	CD pump	7	32	
MW-26	Route 66	502.22	51.5 - 71.5	2 in PVC	70.1	47.1	CD pump	7	50	
MW-27-20	Floodplain	460.56	7 - 17	2 in PVC	14.4	5.4	Temp. pump	1	7	
MW-27-60	Floodplain	461.38	47.3 - 57.3	2 in PVC	59.0	6.5	Temp. pump	2	25	
MW-27-85	Floodplain	460.99	77.5 - 87.5	2 in PVC	80.0	6.6	Temp. pump	2	36	
MW-28-25	Floodplain	466.76	13 - 23	2 in PVC	21.1	12.0	Ded. RF	1	5	
MW-28-90	Floodplain	467.53	70 - 90	2 in PVC	98.4	12.8	Temp. pump	2	50	
MW-29	Floodplain	485.21	29.5 - 39.5	2 in PVC	41.5	29.8	Temp. pump	0.5	6	
MW-30-30	Floodplain	468.12	12 - 32	2 in PVC	26.9	13.8	Ded. RF	1	10	
MW-30-50	Floodplain	468.81	40 - 50	4 in PVC	52.6	14.4	Ded. RF	2	75	
MW-31-60	MW-20 Bench	496.81	41.5 - 61.5	4 in PVC	64.0	42.0	CD pump	10	40	
MW-31-135	MW-20 Bench	498.11	113 - 133	2 in PVC	135.4	44.0	Temp. pump	3	60	
MW-32-20	Floodplain	461.51	10 - 20	2 in PVC	19.6	7.6	Ded. RF	1.5	6	
MW-32-35	Floodplain	461.63	27.5 - 35	4 in PVC	37.2	7.3	Ded. RF	2	60	

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Well ID	Site Area	Measuring Point Elevation (ft MSL)	Screen Interval (ft bgs)	Well Casing (inches)	Well Depth (ft bgs)	Depth to Water (ft btoc)	Sampling System	Typical Purge Rate (gpm)	Typical Purge Volume (gallons)	Remarks
GMP Monitoring Wells										
MW-33-40	Floodplain	487.38	29 - 39	4 in PVC	41.8	32.3	Temp. pump	0.5	4	
MW-33-90	Floodplain	487.55	69 - 89	4 in PVC	88.3	32.7	Temp. pump	2	110	
MW-33-150	Floodplain	487.77	132 - 152	2 in PVC	155.4	33.4	Temp. pump	3	60	
MW-33-210	Floodplain	487.25	190 - 210	2 in PVC	223.0	33.2	Temp. pump	3	90	
MW-34-55	Floodplain	460.94	45 - 55	4 in PVC	56.6	6.1	Ded. RF	2	100	
MW-34-80	Floodplain	461.20	73 - 83	4 in PVC	84.3	7.9	Temp. pump	3	150	
MW-34-100	Floodplain	460.96	89.5 - 99.5	2 in PVC	117.0	7.4	Ded. RF	2	55	
MW-35-60	Route 66	484.33	41 - 61	2 in PVC	56.8	29.0	Temp. pump	2	18	
MW-35-135	Route 66	484.24	116 - 136	2 in PVC	158.7	28.8	Temp. pump	3	66	
MW-36-20	Floodplain	469.33	10 - 20	1 in PVC	22.7	15.5	Peristaltic	0.5	4	
MW-36-40	Floodplain	469.59	30 - 40	1 in PVC	42.8	16.3	Peristaltic	0.5	4	
MW-36-50	Floodplain	469.62	46 - 51	1 in PVC	53.3	15.2	Peristaltic	0.75	5	
MW-36-70	Floodplain	469.26	60 - 70	1 in PVC	72.5	14.7	Peristaltic	0.5	7	
MW-36-90	Floodplain	469.64	80 - 90	1 in PVC	92.5	15.6	Peristaltic	0.4	10	
MW-36-100	Floodplain	469.65	88 - 98	2 in PVC	110.2	16.3	Ded. RF	2	45	
MW-37D	Bat Cave Wash	486.19	180 - 200	2 in PVC	226.7	30.9	Temp. pump	3	100	
MW-37S	Bat Cave Wash	485.97	64 - 84	2 in PVC	87.0	30.5	Temp. pump	2	30	
MW-38D	Bat Cave Wash	525.31	163 - 183	2 in PVC	190.9	70.0	Temp. pump	3	60	
MW-38S	Bat Cave Wash	525.51	75 - 95	2 in PVC	98.1	69.8	Temp. pump	1	13	
MW-39-40	Floodplain	468.02	30 - 40	1 in PVC	42.1	14.0	Peristaltic	0.5	3.5	
MW-39-50	Floodplain	467.93	47 - 52	1 in PVC	54.6	13.3	Peristaltic	0.5	5	
MW-39-60	Floodplain	468.00	49 - 59	1 in PVC	66.3	13.4	Peristaltic	0.5	6	
MW-39-70	Floodplain	468.02	60 - 70	1 in PVC	71.7	14.1	Peristaltic	0.5	7	
MW-39-80	Floodplain	467.92	70 - 80	1 in PVC	82.6	14.0	Peristaltic	0.5	9	
MW-39-100	Floodplain	468.12	80 - 100	2 in PVC	117.7	13.8	Ded. RF	2	45	
MW-40D	I-40 Median	566.08	240 - 260	2 in PVC	266.0	110.6	Temp. pump	3	75	
MW-40S	I-40 Median	566.04	115 - 135	2 in PVC	134.0	109.9	Temp. pump	2	13	
MW-41D	Bat Cave Wash	479.42	271 - 291	2 in PVC	313.0	24.0	Temp. pump	5	145	
MW-41M	Bat Cave Wash	479.83	170 - 190	2 in PVC	192.4	24.0	Temp. pump	3	85	
MW-41S	Bat Cave Wash	480.07	40 - 60	2 in PVC	61.6	24.1	Temp. pump	2	42	
MW-42-30	Floodplain	463.74	9.8 - 29.8	2 in PVC	32.0	11.9	Temp. pump	2	28	
MW-42-55	Floodplain	463.85	42.5 - 52.5	2 in PVC	56.0	9.2	Temp. pump	3	21	
MW-42-65	Floodplain	463.37	56.2 - 66.2	2 in PVC	80.0	8.7	Temp. pump	3	36	
MW-43-25	Floodplain	462.54	15 - 25	2 in PVC	27.0	7.6	Temp. pump	1	9	

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GMP Monitoring Wells										
MW-43-75	Floodplain	462.71	65 - 75	2 in PVC	77.0	8.3	Ded. RF	2	28	
MW-43-90	Floodplain	462.76	80 - 90	2 in PVC	102.0	7.4	Temp. pump	2	47	
MW-44-70	Floodplain	471.90	61 - 71	2 in PVC	70.0	17.9	Temp. pump	1.5	38	
MW-44-115	Floodplain	472.01	103 - 113	2 in PVC	113.5	19.0	Ded. RF	3	60	
MW-44-125	Floodplain	472.04	116 - 125	2 in PVC	128.8	18.3	Temp. pump	0.35	57	
MW-46-175	Floodplain	482.16	165 - 175	2 in PVC	181.8	28.6	Ded. RF	1.5	100	
MW-46-205	Floodplain	482.23	196.5 - 206.5	2 in PVC	224.7	28.6	Temp. pump	2	90	
MW-47-55	Floodplain	484.04	45 - 55	2 in PVC	55.0	28.9	Temp. pump	2	30	
MW-47-115	Floodplain	484.17	105 - 115	2 in PVC	115.0	29.3	Temp. pump	1.5	55	
MW-48	East of Station	486.22	124 - 134	2 in PVC	138.0	30.9	Temp. pump	0.5	22	low recharge well; typically purges dry at 1 casing volume
MW-49-135	Floodplain	484.02	125 - 135	1.5 in PVC	136.6	28.9	Temp. pump	0.6	30	
MW-49-275	Floodplain	483.95	255 - 275	2 in PVC	274.7	29.9	Temp. pump	3	126	
MW-49-365	Floodplain	484.01	345 - 365	2 in PVC	367.4	31.5	Temp. pump	2	180	
MW-50-095	Route 66	496.49	85 - 95	2 in PVC	96.4	41.4	Temp. pump	2	36	
MW-50-200	Route 66	496.35	190 - 200	2 in PVC	204.5	46.1	Temp. pump	5	85	
MW-51	Route 66	501.56	97 - 112	4 in PVC	113.3	46.5	Temp. pump	4	180	
MW-52D		462.16	85 - 87	0.75 in	89.5	10.6	Peristaltic	0.2	4.5	
MW-52M		462.16	66 - 68	0.75 in	70.5	11.3	Peristaltic	0.2	4.5	
MW-52S		462.16	47 - 49	0.75 in PVC	51.5	9.8	Peristaltic	0.2	4.5	
MW-53D		461.32	123.5 - 125	0.75 in	---	14.3	Peristaltic	0.2	5.1	
MW-53M		461.32	98.5 - 100	0.75 in	---	13.7	Peristaltic	0.06	5.4	
MW-54-85	Arizona	466.10	77 - 87	in Sch 40 PV	93.2	10.8	---	NA	NA	
MW-54-140	Arizona	465.98	128 - 138	in Sch 40 PV	137.8	10.5	---	NA	NA	
MW-54-195	Arizona	466.32	185 - 195	in Sch 80 PV	195.0	11.6	---	NA	NA	
MW-55-45	Arizona	463.41	37 - 47	in Sch 40 PV	51.8	7.8	---	NA	NA	
MW-55-120	Arizona	463.21	108 - 118	in Sch 80 PV	117.6	7.6	---	NA	NA	
MW-56D	Arizona	461.36	103.5 - 105.5	.75 in MLABS	---	16.3	---	NA	NA	
MW-56M	Arizona	461.36	73.5 - 75.5	.75 in MLABS	---	15.2	---	NA	NA	
MW-56S	Arizona	461.36	33.5 - 35.5	.75 in MLABS	---	14.1	---	NA	NA	
OW-3D	West Mesa	558.63	242 - 262	2 in PVC	274.0	103.2	Temp. pump	3	90	
OW-3M	West Mesa	558.89	180 - 200	2 in PVC	202.0	103.1	Temp. pump	3	54	
OW-3S	West Mesa	558.58	86 - 116	2 in PVC	118.0	101.7	Temp. pump	2	30	
Other Site Wells not in GMP										
MW-1	New Ponds	661.76	201 - 211	4 in PVC	217.0	205.3	Ded. RF	NA	NA	active PG&E pond monitoring well

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Well ID	Site Area	Measuring Point Elevation (ft MSL)	Screen Interval (ft bgs)	Well Casing (inches)	Well Depth (ft bgs)	Depth to Water (ft btoc)	Sampling System	Typical Purge Rate (gpm)	Typical Purge Volume (gallons)	Remarks
Other Site Wells not in GMP										
MW-3	New Ponds	650.51	193 - 203	4 in PVC	205.0	194.6	Ded. RF	NA	NA	active PG&E pond monitoring well
MW-4	New Ponds	625.73	164.5 - 174.5	4 in PVC	176.3	169.1	Ded. RF	NA	NA	active PG&E pond monitoring well
MW-5	New Ponds	635.69	175.9 - 184.9	4 in PVC	186.2	178.8	Ded. RF	NA	NA	active PG&E pond monitoring well
MW-6	New Ponds	642.84	184.5 - 193.5	4 in PVC	194.9	185.7	Ded. RF	NA	NA	active PG&E pond monitoring well
MW-7	New Ponds	631.91	172.7 - 182.7	4 in PVC	185.0	175.6	Ded. RF	NA	NA	active PG&E pond monitoring well
MW-8	New Ponds	627.54	169 - 178	4 in PVC	179.9	170.6	Ded. RF	NA	NA	active PG&E pond monitoring well
MW-45-095a	Floodplain	470.03	83 - 93	2 in PVC	97.0	15.3	Temp. pump	1	40	pressure transducer location
MW-45-095b	Floodplain	469.51	83 - 93	1 in PVC	97.0	17.9	Temp. pump	NA	9	groundwater sampling location
MWP-8	Old Ponds	677.48	181 - 211	3 in PVC	213.0	189.5	---	NA	NA	inactive monitoring well
MWP-10	Old Ponds	675.81	194 - 234	3 in PVC	237.0	208.6	---	NA	NA	inactive monitoring well
MWP-12	Old Ponds	663.49	96 - 136	3 in PVC	143.0	107.8	---	NA	NA	inactive monitoring well
P-2	New Ponds	537.60	238.5 - 248.5	4 in PVC	251.0	169.6	---	NA	NA	inactive monitoring well
PGE-9N	East of River	462.21	25 - 95	12 in Steel	---	---	---	NA	NA	
PGE-9S	East of River	461.99	30 - 100	12 in Steel	---	---	---	NA	NA	
Test and Extraction Wells										
IW-2	East Mesa	550.11	170 - 330	6 in Steel	343.0	95.8	---	NA	NA	IM3 injection well
IW-3	East Mesa	554.44	160 - 320	6 in Steel	333.0	100.1	---	NA	NA	IM3 injection well
PE-1	Floodplain	457.52	79 - 89	6 in Steel	97.0	16.4	CD pump	3	400	active IM extraction well
TW-1	Plan B Test	620.55	169 - 269	5 in PVC	240.2	164.2	CD pump	20	200	inactive pilot test well
TW-2D	MW-20 bench	493.29	113 - 148	6 in PVC	150.0	69.3	CD pump	70.1	160	inactive IM extraction well
TW-2S	MW-20 bench	499.05	42.5 - 92.5	6 in PVC	102.1	34.0	CD pump	6	75	inactive IM extraction well
TW-3D	MW-20 bench	498.09	111 - 156	8 in PVC	157.0	46.5	CD pump	NA	NA	active IM extraction well
TW-4	Floodplain	484.11	210 - 250	4 in PVC	255.0	29.3	Temp. pump	NA	NA	
TW-5	Route 66	496.30	110 - 150	4 in PVC	152.5	41.0	Temp. pump	3	150	
Water Supply Wells										
PGE-7	MW-24 Bench	563.89	195 - 330	14 in Steel	303.0	107.3	CD pump	12	600	inactive supply
PGE-8	Station	596.01	405 - 554	6.75 in Steel	564.0	139.0	CD pump	20	1900	inactive injection
Park Moabi-3	Park Moabi	518.55	80 - 200	8 in Steel	252.0	61.3	active supply well	NA	NA	call Park Ranger to schedule sampling

TABLE 1
Well Construction and Sampling Summary, December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Notes:

bgs	below ground surface
MSL	mean sea level
btoc	below top of casing
NA	not known or available
CD pump	dedicated constant-discharge electric submersible pump
Redi-Flo AR	adjustable-rate electric submersible pump
Temp. pump	temporary pump
PVC	polyvinyl chloride
Ded. RF	dedicated Redi - Flo submersible pump
GMP	Groundwater Monitoring Program

Depth to water shown is the most recently measured depth to water.

All GMP wells except low recharge wells, active IM extraction wells, and Park Moabi wells are purged and sampled using well-volume method.

TABLE 2
Groundwater Sampling Results, December 2007 through December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Well ID	Sample Date		Hexavalent Chromium (µg/L)	Dissolved Chromium (total) (µg/L)	Specific Conductance (µS/cm)	Field pH
MW-9	10/06/2008		282	280	3,300	7.20
MW-10	03/11/2008		478	473	2,990	7.53
	10/06/2008		462	483	3,100	7.40
MW-12	12/13/2007		2,530	2,930	5,170	8.25
	03/10/2008		2,760	2,860	5,270	8.44
	05/05/2008		2,580	2,800	6,200	8.19
	10/07/2008		2,680	3,000	6,400	8.13
	10/07/2008	FD	2,580	2,990	6,400	---
	12/11/2008		2,460	2,740	5,760	8.06
MW-13	10/02/2008		23.2	23.0	1,900	7.00
MW-14	10/03/2008		27.9 J	29.1	1,500	7.57
MW-16	10/03/2008		9.15	6.51	---	7.85
MW-17	10/02/2008		7.93	6.92	---	7.40
MW-18	03/11/2008		30.2	27.7	1,230	7.57
	03/11/2008	FD	30.0	27.2	1,320	---
	10/02/2008		25.5	26.4	1,300	6.92
MW-19	10/07/2008		682	786	2,500	7.31
MW-20-70	03/12/2008		2,580	2,260	2,880	7.53
	10/07/2008		2,010	2,070	3,200	7.44
MW-20-100	03/12/2008		9,690	7,910	3,420	7.39
	10/08/2008		6,770	8,140	3,500	7.23
MW-20-130	03/12/2008		13,300	11,300	12,200	7.42
	10/08/2008		8,990	11,700	12,000	7.29
MW-21	12/11/2007		ND (1.0)	ND (1.0)	13,700	7.01
	03/11/2008		ND (1.0)	1.80	12,900	7.00
	05/06/2008		ND (1.0)	3.01	13,000	6.76
	10/02/2008		ND (1.0)	ND (1.0)	15,000	6.66
	12/11/2008		1.86	ND (1.0)	12,400	7.66
MW-22	03/11/2008		ND (1.0)	ND (1.0)	27,200	6.66
	10/03/2008		ND (0.2)	ND (1.0)	29,000	6.68
MW-23	12/11/2007		39.5	40.1	16,400	7.17
	01/21/2008		ND (1.0)	3.40	---	---
	01/22/2008		2.10	36.5	---	---
	01/23/2008		34.3	40.0	---	---
	03/10/2008		ND (20)	24.3	15,700	---
	03/11/2008		43.7	39.6	---	7.30
	05/06/2008		22.2	22.0	17,000	7.00
	05/06/2008	FD	23.2	23.0	17,000	---
	10/01/2008		8.03	8.50	16,000	6.75
	12/11/2008		5.21 J	6.46	16,200	7.27
	12/12/2008	FD	2.53 J	6.22	16,300	---
MW-24BR	12/14/2007		ND (1.0)	2.60	13,000	7.98
	03/11/2008		7.10	7.46	14,000	8.10
	05/08/2008		ND (1.0)	2.40	15,000	---
	10/02/2008		ND (0.2)	ND (1.0)	14,000	8.41

TABLE 2
Groundwater Sampling Results, December 2007 through December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Well ID	Sample Date		Hexavalent Chromium (µg/L)	Dissolved Chromium (total) (µg/L)	Specific Conductance (µS/cm)	Field pH
MW-24BR	12/10/2008		ND (1.0)	ND (1.0)	13,500	7.93
MW-25	10/07/2008		544	618	1,300	7.27
	10/07/2008	FD	552	572	1,300	---
MW-26	03/12/2008		2,980	2,560	3,570	7.50
	03/12/2008	FD	2,720	2,640	3,570	---
	10/08/2008		2,560	2,410	3,800	7.18
MW-27-20	10/03/2008		ND (0.2)	ND (1.0)	1,100	7.64
MW-27-60	10/03/2008		0.32	ND (1.0)	4,300	7.54
	12/10/2008		ND (0.2)	ND (1.0)	3,870	7.28
MW-27-85	12/11/2007		ND (1.0)	ND (1.0)	17,800	6.80
	03/10/2008		ND (1.0)	ND (1.0)	15,900	7.26
	05/06/2008		ND (1.0)	ND (1.0)	17,000	6.95
	10/03/2008		ND (0.2)	1.72	16,000	7.07
	12/10/2008		ND (1.0)	ND (1.0)	15,800	6.70
MW-28-25	10/08/2008		ND (0.2)	ND (1.0)	1,300	7.68
MW-28-90	12/14/2007		ND (0.2)	ND (1.0)	7,290	7.03
	03/13/2008		ND (0.2)	ND (1.0)	7,420	7.15
	05/07/2008		ND (0.2)	ND (1.0)	7,600	7.34
	10/08/2008		ND (0.2)	ND (1.0)	7,600	7.65
	12/09/2008		ND (1.0)	ND (1.0)	7,270	---
MW-29	03/12/2008		ND (1.0)	ND (1.0)	3,840	6.84
	09/30/2008		0.38 J	1.68	2,800	7.55
	12/10/2008		ND (0.2) J	ND (1.0)	3,010	6.85
MW-31-60	10/06/2008		534	498	3,400	7.30
MW-31-135	10/06/2008		ND (8.6)	20.3	11,000	7.52
MW-32-20	03/10/2008		ND (2.1)	ND (1.0)	38,800	6.65
	10/03/2008		ND (0.2)	ND (1.0)	60,000	6.68
MW-32-35	10/03/2008		ND (0.2)	ND (1.0)	22,000	6.94
MW-33-40	12/12/2007		0.40	4.10	7,890	7.65
	03/12/2008		ND (0.2)	ND (1.0)	5,380	7.76
	05/05/2008		ND (0.2)	ND (1.0)	5,100	8.31
	10/06/2008		ND (1.0)	1.08	10,000	7.69
	12/09/2008		ND (1.0)	2.10	7,640	7.25
MW-33-90	12/13/2007		21.0	22.7	9,730	7.17
	12/13/2007	FD	20.6	21.3	9,710	---
	03/12/2008		23.7	22.5	10,300	7.22
	05/05/2008		21.1	20.2	10,000	7.48
	10/06/2008		21.1	19.2	11,000	7.43
	12/11/2008		23.2	22.6	9,960	7.32
MW-33-150	12/12/2007		8.90	10.0	16,700	7.38
	03/12/2008		7.87	8.06	16,300	7.29
	05/06/2008		8.83	9.21	16,000	7.62
	10/06/2008		8.84	9.07	17,000	7.54
	10/06/2008	FD	8.91	7.86	17,000	---
	12/11/2008		10.4	9.73	16,400	7.33

TABLE 2
Groundwater Sampling Results, December 2007 through December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Well ID	Sample Date		Hexavalent Chromium (µg/L)	Dissolved Chromium (total) (µg/L)	Specific Conductance (µS/cm)	Field pH
MW-33-210	12/12/2007		13.3	14.3	17,600	7.22
	03/12/2008		11.7	11.5	18,900	7.13
	05/05/2008		10.6	9.93	18,000	7.15
	10/06/2008		12.4	11.7	18,000	7.33
	12/11/2008		13.2	12.8	18,000	7.13
MW-34-55	10/07/2008		ND (0.2)	ND (1.0)	1,200	7.54
MW-34-80	12/13/2007		ND (1.0)	ND (1.0)	7,750	6.91
	01/16/2008		ND (1.0)	ND (1.0)	---	7.27
	01/16/2008	FD	ND (1.0)	1.20	---	---
	02/13/2008		ND (0.2)	ND (1.0)	---	7.26
	03/12/2008		ND (0.2)	10.9	8,590	7.07
	04/08/2008		ND (1.0)	ND (1.0)	---	7.83
	05/06/2008		ND (0.2)	ND (1.0)	8,730	7.12
	06/04/2008		ND (1.0)	ND (1.0)	---	7.57
	07/08/2008		ND (1.0)	ND (1.0)	---	7.75
	08/20/2008		ND (0.2)	ND (1.0)	---	7.27
	09/03/2008		ND (1.0)	ND (1.0)	---	7.36
	10/07/2008		ND (0.2)	1.52	8,700	7.32
	11/06/2008		ND (0.2)	ND (1.0)	---	6.45
	12/10/2008		ND (1.0)	ND (1.0)	7,490	6.99
MW-34-100	12/13/2007		567	591	16,400	7.33
	12/13/2007	FD	614	610	15,400	---
	01/16/2008		564	648	---	7.69
	02/13/2008		492	560	---	7.68
	03/12/2008		358	338	17,100	7.45
	04/08/2008		280	276	---	8.11
	04/08/2008	FD	292	274	---	---
	05/06/2008		234	228	17,000	7.32
	05/06/2008	FD	238	228	17,000	---
	06/04/2008		268	323	---	7.41
	07/08/2008		250	266	---	7.61
	07/08/2008	FD	257	268	---	---
	08/20/2008		283	287	---	7.45
	08/20/2008	FD	250	253	---	---
	09/03/2008		294	308	---	7.59
	10/07/2008		272	245	17,000	7.35
	10/07/2008	FD	286 J	242	17,000	---
	11/06/2008		364	447	---	7.28
	12/10/2008		481	422	15,800	7.36
	12/10/2008	FD	519	435	16,000	---
MW-35-60	03/11/2008		35.8	35.4	6,450	7.36
	10/07/2008		24.3	26.8	7,700	7.15
	10/07/2008	FD	26.5	27.7	7,700	---
MW-35-135	10/07/2008		32.0	32.8	10,000	7.58
MW-36-70	10/03/2008		ND (0.2)	ND (1.0)	1,400	7.83
MW-36-90	03/11/2008		0.71	1.46	2,880	7.42

TABLE 2
Groundwater Sampling Results, December 2007 through December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Well ID	Sample Date		Hexavalent Chromium (µg/L)	Dissolved Chromium (total) (µg/L)	Specific Conductance (µS/cm)	Field pH
MW-36-90	03/11/2008	FD	0.703	1.24	2,780	---
	10/03/2008		0.61	1.46	1,800	7.67
MW-36-100	03/11/2008		146	145	14,200	6.72
	10/07/2008		88.4	89.0	13,000	7.04
MW-37D	03/13/2008		695	742	14,800	7.72
	10/06/2008		451	542	15,000	7.49
MW-37S	10/03/2008		7.59	8.74	5,000	7.58
	10/03/2008	FD	7.68 J	7.80	5,000	---
MW-39-50	10/01/2008		ND (0.2)	ND (1.0)	2,700	7.76
MW-39-60	10/01/2008		ND (0.2)	ND (1.0)	3,500	7.62
MW-39-70	10/01/2008		ND (0.2)	ND (1.0)	5,200	7.42
MW-39-80	03/14/2008		34.8	28.6	12,600	6.95
	10/01/2008		7.58	8.05	12,000	6.97
MW-39-100	03/14/2008		1,150	1,290	19,900	6.67
	10/01/2008		706	613	19,000	6.72
MW-40D	03/13/2008		115	108	15,300	7.49
	10/06/2008		ND (100)	102	16,000	7.30
MW-41D	03/12/2008		2.08	2.98	20,800	7.65
	10/03/2008		ND (0.2)	ND (1.0)	19,000	7.67
MW-41M	10/03/2008		10.2	11.4	15,000	7.39
MW-41S	03/12/2008		19.1	18.3	4,820	7.78
	10/03/2008		19.3	18.8	5,000	7.77
	10/03/2008	FD	19.4 J	19.9	5,000	---
MW-42-55	12/11/2007		ND (1.0)	ND (1.0)	14,600	7.00
	03/11/2008		ND (1.0)	ND (1.0)	15,400	6.71
	05/06/2008		ND (1.0)	ND (1.0)	14,000	7.14
	10/03/2008		ND (0.2)	ND (1.0)	13,000	7.20
	12/09/2008		ND (1.0)	ND (1.0)	12,000	6.64
MW-42-65	12/11/2007		ND (1.0)	ND (1.0)	15,900	6.76
	03/11/2008		ND (1.0)	ND (1.0)	17,200	6.72
	05/06/2008		ND (1.0)	ND (1.0)	15,000	6.91
	10/03/2008		ND (0.2) J	1.09	14,000	6.91
	12/09/2008		ND (1.0)	ND (1.0)	13,600	6.41
MW-43-25	10/02/2008		ND (0.2)	ND (1.0)	1,400	7.49
MW-43-75	10/02/2008		ND (0.2)	ND (1.0)	14,000	7.63
MW-43-90	10/02/2008		ND (0.2)	ND (1.0)	18,000	6.92
MW-44-70	12/11/2007		ND (0.2)	ND (1.0)	4,430	7.33
	03/11/2008		ND (0.2)	ND (1.0)	4,490	7.07
	05/07/2008		ND (0.2)	ND (1.0)	4,200	7.53
	10/07/2008		ND (0.2)	ND (1.0)	3,700	7.65
	12/10/2008		ND (0.2)	ND (1.0)	3,120	7.34
MW-44-115	12/11/2007		736	766	13,100	7.61
	01/14/2008		746	652	---	7.64
	02/14/2008		744	668	---	7.59

TABLE 2
Groundwater Sampling Results, December 2007 through December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Well ID	Sample Date		Hexavalent Chromium (µg/L)	Dissolved Chromium (total) (µg/L)	Specific Conductance (µS/cm)	Field pH
MW-44-115	02/14/2008	FD	735	706	---	---
	03/11/2008		742	596	14,000	7.47
	04/07/2008		685	689	---	8.03
	05/08/2008		620	590	13,000	7.90
	06/02/2008		564	542	---	7.66
	07/07/2008		493	478	---	7.98
	08/19/2008		498 J	555	---	7.82
	09/02/2008		488	489	---	11.9
	10/07/2008		456	502	13,000	8.03
	10/07/2008	FD	527 J	466	13,000	---
	11/06/2008		429	529	---	6.86
	12/11/2008		426	403	11,800	7.62
MW-44-125	12/11/2007		359	311	13,600	7.80
	01/14/2008		338	344	---	7.82
	02/14/2008		326	324	---	7.61
	03/14/2008		338	291	12,000	7.63
	04/07/2008		318	326	---	7.90
	05/08/2008		253	342	12,000	7.63
	06/24/2008		293	339	---	7.92
	07/07/2008		281	291	---	8.03
	08/19/2008		294	297	---	7.60
	10/07/2008		55.9	64.5	10,000	7.75
	11/06/2008		312	317	---	7.65
	11/06/2008	FD	301	316	---	---
	12/12/2008		189	200	13,000	7.91
MW-46-175	12/13/2007		123	128	15,800	7.96
	01/14/2008		51.5	133	---	8.21
	02/13/2008		125	136	---	8.39
	03/13/2008		99.8	92.8	16,400	8.09
	04/07/2008		95.6	100	---	8.66
	05/07/2008		77.9	74.7	17,000	8.43
	06/02/2008		74.2	86.8	---	8.17
	06/02/2008	FD	73.6	87.0	---	---
	07/08/2008		75.3	83.4	---	8.29
	08/20/2008		98.2	91.4	---	8.25
	09/03/2008		100	112	---	8.37
	09/03/2008	FD	103	102	---	---
	10/08/2008		105	87.2	17,000	8.77
	11/06/2008		130	171	---	8.43
	12/11/2008		178	167	16,200	8.14
MW-46-205	12/14/2007		3.50	4.20	19,100	7.95
	03/13/2008		5.21	5.20	20,100	8.17
	05/07/2008		4.52	4.25	19,000	8.38
	10/08/2008		ND (4.9)	4.32	19,000	8.66
	12/09/2008		4.28	4.47	19,600	7.79
MW-47-55	12/12/2007		152	134	3,720	7.49

TABLE 2
Groundwater Sampling Results, December 2007 through December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Well ID	Sample Date		Hexavalent Chromium (µg/L)	Dissolved Chromium (total) (µg/L)	Specific Conductance (µS/cm)	Field pH
MW-47-55	02/14/2008		37.1	39.0	---	7.43
	02/14/2008	FD	37.2	39.4	---	---
	03/14/2008		53.7	46.1	3,570	7.52
	03/14/2008	FD	48.4	42.6	3,590	---
	05/07/2008		34.8	32.7	4,100	7.65
	10/08/2008		ND (49)	50.3	4,200	8.26
	12/10/2008		71.8	72.7	3,880	7.66
MW-47-115	12/12/2007		10.3	10.9	13,200	7.49
	12/12/2007	FD	10.5	11.3	13,000	---
	03/14/2008		18.0	16.5	12,400	7.59
	05/07/2008		18.2	18.3	13,000	7.76
	10/08/2008		ND (15)	15.6	13,000	8.22
	12/10/2008		13.3	13.6	13,200	7.68
MW-48	12/14/2007		ND (1.0)	1.10	16,400	7.54
	03/11/2008		ND (2.3)	2.93	18,800	7.21
	05/07/2008		ND (1.0)	1.40	17,000	7.00
	10/01/2008		ND (1.0)	ND (1.0)	17,000	6.83
	12/10/2008		ND (1.0)	ND (1.0)	16,700	7.30
MW-49-135	03/13/2008		ND (1.0)	1.43	13,400	7.64
	10/06/2008		ND (0.2)	1.59	14,000	7.68
MW-49-275	03/13/2008		ND (1.0)	1.27	23,400	7.84
	09/30/2008		ND (1.0)	ND (1.0)	25,000	8.21
MW-49-365	03/13/2008		ND (1.0)	ND (1.0)	35,700	7.79
	10/06/2008		ND (1.0)	ND (1.0)	44,000	7.78
MW-50-095	12/11/2007		173	163	4,910	7.82
	03/12/2008		150	160	4,680	7.77
	03/12/2008	FD	148	160	5,020	---
	05/07/2008		154	187	5,100	7.66
	05/07/2008	FD	164	192	5,200	---
	10/06/2008		ND (89)	87.7	5,200	7.67
	12/10/2008		82.2	73.4	4,670	7.93
	12/10/2008	FD	78.2	74.5	4,650	---
MW-50-200	12/11/2007		8,930	9,340	19,400	7.73
	03/12/2008		10,900	11,800	20,500	7.51
	05/08/2008		10,500	11,000	19,000	7.67
	10/07/2008		7,390	8,890	19,000	7.61
	12/12/2008		8,040	8,700	19,000	7.58
MW-51	03/11/2008		4,940	4,590	12,300	7.39
	10/08/2008		4,160	4,600	11,000	7.27
MW-52D	12/17/2007		ND (1.0)	ND (1.0)	19,500	7.36
	03/13/2008		ND (1.0)	ND (1.0)	20,800	7.76
	05/07/2008		ND (1.0)	ND (1.0)	---	7.99
	10/01/2008		ND (1.0)	ND (1.0)	19,000	7.78
	12/11/2008		ND (1.0)	ND (1.0)	20,100	---
MW-52M	12/17/2007		ND (1.0)	ND (1.0)	15,400	7.89

TABLE 2
Groundwater Sampling Results, December 2007 through December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Well ID	Sample Date	Hexavalent Chromium (µg/L)	Dissolved Chromium (total) (µg/L)	Specific Conductance (µS/cm)	Field pH
MW-52M	03/13/2008	ND (1.0)	ND (1.0)	16,400	7.60
	05/07/2008	ND (1.0)	ND (1.0)	16,000	8.09
	10/01/2008	ND (1.0)	ND (1.0)	16,000	7.26
	12/11/2008	ND (1.0)	ND (1.0)	15,600	6.94
MW-52S	12/17/2007	ND (1.0)	ND (1.0)	10,700	7.52
	03/13/2008	ND (1.0)	ND (1.0)	11,000	7.37
	05/07/2008	ND (1.0)	ND (1.0)	11,000	7.70
	10/01/2008	ND (1.0)	ND (1.0)	11,000	7.19
	12/11/2008	ND (1.0)	ND (1.0)	10,500	---
MW-53D	12/17/2007	ND (1.0)	ND (1.0)	24,300	8.68
	03/13/2008	ND (1.0)	ND (1.0)	25,500	8.55
	05/07/2008	ND (1.0)	ND (1.0)	27,000	8.44
	10/01/2008	ND (1.0)	ND (1.0)	27,000	8.37
	12/11/2008	ND (1.0)	ND (1.0)	24,800	8.79
MW-53M	12/17/2007	ND (1.0)	ND (1.0)	16,900	8.51
	03/13/2008	ND (1.0)	ND (1.0)	17,400	8.37
	05/07/2008	ND (1.0)	ND (1.0)	18,000	8.34
	10/01/2008	ND (1.0)	ND (1.0)	18,000	8.06
	12/11/2008	ND (1.0)	ND (1.0)	18,300	---
MW-54-85	04/15/2008	ND (0.2)	ND (1.0)	---	7.67
	06/03/2008	ND (0.2)	ND (1.0)	---	7.45
	07/09/2008	ND (0.2)	ND (1.0)	---	7.39
	08/19/2008	ND (0.2)	ND (1.0)	---	7.35
	09/04/2008	ND (0.2)	ND (1.0)	---	7.25
	10/01/2008	ND (0.2)	ND (1.0)	---	---
	12/08/2008	ND (1.0)	ND (5.0)	---	7.45
MW-54-140	04/14/2008	ND (0.2)	ND (1.0)	---	7.66
	06/03/2008	ND (0.2)	ND (1.0)	---	7.70
	07/09/2008	ND (1.0)	ND (1.0)	---	7.72
	08/19/2008	ND (1.0)	ND (1.0)	---	7.73
	09/04/2008	ND (1.0)	ND (1.0)	---	7.76
	10/01/2008	ND (0.2)	1.36	---	---
MW-54-140-TLI	10/01/2008	ND (1.0)	ND (1.0)	---	---
MW-54-140	12/08/2008	ND (1.0)	ND (5.0)	---	7.87
MW-54-195	04/14/2008	ND (1.0)	ND (1.0)	---	8.18
	06/03/2008	ND (1.0)	ND (1.0)	---	8.22
	07/09/2008	ND (1.0)	ND (1.0)	---	8.09
	08/19/2008	ND (1.0)	ND (1.0)	---	7.94
	09/04/2008	ND (1.0)	ND (1.0)	---	7.45
	10/01/2008	ND (1.0)	1.27	---	---
MW-54-195-TLI	10/01/2008	ND (1.0) J	ND (1.0)	---	---
MW-54-195	12/09/2008	ND (1.0) J	ND (5.0)	---	8.05
MW-55-45	04/15/2008	ND (0.2)	ND (1.0)	---	8.08
	06/03/2008	ND (0.2)	ND (1.0)	---	7.66
	07/08/2008	ND (1.0)	ND (1.0)	---	7.77
	08/18/2008	ND (0.2)	ND (1.0)	---	7.54

TABLE 2
Groundwater Sampling Results, December 2007 through December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Well ID	Sample Date		Hexavalent Chromium (µg/L)	Dissolved Chromium (total) (µg/L)	Specific Conductance (µS/cm)	Field pH
MW-55-45	09/03/2008		ND (0.2)	ND (1.0)	---	7.40
	10/02/2008		ND (0.2)	ND (1.0)	---	---
	12/08/2008		ND (0.2)	ND (5.0)	---	7.71
MW-55-120	04/15/2008		ND (0.2)	ND (1.0)	---	8.10
	06/03/2008		ND (0.2)	ND (1.0)	---	7.91
	07/08/2008		ND (0.2)	ND (1.0)	---	7.90
	08/18/2008		ND (0.2)	ND (1.0)	---	7.86
	09/03/2008		0.614	1.17	---	7.61
MW-55-120-TLI	09/03/2008		0.60 J	ND (1.0)	---	---
MW-55-120	10/02/2008		0.402	1.13	---	---
	12/08/2008		3.45	4.38	---	7.55
	12/08/2008	FD	3.22	4.34	---	---
MW-56D	04/29/2008		ND (1.0)	ND (5.0)	---	8.00
	06/04/2008		ND (1.0)	ND (1.0)	---	7.91
	07/09/2008		ND (5.0)	ND (1.0)	---	7.92
	08/18/2008		ND (1.0)	ND (1.0)	---	7.75
	09/03/2008		ND (1.0)	ND (1.0)	---	7.45
	10/02/2008		ND (2.0)	ND (1.0)	---	---
	12/08/2008		ND (2.0) J	ND (5.0)	---	7.54
MW-56M	04/29/2008		ND (0.2)	ND (1.0)	---	7.38
	06/04/2008		ND (0.2)	ND (1.0)	---	7.56
	07/09/2008		ND (1.0)	ND (1.0)	---	7.53
	08/18/2008		ND (1.0)	ND (1.0)	---	7.38
	09/03/2008		ND (1.0)	ND (1.0)	---	7.58
	10/02/2008		ND (0.2)	ND (1.0)	---	---
	12/08/2008		ND (1.0)	ND (5.0)	---	7.34
MW-56S	04/29/2008		ND (0.2)	ND (1.0)	---	7.39
	06/04/2008		ND (0.2)	ND (1.0)	---	7.95
	07/09/2008		ND (0.2)	ND (1.0)	---	7.29
	08/18/2008		ND (0.2)	ND (1.0)	---	7.36
	09/03/2008		ND (0.2)	ND (1.0)	---	6.78
	10/02/2008		ND (0.2)	ND (1.0)	---	---
	12/08/2008		ND (0.2) J	ND (5.0)	---	7.39
PE-1	12/12/2007		47.3	54.5	7,120	7.65 J ^
	01/03/2008		48.4	56.9	6,590	7.63 J ^
	02/06/2008		42.8	44.1	6,510	7.54 J ^
	03/05/2008		39.5	40.8	6,380	7.60 J ^
	04/02/2008		29.0	37.1	6,460	7.66 J ^
	05/08/2008		26.4	29.3	6,580	7.69 J ^
	06/04/2008		16.0	33.4	6,320	7.63 J ^
	07/02/2008		25.7	28.7	6,060	7.59 J ^
	08/06/2008		28.2	27.4	6,050	7.65 J ^
	09/04/2008		29.7	28.0	6,040	7.52 J ^
	10/01/2008		27.6	27.5	5,680	7.67 J ^
	12/04/2008		28.8	32.3	5,710	7.59 J ^
PGE-7BR	12/19/2007		ND (1.0)	ND (1.0) LF	---	8.57

TABLE 2
Groundwater Sampling Results, December 2007 through December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Well ID	Sample Date		Hexavalent Chromium (µg/L)	Dissolved Chromium (total) (µg/L)	Specific Conductance (µS/cm)	Field pH
PGE-7BR	03/12/2008		ND (1.0)	1.02	17,300	9.24
	05/08/2008		ND (1.0)	ND (1.0)	18,200	8.61
	10/07/2008		ND (0.2)	ND (1.0)	16,700	9.48
Park Moabi-3	10/02/2008		8.74	8.35 UF	1,400	7.42
Park Moabi-4	10/02/2008		20.6	18.5 UF	1,700	7.44
TW-2D	10/03/2008		561	644	9,400	7.22
TW-2S	10/03/2008		860	748	2,700	7.43
TW-3D	12/12/2007		1,800	2,040	8,930	7.44 J ^
	01/03/2008		1,830	2,210	8,390	7.37 J ^
	02/06/2008		1,760	1,600	8,490	7.31 J ^
	03/05/2008		1,810	1,740	8,320	7.36 J ^
	04/02/2008		1,550	2,010	8,580	7.39 J ^
	05/08/2008		1,540	1,740	8,690	7.69 J ^
	06/04/2008		1,460	1,700	8,440	7.35 J ^
	07/02/2008		1,460	1,780	8,270	7.30 J ^
	08/06/2008		1,440	1,450	8,350	7.26 J ^
	09/04/2008		1,490	1,380	8,460	7.27 J ^
	10/01/2008		1,460	1,300	7,820	7.37 J ^
	12/04/2008		1,570	1,360	8,240	7.28 J ^
TW-4	12/12/2007		26.1	23.2	19,600	7.56
	03/14/2008		27.4	28.4	19,900	7.65
	05/08/2008		22.6	23.2	19,000	7.47
	10/02/2008		19.9	17.5	19,000	7.51
	10/02/2008	FD	19.0	20.5	19,000	---
	12/10/2008		9.81	10.0	20,200	---
TW-5	10/02/2008		9.76	8.89	12,000	7.62

Notes:

µg/L	micrograms per liter
µS/cm	microSiemens per centimeter
ND	not detected at listed reporting limit
J	concentration or reporting limit estimated by laboratory or data validation
(---)	not collected or not available
FD	field duplicate sample
^	Analytical pH results, Method SM4500-HB
UF	Unfiltered

Hexavalent chromium analytical methods: SM3500 (reporting limit 10 µg/L), EPA 218.6 (reporting limit 0.2 µg/L for undiluted samples).

Other analytical methods: dissolved total chromium (Methods SW 6020A), specific conductance (EPA 120.1).

Wells TW-3D and PE-1 are active extraction wells for the IM hydraulic containment system.

TABLE 3
Title 22 Metals Results, October 2007 through December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Well ID		California MCL: Sample Date	6 Antimony	10 ^ Arsenic	1,000 Barium	4 Beryllium	5 Cadmium	NE Cobalt	50 Chromium	1,000* Copper	15 Lead	2 Mercury	NE Molybdenum	100 Nickel	50 Selenium	100* Silver	2 Thallium	NE Vanadium	5,000* Zinc
MW-10		03/11/2008	ND (3.0)	ND (5.0)	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	**473**	ND (10)	ND (2.0)	ND (0.2)	68.3	ND (20)	5.17	ND (5.0)	ND (1.0)	29.8	ND (20)
		10/06/2008	ND (10)	6.32	48.5	ND (1.0)	ND (3.0)	ND (5.0)	**483**	ND (5.0)	ND (10)	ND (0.2)	81.1	ND (10)	ND (10)	ND (5.0)	ND (1.0)	28.7	20.0
MW-12		12/13/2007	ND (3.0)	**75.4**	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	**2,930**	ND (10)	ND (2.0)	ND (0.2)	19.3	ND (20)	8.00	ND (5.0)	ND (1.0)	34.1	ND (20)
		03/10/2008	ND (3.0)	**66.1**	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	**2,860**	ND (10)	ND (2.0)	ND (0.2)	19.6	ND (20)	6.59	ND (5.0)	ND (1.0)	26.3	22.1
		05/05/2008	ND (3.0)	**62.0**	ND (500)	ND (1.0)	ND (2.0)	ND (5.0)	**2,800**	ND (10)	ND (5.0)	ND (0.2)	19.0	ND (20)	6.02	ND (5.0)	ND (10)	17.0	34.4
		10/07/2008	ND (10)	**50.1 J**	73.2	ND (1.0)	ND (3.0)	ND (5.0)	**3,000**	ND (5.0)	ND (10)	ND (0.2)	15.9	ND (10)	ND (10)	ND (5.0)	ND (1.0)	20.4	ND (10)
	FD	10/07/2008	ND (10)	**39.0 J**	74.8	ND (1.0)	ND (3.0)	ND (5.0)	**2,990**	ND (5.0)	ND (10)	ND (0.2)	ND (10)	ND (10)	ND (10)	ND (5.0)	ND (1.0)	14.4	ND (10)
		12/11/2008	ND (10)	**48.0**	66.1	ND (1.0)	ND (3.0)	ND (5.0)	**2,740**	ND (5.0)	ND (10)	ND (0.2) J	12.4	ND (10)	ND (10)	ND (5.0)	ND (1.0)	21.8	ND (10)
MW-21		12/11/2007	ND (3.0)	ND (5.0)	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	ND (1.0)	ND (10)	ND (2.0)	ND (0.2)	38.2	ND (20)	16.2	ND (5.0)	ND (1.0)	ND (5.0)	ND (20)
		03/11/2008	ND (3.0)	ND (5.0)	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	1.80	ND (10)	ND (2.0)	ND (0.2)	39.6	ND (20)	38.0	ND (5.0)	ND (1.0)	ND (5.0)	ND (20)
		05/06/2008	ND (5.0)	ND (5.4)	ND (500)	ND (1.0)	ND (2.0)	ND (5.0)	3.01	ND (10)	ND (5.0)	ND (0.2)	52.0	ND (20)	12.0	ND (5.0)	ND (1.0)	6.20	ND (20)
		10/02/2008	ND (10)	4.47	37.5	ND (1.0)	ND (3.0)	ND (5.0)	ND (1.0)	ND (5.0)	ND (10)	ND (0.2)	64.5	25.7	ND (10)	ND (5.0)	ND (1.0)	ND (5.0)	55.0
MW-22		12/17/2007	ND (3.0)	**11.7**	ND (300)	ND (1.0)	ND (2.0)	5.00	1.50	ND (10)	ND (2.0)	ND (0.2)	31.6	ND (20)	ND (5.0)	ND (5.0)	ND (1.0)	ND (5.0)	ND (20)
		03/11/2008	ND (3.0)	5.51	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	ND (1.0)	22.6	ND (2.0)	ND (0.2)	36.4	ND (20)	ND (5.0)	ND (5.0)	ND (1.0)	ND (5.0)	ND (20)
		07/29/2008	ND (3.0)	**13.8**	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	ND (1.0)	ND (10)	ND (2.0)	0.40 J	48.2	ND (20)	ND (5.0)	ND (5.0)	ND (1.0)	ND (5.0)	ND (20)
		10/03/2008	ND (10)	8.05	69.1	ND (2.0)	ND (3.0)	6.12	ND (1.0)	ND (5.0)	ND (10)	ND (0.2)	43.0	ND (10)	ND (10)	ND (5.0)	ND (2.0)	ND (5.0)	23.7
		12/11/2008	ND (10)	9.93	60.9	ND (1.0)	ND (3.0)	5.52	10.4	15.6	ND (10)	ND (0.2) J	23.9	ND (10)	ND (10)	ND (5.0)	ND (1.0)	ND (5.0)	ND (10)
MW-23		12/11/2007	ND (3.0)	ND (5.0)	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	40.1	ND (10)	ND (2.0)	ND (0.2)	ND (5.0)	ND (20)	6.10	ND (5.0)	ND (1.0)	ND (5.0)	ND (20)
		03/10/2008	ND (3.0)	ND (5.0)	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	24.3	ND (10)	ND (2.0)	ND (0.2)	6.01	ND (20)	5.44	ND (5.0)	ND (1.0)	ND (5.0)	ND (20)
		03/11/2008	ND (3.0)	ND (5.0)	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	39.6	ND (10)	4.26	ND (0.2)	ND (5.0)	ND (20)	6.14	ND (5.0)	ND (1.0)	ND (5.0)	ND (20)
		05/06/2008	ND (5.0)	ND (5.0)	ND (500)	ND (1.0)	ND (2.0)	ND (5.0)	22.0	ND (10)	ND (5.0)	ND (0.2)	15.0	ND (20)	10.9	ND (5.0)	ND (2.0)	ND (5.0)	21.0
	FD	05/06/2008	ND (5.0)	ND (5.0)	ND (500)	ND (1.0)	ND (2.0)	ND (5.0)	23.0	ND (10)	ND (5.0)	ND (0.2)	14.0	ND (20)	7.68	ND (5.0)	ND (1.0)	ND (5.0)	23.0
		10/01/2008	ND (10)	ND (1.0)	80.0	ND (1.0)	ND (3.0)	ND (5.0)	8.50	5.89	ND (10)	ND (0.2)	11.7	ND (10)	ND (10)	ND (5.0)	ND (1.0)	ND (5.0)	ND (10)
MW-24A		12/12/2007	ND (3.0)	ND (5.0)	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	**3,300**	ND (10)	ND (2.0)	ND (0.2)	39.7	ND (20)	ND (5.0)	ND (5.0)	ND (1.0)	27.3	ND (20)
		03/12/2008	ND (3.0)	**10.8**	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	**2,000**	ND (10)	ND (2.0)	ND (0.2)	29.6	ND (20)	**50.7**	ND (5.0)	ND (1.0)	7.18	ND (20)
		05/08/2008	ND (5.0)	**33.6**	944	ND (1.0)	ND (2.0)	ND (5.0)	10.0	ND (10)	ND (5.0)	ND (0.2)	11.0	ND (20)	5.29	ND (5.0)	ND (1.0)	ND (5.0)	ND (20)
		10/16/2008	ND (10)	**13.0**	306	ND (1.0)	ND (3.0)	ND (5.0)	6.02	ND (5.0)	ND (10)	ND (0.2)	ND (10)	ND (10)	18.0	ND (5.0)	ND (1.0)	ND (5.0)	29.0
MW-26		12/11/2007	ND (3.0)	ND (5.0)	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	**2,980**	ND (10)	ND (2.0)	ND (0.2)	34.0	ND (20)	14.4	ND (5.0)	ND (1.0)	5.90	ND (20)
		03/12/2008	ND (3.0)	ND (5.0)	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	**2,560**	ND (10)	ND (2.0)	ND (0.2)	28.8	ND (20)	14.8	ND (5.0)	ND (1.0)	6.14	21.3
	FD	03/12/2008	ND (3.0)	ND (5.0)	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	**2,640**	ND (10)	ND (2.0)	ND (0.2)	27.7	ND (20)	13.3	ND (5.0)	ND (1.0)	5.88	ND (20)
		05/05/2008	ND (3.0)	ND (5.0)	ND (500)	ND (1.0)	ND (2.0)	ND (5.0)	**2,600**	ND (10)	ND (5.0)	ND (0.2)	43.0	ND (20)	16.8	ND (5.0)	ND (1.0)	ND (5.0)	37.3
		10/08/2008	ND (10)	1.26	42.0	ND (1.0)	ND (3.0)	ND (5.0)	**2,410**	ND (5.0)	ND (10)	ND (0.2)	25.7	ND (10)	18.8	ND (5.0)	ND (1.0)	6.36	30.2
MW-32-35		12/10/2007	ND (3.0)	**19.3**	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	ND (2.0)	ND (10)	ND (2.0)	ND (0.2)	17.2	ND (20)	ND (5.0)	ND (50)	ND (2.0)	ND (5.0)	ND (200)
		03/10/2008	ND (3.0)	**23.1**	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	ND (1.0)	ND (10)	ND (2.0)	ND (0.2)	13.8	ND (20)	ND (5.0)	ND (5.0)	ND (1.0)	ND (5.0)	ND (20)
		05/06/2008	ND (5.0)	ND (32)	ND (500)	ND (1.0)	ND (2.0)	ND (5.0)	1.90	ND (10)	ND (5.0)	ND (0.2)	19.0	ND (20)	7.10	ND (5.0)	ND (2.0)	ND (5.0)	ND (20)
		10/03/2008	ND (10)	**25.6**	160	ND (2.0)	ND (3.0)	ND (5.0)	ND (1.0)	ND (5.0)	ND (10)	ND (0.2)	17.4	ND (10)	ND (10)	ND (5.0)	ND (1.0)	ND (5.0)	39.9
MW-43-25		12/10/2007	ND (3.0)	**23.0**	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	ND (1.0)	ND (10)	ND (1.0)	ND (0.2)	10.8	ND (20)	ND (5.0)	ND (5.0)	ND (1.0)	ND (5.0)	ND (20)
		03/10/2008	ND (3.0)	**18.9**	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	ND (1.0)	ND (10)	ND (2.0)	ND (0.2)	10.5	ND (20)	ND (5.0)	ND (5.0)	ND (1.0)	ND (5.0)	ND (20)
		05/07/2008	ND (5.0)	**24.4**	ND (500)	1.10	ND (2.0)	ND (5.0)	ND (1.0)	ND (10)	5.90	ND (0.2)	15.0	ND (20)	ND (5.0)	ND (5.0)	ND (1.0)	ND (5.0)	ND (20)
		10/02/2008	ND (10)	**21.1**	55.5	ND (1.0)	ND (3.0)	ND (5.0)	ND (1.0)	ND (5.0)	ND (10)	ND (0.2)	ND (10)	ND (10)	ND (10)	ND (5.0)	ND (1.0)	ND (5.0)	ND (10)
MW-44-115		12/11/2007	ND (3.0)	5.40	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	**766**	ND (10)	ND (2.0)	ND (0.2)	72.9	ND (20)	ND (5.0)	ND (5.0)	ND (1.0)	7.10	ND (20)
		03/11/2008	ND (3.0)	ND (5.0)	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	**596**	ND (10)	ND (2.0)	ND (0.2)	85.6	ND (20)	ND (5.0)	ND (5.0)	ND (1.0)	6.54	ND (20)
		05/08/2008	ND (5.0)	6.93	ND (500)	ND (1.0)	ND (2.0)	ND (5.0)	**590**	ND (10)	ND (5.0)	ND (0.2)	83.0	ND (20)	ND (5.0)	ND (5.0)	ND (2.0)	6.50	38.3
		10/07/2008	ND (10)	3.40	25.8	ND (1.0)	ND (3.0)	ND (5.0)	**502**	ND (5.0)	ND (10)	ND (0.2)	66.7 J	ND (10)	ND (10)	ND (5.0)	ND (1.0)	7.61	ND (10)

TABLE 3
Title 22 Metals Results, October 2007 through December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Well ID	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Cobalt	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
California MCL:		6	10 ^	1,000	4	5	NE	50	1,000*	15	2	NE	100	50	100*	2	NE	5,000*
MW-44-115 FD	10/07/2008	ND (10)	5.27	24.1	ND (1.0)	ND (3.0)	ND (5.0)	**466**	ND (5.0)	ND (10)	ND (0.2)	86.2 J	ND (10)	ND (10)	ND (5.0)	ND (1.0)	5.97	ND (10)
MW-48	12/14/2007	ND (3.0)	ND (5.0)	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	1.10	ND (10)	ND (2.0)	ND (0.2)	13.6	ND (20)	ND (5.0)	ND (5.0)	ND (1.0)	17.3	ND (20)
	03/11/2008	ND (3.0)	ND (5.0)	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	2.93	ND (10)	ND (2.0)	ND (0.2)	14.3	ND (20)	ND (5.0)	ND (5.0)	ND (1.0)	7.52	ND (20)
	05/07/2008	ND (5.0)	ND (5.0)	ND (500)	ND (1.0)	ND (2.0)	ND (5.0)	1.40	ND (10)	ND (5.0)	ND (0.2)	19.0	ND (20)	5.24	ND (5.0)	ND (2.0)	ND (5.0)	ND (20)
	10/01/2008	ND (10)	2.53	84.6	ND (2.0)	ND (3.0)	ND (5.0)	ND (1.0)	ND (5.0)	ND (10)	ND (0.2)	16.1	ND (10)	ND (10)	ND (5.0)	ND (1.0)	ND (5.0)	26.1
MW-50-200	12/11/2007	ND (3.0)	ND (5.0)	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	**9,340**	ND (10)	ND (2.0)	ND (0.2)	44.3	ND (20)	ND (5.0)	ND (5.0)	ND (1.0)	ND (5.0)	ND (20)
	03/12/2008	ND (3.0)	ND (5.0)	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	**11,800**	ND (10)	ND (2.0)	ND (0.2)	40.4	ND (20)	6.21	ND (5.0)	ND (1.0)	ND (5.0)	ND (20)
	05/08/2008	ND (3.0)	ND (5.0)	ND (500)	ND (1.0)	ND (2.0)	ND (5.0)	**11,000**	ND (10)	ND (5.0)	ND (0.2)	54.0	ND (20)	10.2	ND (5.0)	ND (2.0)	ND (5.0)	31.7
	10/07/2008	ND (10)	1.79	39.4	ND (2.0)	ND (3.0)	ND (5.0)	**8,890**	6.02	ND (10)	ND (0.2)	28.2	ND (10)	ND (10)	ND (5.0)	ND (1.0)	ND (5.0)	ND (10)
MW-51	12/11/2007	ND (3.0)	ND (5.0)	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	**4,460**	ND (10)	ND (2.0)	ND (0.2)	37.6	ND (20)	18.2	ND (5.0)	ND (1.0)	ND (5.0)	ND (20)
	03/11/2008	ND (3.0)	ND (5.0)	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	**4,590**	ND (10)	ND (2.0)	ND (0.2)	33.6	ND (20)	11.5	ND (5.0)	ND (1.0)	ND (5.0)	ND (20)
	05/08/2008	ND (3.0)	ND (5.0)	ND (500)	ND (1.0)	ND (2.0)	ND (5.0)	**4,600**	ND (10)	5.80	ND (0.2)	40.0	ND (20)	16.4	ND (5.0)	ND (2.0)	ND (5.0)	34.4
	10/08/2008	ND (10)	3.68	38.8	ND (1.0)	ND (3.0)	ND (5.0)	**4,600**	ND (5.0)	ND (10)	ND (0.2)	37.5	ND (10)	18.1	ND (5.0)	ND (1.0)	ND (5.0)	43.0
PGE-7BR	03/12/2008	ND (3.0)	ND (5.0)	ND (300)	2.84	ND (2.0)	5.16	1.02	13.0	ND (2.0)	ND (0.2)	6.94	ND (20)	ND (5.0)	ND (5.0)	ND (1.0)	ND (5.0)	341
	05/08/2008	ND (3.0)	ND (5.0)	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	ND (1.0)	ND (10)	ND (2.0)	ND (0.2)	22.6	ND (20)	ND (5.0)	ND (5.0)	ND (1.0)	ND (5.0)	ND (20)
	10/07/2008	ND (10)	ND (1.0)	27.1	ND (1.0)	ND (3.0)	ND (5.0)	ND (1.0)	ND (5.0)	ND (10)	ND (0.2)	39.1	ND (10)	ND (10)	ND (5.0)	ND (1.0)	ND (5.0)	ND (10)
TW-1	12/12/2007	ND (3.0)	ND (5.0)	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	**4,090**	ND (10)	ND (2.0)	ND (0.2)	16.1	ND (20)	**129**	ND (5.0)	ND (1.0)	7.90	84.8
	03/11/2008	ND (3.0)	ND (5.0)	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	**2,450**	ND (10)	ND (2.0)	ND (0.2)	13.4	ND (20)	**55.3**	12.2	ND (1.0)	7.35	88.1
	05/08/2008	ND (3.0)	ND (5.0)	ND (500)	ND (1.0)	ND (2.0)	ND (5.0)	**3,900**	ND (10)	5.10	ND (0.2)	22.0	ND (20)	**87.8**	ND (5.0)	ND (2.0)	ND (5.0)	110
	10/08/2008	ND (10)	0.53	33.3	ND (1.0)	ND (3.0)	ND (5.0)	**2,320**	ND (5.0)	ND (10)	ND (0.2)	ND (10)	ND (10)	**70.5**	ND (5.0)	ND (1.0)	5.53	54.4

Notes:

ND not detected at listed reporting limit
FD field duplicate sample
^ U.S. Environmental Protection Agency (USEPA) MCL as of January 23, 2006
NE not established
* Secondary USEPA MCL

Title 22 metals are the metals listed in California Code of Regulations, Title 22, Section 66261.24(a)(2)(A).

The maximum contaminant levels (MCLs) listed, in micrograms per liter (µg/L), are the California primary drinking water standards, except where noted.

The USEPA MCL for arsenic was lowered to 10 ug/L in January 2006. The California MCL of 50 ug/L is currently under review. California Division of Drinking Water and Environmental Management is proceeding with the regulatory and adoption process.

During the March 10, 2008 purge of monitoring well MW-23, the well did not purge dry as it typically does. An additional sample was collected on March 11 after the well recharged as normal.

All results are dissolved metals concentrations in µg/L from field-filtered samples.

Metals analyzed by Methods SW6020A and SW7470A.

Analytes detected above MCL are in bold.

Monitoring well MW-22 was sampled in July rather than May 2008.

TABLE 4
Surface Water Sampling Results, December 2007 through December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Location	Sample Date	Hexavalent Chromium (µg/L)	Dissolved Chromium (total) (µg/L)	Specific Conductance (µS/cm)	Lab pH
In-channel Locations					
C-BNS-D	12/03/2008	ND (0.2)	ND (1.0)	970	8.24 J
C-CON-S	12/06/2007	ND (0.2)	ND (1.0)	985	8.26 J
C-CON-M	12/06/2007	ND (0.2)	ND (1.0)	973	8.21 J
C-CON-D	12/06/2007	ND (0.2)	ND (1.0)	987	8.37 J
C-CON-S	01/17/2008	ND (0.2)	ND (1.0)	---	---
C-CON-M	01/17/2008	ND (0.2)	ND (1.0)	---	---
C-CON-D	01/17/2008	ND (0.2)	ND (1.0)	---	---
C-CON-S	02/12/2008	ND (0.2)	ND (1.0)	---	---
C-CON-M	02/12/2008	ND (0.2)	ND (1.0)	---	---
C-CON-D	02/12/2008	ND (0.2)	ND (1.0)	---	---
C-CON-D	04/01/2008	ND (0.2)	ND (1.0)	994	8.39 J
C-CON-S	04/02/2008	ND (0.2)	ND (1.0)	997	8.32 J
C-CON-M	04/02/2008	ND (0.2)	ND (1.0)	994	8.34 J
C-CON-S	06/18/2008	ND (0.2)	ND (1.0)	967	8.45 J
C-CON-M	06/18/2008	ND (0.2)	ND (1.0)	1040	8.47 J
C-CON-D	06/18/2008	ND (0.2)	ND (1.0)	1060	8.46 J
C-CON-S	09/17/2008	ND (0.2)	ND (1.0)	957	8.22 J
C-CON-D	09/17/2008	ND (0.2)	ND (1.0)	960	8.21 J
C-CON-S	10/23/2008	ND (0.2)	ND (1.0)	942	8.36 J
C-CON-D	10/23/2008	ND (0.2)	ND (1.0)	946	8.26 J
C-CON-S	12/04/2008	ND (0.2)	ND (1.0)	964	8.30 J
C-CON-D	12/04/2008	ND (0.2)	ND (1.0)	972	8.39 J
C-I-3-S	12/05/2007	ND (0.2)	ND (1.0)	1020	8.56 J
C-I-3-M	12/05/2007	ND (0.2)	ND (1.0)	1040	8.58 J
C-I-3-D	12/05/2007	ND (0.2)	ND (1.0)	1030	8.59 J
C-I-3-S	01/16/2008	ND (0.2)	ND (1.0)	---	---
C-I-3-M	01/16/2008	ND (0.2)	ND (1.0)	---	---
C-I-3-D	01/16/2008	ND (0.2)	ND (1.0)	---	---
C-I-3-S	02/12/2008	ND (0.2)	ND (1.0)	---	---
C-I-3-M	02/12/2008	ND (0.2)	ND (1.0)	---	---
C-I-3-D	02/12/2008	ND (0.2)	ND (1.0)	---	---
C-I-3-S	04/01/2008	ND (0.2)	ND (1.0)	987	8.32 J
C-I-3-M	04/01/2008	ND (0.2)	ND (1.0)	988	8.27 J
C-I-3-D	04/01/2008	ND (0.2)	ND (1.0)	984	8.40 J
C-I-3-S	06/17/2008	ND (0.2)	ND (1.0)	977	8.43 J
C-I-3-M	06/17/2008	ND (0.2)	ND (1.0)	974	8.42 J

TABLE 4
Surface Water Sampling Results, December 2007 through December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Location	Sample Date	Hexavalent Chromium (µg/L)	Dissolved Chromium (total) (µg/L)	Specific Conductance (µS/cm)	Lab pH
C-I-3-D	06/17/2008	ND (0.2)	ND (1.0)	973	8.41 J
C-I-3-S	09/17/2008	ND (0.2)	ND (1.0)	963	8.23 J
C-I-3-D	09/17/2008	ND (0.2)	ND (1.0)	961	8.28 J
C-I-3-S	10/23/2008	ND (0.2)	ND (1.0)	951	8.42 J
C-I-3-D	10/23/2008	ND (0.2)	ND (1.0)	939	8.44 J
C-I-3-S	12/03/2008	ND (0.2)	ND (1.0)	974	8.24 J
C-I-3-D	12/03/2008	ND (0.2)	ND (1.0)	971	8.25 J
C-MAR-D	12/05/2007	ND (0.2)	ND (1.0)	1860	7.93 J
C-MAR-S	01/17/2008	ND (0.2)	ND (1.0)	---	---
C-MAR-D	01/17/2008	ND (0.2)	ND (1.0)	---	---
C-MAR-S	02/12/2008	ND (0.2)	ND (1.0)	---	---
C-MAR-D	02/12/2008	ND (0.2)	ND (1.0)	---	---
C-MAR-D	04/01/2008	ND (0.2)	ND (1.0)	1010	8.05 J
C-MAR-S	04/02/2008	ND (0.2)	ND (1.0)	1000	8.23 J
C-MAR-M	04/02/2008	ND (0.2)	ND (1.0)	1000	8.14 J
C-MAR-S	06/17/2008	ND (0.2)	ND (1.0)	1030	7.82 J
C-MAR-D	06/17/2008	ND (0.2)	ND (1.0)	978	7.85 J
C-MAR-S	09/18/2008	ND (0.2)	ND (1.0)	942	8.28 J
C-MAR-D	09/18/2008	ND (0.2)	ND (1.0)	934	8.13 J
C-MAR-S	10/23/2008	ND (0.2)	ND (1.0)	972	8.25 J
C-MAR-D	10/23/2008	ND (0.2)	ND (1.0)	967	8.34 J
C-MAR-S	12/03/2008	ND (0.2)	ND (1.0)	1980	7.87 J
C-NR1-S	12/06/2007	ND (0.2)	ND (1.0)	985	8.34 J
C-NR1-M	12/06/2007	ND (0.2)	ND (1.0)	982	8.29 J
C-NR1-D	12/06/2007	ND (0.2)	ND (1.0)	996	8.22 J
C-NR1-S	01/17/2008	ND (0.2)	ND (1.0)	---	---
C-NR1-M	01/17/2008	ND (0.2)	ND (1.0)	---	---
C-NR1-D	01/17/2008	ND (0.2)	ND (1.0)	---	---
C-NR1-S	02/13/2008	ND (0.2)	ND (1.0)	---	---
C-NR1-M	02/13/2008	ND (0.2)	ND (1.0)	---	---
C-NR1-D	02/13/2008	ND (0.2)	ND (1.0)	---	---
C-NR1-D	04/01/2008	ND (0.2)	ND (1.0)	983	8.42 J
C-NR1-S	04/02/2008	ND (0.2)	ND (1.0)	995	8.25 J
C-NR1-M	04/02/2008	ND (0.2)	ND (1.0)	999	8.33 J
C-NR1-S	06/18/2008	ND (0.2)	ND (1.0)	975	8.45 J
C-NR1-M	06/18/2008	ND (0.2)	ND (1.0)	1050	8.47 J
C-NR1-D	06/18/2008	ND (0.2)	ND (1.0)	1040	8.44 J

TABLE 4
Surface Water Sampling Results, December 2007 through December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Location	Sample Date	Hexavalent Chromium (µg/L)	Dissolved Chromium (total) (µg/L)	Specific Conductance (µS/cm)	Lab pH
C-NR1-S	09/18/2008	ND (0.2)	ND (1.0)	957	8.22 J
C-NR1-D	09/18/2008	ND (0.2)	ND (1.0)	952	8.20 J
C-NR1-S	10/23/2008	ND (0.2)	ND (1.0)	947	8.39 J
C-NR1-D	10/23/2008	ND (0.2)	ND (1.0)	952	8.43 J
C-NR1-S	12/04/2008	ND (0.2)	ND (1.0)	975	8.31 J
C-NR1-D	12/04/2008	ND (0.2)	ND (1.0)	991	8.32 J
C-NR3-S	12/06/2007	ND (0.2)	ND (1.0)	969	8.43 J
C-NR3-M	12/06/2007	ND (0.2)	ND (1.0)	980	8.44 J
C-NR3-D	12/06/2007	ND (0.2)	ND (1.0)	983	8.42 J
C-NR3-S	01/17/2008	ND (0.2)	ND (1.0)	---	---
C-NR3-M	01/17/2008	ND (0.2)	ND (1.0)	---	---
C-NR3-D	01/17/2008	ND (0.2)	ND (1.0)	---	---
C-NR3-S	02/13/2008	ND (0.2)	ND (1.0)	---	---
C-NR3-M	02/13/2008	ND (0.2)	ND (1.0)	---	---
C-NR3-D	02/13/2008	ND (0.2)	ND (1.0)	---	---
C-NR3-D	04/01/2008	ND (0.2)	ND (1.0)	991	8.38 J
C-NR3-S	04/02/2008	ND (0.2)	ND (1.0)	998	8.29 J
C-NR3-M	04/02/2008	ND (0.2)	ND (1.0)	995	8.27 J
C-NR3-S	06/18/2008	ND (0.2)	ND (1.0)	1060	8.35 J
C-NR3-M	06/18/2008	ND (0.2)	ND (1.0)	1070	8.34 J
C-NR3-D	06/18/2008	ND (0.2)	ND (1.0)	1070	8.26 J
C-NR3-S	09/18/2008	ND (0.2)	ND (1.0)	954	8.25 J
C-NR3-D	09/18/2008	ND (0.2)	ND (1.0)	962	8.24 J
C-NR3-S	10/23/2008	ND (0.2)	ND (1.0)	950	8.38 J
C-NR3-D	10/23/2008	ND (0.2)	ND (1.0)	953	8.41 J
C-NR3-S	12/04/2008	ND (0.2)	ND (1.0)	976	8.23 J
C-NR3-D	12/04/2008	ND (0.2)	ND (1.0)	973	8.32 J
C-NR4-S	12/06/2007	ND (0.2)	ND (1.0)	980	8.46 J
C-NR4-M	12/06/2007	ND (0.2)	ND (1.0)	977	8.44 J
C-NR4-D	12/06/2007	ND (0.2)	ND (1.0)	975	8.45 J
C-NR4-S	01/17/2008	ND (0.2)	ND (1.0)	---	---
C-NR4-M	01/17/2008	ND (0.2)	ND (1.0)	---	---
C-NR4-D	01/17/2008	ND (0.2)	ND (1.0)	---	---
C-NR4-S	02/13/2008	ND (0.2)	ND (1.0)	---	---
C-NR4-M	02/13/2008	ND (0.2)	ND (1.0)	---	---
C-NR4-D	02/13/2008	ND (0.2)	ND (1.0)	---	---
C-NR4-D	04/01/2008	ND (0.2)	ND (1.0)	985	8.40 J

TABLE 4
Surface Water Sampling Results, December 2007 through December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Location	Sample Date	Hexavalent Chromium (µg/L)	Dissolved Chromium (total) (µg/L)	Specific Conductance (µS/cm)	Lab pH
C-NR4-S	04/02/2008	ND (0.2)	ND (1.0)	987	8.31 J
C-NR4-M	04/02/2008	ND (0.2)	ND (1.0)	1010	8.30 J
C-NR4-S	06/18/2008	ND (0.2)	ND (1.0)	1040	8.34 J
C-NR4-M	06/18/2008	ND (0.2)	ND (1.0)	1060	8.35 J
C-NR4-D	06/18/2008	ND (0.2)	ND (1.0)	987	8.33 J
C-NR4-S	09/18/2008	ND (0.2)	ND (1.0)	950	8.20 J
C-NR4-D	09/18/2008	ND (0.2)	ND (1.0)	959	8.18 J
C-NR4-S	10/23/2008	ND (0.2)	ND (1.0)	951	8.36 J
C-NR4-D	10/23/2008	ND (0.2)	ND (1.0)	954	8.27 J
C-NR4-S	12/04/2008	ND (0.2)	ND (1.0)	967	8.32 J
C-NR4-D	12/04/2008	ND (0.2)	ND (1.0)	974	8.35 J
C-R22-S	12/05/2007	ND (0.2)	ND (1.0)	987	8.54 J
C-R22-M	12/05/2007	ND (0.2)	ND (1.0)	982	8.55 J
C-R22-D	12/05/2007	ND (0.2)	ND (1.0)	1030	8.53 J
C-R22-S	01/16/2008	ND (0.2)	ND (1.0)	---	---
C-R22-M	01/16/2008	ND (0.2)	ND (1.0)	---	---
C-R22-D	01/16/2008	ND (0.2)	ND (1.0)	---	---
C-R22-S	02/12/2008	ND (0.2)	ND (1.0)	---	---
C-R22-M	02/12/2008	ND (0.2)	ND (1.0)	---	---
C-R22-D	02/12/2008	ND (0.2)	ND (1.0)	---	---
C-R22-D	04/01/2008	ND (0.2)	ND (1.0)	991	8.42 J
C-R22-S	04/02/2008	ND (0.2)	ND (1.0)	995	8.38 J
C-R22-M	04/02/2008	ND (0.2)	ND (1.0)	992	8.25 J
C-R22-S	06/17/2008	ND (0.2)	ND (1.0)	1070	8.37 J
C-R22-M	06/17/2008	ND (0.2)	ND (1.0)	1070	8.37 J
C-R22-D	06/17/2008	ND (0.2)	ND (1.0)	1080	8.36 J
C-R22A-S	09/18/2008	ND (0.2)	ND (1.0)	956	8.25 J
C-R22A-D	09/18/2008	ND (0.2)	ND (1.0)	959	8.23 J
C-R22A-S	10/23/2008	ND (0.2)	ND (1.0)	951	8.42 J
C-R22A-D	10/23/2008	ND (0.2)	ND (1.0)	949	8.34 J
C-R22A-S	12/03/2008	ND (0.2)	ND (1.0)	976	8.25 J
C-R27-S	12/05/2007	ND (0.2)	ND (1.0)	987	8.43 J
C-R27-M	12/05/2007	ND (0.2)	ND (1.0)	990	8.49 J
C-R27-D	12/05/2007	ND (0.2)	ND (1.0)	994	8.53 J
C-R27-S	01/17/2008	ND (0.2)	ND (1.0)	---	---
C-R27-M	01/17/2008	ND (0.2)	ND (1.0)	---	---
C-R27-D	01/17/2008	ND (0.2)	ND (1.0)	---	---

TABLE 4
Surface Water Sampling Results, December 2007 through December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Location	Sample Date	Hexavalent Chromium (µg/L)	Dissolved Chromium (total) (µg/L)	Specific Conductance (µS/cm)	Lab pH
C-R27-S	02/12/2008	ND (0.2)	ND (1.0)	---	---
C-R27-M	02/12/2008	ND (0.2)	ND (1.0)	---	---
C-R27-D	02/12/2008	ND (0.2)	ND (1.0)	---	---
C-R27-D	04/01/2008	ND (0.2)	ND (1.0)	987	8.41 J
C-R27-S	04/02/2008	ND (0.2)	ND (1.0)	996	8.32 J
C-R27-M	04/02/2008	ND (0.2)	ND (1.0)	999	8.38 J
C-R27-S	06/17/2008	ND (0.2)	ND (1.0)	976	8.33 J
C-R27-M	06/17/2008	ND (0.2)	ND (1.0)	962	8.31 J
C-R27-D	06/17/2008	ND (0.2)	ND (1.0)	979	8.34 J
C-R27-S	09/17/2008	ND (0.2)	ND (1.0)	958	8.24 J
C-R27-D	09/17/2008	ND (0.2)	ND (1.0)	954	8.25 J
C-R27-S	10/23/2008	ND (0.2)	ND (1.0)	949	8.44 J
C-R27-D	10/23/2008	ND (0.2)	ND (1.0)	940	8.43 J
C-R27-S	12/03/2008	ND (0.2)	ND (1.0)	966	8.28 J
C-R27-D	12/03/2008	ND (0.2)	ND (1.0)	963	8.31 J
C-TAZ-S	12/05/2007	ND (0.2)	ND (1.0)	1030	8.56 J
C-TAZ-M	12/05/2007	ND (0.2)	ND (1.0)	1040	8.54 J
C-TAZ-D	12/05/2007	ND (0.2)	ND (1.0)	1020	8.51 J
C-TAZ-S	01/16/2008	ND (0.2)	ND (1.0)	---	---
C-TAZ-M	01/16/2008	ND (0.2)	ND (1.0)	---	---
C-TAZ-D	01/16/2008	ND (0.2)	ND (1.0)	---	---
C-TAZ-S	02/12/2008	ND (0.2)	ND (1.0)	---	---
C-TAZ-M	02/12/2008	ND (0.2)	ND (1.0)	---	---
C-TAZ-D	02/12/2008	ND (0.2)	ND (1.0)	---	---
C-TAZ-S	04/01/2008	ND (0.2)	ND (1.0)	986	8.34 J
C-TAZ-M	04/01/2008	ND (0.2)	ND (1.0)	982	8.36 J
C-TAZ-D	04/01/2008	ND (0.2)	ND (1.0)	988	8.38 J
C-TAZ-S	06/17/2008	ND (0.2)	ND (1.0)	1080	8.45 J
C-TAZ-M	06/17/2008	ND (0.2)	ND (1.0)	1090	8.43 J
C-TAZ-D	06/17/2008	ND (0.2)	ND (1.0)	1100	8.41 J
C-TAZ-S	09/17/2008	ND (0.2)	ND (1.0)	956	8.27 J
C-TAZ-D	09/17/2008	ND (0.2)	ND (1.0)	959	8.20 J
C-TAZ-S	10/23/2008	ND (0.2)	ND (1.0)	951	8.49 J
C-TAZ-D	10/23/2008	ND (0.2)	ND (1.0)	948	8.50 J
C-TAZ-S	12/03/2008	ND (0.2)	ND (1.0)	978	8.12 J
C-TAZ-D	12/03/2008	ND (0.2)	ND (1.0)	969	8.23 J
C-TM-1	09/18/2008	ND (0.2)	ND (1.0)	---	---

TABLE 4
Surface Water Sampling Results, December 2007 through December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Location	Sample Date	Hexavalent Chromium (µg/L)	Dissolved Chromium (total) (µg/L)	Specific Conductance (µS/cm)	Lab pH
C-TM-1	12/04/2008	ND (0.2)	ND (1.0)	---	---
C-TM-2	09/18/2008	ND (0.2)	ND (1.0)	---	---
C-TM-2	12/04/2008	ND (0.2)	ND (1.0)	---	---
Shoreline Samples					
CON	12/06/2007	ND (0.2)	ND (1.0)	981	8.36 J
CON	01/17/2008	ND (0.2)	ND (1.0)	---	---
CON	02/12/2008	ND (0.2)	ND (1.0)	---	---
CON	04/02/2008	ND (0.2)	ND (1.0)	997	8.33 J
CON	06/18/2008	ND (0.2)	ND (1.0)	1030	8.48 J
I-3	12/05/2007	ND (0.2)	ND (1.0)	1030	8.56 J
I-3	01/16/2008	ND (0.2)	ND (1.0)	---	---
I-3	02/12/2008	ND (0.2)	ND (1.0)	---	---
I-3	04/02/2008	ND (0.2)	ND (1.0)	990	8.42 J
I-3	06/17/2008	ND (0.2)	ND (1.0)	1070	8.37 J
NR-1	12/06/2007	ND (0.2)	ND (1.0)	983	8.24 J
NR-1	01/17/2008	ND (0.2)	ND (1.0)	---	---
NR-1	02/13/2008	ND (0.2)	ND (1.0)	---	---
NR-1	04/02/2008	ND (0.2)	ND (1.0)	993	8.31 J
NR-1	06/18/2008	ND (0.2)	ND (1.0)	1060	8.43 J
NR-2	12/06/2007	ND (0.2)	ND (1.0)	989	8.20 J
NR-2	01/17/2008	ND (0.2)	ND (1.0)	---	---
NR-2	02/13/2008	ND (0.2)	ND (1.0)	---	---
NR-2	04/02/2008	ND (0.2)	ND (1.0)	992	8.30 J
NR-2	06/18/2008	ND (0.2)	ND (1.0)	977	8.37 J
NR-3	12/06/2007	ND (0.2)	ND (1.0)	984	8.23 J
NR-3	01/17/2008	ND (0.2)	ND (1.0)	---	---
NR-3	02/13/2008	ND (0.2)	ND (1.0)	---	---
NR-3	04/02/2008	ND (0.2)	ND (1.0)	1010	8.28 J
NR-3	06/18/2008	ND (0.2)	ND (1.0)	975	8.36 J
R-19	09/18/2008	ND (0.2)	ND (1.0)	955	8.27 J
R-19	10/24/2008	ND (0.2)	ND (1.0)	949	8.45 J
R-19	12/04/2008	ND (0.2)	ND (1.0)	976	8.26 J
R-22	12/05/2007	ND (0.2)	ND (1.0)	1020	8.57 J
R-22	01/16/2008	ND (0.2)	ND (1.0)	---	---
R-22	02/12/2008	ND (0.2)	ND (1.0)	---	---
R-22	04/02/2008	ND (0.2)	ND (1.0)	1000	8.41 J
R-22	06/17/2008	ND (0.2) J	ND (1.0)	978	8.32 J

TABLE 4
Surface Water Sampling Results, December 2007 through December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Location	Sample Date	Hexavalent Chromium (µg/L)	Dissolved Chromium (total) (µg/L)	Specific Conductance (µS/cm)	Lab pH
R-23	01/24/2008	ND (0.2)	ND (1.0)	---	---
R-23	02/14/2008	ND (0.2)	ND (1.0)	---	---
R-23	04/03/2008	ND (0.2)	ND (1.0)	1030	7.69 J
R-23	06/17/2008	ND (0.2)	ND (1.0)	1120	7.56 J
R-23	09/18/2008	0.23	ND (1.0)	981	8.29 J
R-23	10/24/2008	ND (0.2)	ND (1.0)	961	7.94 J
R-23	12/04/2008	ND (0.2)	ND (1.0)	990	7.79 J
R-27	12/05/2007	ND (0.2)	ND (1.0)	989	8.47 J
R-27	01/16/2008	ND (0.2)	ND (1.0)	---	---
R-27	02/12/2008	ND (0.2)	ND (1.0)	---	---
R-27	04/02/2008	ND (0.2)	ND (1.0)	983	8.36 J
R-27	06/17/2008	ND (0.2)	ND (1.0)	978	8.39 J
R-28	12/06/2007	ND (0.2)	ND (1.0)	1030	8.22 J
R-28	01/16/2008	ND (0.2)	ND (1.0)	---	---
R-28	02/12/2008	ND (0.2)	ND (1.0)	---	---
R-28	04/02/2008	ND (0.2)	ND (1.0)	998	8.32 J
R-28	06/18/2008	ND (0.2)	ND (1.0)	992	8.46 J
R-28	09/17/2008	ND (0.2)	ND (1.0)	950	8.30 J
R-28	10/24/2008	ND (0.2)	ND (1.0)	948	8.40 J
R-28	12/04/2008	ND (0.2)	ND (1.0)	973	8.22 J
RRB	12/06/2007	ND (0.2)	ND (1.0)	3560	7.46 J
RRB	01/16/2008	ND (0.2)	ND (1.0)	---	---
RRB	02/12/2008	ND (0.2)	ND (1.0)	---	---
RRB	04/02/2008	ND (0.2)	ND (1.0)	1000	8.27 J
RRB	06/18/2008	ND (0.2)	ND (1.0)	1040	8.27 J
RRB	09/18/2008	ND (0.2)	ND (1.0)	957	8.21 J
RRB	10/24/2008	ND (0.2)	ND (1.0)	988	8.16 J
RRB	12/04/2008	ND (0.2)	ND (1.0)	2310	7.75 J

Notes:

µg/L micrograms per liter
ND not detected at listed reporting limit
J concentration or reporting limit estimated by laboratory or data validation
(---) data not collected or not available

Hexavalent chromium analytical method EPA 218.6 (reporting limit 0.2 µg/L for undiluted samples).
Other analytical methods: dissolved total chromium (Method SW 6020A), specific conductance (EPA 120.1), pH (EPA 150.1).
The first quarter river monitoring event was performed in April 2008 to coincide with drilling activities on the river floodplain.

TABLE 5
Unfiltered Surface Water Results, Risk Assessment Data Collection, September and December 2008 River Monitoring Events
PG&E Topock Groundwater and Surface Water Monitoring Program

Location	Sample Date	Hexavalent Chromium (µg/L)	Chromium (total) (µg/L)
In-channel Locations			
C-CON-S	09/17/2008	ND (10)	ND (1.0)
	12/04/2008	ND (10)	ND (1.0)
C-I-3-S	09/17/2008	ND (10)	ND (1.0)
	12/03/2008	ND (10)	ND (1.0)
C-MAR-S	09/18/2008	ND (10)	ND (1.0)
	12/03/2008	ND (10)	ND (1.0)
C-NR1-S	09/18/2008	ND (10)	ND (1.0)
	12/04/2008	ND (10)	ND (1.0)
C-NR3-S	09/18/2008	ND (10)	ND (1.0)
	12/04/2008	ND (10)	ND (1.0)
C-NR4-S	09/18/2008	ND (10)	ND (1.0)
	12/04/2008	ND (10)	ND (1.0)
C-R22A-S	09/18/2008	ND (10)	ND (1.0)
	12/03/2008	ND (10)	ND (1.0)
C-R27-S	09/17/2008	ND (10)	1.04
	12/03/2008	ND (10)	ND (1.0)
C-TAZ-S	09/17/2008	ND (10)	ND (1.0)
	12/03/2008	ND (10)	ND (1.0)
C-TM-1	09/18/2008	ND (10)	ND (1.0)
	12/04/2008	ND (10)	1.27
C-TM-2	09/18/2008	ND (10)	ND (1.0)
	12/04/2008	ND (10)	ND (1.0)
Shoreline Samples			
R-19	09/18/2008	ND (10)	ND (1.0)
	12/04/2008	ND (10)	ND (1.0)
R-23	09/18/2008	ND (10)	ND (1.0)
	12/04/2008	ND (10)	ND (1.0)
R-28	09/17/2008	ND (10)	ND (1.0)
	12/04/2008	ND (10)	ND (1.0)
RRB	09/18/2008	ND (10)	ND (1.0)
	12/04/2008	ND (10)	ND (1.0)

Notes:

µg/L micrograms per liter
ND not detected at listed reporting limit
(---) data not collected or not available

Analytical methods: unfiltered chromium, total (Method SW 6020A), unfiltered hexavalent chromium (SW 3500)

Location	Well Depth (feet BMP)	Measuring Point Elevation (feet AMSL)[1]	Monitoring Date & Time		Water Level Measurement (feet BMP)	Salinity (percent)	Groundwater Elevation Adjusted for Salinity (feet AMSL)
Monitoring Wells							
MW-9	89	536.56	12/12/07	9:52 AM	80.00	0.20	456.53
			10/06/08	8:35 AM	79.98	0.20	456.55
MW-10	97	530.65	12/12/07	8:13 AM	75.40	0.20	455.20
			03/11/08	7:09 AM	75.19	0.20	455.41
			10/06/08	9:27 AM	74.35	0.20	456.24
MW-12	50	484.01	12/13/07	12:06 PM	31.40	0.23	452.57
			03/10/08	2:48 PM	29.21	0.35	454.77
			05/06/08	9:52 AM	27.73	0.35	456.25
			10/07/08	11:09 AM	28.42	0.35	455.57
			12/11/08	3:50 PM	29.30	0.35	454.68
MW-13	52	488.64	10/02/08	11:25 AM	32.55	0.12	456.03
MW-14	134	570.99	10/03/08	8:25 AM	114.35	0.10	456.58
MW-15	203	641.52	12/14/07	8:31 AM	185.60	0.10	455.86
MW-16	218	657.31	12/14/07	9:27 AM	200.53	0.10	456.72
			05/06/08	12:07 PM	184.20	0.10	472.99
			10/03/08	7:04 AM	199.70	0.10	457.54
MW-17	154	589.96	12/12/07	12:55 PM	133.20	0.11	456.69
			05/05/08	2:27 PM	132.29	0.11	457.59
			10/02/08	12:46 PM	132.37	0.11	457.51
MW-18	107	545.32	03/11/08	2:35 PM	88.90	0.08	456.36
			10/02/08	1:56 PM	88.12	0.08	457.14
MW-19	66	499.92	10/07/08	9:39 AM	49.88	0.15	450.00
MW-20-70	70	500.15	03/12/08	10:06 AM	46.12	0.20	453.97
			10/07/08	10:19 AM	46.33	0.20	453.76
MW-20-100	101	500.58	03/12/08	10:44 AM	47.00	0.24	453.46
			10/08/08	12:44 PM	47.21	0.24	453.24
MW-20-130	132	500.66	03/12/08	11:26 AM	47.71	0.85	453.12
			10/08/08	1:30 PM	47.98	0.85	452.84
MW-21	58	505.55	12/11/07	1:40 PM	51.82	0.83	453.74
			03/11/08	1:57 PM	51.16	0.90	454.41
			05/06/08	11:10 AM	54.71	0.90	450.85
			10/02/08	2:45 PM	54.55	0.90	451.01
			12/10/08	12:30 PM	30.61	0.90	475.01
MW-22	12	460.72	12/17/07	2:18 PM	7.15	2.60	453.65
			03/11/08	9:43 AM	5.90	2.25	454.91
			10/03/08	8:22 AM	5.90	2.25	454.90
			12/11/08	1:13 PM	6.85	2.25	453.94
MW-23	81	507.33	12/11/07	2:12 PM	52.86	1.22	454.61
			01/21/08	2:05 PM	53.19	1.22	454.28
			01/22/08	8:47 AM	63.06	1.22	444.36
			01/22/08	2:22 PM	74.01	1.22	433.36

TABLE 6
Manual Water Level Measurements, December 2007 through December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Location	Well Depth (feet BMP)	Measuring Point Elevation (feet AMSL)[1]	Monitoring Date & Time	Water Level Measurement (feet BMP)	Salinity (percent)	Groundwater Elevation Adjusted for Salinity (feet AMSL)
Monitoring Wells						
MW-23	81	507.33	01/23/08 8:45 AM	65.90	1.22	441.51
			03/11/08 12:45 PM	57.40	1.22	450.05
			03/11/08 12:36 PM	52.73	1.22	454.74
			05/06/08 9:42 AM	55.48	1.22	451.98
			10/01/08 12:31 PM	53.55	1.22	453.91
			12/11/08 2:23 PM	52.94	1.22	454.52
MW-24A	127	567.16	12/12/07 8:52 AM	112.15	0.23	454.97
			05/08/08 10:51 AM	110.40	0.20	456.71
			10/16/08 7:55 AM	111.11	0.20	456.01
MW-24BR	441	563.95	12/14/07 8:03 AM	108.56	1.03	456.21
			03/11/08 10:38 AM	108.42	1.03	456.39
			05/07/08 6:55 AM	113.71	1.03	451.04
			10/02/08 1:50 PM	119.10	1.03	445.64
			12/09/08 12:18 PM	108.18	1.03	456.58
MW-25	107	542.90	10/07/08 8:34 AM	87.34	0.09	455.50
MW-26	70	502.22	12/10/07 12:40 PM	48.10	0.23	454.07
			03/12/08 10:40 AM	47.41	0.23	454.76
			05/05/08 1:39 PM	46.00	0.23	456.16
			10/08/08 8:43 AM	47.09	0.23	455.07
MW-27-20	14	460.56	10/03/08 8:58 AM	5.40	0.07	455.15
MW-27-60	59	461.38	10/03/08 9:36 AM	6.50	0.46	454.96
			12/10/08 8:34 AM	8.77	0.46	452.69
MW-27-85	80	460.99	12/11/07 2:50 PM	9.00	1.35	452.50
			03/10/08 2:45 PM	6.59	0.94	454.78
			05/06/08 7:19 AM	4.58	0.94	456.73
			10/03/08 10:17 AM	6.55	0.94	454.79
			12/10/08 9:36 AM	8.78	0.97	452.58
MW-28-25	21	466.77	10/08/08 8:22 AM	12.00	0.08	454.75
MW-28-90	98	467.53	12/14/07 9:19 AM	14.90	0.53	452.75
			03/13/08 10:29 AM	12.30	0.48	455.36
			05/07/08 8:18 AM	12.71	0.48	454.96
			10/08/08 7:20 AM	12.80	0.48	454.86
MW-29	42	485.21	03/12/08 10:48 AM	29.81	0.18	455.38
			09/30/08 1:41 PM	29.80	0.18	455.39
			12/10/08 12:37 PM	31.54	0.18	453.65
MW-31-60	64	496.81	10/06/08 10:17 AM	42.03	0.18	454.73
MW-31-135	135	498.11	10/06/08 10:44 AM	44.05	0.61	454.11
MW-32-20	20	461.51	03/10/08 12:44 PM	6.92	3.00	454.83
			10/03/08 11:22 AM	7.60	3.00	454.13
MW-32-35	37	461.63	12/10/07 2:28 PM	9.03	1.20	452.74
			03/10/08 1:39 PM	6.81	1.24	455.01
			05/06/08 11:28 AM	5.41	1.24	456.42

TABLE 6
Manual Water Level Measurements, December 2007 through December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Location	Well Depth (feet BMP)	Measuring Point Elevation (feet AMSL)[1]	Monitoring Date & Time	Water Level Measurement (feet BMP)	Salinity (percent)	Groundwater Elevation Adjusted for Salinity (feet AMSL)
Monitoring Wells						
MW-32-35	37	461.63	10/03/08 1:45 PM	7.33	1.24	454.45
MW-33-40	42	487.38	12/12/07 12:58 PM	34.34	0.35	453.03
			03/12/08 11:57 AM	32.20	0.50	455.18
			05/05/08 11:48 AM	31.24	0.50	456.14
			10/06/08 11:40 AM	32.35	0.50	455.03
			12/09/08 12:18 PM	34.32	0.50	453.06
MW-33-90	88	487.55	12/13/07 8:21 AM	34.53	0.53	453.02
			03/12/08 1:30 PM	32.44	0.62	455.17
			05/05/08 12:40 PM	31.53	0.62	456.05
			10/06/08 12:28 PM	32.67	0.62	454.93
			12/11/08 11:29 AM	34.71	0.62	452.90
MW-33-150	155	487.77	12/12/07 1:54 PM	34.92	1.14	453.37
			03/12/08 4:10 PM	33.19	1.11	455.13
			05/06/08 2:19 PM	31.45	1.11	456.87
			10/06/08 2:49 PM	33.44	1.11	454.89
			12/11/08 8:13 AM	35.07	1.15	453.31
MW-33-210	223	487.25	12/12/07 3:01 PM	34.66	1.38	453.70
			03/12/08 3:05 PM	32.90	1.20	455.34
			05/05/08 10:24 AM	31.88	1.20	456.36
			10/06/08 1:47 PM	33.15	1.20	454.99
			12/11/08 10:21 AM	34.68	1.20	453.45
MW-34-55	57	460.95	10/07/08 7:37 AM	6.10	0.10	454.77
MW-34-80	84	461.20	12/13/07 11:30 AM	8.82	0.94	452.69
			01/15/08 8:43 AM	7.70	0.94	453.87
			02/13/08 11:37 AM	6.29	0.50	454.99
			03/12/08 7:32 AM	5.81	0.50	455.54
			04/08/08 7:19 AM	4.00	0.50	457.28
			05/06/08 8:36 AM	4.63	0.50	456.73
			06/04/08 9:19 AM	5.23	0.50	456.13
			07/08/08 8:16 AM	5.50	0.50	455.78
			08/20/08 9:50 AM	5.22	0.50	456.14
			09/03/08 8:50 AM	6.73	0.50	454.55
			10/07/08 9:40 AM	6.76	0.50	454.59
			11/06/08 2:41 PM	7.92	0.50	453.36
			12/10/08 1:58 PM	8.96	0.50	452.38
MW-34-100	117	460.96	12/13/07 9:48 AM	9.14	1.18	452.44
			01/15/08 10:11 AM	8.30	1.18	453.39
			02/13/08 1:40 PM	6.81	0.99	454.63
			03/12/08 8:53 AM	6.43	1.02	455.19
			04/08/08 8:47 AM	4.72	1.02	456.76
			05/06/08 9:54 AM	5.10	1.02	456.52
			06/04/08 8:25 AM	5.64	1.02	455.96

TABLE 6
Manual Water Level Measurements, December 2007 through December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Location	Well Depth (feet BMP)	Measuring Point Elevation (feet AMSL)[1]	Monitoring Date & Time		Water Level Measurement (feet BMP)	Salinity (percent)	Groundwater Elevation Adjusted for Salinity (feet AMSL)
Monitoring Wells							
MW-34-100	117	460.96	07/08/08	7:30 AM	5.52	1.02	456.05
			08/20/08	8:52 AM	5.52	1.02	456.08
			09/03/08	8:01 AM	7.10	1.02	454.37
			10/07/08	8:29 AM	7.20	1.02	454.37
			11/06/08	4:13 PM	7.44	1.02	454.12
			12/10/08	3:08 PM	9.40	1.25	452.33
MW-35-60	57	484.33	03/11/08	12:09 PM	28.60	0.45	455.72
			10/07/08	7:03 AM	29.05	0.45	455.27
MW-35-135	159	484.24	10/07/08	7:32 AM	28.78	0.60	455.58
MW-36-70	72	469.27	10/03/08	10:33 AM	14.66	0.10	454.50
MW-36-90	92	469.64	03/11/08	10:39 AM	15.51	0.20	454.05
			10/03/08	9:14 AM	15.61	0.20	453.95
MW-36-100	110	469.65	03/11/08	12:10 PM	15.68	0.80	454.25
			10/07/08	11:23 AM	16.25	0.80	453.63
MW-37D	227	486.19	03/13/08	8:24 AM	31.40	1.02	455.33
			10/06/08	11:57 AM	30.93	1.02	455.80
MW-37S	87	485.97	10/03/08	12:21 PM	30.55	0.27	455.29
MW-39-50	55	467.93	10/01/08	10:23 AM	13.30	0.25	454.58
MW-39-60	66	468.00	10/01/08	9:19 AM	13.40	0.30	454.55
MW-39-70	72	468.02	10/01/08	12:05 PM	14.10	0.40	453.92
MW-39-80	83	467.92	03/14/08	9:59 AM	13.98	0.80	454.12
			10/01/08	11:09 AM	14.00	0.80	454.11
MW-39-100	118	468.12	03/14/08	9:05 AM	13.87	1.30	454.90
			10/01/08	7:35 AM	13.75	1.30	455.03
MW-40D	266	566.08	12/14/07	12:31 PM	111.55	1.11	454.99
			03/13/08	7:11 AM	111.10	1.11	455.45
			10/06/08	7:06 AM	110.55	1.11	456.00
MW-40S	134	566.04	12/14/07	11:59 AM	111.00	0.13	454.96
MW-41D	313	479.42	12/14/07	10:48 PM	25.26	1.38	455.69
			03/12/08	8:05 AM	24.42	1.38	456.53
			10/03/08	9:35 AM	23.98	1.38	456.97
MW-41M	192	479.83	12/14/07	11:48 AM	25.64	1.03	454.71
			10/03/08	10:32 AM	23.98	1.03	456.38
MW-41S	62	480.07	12/14/07	12:55 PM	25.86	0.32	454.15
			03/12/08	9:00 AM	24.29	0.32	455.72
			10/03/08	11:37 AM	24.10	0.32	455.91
MW-42-30	32	463.74	12/11/07	12:28 PM	11.90	1.10	451.92
MW-42-55	56	463.85	12/11/07	1:13 PM	11.78	1.13	452.28
			03/11/08	7:30 AM	9.11	0.90	454.92
			05/06/08	12:19 PM	7.61	0.90	456.43
			10/03/08	7:17 AM	9.20	0.90	454.81

TABLE 6
Manual Water Level Measurements, December 2007 through December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Location	Well Depth (feet BMP)	Measuring Point Elevation (feet AMSL)[1]	Monitoring Date & Time		Water Level Measurement (feet BMP)	Salinity (percent)	Groundwater Elevation Adjusted for Salinity (feet AMSL)
Monitoring Wells							
MW-42-55	56	463.85	12/09/08	2:30 PM	11.57	0.90	452.43
MW-42-65	80	463.37	12/11/07	2:02 PM	11.20	1.21	452.54
			03/11/08	8:36 AM	8.61	1.05	455.11
			05/06/08	1:03 PM	7.18	1.05	456.55
			10/03/08	7:55 AM	8.72	1.05	455.00
			12/09/08	3:34 PM	11.17	1.05	452.53
MW-43-25	27	462.54	12/10/07	11:31 AM	10.19	0.07	452.32
			03/10/08	11:33 AM	7.41	0.08	455.10
			05/07/08	7:28 AM	6.71	0.08	455.81
			10/02/08	10:38 AM	7.55	0.08	454.96
MW-43-75	77	462.71	12/10/07	12:15 PM	10.27	1.05	452.80
			10/02/08	12:50 PM	8.30	0.90	454.68
MW-43-90	102	462.76	12/10/07	1:11 PM	10.54	1.50	453.01
			10/02/08	11:55 AM	7.37	1.22	456.02
MW-44-70	70	471.90	12/11/07	10:20 AM	19.68	0.50	452.28
			03/11/08	1:30 PM	17.10	0.30	454.79
			05/07/08	2:23 PM	17.42	0.30	454.48
			10/07/08	1:02 PM	17.85	0.30	454.05
			12/10/08	11:04 AM	19.45	0.30	452.45
MW-44-115	114	472.01	12/11/07	11:18 AM	19.48	1.05	452.98
			01/14/08	12:48 PM	19.58	1.05	452.89
			02/14/08	10:20 AM	17.21	0.85	455.08
			03/11/08	2:13 PM	18.00	0.85	454.36
			04/07/08	10:22 AM	16.96	0.85	455.42
			05/08/08	9:11 AM	16.93	0.85	455.37
			06/02/08	2:02 PM	17.48	0.85	454.90
			07/07/08	10:37 AM	17.04	0.85	455.26
			08/19/08	1:31 PM	18.12	0.85	454.25
			09/02/08	10:19 AM	18.16	0.85	454.14
			10/07/08	12:05 PM	18.45	0.85	453.90
			11/06/08	1:28 PM	19.02	0.85	453.28
			12/11/08	2:54 PM	20.24	0.85	452.10
MW-44-125	129	472.04	12/11/07	8:14 AM	19.90	0.99	452.68
			01/14/08	11:03 AM	18.98	0.99	453.58
			02/14/08	8:28 AM	16.89	0.85	455.46
			03/14/08	7:14 AM	16.98	0.85	455.49
			04/07/08	11:05 AM	16.74	0.85	455.71
			05/08/08	6:02 AM	16.18	0.85	456.28
			06/24/08	7:05 AM	15.66	0.85	456.70
			07/08/08	11:10 AM	16.90	0.85	455.46
			08/19/08	11:19 AM	17.35	0.85	455.01
			09/02/08	9:53 AM	17.80	0.85	454.56

TABLE 6
Manual Water Level Measurements, December 2007 through December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Location	Well Depth (feet BMP)	Measuring Point Elevation (feet AMSL)[1]	Monitoring Date & Time		Water Level Measurement (feet BMP)	Salinity (percent)	Groundwater Elevation Adjusted for Salinity (feet AMSL)
Monitoring Wells							
MW-44-125	129	472.04	10/07/08	1:35 PM	18.25	0.85	454.22
			11/06/08	9:56 AM	18.25	0.85	454.11
			12/12/08	8:18 AM	19.78	0.85	452.68
MW-46-175	182	482.16	12/13/07	1:51 PM	30.00	1.26	453.03
			01/14/08	1:34 PM	29.60	1.26	453.56
			02/13/08	2:35 PM	28.75	1.10	454.12
			03/13/08	8:41 AM	27.69	1.10	455.32
			04/07/08	1:02 PM	27.28	1.10	455.74
			05/07/08	10:55 AM	27.88	1.10	455.14
			06/02/08	2:57 PM	27.40	1.10	455.63
			07/08/08	10:24 AM	27.12	1.10	455.76
			08/20/08	6:04 AM	27.02	1.10	456.02
			09/03/08	6:16 AM	28.02	1.10	454.86
			10/08/08	10:05 AM	28.32	1.10	454.71
			11/06/08	8:27 AM	28.56	1.10	454.32
			12/11/08	1:19 PM	30.08	1.10	452.93
MW-46-205	225	482.23	12/14/07	10:21 AM	30.01	1.48	453.61
			03/13/08	7:25 AM	28.00	1.30	455.70
			05/07/08	9:28 AM	27.88	1.30	455.82
			10/08/08	9:14 AM	28.58	1.30	454.82
			12/09/08	10:35 AM	30.21	1.30	453.19
MW-47-55	55	484.04	12/12/07	11:53 AM	30.56	0.27	453.43
			02/14/08	11:26 AM	28.75	0.25	455.24
			03/14/08	9:07 AM	28.32	0.25	455.67
			05/07/08	12:53 PM	27.64	0.25	456.35
			10/08/08	1:04 PM	28.85	0.25	455.15
MW-47-115	115	484.17	12/12/07	11:02 AM	30.80	1.01	453.64
			03/14/08	9:07 AM	28.32	0.90	456.10
			05/07/08	12:15 PM	28.25	0.90	456.16
			10/08/08	1:52 PM	29.25	0.90	455.16
			12/10/08	11:28 AM	30.90	0.90	453.51
MW-48	138	486.22	12/14/07	11:15 AM	42.02	1.09	444.48
			03/11/08	2:24 PM	31.91	1.15	454.78
			05/07/08	10:34 AM	111.60	1.15	374.74
			09/30/08	11:53 AM	30.88	1.15	455.70
			12/09/08	2:36 PM	31.72	1.15	454.86
MW-49-135	137	484.02	03/13/08	2:35 PM	29.03	0.83	455.31
			10/06/08	7:40 AM	28.90	0.83	455.45
MW-49-275	275	483.95	03/13/08	2:40 PM	29.98	1.52	455.92
			09/30/08	11:56 AM	29.85	1.52	455.81
MW-49-365	367	484.01	03/13/08	11:43 AM	31.53	2.50	457.47
			10/06/08	9:40 AM	31.53	2.50	457.08

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Location	Well Depth (feet BMP)	Measuring Point Elevation (feet AMSL)[1]	Monitoring Date & Time	Water Level Measurement (feet BMP)	Salinity (percent)	Groundwater Elevation Adjusted for Salinity (feet AMSL)
Monitoring Wells						
MW-50-095	96	496.49	12/11/07 10:10 AM	43.20	0.33	453.21
			03/12/08 1:00 PM	41.35	0.31	455.05
			05/07/08 3:16 PM	40.40	0.31	455.99
			10/06/08 1:02 PM	41.38	0.31	455.02
			12/10/08 3:24 PM	43.08	0.31	453.30
MW-50-200	205	496.35	12/11/07 9:05 AM	43.93	1.40	453.42
			03/12/08 1:39 PM	41.24	1.30	455.99
			05/08/08 6:57 AM	41.00	1.30	456.23
			10/07/08 12:20 PM	46.06	1.30	451.04
			12/12/08 11:12 AM	43.39	1.30	453.73
MW-51	113	501.56	12/11/07 10:14 AM	48.22	0.64	453.38
			03/11/08 11:05 AM	46.91	0.70	454.71
			05/08/08 5:57 AM	46.75	0.70	454.88
			06/03/08 1:56 PM	45.53	0.70	456.09
			10/08/08 9:16 AM	46.54	0.70	455.08
MW-52D	90	462.02	12/17/07 8:36 AM	13.79	---	---
			03/13/08 10:07 AM	10.65	---	---
MW-52M	71	462.04	12/17/07 8:49 AM	13.20	---	---
			03/13/08 11:30 AM	11.32	---	---
		462.16	12/11/08 11:10 AM	11.32	---	---
MW-52S	52	462.22	12/17/07 9:40 AM	12.04	---	---
			03/13/08 12:00 PM	9.80	---	---
MW-53D	---	461.32	12/17/07 10:34 AM	18.53	---	---
			03/13/08 1:32 PM	14.30	---	---
			12/11/08 9:18 AM	14.30	---	---
MW-53M	---	461.32	12/17/07 10:36 AM	17.33	---	---
			03/13/08 2:10 PM	13.73	---	---
MW-54-85	93	466.10	04/15/08 9:45 AM	9.21	0.60	456.98
			06/03/08 7:34 AM	9.72	0.60	456.47
			07/09/08 7:07 AM	9.20	0.60	456.99
			08/19/08 7:51 AM	10.32	0.60	455.86
			09/04/08 7:21 AM	11.23	0.60	454.95
			10/01/08 6:50 AM	10.82	0.60	455.36
MW-54-140	138	465.98	04/14/08 1:35 PM	9.00	0.70	457.23
			06/03/08 8:11 AM	9.86	0.70	456.34
			07/09/08 6:20 AM	9.75	0.70	456.48
			08/19/08 8:29 AM	10.62	0.70	455.60
			09/04/08 6:36 AM	11.22	0.70	455.00
			10/01/08 7:50 AM	10.52	0.70	455.65
MW-54-195	195	466.32	04/14/08 12:05 PM	9.62	1.00	457.45
			06/03/08 9:08 AM	10.82	1.00	456.20
			07/09/08 7:54 AM	10.60	1.00	456.47

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Location	Well Depth (feet BMP)	Measuring Point Elevation (feet AMSL)[1]	Monitoring Date & Time		Water Level Measurement (feet BMP)	Salinity (percent)	Groundwater Elevation Adjusted for Salinity (feet AMSL)
Monitoring Wells							
MW-54-195	195	466.32	08/19/08	6:24 AM	11.34	1.00	455.72
			09/04/08	5:35 AM	11.92	1.00	455.13
			10/01/08	9:29 AM	11.58	1.00	455.37
MW-55-45	52	463.41	04/15/08	8:42 AM	6.13	0.10	457.20
			06/03/08	12:32 PM	6.81	0.10	456.47
			07/08/08	1:35 PM	6.90	0.10	456.40
			08/18/08	2:16 PM	7.76	0.10	455.53
			09/03/08	12:53 PM	7.82	0.10	455.47
			10/02/08	10:24 AM	7.53	0.10	455.70
			10/08/08	6:58 AM	7.75	0.10	455.48
MW-55-120	118	463.21	04/15/08	7:40 AM	5.98	0.31	457.03
			06/03/08	11:29 AM	6.50	0.31	456.56
			07/08/08	12:50 PM	6.67	0.31	456.35
			08/18/08	1:27 PM	7.44	0.31	455.58
			09/03/08	12:50 PM	7.51	0.31	455.51
			10/02/08	9:23 AM	7.60	0.31	455.42
MW-56D	---	461.36	04/29/08	10:13 AM	11.98	---	---
			06/04/08	11:30 AM	11.89	---	---
			07/09/08	10:44 AM	0.00	---	---
			08/18/08	10:22 AM	15.83	---	---
			09/03/08	11:00 AM	16.27	---	---
MW-56M	---	461.36	04/29/08	10:27 AM	11.71	---	---
			06/04/08	11:30 AM	11.68	---	---
			07/09/08	10:43 AM	0.00	---	---
			09/03/08	11:16 AM	15.17	---	---
MW-56S	---	461.36	04/29/08	12:13 PM	11.24	---	---
			06/04/08	11:30 AM	11.26	---	---
			07/09/08	10:46 AM	0.00	---	---
			08/18/08	10:22 AM	14.02	---	---
			09/03/08	11:02 AM	14.12	---	---
OW-3D	274	558.63	12/14/07	1:45 PM	103.20	0.51	455.27
OW-3M	202	558.90	12/14/07	2:26 PM	103.10	0.32	455.58
OW-3S	118	558.58	12/14/07	1:53 PM	102.72	0.08	455.80
PGE-7BR	300	---	03/12/08	8:20 AM	110.51	---	---
			05/07/08	9:42 AM	109.53	---	---
			10/06/08	1:59 PM	109.67	---	---
TW-1	240	620.55	12/12/07	11:18 AM	165.28	0.42	455.20
			03/11/08	9:12 AM	165.10	0.42	455.37
			05/08/08	12:39 PM	163.72	0.42	456.75
			10/08/08	7:53 AM	164.22	0.42	456.25
TW-4	255	484.11	12/12/07	7:45 AM	31.00	1.12	453.83
			03/14/08	6:55 AM	29.40	1.27	455.70

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Location	Well Depth (feet BMP)	Measuring Point Elevation (feet AMSL)[1]	Monitoring Date & Time		Water Level Measurement (feet BMP)	Salinity (percent)	Groundwater Elevation Adjusted for Salinity (feet AMSL)
Monitoring Wells							
TW-4	255	484.11	05/08/08	7:53 AM	28.60	1.27	456.52
			10/02/08	7:35 AM	29.30	1.27	455.83
			12/10/08	8:22 AM	30.97	1.27	454.15
TW-5	153	496.30	12/13/07	1:35 PM	43.13	0.83	453.29
			10/02/08	7:12 AM	41.05	0.95	455.48
Site Wide Water Levels							
MW-9	89	536.56	09/30/08	9:20 AM	80.05	0.20	456.48
MW-10	97	530.65	09/30/08	9:25 AM	2.10	0.20	528.31
MW-11	86	522.61	09/30/08	9:30 AM	3.65	0.16	518.71
MW-12	50	484.01	09/30/08	9:40 AM	28.40	0.35	455.58
MW-13	52	488.64	09/30/08	8:44 AM	32.52	0.12	456.06
MW-14	134	570.99	09/30/08	8:40 AM	114.55	0.10	456.38
MW-15	203	641.52	09/30/08	7:55 AM	184.60	0.10	456.86
MW-16	218	657.31	09/30/08	8:02 AM	199.84	0.10	457.40
MW-17	154	589.96	09/30/08	8:09 AM	132.60	0.11	457.28
MW-18	107	545.32	09/30/08	8:12 AM	88.38	0.08	456.88
MW-19	66	499.92	09/30/08	8:50 AM	44.56	0.15	455.30
MW-20-70	70	500.15	09/30/08	8:55 AM	45.96	0.20	454.13
MW-21	58	505.55	09/30/08	7:56 AM	49.99	0.90	455.58
MW-24A	127	567.16	09/30/08	9:50 AM	110.96	0.20	456.16
MW-25	107	542.90	09/30/08	9:55 AM	87.25	0.09	455.58
MW-26	70	502.22	09/30/08	8:05 AM	47.02	0.23	455.14
MW-31-60	64	496.81	09/30/08	9:55 AM	41.72	0.18	455.03
MW-35-60	57	484.33	09/30/08	9:33 AM	28.68	0.45	455.63
MW-38S	98	525.51	09/30/08	9:43 AM	69.82	0.23	455.62
MW-40D	266	566.08	09/30/08	8:46 AM	110.50	1.11	456.05
MW-40S	134	566.04	09/30/08	9:14 AM	109.90	0.13	456.05
MW-41S	62	480.07	09/30/08	8:45 AM	24.08	0.32	455.93
OW-3S	118	558.58	09/30/08	8:24 AM	101.66	0.08	456.86

Notes:

[1] Measuring Point Elevations were re-surveyed in Febuary 2004.

AMSL above mean sea level
BMP below well measure point
(---) data not collected or available.
T Results from transducers presented to fill water level data gaps

Well depths rounded off to whole foot.

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

I-3 water elevation data not available from 9/1/05 to 10/4/05 due to transducer damage from river.

Water level snapshot data was not collected in March 2007.

Monitoring well MW-39-70 was resampled on June 7, 2007 due to the rejected hexavalent chromium sample collected on May 3, 2007.

TABLE 7
Field Water Quality Measurements, December 2007 through December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Location	Sampling Date	Specific Conductance (µS/cm)	Temperature (°C)	pH	ORP (mV)	Dissolved Oxygen (mg/L)
Monitoring Wells						
MW-9	12/12/2007	3,078	28.64	7.31	22	4.61
MW-9	10/06/2008	3,522	29.89	7.20	137	3.79
MW-10	12/12/2007	2,763	28.39	7.62	181	4.70
MW-10	03/11/2008	3,240	28.83	7.53	172	4.00
MW-10	10/06/2008	3,104	28.96	7.40	131	3.55
MW-12	12/13/2007	5,740	27.60	8.25	-14	6.15
MW-12	03/10/2008	5,980	29.24	8.44	-51	7.58
MW-12	05/05/2008	6,780	28.29	8.19	-7	6.43
MW-12	10/07/2008	6,493	28.09	8.13	105	5.71
MW-12	12/11/2008	6,305	27.73	8.06	23	6.12
MW-13	10/02/2008	2,071	28.20	7.00	62	4.85
MW-14	10/03/2008	1,617	28.69	7.57	125	6.58
MW-15	12/14/2007	1,467	29.20	7.66	27	6.82
MW-16	12/14/2007	1,099	30.00	7.90	47	6.41
MW-16	05/06/2008	2,390	30.80	7.46	-3	8.51
MW-16	10/03/2008	1,191	30.03	7.85	154	7.08
MW-17	12/12/2007	1,876	29.70	7.58	25	5.90
MW-17	05/05/2008	1,960	30.35	7.52	-33	8.87
MW-17	10/02/2008	1,850	29.58	7.40	-37	1.75
MW-18	03/11/2008	1,370	28.95	7.57	53	6.57
MW-18	10/02/2008	1,383	29.48	6.92	150	7.39
MW-19	10/07/2008	2,508	28.40	7.31	72	6.02
MW-20-70	03/12/2008	3,210	28.70	7.53	86	7.91
MW-20-70	10/07/2008	3,188	29.02	7.44	110	7.31
MW-20-100	03/12/2008	3,770	29.20	7.39	96	2.95
MW-20-100	10/08/2008	3,714	29.42	7.23	89	3.27
MW-20-130	03/12/2008	8,850	29.30	7.42	101	1.75
MW-20-130	10/08/2008	13,220	29.42	7.29	98	1.70
MW-21	12/11/2007	14,476	28.80	7.01	81	1.71
MW-21	03/11/2008	14,050	28.30	7.00	-82	0.49
MW-21	05/06/2008	15,080	28.38	6.76	-85	0.68
MW-21	10/02/2008	16,220	30.89	6.66	11	0.56
MW-21	12/11/2008	4,405	27.04	7.66	52	2.33
MW-22	12/17/2007	33,500	25.30	6.76	-129	0.00
MW-22	03/11/2008	30,750	21.38	6.66	-94	2.29
MW-22	10/03/2008	36,800	28.66	6.68	-151	0.00
MW-22	12/11/2008	34,407	25.64	6.91	-101	0.22
MW-23	12/11/2007	18,598	28.07	7.17	-68	3.85
MW-23	03/11/2008	17,840	29.05	7.28	-54	6.28
MW-23	03/11/2008	18,120	29.67	7.30	-28	4.60
MW-23	05/06/2008	19,690	28.73	7.00	39	8.00
MW-23	10/01/2008	17,270	28.81	6.75	201	4.76
MW-23	12/11/2008	1,828	28.19	7.27	97	5.94

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Field Water Quality Measurements, December 2007 through December 2008
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Location	Sampling Date	Specific Conductance (µS/cm)	Temperature (°C)	pH	ORP (mV)	Dissolved Oxygen (mg/L)
Monitoring Wells						
MW-24A	12/12/2007	2,950	29.10	7.51	145	1.96
MW-24A	03/12/2008	9,758	31.20	7.44	-201	0.20
MW-24A	05/08/2008	11,260	31.84	6.33	-367	0.28
MW-24A	10/16/2008	10,626	30.91	7.01	-254	0.70
MW-24BR	12/14/2007	14,990	31.77	7.98	-161	0.39
MW-24BR	03/11/2008	15,030	32.09	8.10	-208	0.26
MW-24BR	05/07/2008	16,460	34.78	7.96	-186	0.12
MW-24BR	10/02/2008	14,876	30.71	8.41	-116	0.17
MW-24BR	12/10/2008	15,493	32.00	7.93	-204	0.15
MW-25	10/07/2008	1,299	29.25	7.27	122	6.41
MW-26	12/11/2007	3,868	29.44	7.51	148	4.89
MW-26	03/12/2008	4,380	24.61	7.50	180	3.90
MW-26	05/05/2008	4,220	29.78	7.22	9	19.10
MW-26	10/08/2008	4,122	29.78	7.18	97	2.40
MW-27-20	10/03/2008	1,097	20.96	7.64	-66	0.25
MW-27-60	10/03/2008	4,430	19.30	7.54	-83	0.16
MW-27-60	12/10/2008	4,293	18.79	7.28	-18	0.10
MW-27-85	12/11/2007	18,240	20.50	6.80	-44	0.07
MW-27-85	03/10/2008	18,550	20.35	7.26	-64	0.18
MW-27-85	05/06/2008	18,720	20.78	6.95	16	0.42
MW-27-85	10/03/2008	16,341	20.20	7.07	7	0.18
MW-27-85	12/10/2008	17,370	19.98	6.70	19	0.08
MW-28-25	10/08/2008	1,245	22.45	7.68	14	0.19
MW-28-90	12/14/2007	7,932	19.80	7.03	-133	0.20
MW-28-90	03/13/2008	8,048	19.68	7.15	-117	0.15
MW-28-90	05/07/2008	7,956	19.70	7.34	-112	0.20
MW-28-90	10/08/2008	7,700	19.57	7.65	-83	0.14
MW-29	03/12/2008	4,490	25.37	6.84	-132	0.43
MW-29	09/30/2008	3,507	24.79	7.55	-269	0.34
MW-29	12/10/2008	3,333	25.45	6.85	-63	2.57
MW-31-60	10/06/2008	3,337	28.38	7.30	124	4.82
MW-31-135	10/06/2008	11,250	29.82	7.52	103	0.43
MW-32-20	03/10/2008	45,930	23.90	6.65	-121	0.25
MW-32-20	10/03/2008	55,840	29.00	6.68	-7	0.13
MW-32-35	12/10/2007	19,800	25.10	6.83	-145	0.22
MW-32-35	03/10/2008	25,210	25.20	7.03	-145	0.11
MW-32-35	05/06/2008	25,580	25.25	6.85	-120	0.12
MW-32-35	10/03/2008	22,365	25.11	6.94	-52	0.12
MW-33-40	12/12/2007	8,969	28.20	7.65	22	0.18
MW-33-40	03/12/2008	6,112	28.32	7.76	-30	0.33
MW-33-40	05/05/2008	5,564	27.50	8.31	59	3.00
MW-33-40	10/06/2008	11,782	29.09	7.69	-118	0.76
MW-33-40	12/09/2008	8,831	31.05	7.25	42	0.97

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Field Water Quality Measurements, December 2007 through December 2008
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Location	Sampling Date	Specific Conductance (µS/cm)	Temperature (°C)	pH	ORP (mV)	Dissolved Oxygen (mg/L)
Monitoring Wells						
MW-33-90	12/13/2007	10,680	26.80	7.17	138	0.10
MW-33-90	03/12/2008	11,390	26.79	7.22	-66	0.15
MW-33-90	05/05/2008	11,160	26.80	7.48	45	0.14
MW-33-90	10/06/2008	10,635	26.96	7.43	-209	0.14
MW-33-90	12/11/2008	11,030	26.48	7.32	61	0.09
MW-33-150	12/12/2007	17,920	27.00	7.38	-67	0.07
MW-33-150	03/12/2008	18,180	27.06	7.29	1	0.65
MW-33-150	05/06/2008	18,150	27.12	7.62	24	0.13
MW-33-150	10/06/2008	16,991	27.49	7.54	-223	0.11
MW-33-150	12/11/2008	18,260	26.93	7.33	85	0.10
MW-33-210	12/12/2007	19,800	27.40	7.22	-14	0.04
MW-33-210	03/12/2008	21,180	27.41	7.13	-31	0.08
MW-33-210	05/05/2008	21,150	27.50	7.15	139	0.20
MW-33-210	10/06/2008	19,726	27.55	7.33	-190	0.08
MW-33-210	12/11/2008	20,110	27.23	7.13	67	0.05
MW-34-55	10/07/2008	1,107	17.99	7.54	-108	0.09
MW-34-80	12/13/2007	5,648	19.50	6.91	-34	0.06
MW-34-80	01/16/2008	9,135	19.40	7.27	-26	0.09
MW-34-80	02/13/2008	9,412	19.41	7.26	-52	0.15
MW-34-80	03/12/2008	9,779	19.11	7.07	-62	0.13
MW-34-80	04/08/2008	9,061	19.35	7.83	29	0.25
MW-34-80	05/06/2008	9,911	20.44	7.12	-3	0.22
MW-34-80	06/04/2008	9,403	20.54	7.57	-114	1.04
MW-34-80	07/08/2008	9,300	20.90	7.75	-103	0.20
MW-34-80	08/20/2008	9,337	21.50	7.27	-26	0.16
MW-34-80	09/03/2008	8,837	20.79	7.36	-286	0.13
MW-34-80	10/07/2008	8,610	19.17	7.32	-126	0.09
MW-34-80	11/06/2008	8,665	19.26	6.45	24	0.10
MW-34-80	12/10/2008	8,249	18.84	6.99	1	0.09
MW-34-100	12/13/2007	17,000	17.00	7.33	115	0.06
MW-34-100	01/16/2008	17,830	20.88	7.69	-7	0.08
MW-34-100	02/13/2008	18,310	20.84	7.68	-20	0.14
MW-34-100	03/12/2008	19,150	20.65	7.45	9	0.16
MW-34-100	04/08/2008	17,878	20.84	8.11	20	0.19
MW-34-100	05/06/2008	19,660	21.29	7.32	52	0.15
MW-34-100	06/04/2008	18,918	21.59	7.41	70	0.71
MW-34-100	07/08/2008	18,910	21.90	7.61	22	0.16
MW-34-100	08/20/2008	19,420	22.70	7.45	75	0.16
MW-34-100	09/03/2008	18,510	21.72	7.59	-264	0.15
MW-34-100	10/07/2008	18,088	20.58	7.35	17	0.09
MW-34-100	11/06/2008	18,650	20.71	7.28	45	0.08
MW-34-100	12/10/2008	17,840	20.22	7.36	10	0.06
MW-35-60	03/11/2008	6,930	26.97	7.36	-181	0.94

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Field Water Quality Measurements, December 2007 through December 2008
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Location	Sampling Date	Specific Conductance (µS/cm)	Temperature (°C)	pH	ORP (mV)	Dissolved Oxygen (mg/L)
Monitoring Wells						
MW-35-60	10/07/2008	7,957	26.86	7.15	185	0.80
MW-35-135	10/07/2008	10,450	27.04	7.58	168	0.48
MW-36-70	10/03/2008	1,630	22.05	7.83	-29	0.00
MW-36-90	03/11/2008	2,918	22.59	7.42	-54	0.19
MW-36-90	10/03/2008	2,240	22.95	7.67	-68	0.00
MW-36-100	03/11/2008	14,550	23.90	6.72	-170	0.24
MW-36-100	10/07/2008	12,687	23.57	7.04	-200	0.11
MW-37D	03/13/2008	15,720	29.90	7.72	98	0.17
MW-37D	10/06/2008	16,064	30.05	7.49	106	0.53
MW-37S	10/03/2008	5,425	29.32	7.58	91	1.81
MW-39-50	10/01/2008	2,702	24.51	7.76	-231	0.16
MW-39-60	10/01/2008	3,518	24.68	7.62	-215	0.19
MW-39-70	10/01/2008	5,190	24.78	7.42	-279	0.13
MW-39-80	03/14/2008	14,220	24.86	6.95	-63	0.39
MW-39-80	10/01/2008	12,105	25.15	6.97	-257	0.11
MW-39-100	03/14/2008	22,680	25.72	6.67	37	0.57
MW-39-100	10/01/2008	20,895	25.80	6.72	-19	0.17
MW-40D	12/14/2007	16,380	31.30	7.25	18	0.51
MW-40D	03/13/2008	16,630	31.40	7.49	171	0.36
MW-40D	10/06/2008	17,260	31.68	7.30	180	0.45
MW-40S	12/14/2007	2,169	30.40	7.40	13	6.64
MW-41D	12/14/2007	20,829	30.30	7.64	-127	0.05
MW-41D	03/12/2008	22,380	30.60	7.65	64	0.10
MW-41D	10/03/2008	23,060	29.92	7.67	-110	0.08
MW-41M	12/14/2007	14,687	29.00	7.54	-2	0.23
MW-41M	10/03/2008	15,950	29.43	7.39	60	0.22
MW-41S	12/14/2007	4,814	27.30	7.74	-1	1.35
MW-41S	03/12/2008	5,240	28.40	7.78	56	1.39
MW-41S	10/03/2008	5,296	28.86	7.77	75	1.25
MW-42-30	12/11/2007	24,330	25.46	6.89	-123	0.53
MW-42-55	12/11/2007	14,960	23.90	7.00	-132	0.15
MW-42-55	03/11/2008	15,890	23.70	6.71	-126	0.31
MW-42-55	05/06/2008	15,580	23.94	7.14	-100	0.18
MW-42-55	10/03/2008	13,322	23.93	7.20	-123	0.19
MW-42-55	12/09/2008	13,640	23.32	6.64	-93	0.07
MW-42-65	12/11/2007	16,470	23.90	6.76	-59	0.13
MW-42-65	03/11/2008	17,980	23.74	6.72	-50	0.21
MW-42-65	05/06/2008	16,680	23.84	6.91	-23	0.14
MW-42-65	10/03/2008	14,084	23.77	6.91	-32	0.29
MW-42-65	12/09/2008	15,360	23.36	6.41	-12	0.07
MW-43-25	12/10/2007	1,333	21.60	7.30	-171	0.12
MW-43-25	03/10/2008	1,614	20.70	8.22	-161	0.20
MW-43-25	05/07/2008	1,617	20.30	7.49	-165	0.19

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Monitoring Wells						
MW-43-25	10/02/2008	1,361	21.54	7.49	-98	0.16
MW-43-75	12/10/2007	14,600	21.20	7.31	-148	0.09
MW-43-75	10/02/2008	14,010	21.23	7.63	-90	0.14
MW-43-90	12/10/2007	19,370	21.40	6.60	-95	0.38
MW-43-90	10/02/2008	19,543	21.54	6.92	-85	0.13
MW-44-70	12/11/2007	4,448	21.00	7.33	-147	0.08
MW-44-70	03/11/2008	4,663	20.41	7.07	-128	0.25
MW-44-70	05/07/2008	4,321	21.40	7.53	-107	0.14
MW-44-70	10/07/2008	3,510	20.11	7.65	-159	0.11
MW-44-70	12/10/2008	3,351	19.66	7.34	-88	0.08
MW-44-115	12/11/2007	13,420	22.90	7.61	-60	0.07
MW-44-115	01/14/2008	13,550	23.38	7.64	-48	0.08
MW-44-115	02/14/2008	14,300	22.78	7.59	-48	0.10
MW-44-115	03/11/2008	14,330	22.70	7.47	-70	0.35
MW-44-115	04/07/2008	13,480	22.90	8.03	100	0.77
MW-44-115	05/08/2008	14,330	22.50	7.90	-2	0.11
MW-44-115	06/02/2008	13,811	22.60	7.66	-142	0.09
MW-44-115	07/07/2008	13,570	22.70	7.98	-108	0.17
MW-44-115	08/19/2008	13,730	21.10	7.82	-66	0.22
MW-44-115	09/02/2008	13,550	20.41	11.91	-274	0.11
MW-44-115	10/07/2008	12,917	22.34	8.03	-185	0.09
MW-44-115	11/06/2008	13,400	22.41	6.86	39	0.09
MW-44-115	12/11/2008	13,060	22.03	7.62	20	0.04
MW-44-125	12/11/2007	14,030	22.90	7.80	-61	0.09
MW-44-125	01/14/2008	13,630	22.95	7.82	-55	0.06
MW-44-125	02/14/2008	13,760	22.68	7.61	-82	0.09
MW-44-125	03/14/2008	13,430	23.25	7.63	-112	0.14
MW-44-125	04/07/2008	10,272	23.48	7.90	-6	0.32
MW-44-125	05/08/2008	12,400	22.80	7.63	1	0.08
MW-44-125	06/24/2008	17,300	23.50	7.92	-77	0.00
MW-44-125	07/07/2008	13,860	23.40	8.03	-155	0.15
MW-44-125	08/19/2008	10,910	23.20	7.60	-65	0.70
MW-44-125	09/02/2008	4,379	23.78	6.77	77	0.73
MW-44-125	10/07/2008	3,249	22.00	7.75	-150	0.08
MW-44-125	11/06/2008	14,260	23.07	7.65	52	0.07
MW-44-125	12/12/2008	14,420	22.20	7.91	56	0.04
MW-46-175	12/13/2007	17,510	24.40	7.96	-202	0.04
MW-46-175	01/14/2008	17,520	24.35	8.21	-159	0.08
MW-46-175	02/13/2008	18,300	24.16	8.39	-146	0.08
MW-46-175	03/13/2008	18,300	23.94	8.09	-174	0.10
MW-46-175	04/07/2008	17,588	24.05	8.66	-52	0.17
MW-46-175	05/07/2008	18,470	24.00	8.43	-121	0.10
MW-46-175	06/02/2008	18,176	23.90	8.17	-225	0.08

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Field Water Quality Measurements, December 2007 through December 2008
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Location	Sampling Date	Specific Conductance (µS/cm)	Temperature (°C)	pH	ORP (mV)	Dissolved Oxygen (mg/L)
Monitoring Wells						
MW-46-175	07/08/2008	17,700	24.20	8.29	-192	0.09
MW-46-175	08/20/2008	18,470	24.10	8.25	-103	0.19
MW-46-175	09/03/2008	17,770	23.74	8.37	-314	0.13
MW-46-175	10/08/2008	17,622	24.12	8.77	-207	0.07
MW-46-175	11/06/2008	18,180	23.91	8.43	6	0.09
MW-46-175	12/11/2008	17,810	23.57	8.14	1	0.04
MW-46-205	12/14/2007	21,470	24.90	7.95	-12	0.05
MW-46-205	03/13/2008	22,360	24.58	8.17	91	0.11
MW-46-205	05/07/2008	22,620	24.30	8.38	57	0.13
MW-46-205	10/08/2008	21,491	25.01	8.66	-127	0.11
MW-46-205	12/09/2008	22,400	24.37	7.79	58	0.13
MW-47-55	12/12/2007	4,042	27.50	7.49	30	2.15
MW-47-55	02/14/2008	4,449	27.62	7.43	5	2.42
MW-47-55	03/14/2008	3,840	27.50	7.52	85	2.82
MW-47-55	05/07/2008	4,346	28.00	7.65	0	2.20
MW-47-55	10/08/2008	4,271	27.95	8.26	-119	2.54
MW-47-55	12/10/2008	4,405	27.04	7.66	52	2.33
MW-47-115	12/12/2007	14,990	28.00	7.49	53	0.10
MW-47-115	03/14/2008	13,520	28.00	7.59	58	0.23
MW-47-115	05/07/2008	14,160	28.40	7.76	-37	0.24
MW-47-115	10/08/2008	13,750	28.36	8.22	-174	0.14
MW-47-115	12/10/2008	15,105	27.59	7.68	-18	0.11
MW-48	12/14/2007	18,670	29.18	7.54	-135	0.30
MW-48	03/11/2008	18,790	28.37	7.21	94	1.83
MW-48	05/07/2008	20,360	32.03	7.00	-66	1.30
MW-48	10/01/2008	18,530	32.73	6.83	187	1.92
MW-48	12/10/2008	19,297	30.94	7.30	8	1.36
MW-49-135	03/13/2008	14,430	25.47	7.64	-82	8.36
MW-49-135	10/06/2008	13,684	24.95	7.68	-147	0.21
MW-49-275	03/13/2008	26,350	26.90	7.84	-191	0.08
MW-49-275	09/30/2008	24,030	27.24	8.21	-322	0.13
MW-49-365	03/13/2008	40,600	27.39	7.79	-207	0.07
MW-49-365	10/06/2008	38,436	27.37	7.78	-296	0.09
MW-50-095	12/11/2007	5,122	28.90	7.82	84	2.30
MW-50-095	03/12/2008	5,160	28.90	7.77	80	2.29
MW-50-095	05/07/2008	5,630	29.60	7.66	-53	2.34
MW-50-095	10/06/2008	5,575	29.54	7.67	91	1.78
MW-50-095	12/10/2008	5,263	28.92	7.93	55	2.00
MW-50-200	12/11/2007	21,335	29.75	7.73	123	2.86
MW-50-200	03/12/2008	21,790	29.60	7.51	101	1.29
MW-50-200	05/08/2008	23,830	30.09	7.67	48	2.86
MW-50-200	10/07/2008	21,430	29.72	7.61	101	2.47
MW-50-200	12/12/2008	21,370	29.20	7.58	60	2.27

TABLE 7
Field Water Quality Measurements, December 2007 through December 2008
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Location	Sampling Date	Specific Conductance (µS/cm)	Temperature (°C)	pH	ORP (mV)	Dissolved Oxygen (mg/L)
Monitoring Wells						
MW-51	12/11/2007	10,879	29.60	7.34	89	3.78
MW-51	03/11/2008	12,290	29.77	7.39	-71	0.97
MW-51	05/08/2008	12,720	29.94	7.28	75	1.78
MW-51	10/08/2008	11,780	29.76	7.27	111	1.70
MW-52D	12/17/2007	24,100	20.10	7.36	-280	0.00
MW-52D	03/13/2008	22,190	20.90	7.76	-142	0.13
MW-52D	05/07/2008	24,050	21.31	7.99	-192	0.89
MW-52D	10/01/2008	28,600	22.09	7.78	-262	0.00
MW-52M	12/17/2007	21,200	20.20	7.89	-240	0.00
MW-52M	03/13/2008	17,460	20.70	7.60	-220	0.15
MW-52M	05/07/2008	20,800	21.48	8.09	-230	0.00
MW-52M	10/01/2008	23,400	21.40	7.26	-191	0.00
MW-52M	12/11/2008	17,431	20.48	6.94	-73	0.15
MW-52S	12/17/2007	14,800	20.20	7.52	-232	0.00
MW-52S	03/13/2008	11,390	20.60	7.37	-176	0.48
MW-52S	05/07/2008	15,500	21.26	7.70	-226	0.00
MW-52S	10/01/2008	17,800	22.07	7.19	-173	0.50
MW-53D	12/17/2007	30,000	16.70	8.68	-283	0.00
MW-53D	03/13/2008	27,630	19.90	8.55	-241	0.38
MW-53D	05/07/2008	37,300	21.00	8.44	-160	0.00
MW-53D	10/01/2008	34,000	21.34	8.37	-279	0.00
MW-53D	12/11/2008	27,252	19.10	8.79	-13	0.25
MW-53M	12/17/2007	22,000	19.60	8.51	-176	0.00
MW-53M	03/13/2008	18,890	20.00	8.37	-140	6.91
MW-53M	05/07/2008	20,940	20.30	8.34	-167	1.72
MW-53M	10/01/2008	25,900	22.08	8.06	-153	1.73
MW-54-85	04/15/2008	10,050	25.90	7.67	-202	0.20
MW-54-85	06/03/2008	11,453	25.80	7.45	-139	0.26
MW-54-85	07/09/2008	10,900	25.90	7.39	-178	0.17
MW-54-85	08/19/2008	11,360	26.50	7.35	-159	0.16
MW-54-85	09/04/2008	10,880	26.07	7.25	-151	0.20
MW-54-85	12/08/2008	10,893	25.70	7.45	-160	0.16
MW-54-140	04/14/2008	12,400	25.03	7.66	-162	0.16
MW-54-140	06/03/2008	13,881	24.90	7.70	-139	0.20
MW-54-140	07/09/2008	13,280	25.10	7.72	-164	0.20
MW-54-140	08/19/2008	13,800	26.60	7.73	-126	0.13
MW-54-140	09/04/2008	13,430	25.42	7.76	-154	0.20
MW-54-140	12/08/2008	13,410	25.04	7.87	-131	0.13
MW-54-195	04/14/2008	21,760	25.11	8.18	-202	0.15
MW-54-195	06/03/2008	21,500	24.90	8.22	-199	0.13
MW-54-195	07/09/2008	20,260	25.10	8.09	-210	0.11
MW-54-195	08/19/2008	20,800	26.20	7.94	-172	0.19
MW-54-195	09/04/2008	19,470	25.43	7.45	-184	0.33

TABLE 7
Field Water Quality Measurements, December 2007 through December 2008
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Location	Sampling Date	Specific Conductance (µS/cm)	Temperature (°C)	pH	ORP (mV)	Dissolved Oxygen (mg/L)
Monitoring Wells						
MW-54-195	12/09/2008	20,488	24.55	8.05	-234	0.13
MW-55-45	04/15/2008	1,582	22.92	8.08	-222	0.13
MW-55-45	06/03/2008	1,699	27.60	7.66	-176	0.09
MW-55-45	07/08/2008	1,580	27.90	7.77	-179	0.11
MW-55-45	08/18/2008	1,633	27.90	7.54	-187	0.15
MW-55-45	09/03/2008	1,544	28.21	7.40	-167	0.19
MW-55-45	12/08/2008	1,532	27.78	7.71	-169	0.24
MW-55-120	04/15/2008	8,943	28.62	8.10	-206	0.17
MW-55-120	06/03/2008	9,808	28.50	7.91	-170	0.23
MW-55-120	07/08/2008	8,990	28.70	7.90	-169	0.09
MW-55-120	08/18/2008	2,434	28.00	7.86	-249	0.20
MW-55-120	09/03/2008	8,499	28.67	7.61	-82	0.18
MW-55-120	12/08/2008	9,336	28.20	7.55	72	0.97
MW-56D	04/29/2008	24,500	23.30	8.00	-181	3.50
MW-56D	06/04/2008	21,868	22.70	7.91	-146	6.52
MW-56D	07/09/2008	21,480	24.20	7.92	-142	3.30
MW-56D	08/18/2008	22,600	29.90	7.75	-154	6.68
MW-56D	09/03/2008	28,000	25.90	7.45	-138	7.00
MW-56D	12/08/2008	21,910	20.41	7.54	-110	7.00
MW-56M	04/29/2008	18,700	23.00	7.38	-228	0.30
MW-56M	06/04/2008	18,900	22.30	7.56	-210	0.02
MW-56M	07/09/2008	20,500	24.00	7.53	-173	0.27
MW-56M	08/18/2008	15,080	25.30	7.38	-133	7.01
MW-56M	09/03/2008	14,770	26.06	7.58	-157	7.44
MW-56M	12/08/2008	14,320	20.89	7.34	-65	4.71
MW-56S	04/29/2008	6,760	22.30	7.39	-214	0.00
MW-56S	06/04/2008	7,219	22.10	7.95	-173	0.23
MW-56S	07/09/2008	7,110	22.30	7.29	-118	0.33
MW-56S	08/18/2008	7,227	23.20	7.36	-139	0.25
MW-56S	09/03/2008	6,877	22.35	6.78	-127	2.69
MW-56S	12/08/2008	6,291	21.38	7.39	-117	6.47
OW-3D	12/14/2007	7,925	30.40	7.96	-70	0.15
OW-3M	12/14/2007	5,205	29.20	7.87	-30	0.65
OW-3S	12/14/2007	1,452	29.00	7.53	16	6.11
PGE-7BR	12/19/2007	21,900	29.20	8.57	-479	0.00
PGE-7BR	03/12/2008	19,060	29.57	9.24	-248	0.16
PGE-7BR	10/07/2008	20,900	30.65	9.48	-95	0.08
Park Moabi-3	12/17/2007	1,520	28.30	7.71	4	6.28
Park Moabi-3	10/02/2008	1,550	30.02	7.42	-30	2.93
Park Moabi-4	10/02/2008	1,970	29.78	7.44	-7	2.00
TW-1	12/12/2007	7,315	29.14	7.23	37	3.74
TW-1	03/11/2008	6,090	29.63	7.26	67	3.34
TW-1	05/08/2008	7,350	29.65	7.16	-12	3.57

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Location	Sampling Date	Specific Conductance (µS/cm)	Temperature (°C)	pH	ORP (mV)	Dissolved Oxygen (mg/L)
Monitoring Wells						
TW-1	10/08/2008	6,730	29.72	7.05	86	3.46
TW-2D	12/17/2007	9,050	26.60	7.43	-13	0.19
TW-2D	10/03/2008	15,500	27.07	7.22	100	0.00
TW-2S	12/17/2007	3,040	27.80	7.45	12	6.51
TW-2S	10/03/2008	5,850	28.85	7.43	134	3.28
TW-4	12/12/2007	21,860	28.90	7.56	78	0.05
TW-4	03/14/2008	21,990	28.80	7.65	16	0.13
TW-4	05/08/2008	22,710	29.60	7.47	-107	0.13
TW-4	10/02/2008	21,277	29.07	7.51	-94	0.10
TW-5	12/13/2007	15,549	29.30	7.73	-31	0.17
TW-5	10/02/2008	11,650	29.34	7.62	187	0.56
Shoreline Surface Water Station						
CON	12/06/2007	1,030	13.80	8.24	148	9.40
CON	01/17/2008	1,061	7.60	8.33	159	9.60
CON	02/12/2008	900	12.07	7.90	150	11.37
CON	04/02/2008	1,440	15.68	8.17	152	10.44
CON	06/18/2008	3,310	20.90	7.46	185	10.60
I-3	12/05/2007	1,070	14.50	8.35	105	10.90
I-3	01/16/2008	1,049	9.40	8.32	150	10.90
I-3	02/12/2008	900	10.84	7.82	172	11.43
I-3	04/02/2008	1,670	14.87	7.79	252	10.49
I-3	06/17/2008	2,180	20.90	8.23	264	10.07
NR-1	12/06/2007	1,030	14.10	8.34	137	8.30
NR-1	01/17/2008	1,038	8.20	8.29	199	9.30
NR-1	02/13/2008	1,220	10.63	6.69	162	10.87
NR-1	04/02/2008	2,090	15.69	8.24	209	10.59
NR-1	06/18/2008	3,210	20.60	7.71	189	10.40
NR-2	12/06/2007	1,030	14.10	8.35	126	8.80
NR-2	01/17/2008	1,053	8.30	8.28	160	8.90
NR-2	02/13/2008	1,190	10.60	7.62	142	10.48
NR-2	04/02/2008	3,020	15.56	8.33	197	10.83
NR-2	06/18/2008	2,930	20.40	7.77	185	10.20
NR-3	12/06/2007	1,030	14.10	8.29	121	9.50
NR-3	01/17/2008	1,051	8.30	8.30	148	9.30
NR-3	02/13/2008	1,190	10.55	7.67	148	10.44
NR-3	04/02/2008	1,940	15.70	8.14	220	10.57
NR-3	06/18/2008	2,990	20.40	7.78	179	10.20
R-22	12/05/2007	1,080	15.00	8.36	107	11.10
R-22	01/16/2008	1,039	9.30	8.35	122	10.90
R-22	02/12/2008	920	11.62	7.91	163	11.18
R-22	04/02/2008	1,540	15.26	8.09	249	10.83
R-22	06/17/2008	2,170	21.40	8.30	270	10.02
R-23	01/24/2008	1,150	9.50	7.01	163	12.90

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Location	Sampling Date	Specific Conductance (µS/cm)	Temperature (°C)	pH	ORP (mV)	Dissolved Oxygen (mg/L)
Shoreline Surface Water Station						
R-23	02/14/2008	1,118	10.42	7.85	29	12.20
R-23	04/03/2008	2,580	17.20	7.93	138	6.49
R-23	06/17/2008	3,290	26.50	7.56	218	7.31
R-23	09/18/2008	1,320	26.62	7.66	196	12.59
R-23	10/24/2008	1,170	15.40	6.44	224	---
R-27	12/05/2007	1,070	15.10	8.38	104	11.40
R-27	01/16/2008	945	9.20	8.34	164	11.00
R-27	02/12/2008	960	11.98	7.97	146	11.83
R-27	04/02/2008	1,580	15.51	8.13	231	10.94
R-27	06/17/2008	2,090	23.20	8.28	247	9.58
R-28	12/06/2007	1,020	13.70	8.24	188	8.30
R-28	01/16/2008	990	9.20	8.33	104	10.80
R-28	02/12/2008	999	11.57	7.89	152	11.28
R-28	04/02/2008	1,560	15.59	8.15	233	10.87
R-28	06/18/2008	1,410	20.90	7.41	207	10.80
R-28	09/17/2008	1,170	23.23	7.76	220	7.16
R-28	10/24/2008	1,120	18.90	6.99	220	---
RRB	12/06/2007	3,440	12.30	8.09	202	4.60
RRB	01/16/2008	1,133	8.00	8.28	67	11.60
RRB	02/12/2008	920	11.82	7.95	148	10.48
RRB	04/02/2008	1,330	16.68	8.39	203	9.90
RRB	06/18/2008	3,490	22.06	7.41	172	9.24
RRB	09/18/2008	1,150	23.79	7.81	143	9.73
RRB	10/24/2008	1,180	16.60	6.63	226	---
In-Channel Surface Water Station						
C-CON-D	12/06/2007	1,030	14.00	8.32	179	9.50
C-CON-M	12/06/2007	1,030	14.10	8.32	128	9.40
C-CON-S	12/06/2007	1,030	14.10	8.30	103	9.60
C-CON-D	01/17/2008	1,045	8.30	8.35	156	10.10
C-CON-M	01/17/2008	1,049	8.30	8.32	156	9.10
C-CON-S	01/17/2008	1,052	8.20	8.30	159	10.90
C-CON-D	02/12/2008	930	11.85	8.06	124	11.98
C-CON-M	02/12/2008	910	11.96	7.91	132	11.95
C-CON-S	02/12/2008	960	12.02	8.02	131	12.40
C-CON-D	04/01/2008	1,660	14.92	7.99	208	10.81
C-CON-M	04/02/2008	1,730	16.27	8.24	188	9.72
C-CON-S	04/02/2008	1,550	16.03	8.25	194	10.19
C-CON-D	06/18/2008	3,370	20.70	7.54	204	10.01
C-CON-M	06/18/2008	3,670	20.50	7.49	206	10.18
C-CON-S	06/18/2008	3,670	20.50	7.59	203	10.20
C-CON-D	09/17/2008	1,170	22.28	7.72	219	6.30
C-CON-S	09/17/2008	1,180	22.60	7.70	218	6.95
C-CON-D	10/23/2008	1,500	21.40	6.56	163	---

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Location	Sampling Date	Specific Conductance (µS/cm)	Temperature (°C)	pH	ORP (mV)	Dissolved Oxygen (mg/L)
In-Channel Surface Water Station						
C-CON-S	10/23/2008	1,490	20.89	6.56	152	---
C-I-3-D	12/05/2007	1,070	14.80	8.42	117	10.60
C-I-3-M	12/05/2007	1,070	14.80	8.45	109	10.90
C-I-3-S	12/05/2007	1,070	14.80	8.49	106	10.90
C-I-3-D	01/16/2008	1,652	9.70	8.36	189	10.50
C-I-3-M	01/16/2008	1,050	9.80	8.28	188	10.54
C-I-3-S	01/16/2008	1,050	9.80	8.31	192	10.80
C-I-3-D	02/12/2008	900	13.29	7.76	167	13.11
C-I-3-M	02/12/2008	1,010	12.22	7.77	165	12.07
C-I-3-S	02/12/2008	970	12.31	7.84	163	11.39
C-I-3-D	04/01/2008	1,370	14.51	7.12	292	10.56
C-I-3-M	04/01/2008	1,530	15.59	8.02	223	10.46
C-I-3-S	04/01/2008	1,580	15.56	8.02	275	9.86
C-I-3-D	06/17/2008	1,450	21.60	8.27	265	9.58
C-I-3-M	06/17/2008	2,690	21.70	8.23	267	9.26
C-I-3-S	06/17/2008	2,560	20.80	8.24	269	9.26
C-I-3-D	09/17/2008	1,160	21.60	7.52	218	6.26
C-I-3-S	09/17/2008	1,170	21.90	7.56	222	5.29
C-I-3-D	10/23/2008	1,570	19.22	6.48	231	---
C-I-3-S	10/23/2008	1,570	19.04	6.51	228	---
C-MAR-D	12/05/2007	2,100	13.70	7.93	120	8.30
C-MAR-D	01/17/2008	1,144	6.80	8.14	166	10.40
C-MAR-S	01/17/2008	1,163	6.80	8.13	164	9.90
C-MAR-D	02/12/2008	990	13.87	8.10	134	11.31
C-MAR-S	02/12/2008	1,000	14.30	8.02	130	11.18
C-MAR-D	04/01/2008	1,390	15.97	7.95	228	8.95
C-MAR-M	04/02/2008	1,740	15.50	7.20	273	9.57
C-MAR-S	04/02/2008	1,700	15.63	7.53	258	9.32
C-MAR-D	06/17/2008	2,800	24.40	7.82	265	7.53
C-MAR-S	06/17/2008	2,400	24.50	7.76	271	7.49
C-MAR-D	09/18/2008	1,200	22.12	7.58	208	9.01
C-MAR-S	09/18/2008	1,180	22.11	7.68	212	7.83
C-MAR-D	10/23/2008	1,480	20.13	6.63	182	---
C-MAR-S	10/23/2008	1,500	20.31	6.58	164	---
C-NR1-D	12/06/2007	1,030	14.10	8.35	214	9.40
C-NR1-M	12/06/2007	1,030	14.10	8.34	132	9.40
C-NR1-S	12/06/2007	1,030	14.10	8.34	88	9.40
C-NR1-D	01/17/2008	1,063	8.40	8.35	176	8.80
C-NR1-M	01/17/2008	1,053	8.30	8.32	151	8.90
C-NR1-S	01/17/2008	1,057	8.40	8.28	143	9.10
C-NR1-D	02/13/2008	1,260	11.86	7.15	149	10.73
C-NR1-M	02/13/2008	1,200	11.69	7.26	137	10.36
C-NR1-S	02/13/2008	1,170	11.32	7.47	136	10.51
C-NR1-D	04/01/2008	1,690	15.09	7.97	215	10.39

TABLE 7
Field Water Quality Measurements, December 2007 through December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Location	Sampling Date	Specific Conductance (µS/cm)	Temperature (°C)	pH	ORP (mV)	Dissolved Oxygen (mg/L)
In-Channel Surface Water Station						
C-NR1-M	04/02/2008	1,950	16.81	8.28	187	9.45
C-NR1-S	04/02/2008	1,920	16.74	8.82	191	9.61
C-NR1-D	06/18/2008	3,850	20.40	7.61	199	10.30
C-NR1-M	06/18/2008	3,530	20.50	7.63	198	10.20
C-NR1-S	06/18/2008	3,220	20.50	7.66	195	10.10
C-NR1-D	09/18/2008	1,180	22.04	7.70	220	8.07
C-NR1-S	09/18/2008	1,160	21.44	7.66	223	6.80
C-NR1-D	10/23/2008	1,480	21.74	6.60	129	---
C-NR1-S	10/23/2008	1,470	21.62	6.62	115	---
C-NR3-D	12/06/2007	1,030	14.30	8.39	112	9.60
C-NR3-M	12/06/2007	1,030	14.40	8.39	79	9.80
C-NR3-S	12/06/2007	1,030	14.40	8.39	72	9.70
C-NR3-D	01/17/2008	1,060	8.60	8.27	151	9.20
C-NR3-M	01/17/2008	1,058	8.60	8.27	149	9.10
C-NR3-S	01/17/2008	1,055	8.50	8.29	72	9.40
C-NR3-D	02/13/2008	1,190	12.06	7.83	144	10.64
C-NR3-M	02/13/2008	1,190	10.86	7.77	140	10.54
C-NR3-S	02/13/2008	1,180	11.09	7.77	137	10.66
C-NR3-D	04/01/2008	1,530	15.27	7.98	237	10.46
C-NR3-M	04/02/2008	1,750	16.02	8.75	199	10.29
C-NR3-S	04/02/2008	1,780	16.00	8.27	199	9.89
C-NR3-D	06/18/2008	3,500	20.90	7.76	186	10.20
C-NR3-M	06/18/2008	3,680	20.60	7.77	183	10.10
C-NR3-S	06/18/2008	3,750	20.50	7.78	179	10.10
C-NR3-D	09/18/2008	1,170	21.66	7.83	226	7.79
C-NR3-S	09/18/2008	1,160	21.47	7.83	221	6.48
C-NR3-D	10/23/2008	1,490	22.34	6.65	109	---
C-NR3-S	10/23/2008	1,460	21.90	6.65	101	---
C-NR4-D	12/06/2007	1,030	14.40	8.42	165	9.70
C-NR4-M	12/06/2007	1,030	14.40	8.41	102	9.80
C-NR4-S	12/06/2007	1,020	14.40	8.41	75	9.80
C-NR4-D	01/17/2008	1,061	8.80	8.27	73	10.20
C-NR4-M	01/17/2008	1,054	8.60	8.29	71	10.40
C-NR4-S	01/17/2008	1,056	8.60	8.27	69	10.50
C-NR4-D	02/13/2008	1,200	10.84	7.82	146	10.76
C-NR4-M	02/13/2008	1,200	10.91	7.78	144	10.60
C-NR4-S	02/13/2008	1,190	10.80	7.80	143	10.68
C-NR4-D	04/01/2008	1,440	15.46	8.01	202	9.93
C-NR4-M	04/02/2008	2,070	16.18	8.27	214	9.82
C-NR4-S	04/02/2008	1,690	16.01	8.26	210	10.01
C-NR4-D	06/18/2008	3,730	21.20	7.78	176	9.90
C-NR4-M	06/18/2008	3,710	20.80	7.84	167	9.50
C-NR4-S	06/18/2008	3,350	20.50	7.85	160	9.80
C-NR4-D	09/18/2008	1,180	22.15	7.71	222	9.60

TABLE 7
Field Water Quality Measurements, December 2007 through December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Location	Sampling Date	Specific Conductance (µS/cm)	Temperature (°C)	pH	ORP (mV)	Dissolved Oxygen (mg/L)
In-Channel Surface Water Station						
C-NR4-S	09/18/2008	1,160	21.77	7.71	221	9.00
C-NR4-D	10/23/2008	1,470	22.50	6.61	104	---
C-NR4-S	10/23/2008	1,440	21.97	6.65	105	---
C-R22-D	12/05/2007	1,080	15.20	8.36	108	11.40
C-R22-M	12/05/2007	1,070	15.20	8.39	105	10.90
C-R22-S	12/05/2007	1,070	15.20	8.35	103	10.80
C-R22-D	01/16/2008	1,042	9.50	8.36	153	10.90
C-R22-M	01/16/2008	1,049	9.50	8.33	154	10.50
C-R22-S	01/16/2008	1,051	9.50	8.33	152	10.50
C-R22-D	02/12/2008	1,050	14.78	8.06	133	12.48
C-R22-M	02/12/2008	980	15.27	7.99	131	11.24
C-R22-S	02/12/2008	950	13.74	8.06	129	11.28
C-R22-D	04/01/2008	1,650	14.69	7.62	278	10.43
C-R22-M	04/02/2008	1,610	15.25	8.12	246	10.43
C-R22-S	04/02/2008	1,590	15.12	8.19	245	10.19
C-R22-D	06/17/2008	2,500	21.30	8.22	268	9.75
C-R22-M	06/17/2008	2,310	20.90	8.26	266	9.59
C-R22-S	06/17/2008	2,250	20.90	8.25	267	9.49
C-R22-D	09/18/2008	1,180	23.53	7.80	207	7.87
C-R22-S	09/18/2008	1,170	22.93	7.77	211	8.33
C-R22A-D	10/23/2008	1,530	19.80	6.53	215	---
C-R22A-S	10/23/2008	1,520	19.25	6.51	220	---
C-R27-D	12/05/2007	1,060	15.00	8.35	103	11.20
C-R27-M	12/05/2007	1,060	15.10	8.35	103	10.80
C-R27-S	12/05/2007	1,060	15.60	8.34	104	10.70
C-R27-M	01/16/2008	1,053	7.80	8.32	167	10.90
C-R27-S	01/16/2008	1,053	7.90	8.34	163	12.50
C-R27-D	01/17/2008	1,050	7.70	8.29	176	10.80
C-R27-D	02/12/2008	1,010	11.64	8.03	144	12.60
C-R27-M	02/12/2008	990	11.61	8.00	137	12.14
C-R27-S	02/12/2008	950	11.90	8.01	133	11.83
C-R27-D	04/01/2008	1,860	14.81	7.75	267	9.82
C-R27-M	04/02/2008	1,590	15.45	8.20	215	9.91
C-R27-S	04/02/2008	1,400	15.47	8.31	205	10.46
C-R27-D	06/17/2008	2,820	21.10	8.23	263	9.60
C-R27-M	06/17/2008	2,500	21.10	8.32	246	9.48
C-R27-S	06/17/2008	2,410	21.20	8.34	243	9.57
C-R27-D	09/17/2008	1,170	22.23	7.65	229	6.66
C-R27-S	09/17/2008	1,170	22.15	7.71	226	5.97
C-R27-D	10/23/2008	1,490	19.37	6.52	209	---
C-R27-S	10/23/2008	1,500	19.32	6.54	204	---
C-TAZ-D	12/05/2007	1,100	14.06	8.30	140	9.45
C-TAZ-M	12/05/2007	1,120	14.60	8.39	140	10.36

TABLE 7
Field Water Quality Measurements, December 2007 through December 2008
PG&E Topock Groundwater and Surface Water Monitoring Program

Location	Sampling Date	Specific Conductance (µS/cm)	Temperature (°C)	pH	ORP (mV)	Dissolved Oxygen (mg/L)
In-Channel Surface Water Station						
C-TAZ-S	12/05/2007	1,090	14.60	8.13	118	10.90
C-TAZ-D	01/16/2008	1,049	9.89	8.35	196	10.45
C-TAZ-M	01/16/2008	1,052	9.90	8.37	175	10.92
C-TAZ-S	01/16/2008	1,056	9.90	8.34	180	10.50
C-TAZ-D	02/12/2008	1,250	12.99	6.49	218	12.67
C-TAZ-M	02/12/2008	980	12.16	7.24	213	11.09
C-TAZ-S	02/12/2008	950	11.12	7.62	192	11.60
C-TAZ-D	04/01/2008	1,920	14.55	6.83	278	10.78
C-TAZ-M	04/01/2008	1,770	15.75	8.00	237	10.43
C-TAZ-S	04/01/2008	1,940	15.71	7.99	232	10.27
C-TAZ-D	06/17/2008	1,330	21.10	7.85	222	9.53
C-TAZ-M	06/17/2008	2,890	21.10	8.20	236	9.30
C-TAZ-S	06/17/2008	2,770	21.10	8.24	239	9.18
C-TAZ-D	09/17/2008	1,350	22.30	7.07	210	5.40
C-TAZ-S	09/17/2008	1,170	21.90	7.38	206	6.27
C-TAZ-D	10/23/2008	1,610	19.22	6.44	239	---
C-TAZ-S	10/23/2008	1,650	19.94	6.40	247	---
C-TM-1	09/18/2008	1,220	22.72	7.61	187	7.64
C-TM-2	09/18/2008	1,180	21.95	7.71	161	8.72

NOTES:

µS/cm microSiemens per centimeter
°C degree celsius
ORP oxidation reduction potential, results rounded off to whole point
mV millivolts
mg/L milligrams per liter
(---) data not collected, not available, or rejected

All field measurements were collected during groundwater and surface water sampling using a Horiba U-22 water quality meter, a YSI multi-parameter water quality meter, or an Orion pH/ORP meter.

Figures

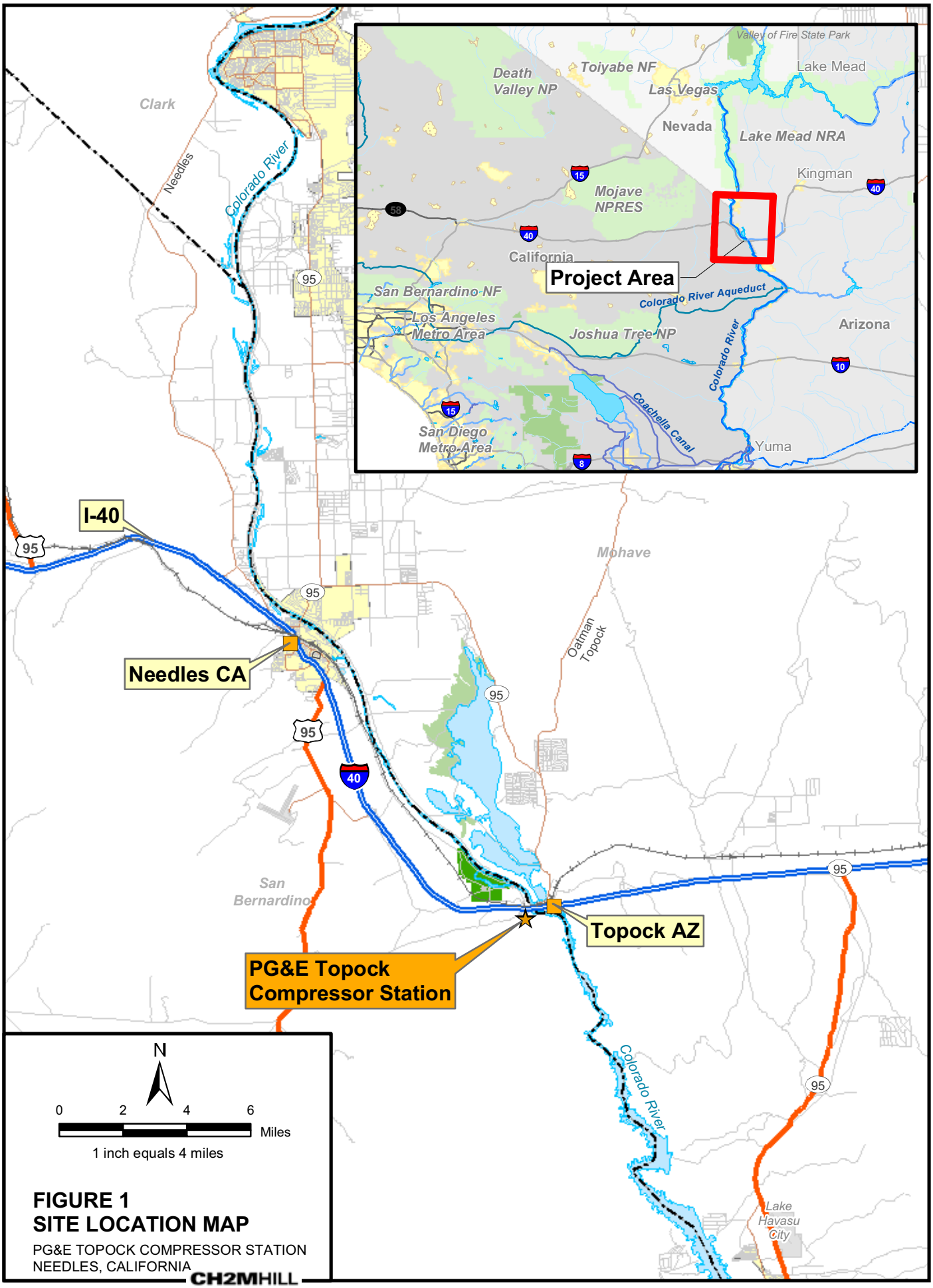
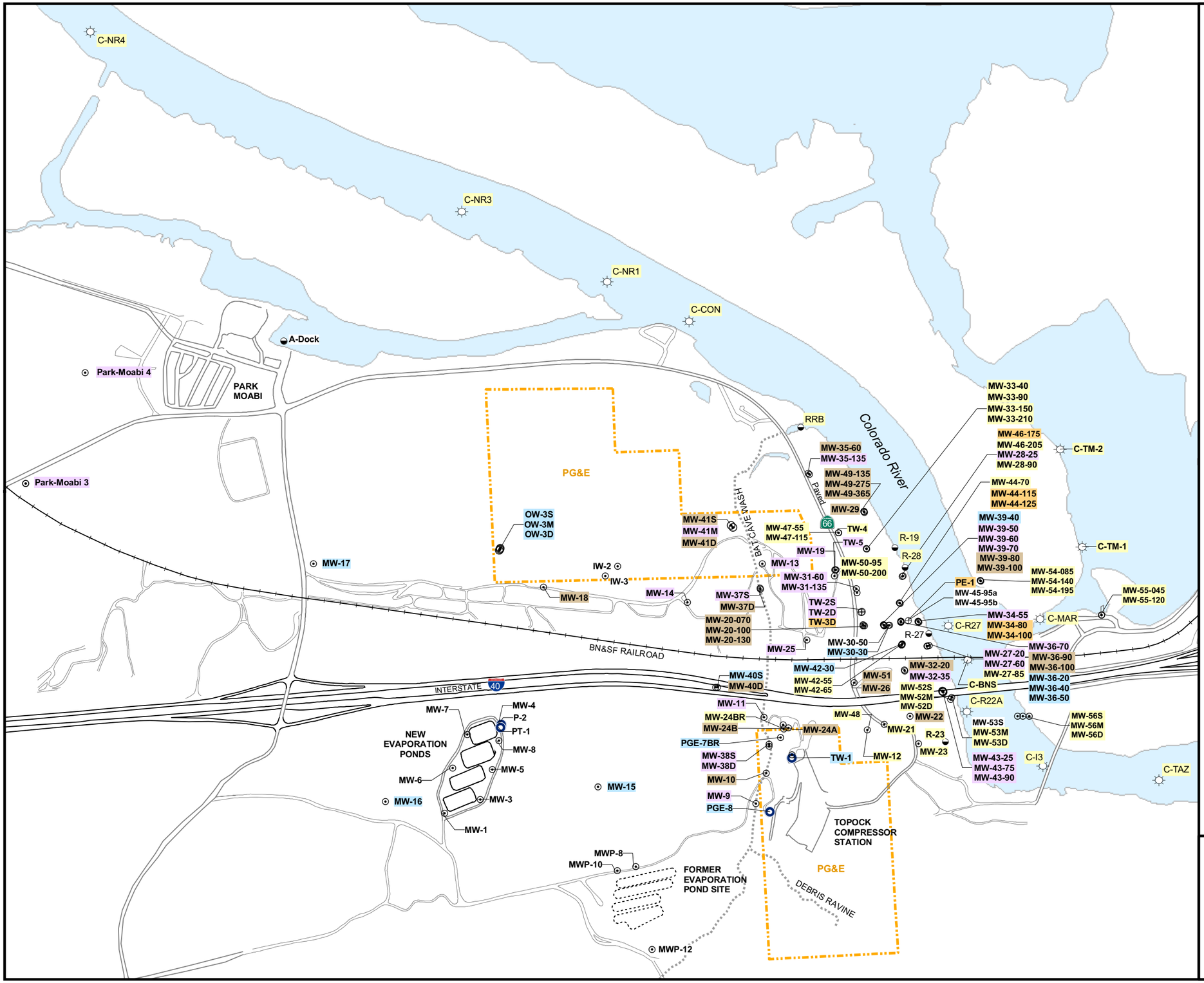


FIGURE 1
SITE LOCATION MAP

PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CH2MHILL

RDD \\ZINFANDEL\PROJ\PACIFICGASELECTRICCO\TOPOCKPROGRAM\GIS\MXD\2005\LOCATION_MAP_PORTRAIT.MXD 12/13/2005 16:33:49



LEGEND

- Groundwater Monitoring Well
- Test Well or Supply Well (Inactive)
- Extraction Well
- River Channel Surface Water Monitoring Location
- Shoreline Surface Water Monitoring Location
- PG&E Property Boundary

Sampling Frequency for Groundwater and Surface Water Monitoring Program (GMP) - December 2008

MW-17	Biennial Sampling
MW-9	Annual Sampling
MW-22	Semi-Annual Sampling
MW-12	Quarterly Sampling
MW-34-100	Monthly Sampling

Note: Shoreline and river channel locations are sampled twice during periods of low river stage (typically November - January). Otherwise they are sampled quarterly.

N

0 500 1,000 Feet

California State Plane NAD83 Zone 5 US Feet

FIGURE 2
MONITORING LOCATIONS AND SAMPLING FREQUENCY FOR GMP DECEMBER 2008

GROUNDWATER AND SURFACE WATER MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CH2MHILL

NR-3
ND (0.2)

NR-2
ND (0.2)

NR-1
ND (0.2)

CON
ND (0.2)

MOABI
REGIONAL
PARK

Colorado River

RRB
ND (0.2) *

MW-35-060
26.5

MW-29
ND (0.2) J*

MW-33-040
ND (1.0) *

MW-41S
19.4 J

BAT CAVE WASH

MW-47-055
71.8 *

R-19
ND (0.2) *

MW-13
23.2

MW-28-025
ND (0.2)

R-28
ND (0.2) *

C-TM-2
ND (0.2) *

C-TM-1
ND (0.2) *

MW-17
7.9

MW-18
25.5

MW-14
27.9 J

MW-19
682

MW-31-060
534

MW-20-070
2,010

MW-27-020
ND (0.2)

R-27 †
ND (0.2)

BNSF RAILROAD

32

MW-25
552

MW-32-020
ND (0.2)

MW-32-035
ND (0.2)

C-BNS
ND (0.2) *

MW-43-025
ND (0.2)

INTERSTATE 40

MW-26
2,560

32

MW-56S
ND (0.2) J*

R-22 †
ND (0.2) J

MW-21
1.9 *

MW-22
ND (0.2)

MW-12
2,460 *

R-23
ND (0.2) *

NEW
EVAPORATION
PONDS

MW-10
462

MW-09
282

I-3 †
ND (0.2)

MW-16
9.2

TOPOCK
COMPRESSOR
STATION

FORMER
EVAPORATION
POND SITE

DEBRIS RAVINE

LEGEND

- Monitoring, Test, or Supply Well
- Shoreline Surface Water Monitoring Location

Results for October 2008 Monitoring Event

6.48 Concentration of hexavalent chromium [Cr(VI)] in micrograms per liter (µg/L)

Results shown are maximum concentrations in primary and duplicate samples from wells completed in **Shallow zone** of Alluvial Aquifer.

ND (0.2) Cr(VI) not detected, at listed reporting limit

* **Results from December 2008 sampling event**

† Results from June 2008. Sampling discontinued at these locations

Cr(VI) Concentrations in Water Samples

- Not detected at analytical reporting limit
- Concentration between reporting limit and 32 µg/L
- Concentration ≥ 32 µg/L

32 Approximate Cr(VI) isoconcentration contour in Alluvial Aquifer, **October 2008**

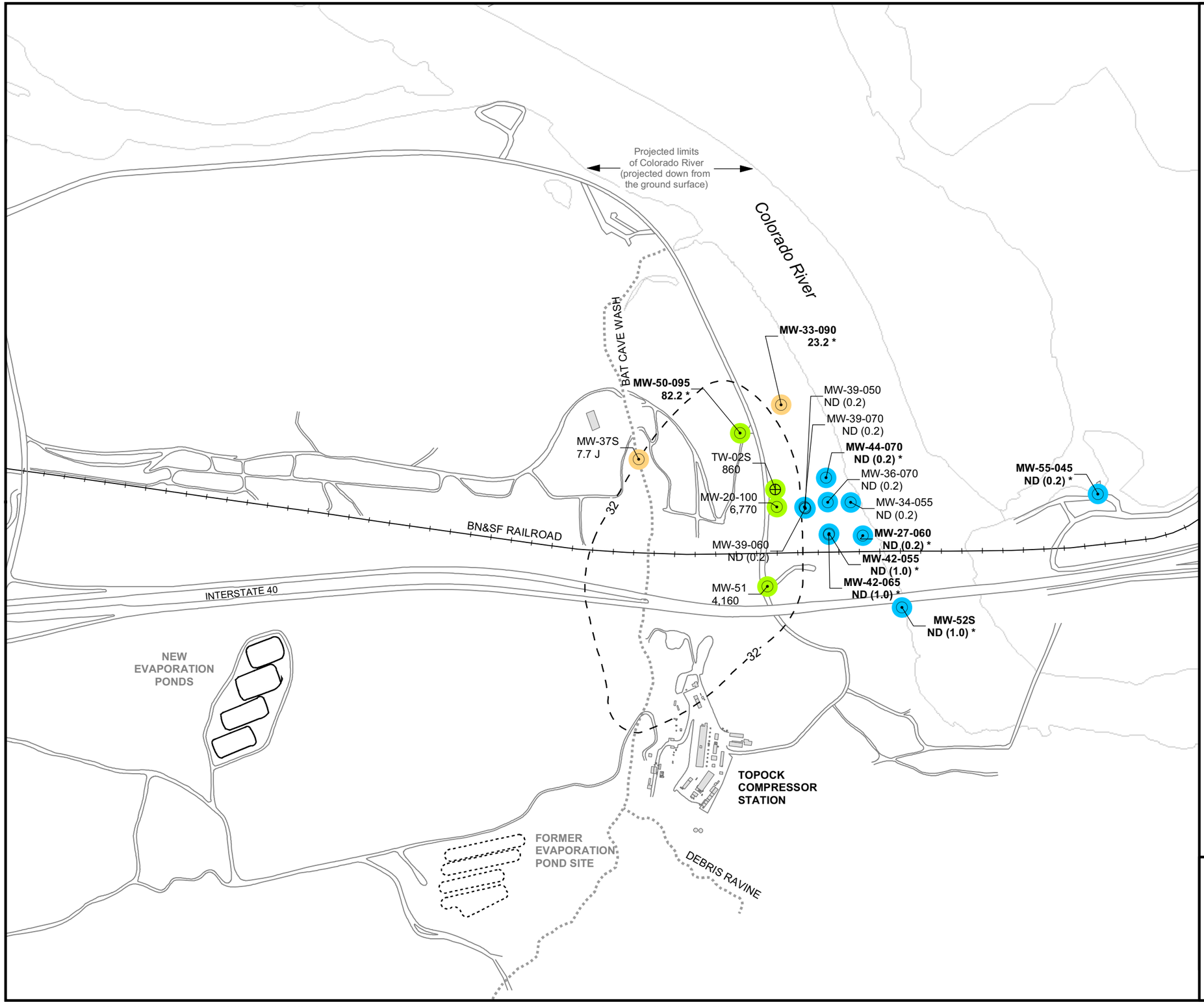
N

0 500 1,000
Feet

FIGURE 3
Cr(VI) SAMPLING RESULTS SHALLOW WELLS IN ALLUVIAL AQUIFER AND SHORELINE SURFACE WATER LOCATIONS 4TH QUARTER 2008 MONITORING

GROUNDWATER AND SURFACE WATER
MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CH2MHILL



LEGEND

- ⊕ Extraction Well
- ⊙ Monitoring, Test, or Supply Well

Results for October 2008 Monitoring Event

6.48 Concentration of hexavalent chromium [Cr(VI)] in micrograms per liter (µg/L)

Results shown are maximum concentrations in primary and duplicate samples from wells completed in **Mid-Depth zone** of Alluvial Aquifer.

ND (0.2) Cr(VI) not detected at listed reporting limit

* **Results from December 2008 sampling event**

Cr(VI) Concentrations in Groundwater Samples

- Not detected at analytical reporting limit
- Concentration between reporting limit and 32 µg/L
- Concentration ≥ 32 µg/L

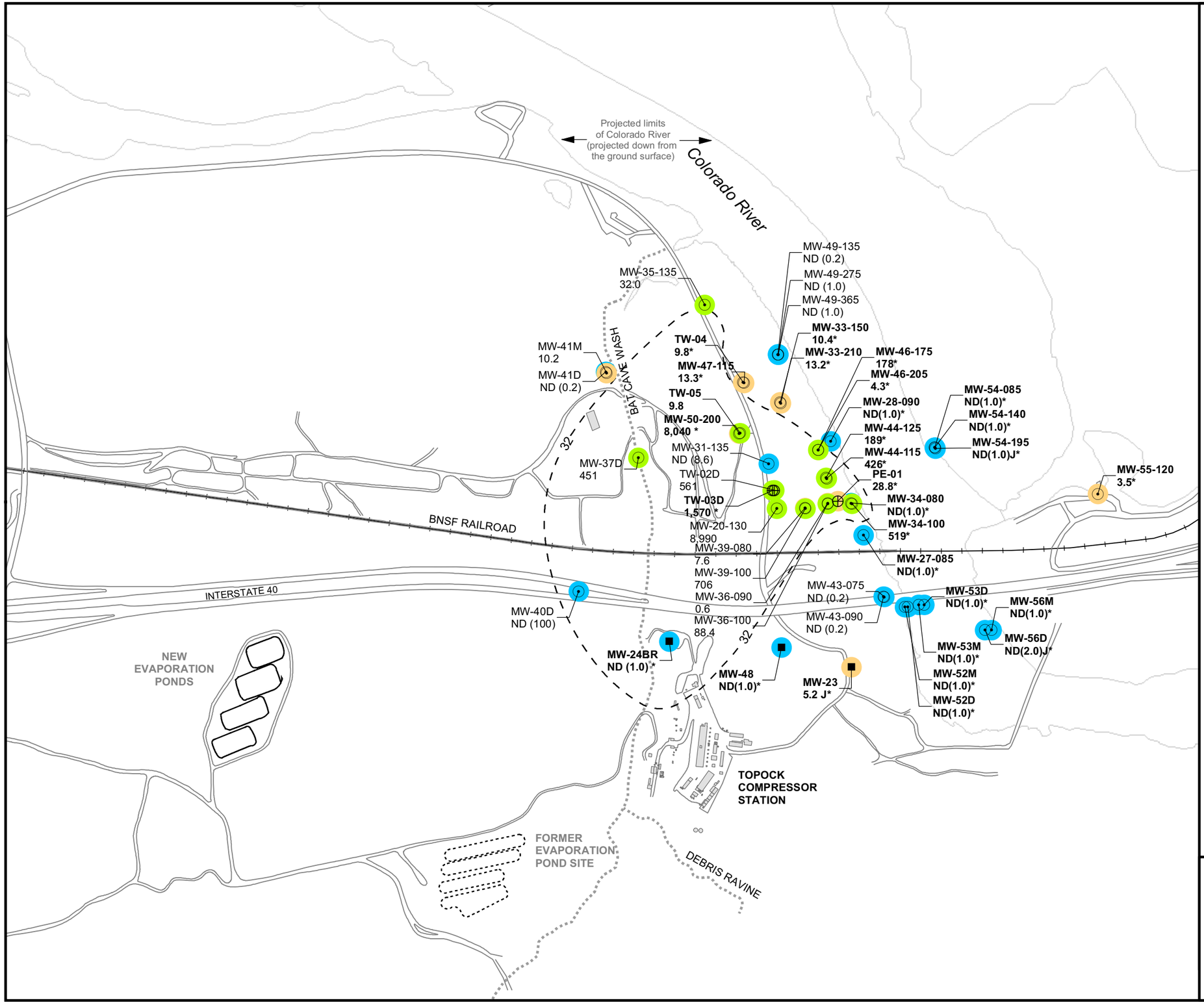
-32- Approximate Cr(VI) isoconcentration contour in Alluvial Aquifer, **October 2008**

N

0 500 1,000 Feet

FIGURE 4
Cr(VI) SAMPLING RESULTS
MID-DEPTH WELLS IN ALLUVIAL AQUIFER
4TH QUARTER 2008 MONITORING
GROUNDWATER AND SURFACE WATER
MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CH2MHILL



LEGEND

- Extraction Well
- Bedrock Well
- Monitoring, Test or Supply Well

Results for October 2008 Monitoring Event

6.48 Concentration of hexavalent chromium [Cr(VI)] in micrograms per liter (µg/L)

Results shown are maximum concentrations in primary and duplicate samples from wells completed in **Deep zone** of Alluvial Aquifer.

ND (0.2) Cr(VI) not detected at listed reporting limit

* **Results from December 2008 sampling event**

Cr(VI) Concentrations in Groundwater Samples

- Not detected at analytical reporting limit
- Concentration between reporting limit and 32 µg/L
- Concentration ≥ 32 µg/L

32 Approximate Cr(VI) isoconcentration contour in Alluvial Aquifer, **October 2008**

The Cr(VI) distribution map for the lower depth interval incorporates all available data and depicts the inferred location of the Cr(VI) plume based upon analysis of the relevant hydrogeologic, water quality, and geochemical data collected during 2005-2008 site monitoring. There is no data confirming the existence of Cr(VI) under the Colorado River.

N

0 500 1,000 Feet

FIGURE 5
Cr(VI) SAMPLING RESULTS
DEEP WELLS IN ALLUVIAL AQUIFER
4TH QUARTER 2008 MONITORING

GROUNDWATER AND SURFACE WATER
MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CH2MHILL

PARK MOABI

Colorado River

BN & SF RAILROAD

INTERSTATE 40

BAT CAVE WASH

DEBRIS RAVINE

NEW EVAPORATION PONDS

FORMER EVAPORATION POND SITE

TOPOCK COMPRESSOR STATION

457.5

457.0

456.5

456.0

455.5

MW-17 457.28

MW-18 456.88

OW-03S 456.86

OW-02S 456.54

OW-01S 456.52

MW-14 456.38

MW-41S 455.93

MW-13 456.06

MW-35-060 455.63

MW-19 455.30

MW-31-060 455.03

TW-3D

TW-2D

PE-1

MW-20-070 454.13

MW-25 455.58

MW-26 455.14

MW-21 455.58

MW-12 455.58

MW-11 (518.71)

MW-38S 455.62

MW-24A 456.16

MW-10 (528.31)

MW-09 456.48

MW-07 456.25

MW-04 456.55

MW-08 456.89

MW-06 457.09

MW-05 456.90

MW-03 455.89

MW-01 456.43

MW-16 457.41

MW-15 456.86

N

0 700 1,400 Feet

1 inch = 700 feet

LEGEND

- Extraction well
- Groundwater monitoring / observation well
- MW-14 456.38 — Well name with water level elevation (ft MSL)
- MW-10 (528.31) — Well name with water level elevation (ft MSL) not used in contouring
- Groundwater Elevation Contour 0.5 ft
- Inferred or Approximate Groundwater Elevation Contour 0.5 ft
- Approximate Bedrock/Alluvial Aquifer Contact at 455 ft MSL
- NA — Data not available

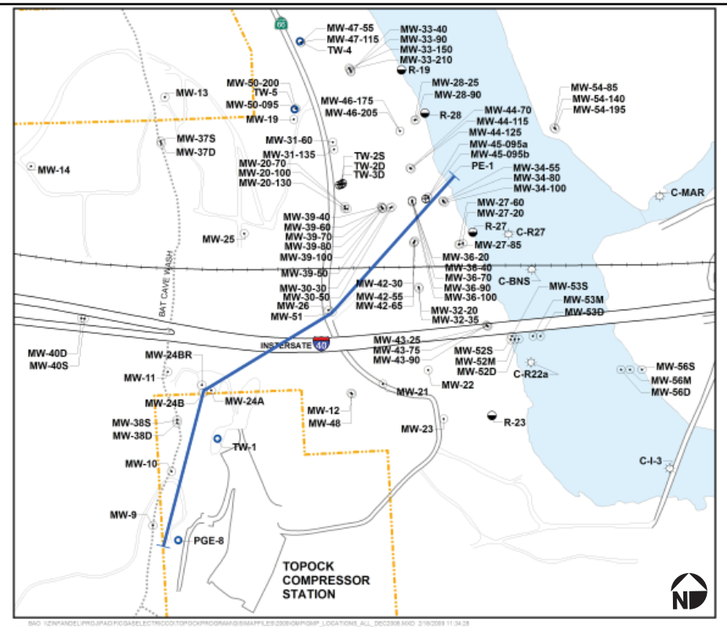
Notes:

1. Water level contours for the floodplain area are presented in IM Performance Monitoring Reports.
2. Extraction wells TW-3D and PE-1 are pumping from lower portion of the aquifer.
3. Floodplain well data taken from pressure transducers at the time of manual measurements (approximately 12:30 PM).
4. Gradients shown on this figure show transient conditions in the aquifer at the time of measurement and may not reflect the expected average groundwater flow directions.

FIGURE 6
GROUNDWATER ELEVATION MAP
SHALLOW ZONE OF ALLUVIAL AQUIFER (WATER TABLE)
SEPTEMBER 30, 2008 WATER LEVEL SURVEY

GROUNDWATER AND SURFACE WATER MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CH2MHILL



Cross-section Location

Southwest — Bat Cave Wash — Bend in Section — Interstate 40 — Bend in Section — **IM Extraction Wells** — **East Section A** — Colorado River

PGE-08 — projected: 40' — **MW-09** — projected: 20' — **MW-10** — projected: 150' — **TW-1** — **MW-24 Cluster** — projected: 300' — **MW-26** — **MW-20 Cluster** — projected: 140' — **TW-2S** **TW-2D** — **MW-39 Cluster** — **MW-36 Cluster** — projected: 30' — **PE-01** — **MW-34 Cluster**

Elevation (feet above MSL)

2,000 1,800 1,600 1,400 1,200 1,000 800 600 400 200 0

Distance (feet)

0 500 1,000 1,500 2,000 2,500 3,000 3,500 4,000

282 — 89' — 462 — 99' — NS — NS — NS — ND (1.0) — 442' — 2,560 — 74' — 2,010 — 6,770 — 8,990 — 860 — 561 — 180' — 118' — 108' — 105' — 116' — ND (0.2) — ND (0.2) — 286

NS — 562'

water table (average 456' msl)

UPPER DEPTH INTERVAL

MIDDLE DEPTH INTERVAL

LOWER DEPTH INTERVAL

Alluvial fan deposits

Fluvial Deposits

Miocene Conglomerate (Bedrock)

Pre-Tertiary Metamorphic and Igneous Bedrock (pTbr)

inferred fault location - actual depth uncertain

TRUE-SCALE (NO VERTICAL EXAGGERATION)

NS	NS	27.6
ND (0.2)	NS	
ND (0.2)	NS	
ND (0.2)	ND (0.2)	
7.58	0.61	
706	88.4	

Note: Miocene Conglomerate overlies Pre-Tertiary Bedrock. Depth and structure of geologic contact between bedrock formations not defined by drilling.

well ID **MW-26**

water level

well screen 2.560

total depth of boring (feet) 71

Hexavalent Chromium [Cr(VI)] Sampling Results, October 2008
Groundwater concentrations in micrograms per liter (ug/L)

Maximum Cr(VI) concentrations detected in October 2008 primary and duplicate samples

ND = Not detected at listed reporting limit
NS = Not sampled for Cr(VI) in October 2008

FIGURE 7
Cr(VI) SAMPLING RESULTS
HYDROGEOLOGIC SECTION A
OCTOBER 2008

GROUNDWATER AND SURFACE WATER MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CH2MHILL

ES112008005BAO_Fig7_CrVI_SamplingResults.indd_030509_lho