

# Topock Project Executive Abstract

<p>Document Title: First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test</p> <p>Submitting Agency/ Authored by: PG&amp;E</p> <p>Final Document? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>Date of Document: April 15, 2009</p> <p>Who Created this Document?: (i.e. PG&amp;E, DTSC, DOI, Other)</p> <p>PG&amp;E</p>
<p>Priority Status: <input type="checkbox"/> <b>HIGH</b> <input type="checkbox"/> <b>MED</b> <input checked="" type="checkbox"/> <b>LOW</b></p> <p>Is this time critical? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>Action Required:</p> <p><input checked="" type="checkbox"/> Information Only <input type="checkbox"/> Review &amp; Comment</p> <p>Return to: _____</p> <p>By Date: _____</p> <p><input type="checkbox"/> Other / Explain:</p>
<p>Type of Document:</p> <p><input type="checkbox"/> Draft <input checked="" type="checkbox"/> Report <input type="checkbox"/> Letter <input type="checkbox"/> Memo</p> <p><input type="checkbox"/> Other / Explain:</p>	<p>What does this information pertain to?</p> <p><input type="checkbox"/> Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA)/Preliminary Assessment (PA)</p> <p><input type="checkbox"/> RCRA Facility Investigation (RFI)/Remedial Investigation (RI) (including Risk Assessment)</p> <p><input type="checkbox"/> Corrective Measures Study (CMS)/Feasibility Study (FS)</p> <p><input type="checkbox"/> Corrective Measures Implementation (CMI)/Remedial Action</p> <p><input type="checkbox"/> California Environmental Quality Act (CEQA)/Environmental Impact Report (EIR)</p> <p><input type="checkbox"/> Interim Measures</p> <p><input checked="" type="checkbox"/> Other / Explain: Regional Water Quality Control Board (RWQCB)</p>
<p>What is the consequence of NOT doing this item? What is the consequence of DOING this item? Not performing this monitoring would result in the loss of valuable data on the longer term performance of the floodplain in situ pilot test.</p>	<p>Is this a Regulatory Requirement?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If no, why is the document needed? Document is needed to document post-test conditions in the Floodplain.</p> <p>Other Justification/s:</p> <p><input checked="" type="checkbox"/> Permit <input type="checkbox"/> Other / Explain:</p>
<p>Brief Summary of attached document:</p> <p>The report summarizes the activities conducted during the First Quarter 2009 for the Floodplain In-Situ Pilot Test. The report presents data received since the last report was submitted and details any operational changes to the pilot test as allowed by the WDR.</p>	
<p>Written by: ARCADIS on behalf of PG&amp;E</p>	
<p>Recommendations: None</p>	
<p>How is this information related to the Final Remedy or Regulatory Requirements: The report follows up on required actions under the Waste Discharge Requirement Permit Order No. R7-2007-0015. The results of the pilot test conducted under that Order will be used in the evaluation of in situ remedies as a potential component of the final groundwater remedy.</p>	
<p>Other requirements of this information?</p> <p>None.</p>	

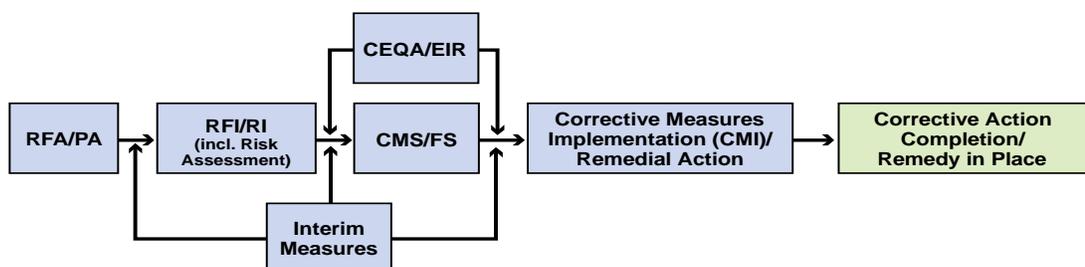
Related Reports and Documents:

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](http://www.dtsc-topock.com)). The link to the Documents Library is currently UNDER CONSTRUCTION.

Version 8

Other

**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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April 15, 2009

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

**Subject: PG&E Topock Compressor Station, Needles, California  
Floodplain Reductive Zone In Situ Pilot Test  
First Quarter 2009 Monitoring Report  
(Rescinded Board Orders R7-2006-0008 and R7-2007-0014)**

Dear Mr. Perdue:

Enclosed is the First Quarter 2009 Monitoring Report for the Pacific Gas and Electric Company (PG&E) Topock Compressor Station, Floodplain reductive zone in situ pilot test. Although the Waste Discharge Requirements (WDRs) issued by the Colorado River Basin Regional Water Quality Control Board (Water Board) under Board Orders R7-2006-0008 and R7-2007-0014 were rescinded in November 2008, PG&E is continuing to monitor the test area and is providing this report for your information.

If you have any questions regarding this report, please call me at (805) 546-5243.

Sincerely,

Yvonne Meeks  
Topock Project Manager

Enclosures:

Board Order R7-2006-0008 First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In Situ Pilot Test.

cc: Cliff Raley, Water Board  
Robert Perdue, CA RWACB  
Aaron Yue, DTSC (2 copies)

**Pacific Gas and Electric Company**

**First Quarter 2009 Monitoring  
Report for the Floodplain  
Reductive Zone  
In-Situ Pilot Test**

PG&E Topock Compressor Station  
San Bernardino County, California

15 April 2009

This report was prepared under the supervision of a California licensed Professional Geologist (PG)



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Janis Lutrick  
Senior Scientist



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Project Engineer



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Lisa Kellogg, PG, CEM  
Principal Geologist  
Certified Project Manager

**First Quarter 2009 Monitoring  
Report for the Floodplain  
Reductive Zone In-Situ Pilot  
Test**

PG&E Topock Compressor  
Station  
San Bernardino County,  
California

Prepared for:  
Pacific Gas and Electric Company

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Our Ref.:  
RC000689.0001.00007

Date:  
15 April 2009

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of the individual or entity for which it was  
prepared and may contain information that  
is privileged, confidential, and exempt from  
disclosure under applicable law.*

<b>1.0 Introduction</b>	<b>1</b>
<b>2.0 In-Situ Pilot Test Sampling Locations</b>	<b>2</b>
<b>3.0 Description of Activities</b>	<b>3</b>
<b>4.0 Sampling and Analytical Procedures</b>	<b>5</b>
<b>5.0 Analytical Results</b>	<b>7</b>
<b>6.0 Conclusions</b>	<b>8</b>
<b>7.0 References</b>	<b>9</b>
<b>8.0 Certification</b>	<b>10</b>

**Tables**

1	Boring and Well Construction Detail Summary
2	Summary of Field Parameters
3	Summary of Primary Analytical Parameters
4	Summary of Secondary Analytical Parameters
5	Summary of Monitoring Information

**Figures**

1	Site Plan
2	Sample Location Map

**Appendices**

A	Calibration Logs for Field Monitoring Instruments
B	Groundwater Sampling Logs
C	Analytical Reports and Chain-of-Custody Documentation (on Compact Disc)

Calscience	Calscience Environmental Laboratories, Inc.
ISPT	In-Situ Pilot Test
MRP	Monitoring and Reporting Program
Ozark	Ozark Underground Laboratory
PG&E	Pacific Gas and Electric Company
SAFPM	<i>Sampling, Analysis, and Field Procedures Manual, PG&amp;E Topock Program, Revision 1</i>
TOC	Total Organic Carbon
Truesdail	Truesdail Laboratories
USEPA	United States Environmental Protection Agency
Water Board	California Regional Water Quality Control Board, Colorado River Basin Region
Work Plan	<i>In-Situ Hexavalent Chromium Reduction Plan, Floodplain Reductive Zone Enhancement (August 2005)</i>
Work Plan Addendum	<i>Final Addendum to the In-Situ Hexavalent Chromium Reduction Plan, Floodplain Reductive Zone Enhancement (December 5, 2005)</i>
Work Plan Addendum 2	<i>Addendum 2 to the In-Situ Hexavalent Chromium Reduction Plan, Floodplain Reductive Zone Enhancement (April 14, 2006)</i>
Work Plan Addendum 3	<i>Addendum 3 to the In-Situ Hexavalent Chromium Reduction Plan, Floodplain Reductive Zone Enhancement (November 30, 2006)</i>

## 1.0 Introduction

Pacific Gas and Electric Company (PG&E) has implemented a floodplain reductive zone in-situ pilot test (ISPT) to address chromium concentrations in groundwater at the Topock Compressor Station near Needles, California. The purpose of the floodplain ISPT was to evaluate the efficacy of using a food-grade reagent mixture to remove hexavalent chromium [Cr(VI)] from groundwater using chemical reduction to form stable, insoluble trivalent chromium [Cr(III)]. The floodplain ISPT consisted of injecting a reagent mixture into the well cluster (PTI-1S/M/D) and monitoring the results in six three-level well nests (PT-1 through PT-6). Figure 1 provides a map of the PG&E Topock Compressor Station and floodplain ISPT area. A separate upland in situ pilot test began in March 2008; the location is also shown on Figure 1.

Waste Discharge Requirements  
Order No. R7-2006-0008 and  
Order No. R7-2007-0014  
PG&E Topock Compressor  
Station  
San Bernardino County,  
California

California Regional Water Quality Control Board, Colorado River Basin Region (Water Board), Order No. R7-2006-0008 authorized PG&E to inject 6,000 gallons of blended groundwater and reagent mixture into each well of injection well cluster PTI-1S/M/D located in the Colorado River floodplain, one to four times during a 6-month period. Water Board Order No. R7-2007-0014 revised Order No. R7-2006-0008 to allow two additional injections of 18,000 gallons of reagent mixture into the PTI-1 injection well cluster. A total of six injections were planned and have been completed as part of the ISPT: May 3 through 6, 2006, August 11, 2006, September 7, 2006, November 1, 2006, May 7 and 8, 2007, and July 17 and 18, 2007. The ISPT injections are complete.

The Monitoring and Reporting Program (MRP) under Order No. R7-2006-0008 (Revision 1) required a final report to be submitted within 90 days of the completion of the ISPT. The *Floodplain Reductive Zone in-Situ Pilot Test, Final Completion Report* (ARCADIS 2008) was submitted on March 5, 2008 and summarizes the activities and results related to the floodplain ISPT from January 2006 through December 4, 2007. Based on this report and the completion of injection activities, the Order was rescinded by the Water Board on November 19, 2008.

While no more injections are planned, ongoing post-test monitoring of the test area continued on a quarterly basis in 2008 and will continue in 2009 to monitor the long-term effectiveness of the test. The results of the quarterly monitoring are submitted in report format by the 15<sup>th</sup> day of the month following the end of each quarter. This report describes monitoring activities related to the floodplain ISPT for the first quarter 2009 (January through March). Self monitoring quarterly reports will be submitted by the 15<sup>th</sup> day of the month following the end of each quarter.

## **2.0 In-Situ Pilot Test Sampling Locations**

Table 1 summarizes the well construction details of the injection well cluster (PTI-1S/M/D) and monitoring well nests (PT-1 through PT-6). Figure 2 provides a map of the sampling locations, including extraction wells TW-2D, TW-3D, and PE-1.

Waste Discharge Requirements  
Order No. R7-2006-0008 and  
Order No. R7-2007-0014  
PG&E Topock Compressor  
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San Bernardino County,  
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**3.0 Description of Activities**

The procedures and the refinements to the floodplain ISPT are outlined in the following documents: *In-Situ Hexavalent Chromium Reduction Plan, Floodplain Reductive Zone Enhancement* (Work Plan; MWH 2005), the *Final Addendum to the In-Situ Hexavalent Chromium Reduction Plan, Floodplain Reductive Zone Enhancement* (Work Plan Addendum; ARCADIS 2005), the *Addendum 2 to the In-Situ Hexavalent Chromium Reduction Plan, Floodplain Reductive Zone Enhancement* (Work Plan Addendum 2; ARCADIS 2006a), and the *Addendum 3 to the In-Situ Hexavalent Chromium Reduction Plan, Floodplain Reductive Zone Enhancement* (Work Plan Addendum 3; ARCADIS 2006b).

Waste Discharge Requirements  
Order No. R7-2006-0008 and  
Order No. R7-2007-0014  
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San Bernardino County,  
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Six injections occurred on the following dates: May 3 through 6, 2006, August 11, 2006, September 7, 2006, November 1, 2006, May 7 and 8, 2007, and July 17 and 18, 2007.

During December 2008, ARCADIS completed the 23<sup>rd</sup> sampling event. Associated field activities were performed in accordance with the above documents and the applicable procedures contained within the *Sampling, Analysis, and Field Procedures Manual, PG&E Topock Program, Revision 1* (SAFPM) (CH2M Hill, 2005) and Revision 1 of the MRP (October 1, 2007).

The 24<sup>th</sup> sampling event was performed on February 10, 11, and 12, 2009 and was the fifth quarterly sampling round since the ISPT was completed in December 2007. Data from this event are included in this report. The post-injection groundwater sampling event was performed in accordance with the Work Plan, Work Plan Addenda 1 and 2 and the revised MRP.

Samples were collected, labeled, and packaged according to the SAFPM and as summarized in Section 4.0. Table 2 presents the field parameter results. Tables 3 and 4 present the groundwater analytical results. As required under the MRP, calibration logs for field-monitoring instruments are included in Appendix A. Groundwater sampling logs are included in Appendix B.

Groundwater samples for this sampling event were analyzed for hexavalent chromium (United States Environmental Protection Agency [USEPA] Method 218.6 SM 3500) and for total dissolved chromium (USEPA Method SW 6020) by Truesdail Laboratories (Truesdail); fluorescein (in-house method) by Ozark Underground Laboratory (fluorescence spectroscopy according to Ozark standard operating procedures); total

iron (USEPA Method 200.7), dissolved iron, dissolved manganese and dissolved arsenic (USEPA Method 200.8), nitrate, nitrite, sulfate, and bromide (USEPA Method 300), carbonate, bicarbonate alkalinity (USEPA Method SM 2320B), iodide (USEPA Method SM 4500-I D(M)), total organic carbon (TOC) (USEPA Method 5310B), and sulfide (USEPA Method 4500-S<sup>2-</sup>) by Calscience Environmental Laboratories, Inc. (Calscience).

Waste Discharge Requirements  
Order No. R7-2006-0008 and  
Order No. R7-2007-0014  
PG&E Topock Compressor  
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San Bernardino County,  
California

**4.0 Sampling and Analytical Procedures**

Groundwater sampling and associated tasks were performed in accordance with the applicable procedures contained in the SAFPM (CH2M Hill, 2005) and as summarized below.

Prior to groundwater sampling, the depth to water was recorded for each well. These data were used to evaluate the volume of standing water in the well. The monitoring wells were purged using an Enviro-Tech ES-60 Whaler pump or a WaTerra® purge pump with dedicated polyethylene tubing. Purging continued until three casing volumes had been removed. The field parameters, such as pH, specific conductance, temperature, color, odor, and depth to water, were recorded (Table 2). After completion of purging, the groundwater samples were collected into the appropriate containers. Extraction well (TW-2D and TW-3D) samples were collected from dedicated sampling ports. Water was purged from the sample port prior to sampling the extraction well, to remove any stagnant water from the port.

The samples were stored in coolers at 4 degrees Celsius and transported to Truesdail, Calscience, and Ozark via a courier service under chain-of-custody documentation. Truesdail and Calscience are certified by the California Department of Health Services (Certification #1237 and #1230, respectively) under the State of California’s Environmental Laboratory Accreditation Program.

Analyses were performed in accordance with the latest edition of the “Guidelines Establishing Test Procedures for Analysis of Pollutants” (40 CFR Part 136), or equivalent methods promulgated by the USEPA.

Although Order No. R7-2006-0008 was rescinded November 19, 2008, post-injection sampling is continuing to monitor long-term trends at the Floodplain ISPT area. Sample results are summarized in Tables 3 and 4. Calibration logs for field-monitoring instruments are presented in Appendix A. Sampling logs are presented in Appendix B. Copies of laboratory analytical results are presented on compact disc in Appendix C.

Table 5 identifies the laboratory that performed each analysis and lists the following required monitoring information:

- Sample Location
- Sample identification

Waste Discharge Requirements  
Order No. R7-2006-0008 and  
Order No. R7-2007-0014  
PG&E Topock Compressor  
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San Bernardino County,  
California

- Sampler name
- Sample date
- Sample time
- Laboratory performing the analysis
- Analysis method
- Analysis date
- Laboratory technician

Waste Discharge Requirements  
Order No. R7-2006-0008 and  
Order No. R7-2007-0014  
PG&E Topock Compressor  
Station  
San Bernardino County,  
California

No operational and maintenance issues or interruptions to remedial systems occurred during the reporting period.

## 5.0 Analytical Results

Laboratory reports prepared by the certified analytical laboratories are presented on the compact disc in Appendix C. Summaries of the tracer test parameters, primary parameters, and secondary parameters are presented in Tables 2, 3, and 4, respectively.

Waste Discharge Requirements  
Order No. R7-2006-0008 and  
Order No. R7-2007-0014  
PG&E Topock Compressor  
Station  
San Bernardino County,  
California

Lab results for hexavalent chromium concentrations remained below the reporting limit (0.2 µg/L) in PT-1D, PT-2D, and PTI-1D in February 2009. The hexavalent chromium concentrations are maintained at non-detect in these wells by the reducing capacity created in the aquifer by the TOC injections. In February 2009, dissolved chromium concentrations in PT-3D were 788 µg/L. This value is still below pre-test concentrations of 2,000 to 4,000 µg/L, and likely reflects an inflow of upgradient water into the area as a result of pumping from extraction wells TW-2D and TW-3D.

The reduction of hexavalent chromium continues to occur despite the absence of residual lactate or other organic carbon in the pilot test area. TOC measured in PT-1D, PT-2D, PT-3D, PTI-1D, and extraction wells TW-2D and TW-3D was less than 2 mg/L, which is similar to baseline levels.

Observed indications of continued reducing conditions in the pilot test area include decreased nitrate concentrations, and elevated iron and manganese concentrations in certain wells (Table 3). The formation of soluble iron and manganese is consistent with the formation of a residual ferrous iron zone in both the solid and aqueous phase that will react with and precipitate hexavalent chromium. It is expected that in time the concentrations of soluble ferrous iron and manganese will decrease, but that the solid phase iron compounds will continue to be reactive even when reduced iron and manganese are no longer soluble. During the first quarter 2009 sampling event iron and manganese concentrations have remained relatively stable, declining in some cases or remaining similar to previous results in others. The concentrations of dissolved iron and manganese in the pilot test area are similar to concentrations detected in monitoring wells in the naturally-reducing fluvial aquifer. Iron and manganese concentrations remain below detection in the extraction wells. In general, dissolved arsenic levels have remained stable at pre-pilot concentrations.

## **6.0 Conclusions**

This report summarizes the results of the sampling activities conducted during the first quarter of 2009. The ISPT was completed in December 2007, but quarterly post-test monitoring is continuing to assess longer term trends. February 2009 results demonstrated that hexavalent chromium continued to be reduced nineteen months following the sixth and final ISPT injection event in July 2007.

The next quarterly sampling event will occur in May 2009. These results will be reported in July 2009.

Waste Discharge Requirements  
Order No. R7-2006-0008 and  
Order No. R7-2007-0014  
PG&E Topock Compressor  
Station  
San Bernardino County,  
California

**7.0 References**

ARCADIS, 2005. Final Addendum to the In-Situ Hexavalent Chromium Reduction Plan, Floodplain Reductive Zone Enhancement (Work Plan Addendum), Waste Discharge Requirements, Order No. R7-2006-0008, PG&E Topock Compressor Station, San Bernardino County, California, December 5.

Waste Discharge Requirements  
Order No. R7-2006-0008 and  
Order No. R7-2007-0014  
PG&E Topock Compressor  
Station  
San Bernardino County,  
California

\_\_\_\_\_, 2006a. Addendum 2 to the In-Situ Hexavalent Chromium Reduction Plan, Floodplain Reductive Zone Enhancement (Work Plan Addendum 2), Waste Discharge Requirements, Order No. R7-2006-0008, PG&E Topock Compressor Station, San Bernardino County, California, April 14.

\_\_\_\_\_, 2006b. Addendum 3 to the In-Situ Hexavalent Chromium Reduction Plan, Floodplain Reductive Zone Enhancement (Work Plan Addendum 3), Waste Discharge Requirements, Order No. R7-2006-0008, PG&E Topock Compressor Station, San Bernardino County, California, November 30.

\_\_\_\_\_, 2008. Floodplain Reductive Zone In-Situ Pilot Test, Final Completion Report, Waste Discharge Requirements, Order No. R7-2006-0008, PG&E Topock Compressor Station, San Bernardino County, California, March 5.

CH2M Hill. 2005. Sampling, Analysis, and Field Procedures Manual (SAFPM), PG&E Topock Program, PG&E Topock Compressor Station Needles, California, March 31, 2005.

MWH, 2005. In-Situ Hexavalent Chromium Reduction Plan, Floodplain Reductive Zone Enhancement (Work Plan), Waste Discharge Requirements, Order No. R7-2006-0008, PG&E Topock Compressor Station, San Bernardino County, California, August 8.

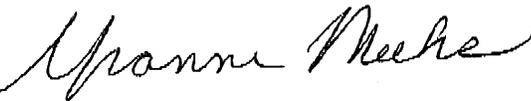
**8.0 Certification**

PG&E submitted a signature delegation letter to the Water Board on July 5, 2006. The letter delegated PG&E's signature authority to Mr. Curt Russell and Ms. Yvonne Meeks.

Waste Discharge Requirements  
Order No. R7-2006-0008 and  
Order No. R7-2007-0014  
PG&E Topock Compressor  
Station  
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California

Certification Statement:

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

Signature:   
Name: Yvonne Meeks  
Company: PG&E  
Title: Project Manager  
Date: April 15, 2009

**Table 1**  
**Boring and Well Construction Detail Summary**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Well or Boring Designation	Date Completed	Aquifer Zone	Ground Elevation* (feet msl)	TOC Elevation** (feet msl)	Total Depth of Boring (feet bgs)	Casing Diameter (inches)	Boring Diameter (inches)	Well Completion Depth (feet bgs)	Well Completion Elevation (feet msl)	Screen Depth Interval (feet bgs)	Screen Elevation Interval (feet msl)	Sand Pack Depth Interval (feet bgs)	Sand Pack Elevation Interval (feet msl)	Bentonite Depth Interval (feet bgs)	Bentonite Elevation Interval (feet msl)	Well Permit Number	Distance From PTI-1 (feet)	Latitude	Longitude
PT-1S	31-Jan-06	S	472.239	474.644	125	2	10	45	430	35-45	440-430	32-47	443-428	28-32	447-443	2006010013	20	34° 43' 10.3"	114° 29' 25.8"
PT-1M	31-Jan-06	M	472.239	474.622	125	2	10	70	405	60-70	415-405	57-72	428-403	46-57	429-418	2006010013	23	34° 43' 10.3"	114° 29' 25.8"
PT-1D	31-Jan-06	D	472.239	474.627	125	2	10	105	370	95-105	380-370	92-125	383-350	72-92	403-383	2006010013	24	34° 43' 10.3"	114° 29' 25.8"
PT-2S	8-Feb-06	S	471.627	473.487	127	2	10	45	428	35-45	438-428	32-47	441-426	28-32	445-441	2006010012	45	34° 43' 10.3"	114° 29' 26.1"
PT-2M	8-Feb-06	M	471.627	473.587	127	2	10	70	404	60-70	414-404	57-72	423-402	46-57	428-417	2006010012	47	34° 43' 10.3 "	114° 29' 26.1"
PT-2D	8-Feb-06	D	471.627	473.522	127	2	10	105	369	95-105	379-369	92-127	382-347	72-92	402-382	2006010012	49	34° 43' 10.3"	114° 29' 26.1"
PT-3S	14-Feb-06	S	471.698	473.584	129	2	10	45	429	35-45	439-429	32-47	442-427	28-32	446-442	2006010011	12	34° 43' 10.2"	114° 29' 25.6"
PT-3M	14-Feb-06	M	471.698	473.520	129	2	10	70	404	60-70	414-404	57-72	427-402	46-57	428-417	2006010011	15	34° 43' 10.2"	114° 29' 25.6"
PT-3D	14-Feb-06	D	471.698	473.525	129	2	10	105	369	95-105	379-369	92-127	382-347	72-92	402-382	2006010011	13	34° 43' 10.2"	114° 29' 25.6"
PT-4S	12-Feb-06	S	471.79	474.430	127	2	10	45	429	35-45	439-429	32-47	442-427	28-32	446-442	2006010010	27	34° 43' 10.1"	114° 29' 25.4"
PT-4M	12-Feb-06	M	471.79	474.331	127	2	10	70	404	60-70	414-404	57-72	423-403	46-57	428-417	2006010010	29	34° 43' 10.1"	114° 29' 25.4"
PT-4D	12-Feb-06	D	471.79	474.299	127	2	10	105	369	95-105	379-369	92-127	382-347	72-92	402-382	2006010010	24	34° 43' 10.1"	114° 29' 25.4"
PT-5S	10-Feb-06	S	471.262	473.611	127	2	10	45	429	35-45	439-429	32-47	442-427	28-32	446-442	2006010009	54	34° 43' 10.1"	114° 29' 25.0"
PT-5M	10-Feb-06	M	471.262	473.630	127	2	10	70	404	60-70	414-404	57-72	427-402	46-57	428-417	2006010009	53	34° 43' 10.2"	114° 29' 25.0"
PT-5D	10-Feb-06	D	471.262	473.625	127	2	10	105	369	95-105	379-369	92-127	382-347	72-92	402-382	2006010009	49	34° 43' 10.2"	114° 29' 25.0"
PT-6S	28-Jan-06	S	474.441	475.981	137	2	10	45	431	35-45	441-431	32-47	444-429	28-32	448-444	2006010008	27	34° 43' 10.6"	114° 29' 25.4"
PT-6M	28-Jan-06	M	474.441	476.025	137	2	10	70	406	60-70	416-406	57-72	425-404	46-57	430-419	2006010008	23	34° 43' 10.6"	114° 29' 25.4"
PT-6D	28-Jan-06	D	474.441	476.013	137	2	10	105	371	95-105	381-381	92-137	384-339	72-92	444-384	2006010008	25	34° 43' 10.6"	114° 29' 25.4"
PTI-1S	28-Jan-06	S	472.751	475.035	47	4	10	45	430	35-45	440-430	32-47	443-428	28-32	447-443	2006010006	0	34° 43' 10.4"	114° 29' 25.5"
PTI-1M	26-Jan-06	M	472.938	475.087	77	4	10	70	405	60-70	415-405	57-72	428-403	46-57	429-418	2006010007	0	34° 43' 10.4"	114° 29' 25.6"
PTI-1D	26-Jan-06	D	472.573	474.762	137	4	10	105	370	95-105	380-370	92-137	383-338	72-92	403-383	2006010005	0	34° 43' 10.4"	114° 29' 25.6"
TW-2D	1-Apr-04	D	496.932	496.932	180	6	12	153	344	113-148	384-349	108-153	389-344	153-180, 101-108	344-317, 396-394	-	205	34° 43' 10.3"	114° 29' 28.0"
TW-3D	24-Oct-05	D	497.415	497.415	157	6	10	153	344	111-156	386-341	105-157	392-340	50-105	447-392	-	217	34° 43' 10.2"	114° 29' 28.1"
PE-1	2-Mar-05	D	466.879	496.549	105	6	10	110	387	79-89	418-408	76-99	421-398	99-105, 72-76	398-425, 392-421	2005101057	296	34° 43' 9.3"	114° 29' 22.2"

Notes:

- feet bgs Feet below ground surface
- feet msl Feet mean sea level
- PTI- Pilot test injection well
- PT- Pilot test monitoring well
- S Shallow
- M Middle
- D Deep
- TOC Top of casing
- \* Elevations are in feet, North American Vertical Datum of 1988 (NAVD 88), NGS data sheet EU0763.
- \*\* Reference elevation
- Not available

**Table 2**  
**Summary of Field Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	pH	Specific Conductance (µS/cm)	Temperature (C°)	Hexavalent Chromium Field (µg/L)
PT-1S	17-Mar-06	N	35-45	-150.7	7.05	6,565	26.62	<10
	06-Apr-06	N		-173	7.06	6,892	26.92	<10
	04-May-06	N		-100.6	8.06	8,889	25.64	<10
	05-May-06	N		-107.2	7.55	7,457	26.82	<10
	06-May-06	N		-88.4	7.09	7,318	26.45	<10
	07-May-06	N		-98.6	7.31	7,097	26.59	10
	08-May-06	N		-82.7	7.35	6,976	26.65	<10
	09-May-06	N		-30.7	7.12	7,550	26.63	<10
	10-May-06	N		-102.2	7.15	6,735	26.72	<10
	11-May-06	N		-97.7	7.22	6,369	26.72	<10
	12-May-06	N		-73	7.08	6,594	26.72	<10
	13-May-06	N		-47.2	7.18	5,961	26.61	---
	23-May-06	N		14.1	7.34	5,830	27.01	<10
	01-Jun-06	N		567.9	7.03	3,636	26.54	<10
	06-Jun-06	N		-173.5	7.39	6,546	26.88	<10
	18-Jul-06	N		-133.4	7.25	6,461	26.60	<10
	08-Aug-06	N		-139.1	6.96	7,412	26.43	10
	06-Sep-06	N		-175.9	7.44	6,555	26.87	13
	04-Oct-06	N		-151.8	7.33	6,939	26.97	18
	08-Nov-06	N		-138.6	6.78	9,980	26.04	38
	05-Dec-06	N		-132.4	6.57	10,303	22.97	63
	03-Jan-07	N		-131.6	6.87	9,494	24.91	18
	07-Feb-07	N		-140.5	7.49	7,834	24.72	<10
	07-Mar-07	N		-120.6	7.21	6,381	25.51	<10
	05-Apr-07	N		-133.4	7.26	6,538	25.94	<10
	02-May-07	N		-128.7	7.04	6,515	25.65	<10
	06-Jun-07	N		-119.6	7.10	6,256	25.44	<10
	11-Jul-07	N		-99.2	7.04	6,745	25.98	<10
	08-Aug-07	N		-113.4	7.14	8,112	25.99	22
	06-Sep-07	N		-125.8	6.98	7,618	26.31	<10

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First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	pH	Specific Conductance (µS/cm)	Temperature (C°)	Hexavalent Chromium Field (µg/L)
PT-1M	17-Mar-06	N	60-70	-211	7.50	7,000	26.21	<10
	06-Apr-06	N		-211.1	9	7,506	26.54	<10
	04-May-06	N		-88.7	8.5	6,824	25.10	<10
	06-May-06	N		-93.1	7.50	7,221	25.8	---
	07-May-06	N		-98.2	7.60	7,202	26.10	38
	08-May-06	N		-77.6	7.10	4,593	26.16	42
	09-May-06	N		-19.6	7.60	7,273	26.23	<10
	10-May-06	N		-118.8	7.70	6,657	26.55	15
	11-May-06	N		-92.1	7.60	6,539	26.29	11
	12-May-06	N		-77.3	7.50	6,877	26.30	<10
	13-May-06	N		-39.2	7.50	5,933	26.26	---
	24-May-06	N		-16.2	7.70	5,837	26.24	<10
	31-May-06	N		-59.6	7.40	4,549	27.59	<10
	06-Jun-06	N		-176.9	7.60	7,071	26.27	<10
	18-Jul-06	N		-139.6	7.50	6,927	26.30	<10
	08-Aug-06	N		-183.5	7.21	6,826	25.66	<10
	06-Sep-06	N		-233.4	7.88	6,750	26.30	17
	04-Oct-06	N		-132.1	7.51	6,823	28.81	12
	08-Nov-06	N		-146	7.14	6,743	25.36	10
	05-Dec-06	N		-133.1	6.87	6,503	23.29	83
	03-Jan-07	N		-100.2	7.26	6,511	24.62	<10
	07-Feb-07	N		-142.4	7.73	6,473	24.06	<10
	06-Mar-07	N		-160.7	7.45	5,959	25.38	<10
	05-Apr-07	N		-110.9	7.63	5,970	25.41	<10
	02-May-07	N		-101.3	7.29	5,693	24.82	<10
	15-May-07	N		-136.4	7.50	5,872	25.28	<10
	22-May-07	N		-134.9	7.13	5,783	25.07	<10
	30-May-07	N		-122.9	7.30	5,873	25.02	<10
	06-Jun-07	N		-176.3	7.49	5,526	24.78	<10
	11-Jul-07	N		-35.6	7.32	5,857	25.20	<10
	24-Jul-07	N		-107.6	7.29	5,891	25.20	<10
	31-Jul-07	N		-76.1	7.50	5,967	25.36	<10
08-Aug-07	N		-103.8	7.53	5,958	25.04	<10	
14-Aug-07	N		-112.1	7.31	5,928	26.26	<10	
06-Sep-07	N		-94.4	7.20	6,130	25.21	<10	
04-Dec-07	N		-171.4	7.30	5,184	23.14	<10	
05-Mar-08	N		-102.5	7.30	5,368	23.53	<10	
04-Jun-08	N		44.7	6.75	5,770	24.10	<10	
10-Sep-08	N		-131	7.44	5,369	24.44	<10	
03-Dec-08	N		299.9	7.30	5,412	21.62	<10	
	<b>10-Feb-09</b>	<b>N</b>		<b>-83</b>	<b>7.28</b>	<b>5,080</b>	<b>22.78</b>	<b>&lt;10</b>

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 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	pH	Specific Conductance (µS/cm)	Temperature (C°)	Hexavalent Chromium Field (µg/L)
PT-1D	17-Mar-06	N	95-105	-129.5	7.36	13,149	26.06	1,900
	06-Apr-06	N		112	6.66	14,027	26.00	3,040
	05-May-06	N		47.6	7.86	12,918	26.03	---
	06-May-06	N		69.3	7.36	14,048	26.18	4,660
	07-May-06	N		79.3	7.62	13,536	26.07	3,680
	08-May-06	N		85.6	7.71	12,334	26.14	4,980
	09-May-06	N		-145.2	7.59	12,058	26.18	2,960
	10-May-06	N		5.7	7.54	11,794	26.19	2,840
	11-May-06	N		-7.1	7.71	10,586	26.10	1,740
	12-May-06	N		-6	7.56	10,653	26.50	2,260
	13-May-06	N		41.9	7.60	9,215	25.90	---
	24-May-06	N		90.2	6.60	10,570	26.25	1,420
	31-May-06	N		358.1	5.89	5,935	29.21	980
	05-Jun-06	N		403.4	8.41	10,776	27.13	840
	17-Jul-06	N		201.6	7.39	11,498	26.29	840
	08-Aug-06	N		-163.8	7.17	11,662	25.83	1,240
	14-Aug-06	N		-22.9	8.10	9,762	27.52	820
	17-Aug-06	N		-154.6	8.16	10,189	26.46	580
	22-Aug-06	N		-109.3	8.31	9,846	26.68	540
	24-Aug-06	N		-2.1	8.03	9,779	26.62	580
	29-Aug-06	N		-42.1	8.12	9,308	26.56	480
	05-Sep-06	N		-94.7	8.33	9,402	27.92	371
	12-Sep-06	N		-174.1	7.95	9,129	26.76	180
	19-Sep-06	N		-361.1	8.32	8,445	26.49	320
	28-Sep-06	N		-155.8	7.74	8,889	26.58	118
	04-Oct-06	N		-173.9	7.82	9,298	26.73	103
	17-Oct-06	N		-186.0	7.57	9,869	26.50	40
	31-Oct-06	N		117.6	7.58	10,534	25.80	171
	08-Nov-06	N		-252.4	7.38	9,572	25.69	<10
	14-Nov-06	N		-124.7	6.91	9,798	25.69	41
21-Nov-06	N	-130.4	7.02	9,382	24.85	12		
28-Nov-06	N	-202.9	7.60	8,884	25.27	17		
05-Dec-06	N	-242.7	7.16	9,548	23.52	36		
18-Dec-06	N	-231.2	8.27	10,087	23.62	44		
03-Jan-07	N	-64.9	7.39	11,107	24.79	10		
15-Jan-07	N	-216.8	7.69	11,036	23.05	88		
29-Jan-07	N	-229.6	7.45	10,905	24.18	<10		
07-Feb-07	N	-143.0	7.89	11,830	23.96	11		

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Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	pH	Specific Conductance (µS/cm)	Temperature (C°)	Hexavalent Chromium Field (µg/L)
PT-1D (cont)	06-Mar-07	N		-108.6	7.48	11,562	25.31	<10
	05-Apr-07	N		-108.8	7.68	11,728	25.29	<10
	02-May-07	N		-115.4	7.48	11,209	25.18	<10
	15-May-07	N		-242.2	7.22	9,393	25.84	<10
	22-May-07	N		-251.3	6.79	8,630	25.89	<10
	30-May-07	N		-212.9	7.03	8,824	26.73	<10
	06-Jun-07	N		-285.4	7.21	8,436	25.50	<10
	11-Jun-07	N		-222.6	7.29	9,204	26.43	53
	26-Jun-07	N		-268.0	7.70	9,555	26.41	<10
	11-Jul-07	N		-189.7	7.43	9,604	25.89	15
	24-Jul-07	N		-206.9	7.18	8,057	26.30	<10
	31-Jul-07	N		-174.3	7.41	8,040	26.45	<10
	08-Aug-07	N		-167.3	7.41	8,721	26.53	<10
	14-Aug-07	N		-211.6	7.39	8,861	27.78	<10
	28-Aug-07	N		-192.0	7.27	8,811	26.85	<10
	06-Sep-07	N		-291.7	7.44	9,368	26.50	<10
	02-Oct-07	N		-164.9	7.25	9,721	25.78	<10
	06-Nov-07	N		-32.4	7.34	9,532	25.51	21
	04-Dec-07	N		-222.9	7.32	9,442	24.35	<10
	05-Mar-08	N		-157.6	7.28	11,540	22.89	10
	03-Jun-08	N		-102.0	6.19	12,805	26.01	<10
	10-Sep-08	N		-153.0	7.45	11,950	24.42	180.0
	02-Dec-08	N		26.9	7.18	12,500	23.98	<10
	<b>10-Feb-09</b>	<b>N</b>		<b>-131.6</b>	<b>7.27</b>	<b>12,920</b>	<b>23.14</b>	<b>&lt;10</b>
PT-2S	17-Mar-06	N	35-45	-204.0	7.27	6,273	26.87	<10
	06-Apr-06	N		-175.9	6.14	6,867	26.79	<10
	24-May-06	N		-6.5	7.57	5,405	27.13	10
	01-Jun-06	N		-88.7	7.25	6,678	26.74	10
	07-Jun-06	N		-168.6	7.57	6,268	26.37	<10
	18-Jul-06	N		-203.8	7.28	6,492	27.51	<10
	08-Aug-06	N		-74.6	7.54	6,892	26.96	19
	06-Sep-06	N		-205.1	7.69	6,563	28.21	17
	04-Oct-06	N		-152.2	7.40	6,548	26.53	24
	08-Nov-06	N		-152.0	7.10	7,712	26.23	18
	05-Dec-06	N		-140.7	6.89	7,515	25.04	12
	03-Jan-07	N		-166.2	7.58	7,024	25.19	<10
	08-Feb-07	N		-141.7	7.26	6,868	25.85	<10
	07-Mar-07	N		-153.7	7.37	6,727	26.11	<10
	05-Apr-07	N		-151.2	7.43	6,780	26.54	<10
	02-May-07	N		-124.9	7.84	6,728	26.42	16
	06-Jun-07	N		-99.4	7.21	6,657	25.88	<10
11-Jul-07	N		-123.9	7.40	6,456	26.47	13	
08-Aug-07	N		-122.4	7.49	7,170	26.45	<10	
06-Sep-07	N		-131.6	7.21	7,045	26.60	14	

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PT-2M	17-Mar-06	N	60-70	-170.9	7.29	7,304	26.30	<10
	06-Apr-06	N		-173.8	8.01	7,752	26.90	<10
	24-May-06	N		44.3	7.61	5,902	2,647	<10
	31-May-06	N		-65	7.14	7,271	25.94	<10
	07-Jun-06	N		-99.7	7.62	6,825	26.71	<10
	18-Jul-06	N		-173.1	7.16	6,849	27.25	<10
	08-Aug-06	N		-27.6	7.44	6,797	26.39	<10
	06-Sep-06	N		-227.6	7.66	6,610	27.04	19
	04-Oct-06	N		-82.9	7.33	6,592	25.85	18
	08-Nov-06	N		-20.1	6.90	6,813	25.86	<10
	05-Dec-06	N		-62.8	6.73	6,639	23.53	22
	03-Jan-07	N		-160.3	7.47	6,298	24.71	12
	07-Feb-07	N		-69.5	7.09	6,221	24.82	12
	07-Mar-07	N		-192.1	7.37	5,955	25.43	<10
	05-Apr-07	N		-81.1	7.40	5,813	26.07	<10
	02-May-07	N		-90.7	7.86	5,751	26.68	<10
	15-May-07	N		-86.9	7.38	5,881	26.08	<10
	22-May-07	N		-138	7.19	5,731	25.21	<10
	30-May-07	N		-93.7	7.12	5,824	25.54	<10
	06-Jun-07	N		-46.8	7.22	5,679	24.88	<10
	11-Jul-07	N		-86.4	7.30	5,529	26.07	<10
	24-Jul-07	N		-84.5	7.23	5,783	25.35	<10
	31-Jul-07	N		-79.6	7.45	5,821	25.28	<10
	08-Aug-07	N		-64.6	7.53	5,887	25.84	<10
	14-Aug-07	N		-104.4	7.23	5,719	25.66	<10
	06-Sep-07	N		-61.4	7.18	5,995	25.90	<10
	05-Dec-07	N		-62.2	7.22	6,150	24.03	<10
05-Mar-08	N	-56.8	7.31	5,323	23.70	<10		
04-Jun-08	N	-15.6	6.79	5,690	24.51	<10		
10-Sep-08	N	-138.4	7.42	5,301	24.86	<10		
03-Dec-08	N	404.6	7.97	6,256	21.17	<10		
	<b>10-Feb-09</b>	<b>N</b>		<b>-34</b>	<b>7.24</b>	<b>5,209</b>	<b>23.39</b>	<b>13.0</b>

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PT-2D	17-Mar-06	N	95-105	-100.5	7.21	12,626	26.17	1,600
	06-Apr-06	N		-71.3	7.04	13,924	26.03	2,300
	24-May-06	N		180.9	7.39	9,229	26.45	1,640
	31-May-06	N		-51.2	7.39	11,157	25.95	1,160
	07-Jun-06	N		403.3	7.61	10,386	26.21	840
	17-Jul-06	N		426.4	7.46	11,231	26.63	500
	07-Aug-06	N		-134.6	7.43	11,647	26.80	660
	14-Aug-06	N		3.5	7.95	11,541	26.64	620
	17-Aug-06	N		-157.2	7.93	11,608	26.61	560
	21-Aug-06	N		-177.7	8.26	11,140	26.52	500
	24-Aug-06	N		-73.9	8.01	10,924	26.45	580
	29-Aug-06	N		-72.0	8.01	10,433	26.39	680
	05-Sep-06	N		-234.6	7.82	10,660	27.33	520
	12-Sep-06	N		-87.0	7.74	10,774	26.50	520
	19-Sep-06	N		-245.7	7.65	9,754	26.57	500
	28-Sep-06	N		-146.9	7.68	9,443	26.41	258
	04-Oct-06	N		91.0	7.58	9,240	25.85	4220*
	17-Oct-06	N		378.7	7.42	9,445	25.45	76
	31-Oct-06	N		393.3	7.53	10,065	25.69	282
	08-Nov-06	N		212.0	7.31	10,769	25.98	225
	14-Nov-06	N		395.4	7.46	10,256	25.40	279
	21-Nov-06	N		12.2	7.48	10,695	25.42	253
	28-Nov-06	N		22.1	7.38	10,417	23.83	214
	05-Dec-06	N		-106.9	7.04	10,124	24.67	205
	18-Dec-06	N		-95.5	8.00	10,285	24.75	158
	03-Jan-07	N		61.2	7.67	10,700	23.92	151
	15-Jan-07	N		-149.5	7.69	11,205	23.90	170
	29-Jan-07	N		-240.6	7.49	11,398	24.65	151
	08-Feb-07	N		-17.7	7.39	12,399	23.77	109
	07-Mar-07	N		-141.2	7.53	12,397	25.49	90
05-Apr-07	N	-61.1	7.57	12,290	26.11	103		
02-May-07	N	-80.7	7.52	11,973	26.11	104		
15-May-07	N	-165.9	7.38	11,772	25.84	<10		
22-May-07	N	-118.4	7.03	10,362	25.43	<10		
30-May-07	N	-231.8	7.31	9,711	25.84	<10		

**Table 2**  
**Summary of Field Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	pH	Specific Conductance (µS/cm)	Temperature (C°)	Hexavalent Chromium Field (µg/L)
PT-2D (cont)	06-Jun-07	N		-124.4	7.26	9,050	25.57	<10
	11-Jun-07	N		-232.9	7.41	9,097	26.16	49
	26-Jun-07	N		-297.6	7.71	8,797	26.92	<10
	11-Jul-07	N		-237.0	7.81	8,760	26.49	<10
	24-Jul-07	N		-251.2	7.36	9,459	26.30	<10
	31-Jul-07	N		-263.6	7.51	9,295	25.88	<10
	08-Aug-07	N		-279.9	7.67	9,012	25.93	<10
	14-Aug-07	N		-241.6	7.33	8,559	26.62	<10
	28-Aug-07	N		-159.2	7.34	8,469	26.31	<10
	06-Sep-07	N		-186.4	7.36	9,306	26.10	<10
	02-Oct-07	N		-161.9	7.22	9,412	26.12	<10
	06-Nov-07	N		-55.3	7.27	9,678	25.57	<10
	05-Dec-07	N		-137.9	7.18	10,792	23.94	<10
	05-Mar-08	N		-127.2	7.19	12,160	22.02	22
	04-Jun-08	N		-116.8	6.74	12,709	24.70	10.0
	10-Sep-08	N		-158.7	7.30	11,898	24.78	<10
	03-Dec-08	N		438.0	7.77	12,571	20.14	16.0
	<b>10-Feb-09</b>	<b>N</b>		<b>-124.1</b>	<b>7.16</b>	<b>12,510</b>	<b>23.17</b>	<b>12.0</b>
PT-3S	16-Mar-06	N	35-45	-218.9	7.14	6,353	26.67	<10
	03-Apr-06	N		-238.1	7.38	6,846	26.68	<10
	04-May-06	N		-119.3	8.1	6,380	27.1	<10
	05-May-06	N		-130.6	7.44	6,690	26.46	<10
	06-May-06	N		-130.7	7.1	6,363	26.6	<10
	07-May-06	N		-115.2	7.25	6,846	26.56	<10
	09-May-06	N		-43.9	7.27	6,976	26.55	<10
	10-May-06	N		-135.7	7.35	6,419	26.81	11
	11-May-06	N		-20.1	7.39	6,218	26.77	<10
	12-May-06	N		-92.7	7.14	6,169	26.69	<10
	13-May-06	N		-90.5	7.28	6,358	26.7	---
	23-May-06	N		1.37	7.13	5,944	26.82	<10
	30-May-06	N		-162.7	12.28	5,971	27.5	13
	06-Jun-06	N		-177.7	7.57	5,295	26.72	12
	19-Jul-06	N		-166.3	7.27	5,771	26.64	<10
	08-Aug-06	N		-120.1	7.04	6,105	27.83	<10
	06-Sep-06	N		-98.0	7.52	6,205	26.68	23
	04-Oct-06	N		-156.2	7.32	6,249	26.31	20
	07-Nov-06	N		-155.4	7.43	6,586	26.40	20
	05-Dec-06	N		-146.3	6.85	6,377	24.46	32
03-Jan-07	N		-141.2	7.55	6,391	24.52	<10	
07-Feb-07	N		-154.4	7.70	6,706	24.84	<10	
07-Mar-07	N		-151.2	7.37	6,350	25.35	<10	
05-Apr-07	N		-157.6	7.42	6,468	25.21	12	
02-May-07	N		-139.7	7.80	6,286	25.47	<10	
06-Jun-07	N		-156.7	7.32	5,999	25.30	18	
11-Jul-07	N		-121.7	7.02	6,043	26.60	<10	
08-Aug-07	N		-146.7	7.41	6,213	25.76	20	
06-Sep-07	N		-141.7	7.43	6,107	25.69	<10	

**Table 2**  
**Summary of Field Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	pH	Specific Conductance (µS/cm)	Temperature (C°)	Hexavalent Chromium Field (µg/L)
PT-3M	18-Mar-06	N	60-70	-249.1	7.96	7,232	26.19	<10
	07-Apr-06	N		-218.3	7.33	8,041	26.06	---
	04-May-06	N		-101.8	8.68	7,193	24.31	---
	05-May-06	N		-106.0	7.99	7,665	26.05	<10
	06-May-06	N		-96.6	7.53	7,613	25.83	<10
	07-May-06	N		-82.0	7.64	7,681	26.23	<10
	09-May-06	N		-8.4	7.58	7,718	25.98	<10
	10-May-06	N		-103.0	7.61	7,176	26.41	14
	11-May-06	N		-86.4	7.7	6,879	26.32	<10
	12-May-06	N		-71.8	7.54	6,927	26.27	13
	13-May-06	N		6.9	7.49	7,130	26.12	---
	23-May-06	N		42.8	7.38	7,475	26.13	<10
	30-May-06	N		-70.3	12.31	7,977	26.69	16
	06-Jun-06	N		-112.8	7.68	7,026	25.75	<10
	19-Jul-06	N		-156.3	7.33	6,911	25.70	<10
	08-Aug-06	N		-92.5	7.52	7,048	26.72	10
	06-Sep-06	N		-39.3	7.68	6,777	25.84	14
	04-Oct-06	N		-126.1	7.49	6,566	25.36	19
	07-Nov-06	N		-150	7.38	6,571	26.48	19
	05-Dec-06	N		-108.9	7.04	6,219	24.26	60
	03-Jan-07	N		-149.1	7.68	6,098	24.48	13
	07-Feb-07	N		-147.7	7.87	6,074	24.43	<10
	06-Mar-07	N		-113.4	7.48	5,693	25.12	<10
	04-Apr-07	N		-110.3	7.42	5,699	24.80	<10
	02-May-07	N		-97.1	7.77	5,556	25.04	<10
	16-May-07	N		-131.1	7.46	5,800	24.97	<10
	23-May-07	N		-112.1	7.69	5,817	24.17	<10
	31-May-07	N		-118.4	7.48	5,691	24.58	<10
	06-Jun-07	N		-101.9	7.40	5,509	25.30	<10
	11-Jul-07	N		-90.0	7.23	5,629	25.72	<10
	25-Jul-07	N		-100.8	7.33	5,652	24.63	10
	01-Aug-07	N		-119.8	7.42	5,564	24.52	<10
	08-Aug-07	N		-111.7	7.43	5,617	25.34	<10
15-Aug-07	N	-105.0	7.39	5,650	25.94	<10		
06-Sep-07	N	-93.9	7.40	5,199	24.54	<10		
05-Dec-07	N	-88.8	7.38	5,141	22.72	<10		
05-Mar-08	N	-108.3	7.50	4,807	22.54	15		
04-Jun-08	N	-68.1	7.07	5,607	24.88	<10		
11-Sep-08	N	-136.3	7.34	4,945	23.42	<10		
03-Dec-08	N	321.8	7.77	4,826	20.14	<10		
<b>11-Feb-09</b>	<b>N</b>	<b>-117.4</b>	<b>7.38</b>	<b>4,522</b>	<b>23.28</b>	<b>&lt;10</b>		

**Table 2**  
**Summary of Field Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	pH	Specific Conductance (µS/cm)	Temperature (C°)	Hexavalent Chromium Field (µg/L)
PT-3D	18-Mar-06	N	95-105	-54.4	7.38	13,782	25.98	4,620
	05-Apr-06	N		51.8	7.51	14,347	26.71	7,760
	05-May-06	N		66.7	7.87	13,263	25.96	3,140
	06-May-06	N		71.7	7.54	11,437	26.03	3,440
	07-May-06	N		76.8	7.81	9,027	26.14	4,200
	09-May-06	N		168.5	7.62	12,715	26.08	3,960
	10-May-06	N		2.6	6.66	10,771	26.33	3,960
	11-May-06	N		-11.9	7.86	11,767	26.28	3,780
	12-May-06	N		-6.1	7.65	12,290	26.18	3,720
	13-May-06	N		144.5	7.72	12,139	26.33	---
	23-May-06	N		129.1	7.31	13,111	27.37	3,900
	30-May-06	N		30.7	12.4	13,907	27.29	3,800
	06-Jun-06	N		12.6	7.71	12,310	25.82	3,380
	17-Jul-06	N		-246.7	7.51	12,277	26.17	1,920
	08-Aug-06	N		-66.9	8.62	13,045	29.12	4,100
	14-Aug-06	N		-24.3	8.46	10,984	26.95	3,140
	17-Aug-06	N		-176.1	8.34	11,853	26.29	3,600
	21-Aug-06	N		-163.9	8.54	12,168	26.73	3,860
	24-Aug-06	N		-95.2	8.31	12,213	26.30	3,520
	29-Aug-06	N		-124.4	8.34	12,065	26.68	3,340
	05-Sep-06	N		-61.2	8.41	12,130	26.55	3,200
	12-Sep-06	N		-144.8	8.01	12,434	26.47	2,880
	19-Sep-06	N		-231.4	7.66	12,884	26.31	3,100
	28-Sep-06	N		-115.5	7.75	12,579	25.98	3,800
	04-Oct-06	N		-69.8	7.84	12,638	26.11	3,520
	17-Oct-06	N		-115.2	7.61	13,181	26.85	700
	31-Oct-06	N		-74.9	7.77	13,265	25.45	3,440
	07-Nov-06	N		-140.8	7.94	13,517	26.23	2,640
	14-Nov-06	N		-186.7	7.69	11,694	25.13	680
	21-Nov-06	N		-80.4	7.70	13,544	25.10	2,960
28-Nov-06	N	-118.6	7.61	13,654	23.36	2,880		
05-Dec-06	N	-24.5	7.19	13,171	24.79	3,100		
18-Dec-06	N	-192.5	8.34	13,619	23.50	4,120		
03-Jan-07	N	-159.2	7.75	13,761	25.26	3,400		
15-Jan-07	N	-168.4	8.06	13,540	23.46	3,200		
29-Jan-07	N	-211.6	7.60	13,155	24.10	3,060		
07-Feb-07	N	-139.1	8.07	14,021	24.70	3,280		

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 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	pH	Specific Conductance (µS/cm)	Temperature (C°)	Hexavalent Chromium Field (µg/L)
PT-3D (cont)	06-Mar-07	N		-44.9	7.66	13,494	25.75	3,480
	05-Apr-07	N		18.3	7.68	13,102	24.57	2,880
	02-May-07	N		31.4	7.69	12,715	26.27	2,780
	16-May-07	N		-178.1	7.3	11,901	25.85	2,450
	23-May-07	N		-187.3	8.17	12,024	25.16	141
	31-May-07	N		-169.3	7.66	11,476	26.07	221
	06-Jun-07	N		-141.7	7.59	10,941	25.30	709
	11-Jun-07	N		-171.3	7.65	11,867	26.04	718
	26-Jun-07	N		-195.6	7.77	11,501	25.80	701
	11-Jul-07	N		-189.7	7.39	11,241	26.29	775
	25-Jul-07	N		-223.3	7.11	10,643	26.75	<10
	01-Aug-07	N		-181.6	7.34	11,379	26.38	<10
	08-Aug-07	N		-285.1	7.52	11,190	28.12	<10
	15-Aug-07	N		-250.9	7.48	11,245	26.78	<10
	28-Aug-07	N		-192.5	7.53	11,180	26.51	<10
	06-Sep-07	N		-227.5	7.62	11,607	25.92	103
	03-Oct-07	N		-134.0	7.46	12,195	24.82	562
	07-Nov-07	N		-25.1	7.49	11,524	24.45	601
	05-Dec-07	N		-148.2	7.65	13,783	23.79	392
	05-Mar-08	N		-128.3	7.62	12,600	23.92	1,060
04-Jun-08	N		-32.6	7.29	13,468	24.51	1,200	
11-Sep-08	N		-144.7	7.76	13,506	24.17	1,300	
03-Dec-08	N		359.3	7.95	14,656	20.81	1,280	
	<b>11-Feb-09</b>	<b>N</b>		<b>-143.7</b>	<b>7.61</b>	<b>13,901</b>	<b>23.14</b>	<b>738</b>

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 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	pH	Specific Conductance (µS/cm)	Temperature (C°)	Hexavalent Chromium Field (µg/L)
PT-4S	15-Mar-06	N	35-45	-257.0	7.32	7,072	26.16	<10
	06-Apr-06	N		-159.9	7.80	7,783	26.11	<10
	04-May-06	N		-117	8.33	6,585	25.39	<10
	05-May-06	N		-126.6	7.70	7,325	25.82	<10
	09-May-06	N		-93.5	7.21	7,752	25.75	<10
	10-May-06	N		-119.8	7.41	4,939	26.33	<10
	11-May-06	N		6.2	7.62	7,180	27.26	<10
	12-May-06	N		-71.2	7.35	6,997	26.08	14
	13-May-06	N		-68.7	7.60	7,305	26.09	---
	23-May-06	N		20.4	7.53	6,411	27.13	<10
	30-May-06	N		-121.7	7.10	7,504	25.93	<10
	06-Jun-06	N		-230.2	7.78	7,377	27.56	<10
	19-Jul-06	N		-137.8	7.33	7,106	26.16	11
	08-Aug-06	N		-151.6	7.20	7,174	26.05	11
	06-Sep-06	N		-126.1	7.73	7,212	26.70	<10
	04-Oct-06	N		-130.0	7.62	7,314	26.67	11
	08-Nov-06	N		-135.2	7.88	7,478	24.89	13
	05-Dec-06	N		-145.3	6.97	7,165	24.14	65
	03-Jan-07	N		-125.0	7.39	7,329	25.09	<10
	07-Feb-07	N		-149.5	7.48	7,186	24.24	<10
07-Mar-07	N	-140.2	7.44	6,470	25.14	<10		
05-Apr-07	N	-129.7	7.61	6,371	25.28	<10		
02-May-07	N	-143.6	7.51	6,285	25.65	<10		
06-Jun-07	N	-98.7	7.56	6,272	24.23	<10		
11-Jul-07	N	-84.3	7.56	6,261	25.50	<10		
08-Aug-07	N	-139.7	7.59	6,380	25.88	14		
06-Sep-07	N	-132.4	7.46	6,106	26.07	<10		

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 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	pH	Specific Conductance (µS/cm)	Temperature (C°)	Hexavalent Chromium Field (µg/L)
PT-4M	15-Mar-06	N	60-70	-246.1	7.9	6,784	25.99	<10
	07-Apr-06	N		-210.5	7.48	7,566	26.28	---
	04-May-06	N		-119.6	8.74	7,031	24.95	<10
	08-May-06	N		-113.4	7.97	7,384	26.14	11
	09-May-06	N		-58.9	7.74	7,588	25.84	<10
	10-May-06	N		-134	7.73	7,022	26.24	<10
	11-May-06	N		-115.2	7.92	6,991	26.21	<10
	12-May-06	N		-95.1	7.73	7,084	25.79	<10
	13-May-06	N		-68.6	7.85	6,265	25.93	---
	23-May-06	N		25.9	7.81	6,267	26.82	<10
	30-May-06	N		-113.1	7.48	7,467	25.61	11
	06-Jun-06	N		-211.3	7.89	7,258	26.68	<10
	19-Jul-06	N		-146.4	7.44	6,939	26.19	<10
	08-Aug-06	N		-160.5	7.29	6,976	25.76	10
	06-Sep-06	N		-110.5	7.77	6,825	26.08	<10
	04-Oct-06	N		-123.5	7.6	6,918	26.34	18
	08-Nov-06	N		-178.6	7.82	6,623	25.25	17
	05-Dec-06	N		-128.9	7.01	6,042	24.18	28
	03-Jan-07	N		-100.1	7.42	6,177	24.90	<10
	07-Feb-07	N		-120.8	7.52	5,790	24.07	<10
	07-Mar-07	N		-120.2	7.45	5,392	24.64	<10
	04-Apr-07	N		-117.3	7.66	5,143	24.48	<10
	02-May-07	N		-126.5	7.51	5,095	24.52	<10
	06-Jun-07	N		-78.9	7.53	5,250	24.69	<10
	11-Jul-07	N		56.4	7.62	15,056	25.65	3420*
	08-Aug-07	N		-135.2	7.41	5,358	24.57	<10
	06-Sep-07	N		-83.7	7.40	5,277	26.39	<10
	04-Dec-07	N		-112.9	7.51	4,309	23.04	<10
	05-Mar-08	N		-109.8	7.60	4,213	22.11	<10
	04-Jun-08	N		-97.0	7.15	4,993	25.01	<10
11-Sep-08	N		-160.5	7.42	4,739	23.76	<10	
03-Dec-08	N		264.8	7.98	4,565	22.52	<10	
	<b>11-Feb-09</b>	<b>N</b>		<b>-142.8</b>	<b>7.49</b>	<b>3,741</b>	<b>22.09</b>	<b>&lt;10</b>

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 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	pH	Specific Conductance (µS/cm)	Temperature (C°)	Hexavalent Chromium Field (µg/L)
PT-4D	15-Mar-06	N	95-105	-98.4	7.4	15,180	26.02	5,800
	05-Apr-06	N		-30	7.58	162,310	26.61	5,840
	08-May-06	N		62.7	7.93	14,947	26.10	5,920
	09-May-06	N		48.3	7.45	14,719	25.92	6,520
	10-May-06	N		42.1	7.68	14,351	26.14	6,160
	11-May-06	N		-10.2	7.84	13,923	26.15	5,920
	12-May-06	N		-4.5	7.72	14,580	25.97	7,480
	13-May-06	N		28.1	7.69	12,744	26.00	---
	23-May-06	N		50	7.91	13,640	31.20	4,840
	30-May-06	N		-81.3	7.43	15,116	25.97	5,800
	06-Jun-06	N		-174.3	7.81	15,010	26.65	4,780
	19-Jul-06	N		-76.3	7.49	14,389	25.97	5,960
	08-Aug-06	N		-135.9	7.32	14,160	25.09	6,220
	06-Sep-06	N		46.8	7.79	14,720	26.10	5,020
	04-Oct-06	N		-99.4	7.7	14,992	27.04	5,280
	08-Nov-06	N		11.4	7.72	15,619	24.91	5,640
	05-Dec-06	N		-5.4	7.19	15,149	24.11	5,660
	03-Jan-07	N		15.5	7.64	16,119	24.81	5,580
	07-Feb-07	N		-99.3	7.68	15,975	25.17	5,300
	07-Mar-07	N		-41.9	7.65	15,324	25.80	5,100
	05-Apr-07	N		167.7	7.71	15,396	25.21	4,780
	02-May-07	N		-43.5	7.6	15,129	25.90	4,760
	16-May-06	N		-14	7.77	15,613	25.61	4,300
	23-May-07	N		-56.7	7.73	15,734	24.53	4,520
	31-May-07	N		-89.1	7.55	15,357	25.30	3,280
	06-Jun-07	N		-38.3	7.57	15,267	25.18	3,700
	11-Jun-07	N		-60.2	7.68	15,759	25.60	2,450
	26-Jun-07	N		-157.6	7.79	15,394	25.87	4,280
	11-Jul-07	N		38.0	7.60	15,404	25.55	3,640
	25-Jul-07	N		-82.5	7.65	15,117	25.44	3,980
	01-Aug-07	N		-25.4	7.64	15,743	25.34	3,900
	08-Aug-07	N		-39.3	7.65	15,443	27.86	4,060
15-Aug-07	N	-53.5	7.65	15,477	26.22	3,920		
28-Aug-07	N	-40.6	7.42	15,289	25.94	3,920		
06-Sep-07	N	-58.7	7.67	15,402	26.18	3,980		
03-Oct-07	N	-43.8	7.52	16,026	25.51	4,600		
07-Nov-07	N	89.0	7.55	14,593	24.91	3,380		
05-Dec-07	N	67.2	7.54	16,429	23.22	2,800		
05-Mar-08	N	10.3	7.51	16,500	23.43	1,700		
04-Jun-08	N	92.2	7.02	18,735	25.90	2,640		
11-Sep-08	N	-73.9	7.31	17,233	24.02	2,680		
03-Dec-08	N	313.7	7.88	18,187	20.50	2,520		
	<b>12-Feb-09</b>	<b>N</b>		<b>194.6</b>	<b>7.11</b>	<b>17,878</b>	<b>22.78</b>	<b>2,460</b>

**Table 2**  
**Summary of Field Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	pH	Specific Conductance (µS/cm)	Temperature (C°)	Hexavalent Chromium Field (µg/L)
PT-5S	16-Mar-06	N	35-45	-204.9	7.33	7,714	25.81	<10
	07-Apr-06	N		-177.3	7.00	8,640	25.75	---
	01-Jun-06	N		-88.9	7.17	8,682	25.46	<10
	19-Jul-06	N		-134.5	7.23	8,660	25.53	<10
	09-Aug-06	N		-172.2	7.37	8,902	25.20	<10
	08-Sep-06	N		-209.6	7.32	8,742	25.63	26
	05-Oct-06	N		-133.7	7.32	8,975	25.91	12
	09-Nov-06	N		-108.7	7.33	9,205	22.15	18
	06-Dec-06	N		-136.8	7.33	9,454	23.91	25
	04-Jan-07	N		121.7	7.37	10,029	22.51	12
	08-Feb-07	N		-124.1	7.19	9,907	22.69	<10
	03-Mar-07	N		-127.7	7.21	9,417	24.46	<10
	06-Apr-07	N		-138.6	7.38	9,293	24.85	<10
	03-May-07	N		-136.9	7.23	9,209	23.49	<10
	07-Jun-07	N		-23.5	7.22	9,473	23.62	<10
	12-Jul-07	N		-92.0	7.34	9,299	24.65	<10
09-Aug-07	N	-132.1	7.32	9,165	24.62	<10		
07-Sep-07	N	-95.3	7.20	8,398	25.07	<10		
PT-5M	16-Mar-06	N	60-70	-184.6	7.29	6,989	25.48	<10
	07-Apr-06	N		-183.5	6.97	8,609	25.80	---
	01-Jun-06	N		-49.9	7.05	6,191	24.82	<10
	19-Jul-06	N		-113.4	7.26	5,091	25.32	<10
	09-Aug-06	N		-171.5	7.46	4,740	24.81	<10
	08-Sep-06	N		-184.3	7.58	4,666	25.16	<10
	05-Oct-06	N		-113.8	7.53	4,606	24.89	10
	09-Nov-06	N		-61.7	7.57	4,571	22.25	<10
	06-Dec-06	N		-69.3	7.55	4,807	23.06	38
	04-Jan-07	N		-69.1	7.62	5,397	23.65	<10
	08-Feb-07	N		-55.9	7.39	5,583	23.26	<10
	07-Mar-07	N		-174.7	7.42	5,361	23.97	<10
	06-Apr-07	N		91	7.50	5,291	23.56	<10
	03-May-07	N		-61.7	7.41	5,082	23.31	<10
	07-Jun-07	N		35.9	7.40	4,281	23.76	<10
	12-Jul-07	N		-13.2	7.65	3,814	23.74	<10
	09-Aug-07	N		-77.2	7.69	3,573	25.02	<10
	07-Sep-07	N		-75.4	7.43	3,126	23.61	<10
	05-Dec-07	N		-40.7	7.57	3,873	22.15	<10
	06-Mar-08	N		-49.5	7.57	4,438	22.10	<10
05-Jun-08	N	155.4	6.98	3,915	21.89	<10		
11-Sep-08	N	-147.6	7.63	3,341	21.94	<10		
03-Dec-08	N	247.8	7.70	3,529	19.99	<10		
	<b>12-Feb-09</b>	<b>N</b>		<b>24.0</b>	<b>7.40</b>	<b>3,281</b>	<b>21.15</b>	<b>12.0</b>

**Table 2**  
**Summary of Field Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	pH	Specific Conductance (µS/cm)	Temperature (C°)	Hexavalent Chromium Field (µg/L)		
PT-5D	16-Mar-06	N	95-105	-191.1	7.71	8,304	25.85	6,200		
	07-Apr-06	N		-181.1	7.05	8,561	25.78	---		
	12-May-06	N		-1.2	7.7	13,620	26.62	5,240		
	01-Jun-06	N		-45.5	7.47	14,037	25.5	3,660		
	17-Jul-06	N		-208.6	7.55	13,286	25.97	3,940		
	09-Aug-06	N		-128.2	7.41	13,646	25.65	4,380		
	08-Sep-06	N		-168	7.65	13,954	25.45	4,600		
	05-Oct-06	N		-78.9	7.66	14,067	26.14	4,100		
	09-Nov-06	N		-46.2	7.82	15,243	23.18	4,980		
	06-Dec-06	N		18.8	7.77	14,972	24.06	4,720		
	04-Jan-07	N		28.4	7.79	16,363	23.39	4,840		
	08-Feb-07	N		19.2	7.49	16,006	23.64	4,120		
	08-Mar-07	N		-85.6	7.43	15,662	24.81	3,600		
	05-Apr-07	N		-54.6	7.62	14,325	26.02	3,640		
	03-May-07	N		17.5	7.44	13,679	24.93	3,420		
	07-Jun-07	N		58.3	7.44	14,053	24.55	2,740		
	12-Jun-07	N		65.9	7.57	13,840	25.37	3,200		
	09-Aug-07	N		-3.8	7.67	13,987	25.63	3,700		
	07-Sep-07	N		38.7	7.58	12,341	24.87	3,560		
	03-Oct-07	N		-45.3	7.74	14,735	24.68	4,040		
	07-Nov-07	N		82.3	7.60	14,006	23.98	3,740		
	05-Dec-07	N		-14.4	7.52	15,545	23.78	2,850		
	06-Mar-08	N		16535	7.48	15,150	23.45	2,020		
	05-Jun-08	N		200.1	6.99	16,027	23.46	2,300		
	11-Sep-08	N		-100.3	7.42	14,864	23.16	2,660		
		<b>03-Dec-08</b>		<b>N</b>		<b>276</b>	<b>7.89</b>	<b>16,991</b>	<b>21.58</b>	<b>2,840</b>
	PT-6S	18-Mar-06		N	35-45	-91.7	6.99	10,053	25.49	<10
		04-Apr-06		N		-187.9	7.22	10,379	26.56	<10
13-May-06		N	-48.4	7.31		7,353	26.62	---		
22-May-06		N	-14	7.21		7,476	26.59	<10		
01-Jun-06		N	556.8	6.52		4,423	27.56	<10		
06-Jun-06		N	-164.1	7.65		8,564	26.25	14		
19-Jul-06		N	-161.6	6.97		8,271	22.57	12		
09-Aug-06		N	-107.7	6.88		9,196	26.87	52		
08-Sep-06		N	-143.6	7.78		9,508	26.05	45		
05-Oct-06		N	-139.1	7.09		9,579	25.84	20		
09-Nov-06		N	-138.6	7.04		10,797	25.75	25		
06-Dec-06		N	-136.9	6.81		11,708	23.92	62		
04-Jan-07		N	-140.1	7.13		11,955	22.67	22		
08-Feb-07		N	-135.7	7.44		12,120	23.88	<10		
08-Mar-07		N	-146.2	6.98		9,707	25.60	<10		
06-Apr-07		N	-146.9	7.10		8,395	24.88	30		
03-May-07		N	-130.3	7.43		7,997	25.26	<10		
07-Jun-07		N	-137.4	7.00		8,027	24.98	11		
12-Jul-07		N	-141.6	7.17		8,177	26.09	<10		
09-Aug-07	N	-128.7	7.10	8,999	25.65	37				
07-Sep-07	N	-135.4	6.90	9,175	25.39	32				

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 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	pH	Specific Conductance (µS/cm)	Temperature (C°)	Hexavalent Chromium Field (µg/L)
PT-6M	16-Mar-06	N	60-70	-120.1	7.25	7,221	26.13	<10
	04-Apr-06	N		-114.1	7.45	7,761	26.18	<10
	13-May-06	N		22.6	7.46	6,212	26.22	---
	23-May-06	N		85.6	7.57	5,988	26.51	<10
	01-Jun-06	N		675.3	6.84	3,952	27.04	<10
	06-Jun-06	N		-197.1	7.98	6,832	2,610	<10
	19-Jul-06	N		-168.5	7.28	6,528	26.70	<10
	09-Aug-06	N		-38.9	7.20	6,396	26.43	<10
	08-Sep-06	N		-38.6	8.12	6,168	25.81	28
	05-Oct-06	N		-21.2	7.61	6,166	25.52	<10
	09-Nov-06	N		20.0	7.52	6,076	25.21	<10
	06-Dec-06	N		-45.2	7.28	6,198	24.57	29
	04-Jan-07	N		-135.1	7.60	5,966	24.06	<10
	08-Feb-07	N		-96.1	7.79	6,398	23.75	<10
	07-Mar-07	N		-74.2	7.36	5,975	24.97	<10
	06-Apr-07	N		-14	7.39	6,113	24.40	<10
	03-May-07	N		-92.8	7.60	6,193	25.07	<10
	16-May-07	N		-154.2	7.52	6,385	25.51	<10
	23-May-07	N		-94	7.68	6,307	24.59	<10
	31-May-07	N		-103.8	7.45	6,132	25.00	<10
	07-Jun-07	N		16.4	7.36	6,099	24.31	<10
	12-Jul-07	N		-58.0	7.49	5,578	25.31	<10
	25-Jul-07	N		-82.7	7.42	5,754	2499	<10
	01-Aug-07	N		-77.5	7.42	5,756	24.87	<10
	09-Aug-07	N		-69.0	7.67	5,732	24.98	<10
	15-Aug-07	N		-123.7	7.45	5,879	26.06	<10
	07-Sep-07	N		-12.5	7.41	5,720	25.10	<10
05-Dec-07	N	-30.7	7.37	5,765	23.54	<10		
06-Mar-08	N	16.1	7.56	5,643	23.47	<10		
05-Jun-08	N	59.7	7.02	6,411	24.40	<10		
11-Sep-08	N	-149.8	7.43	5,573	23.08	<10		
	<b>04-Dec-08</b>	<b>N</b>		<b>195.7</b>	<b>8.59</b>	<b>5,376</b>	<b>22.48</b>	<b>&lt;10</b>

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 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	pH	Specific Conductance (µS/cm)	Temperature (C°)	Hexavalent Chromium Field (µg/L)
PT-6D	16-Mar-06	N	95-105	-118.9	7.73	13,489	25.90	3,380
	04-Apr-06	N		-91.1	7.72	12,784	26.95	2,580
	13-May-06	N		28.7	7.77	9,829	25.87	---
	22-May-06	N		79.4	7.90	9,631	26.37	2,040
	01-Jun-06	N		692.8	7.08	6,017	26.42	1,360
	06-Jun-06	N		-170.6	8.00	10,470	25.84	1,000
	17-Jul-06	N		-681.6	7.62	10,365	26.49	920
	09-Aug-06	N		-43.8	7.50	10,793	26.84	1,600
	08-Sep-06	N		14.3	8.26	11,809	25.89	1,780
	05-Oct-06	N		-12.7	7.76	10,885	25.36	1,080
	09-Nov-06	N		131.7	7.68	11,006	25.01	1,400
	06-Dec-06	N		-31.7	7.45	11,056	24.15	1,280
	04-Jan-07	N		-171.3	7.75	11,078	24.07	1,620
	08-Feb-07	N		-97.2	8.02	12,060	24.53	1,220
	08-Mar-07	N		-44.9	7.54	11,502	25.31	820
	05-Apr-07	N		-41.2	7.78	10,753	25.45	740
	03-May-07	N		-63.7	7.81	10,222	24.95	519
	16-May-07	N		-152.7	7.71	10,529	25.20	595
	23-May-07	N		-99.1	7.9	10,562	24.46	594
	31-May-07	N		-103.7	7.59	10,224	25.09	559
	07-Jun-07	N		178.1	7.54	10,944	24.33	742
	11-Jun-07	N		-29.1	7.63	10,620	26.01	637
	26-Jun-07	N		-146.7	7.79	10,642	26.10	569
	12-Jul-07	N		-26.0	7.69	9,682	25.07	581
	25-Jul-07	N		-74.4	7.63	10,284	25.31	637
	01-Aug-07	N		-49.2	7.65	10,830	24.98	623
	09-Aug-07	N		-20.0	7.89	10,570	25.05	656
	15-Aug-07	N		-80.1	7.63	10,474	25.82	618
	28-Aug-07	N		28.2	7.54	10,982	25.44	600
	07-Sep-07	N		-3.4	7.58	11,020	25.07	629
	03-Oct-07	N		-35.6	7.55	11,288	24.47	535
	07-Nov-07	N		81.2	7.65	10,603	24.61	512
05-Dec-07	N	-2.9	7.57	11,066	24.08	259		
06-Mar-08	N	66.5	7.66	10,420	22.26	260		
05-Jun-08	N	139.8	7.11	10,799	23.59	217		
11-Sep-08	N	-134.0	7.53	10,665	22.42	375		
	<b>04-Dec-08</b>	<b>N</b>		<b>205.5</b>	<b>8.54</b>	<b>12,116</b>	<b>21.32</b>	<b>386</b>

**Table 2**  
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 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	pH	Specific Conductance (µS/cm)	Temperature (C°)	Hexavalent Chromium Field (µg/L)
PTI-1S	15-Mar-06	N	35-45	-203.1	7.10	6,390	26.83	<10
	05-Apr-06	N		-184.0	7.28	6,964	27.06	<10
	06-May-06	N		---	---	---	---	620
	07-May-06	N		-137.8	6.73	4,936	33.59	600
	09-May-06	N		-54.8	6.57	5,627	32.39	---
	10-May-06	N		-155.1	6.29	5,313	25.6	290
	11-May-06	N		-156.5	6.27	5,326	28.93	20
	12-May-06	N		-71.9	6.8	4,457	28.07	70
	13-May-06	N		-132.8	6.58	4,582	28.42	---
	23-May-06	N		-21.3	6.66	4,262	27.04	<10
	31-May-06	N		-146.0	6.93	4,313	28.09	28
	05-Jun-06	N		-240.5	7.88	4,144	27.51	<10
	18-Jul-06	N		-164.1	7.28	6,399	26.77	80
	07-Aug-06	N		-124.1	7.22	6,771	26.43	<10
	07-Sep-06	N		-98.6	7.54	6,865	26.62	14
	03-Oct-06	N		-171.7	7.35	6,861	26.74	<10
	07-Nov-06	N		-178.4	6.86	7,209	26.03	14
	04-Dec-06	N		-172.0	6.84	7,347	24.37	13
	02-Jan-07	N		-153.2	7.15	7,219	24.25	<10
	06-Feb-07	N		-143.5	7.83	6,890	25.70	<10
06-Mar-07	N		-157.9	7.30	6,820	24.97	<10	
04-Apr-07	N		-155.3	7.23	6,870	25.92	13	
01-May-07	N		-153.7	7.25	6,519	25.6	<10	
05-Jun-07	N		-147.6	7.34	6,531	26.24	<10	
10-Jul-07	N		-139.6	7.36	6,675	26.22	<10	
07-Aug-07	N		-166.9	7.34	6,699	25.71	10	
05-Sep-07	N		-133.5	7.09	6,301	26.00	<10	

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 Needles, California

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Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	pH	Specific Conductance (µS/cm)	Temperature (C°)	Hexavalent Chromium Field (µg/L)
PTI-1M	15-Mar-06	N	60-70	-220.1	7.38	7,338	26.17	14
	04-Apr-06	N		-173.8	7.71	7,919	27.06	10
	06-May-06	N		-6.8	6.82	6,623	29.31	74
	07-May-06	N		-17.2	7.08	6,244	28.96	55
	09-May-06	N		-2.3	7.22	7,559	28.03	430
	10-May-06	N		57.0	7.26	6,179	29.4	28
	11-May-06	N		-149.5	7.02	7,325	27.56	27
	12-May-06	N		-72.4	7.52	6,066	27.05	29
	13-May-06	N		229.0	7.45	6,745	27.13	---
	23-May-06	N		-231.7	6.66	6,204	27.57	11
	31-May-06	N		-120.2	7.20	6,824	26.76	57
	05-Jun-06	N		-254.0	8.13	7,092	26.94	<10
	18-Jul-06	N		-180.1	7.56	6,990	26.62	<10
	07-Aug-06	N		-150.3	7.45	6,940	27.24	<10
	07-Sep-06	N		-78.2	7.87	6,923	26.86	16
	03-Oct-06	N		-112.8	7.27	6,621	26.15	<10
	07-Nov-06	N		-160.2	6.47	6,610	25.58	<10
	04-Dec-06	N		-64.1	7.00	6,278	24.51	32
	02-Jan-07	N		-75.6	7.29	6,291	23.45	18
	06-Feb-07	N		-130.1	7.88	5,871	24.63	<10
	06-Mar-07	N		-126.8	7.40	5,718	24.25	<10
	04-Apr-07	N		-102	7.34	5,778	25.49	<10
	01-May-07	N		-94.1	7.32	5,573	25.05	<10
	05-Jun-07	N		-111.7	7.36	5,738	26.21	<10
	10-Jul-07	N		15.4	7.33	5,912	26.07	<10
	07-Aug-07	N		-179.8	7.32	5,949	25.42	<10
	05-Sep-07	N		-65.8	7.07	5,684	26.57	<10
	04-Dec-07	N		-107.0	7.39	4,999	23.12	<10
04-Mar-08	N	-90.6	7.74	5,038	23.53	<10		
03-Jun-08	N	106.5	6.19	5,816	25.10	<10		
10-Sep-08	N	-155.6	7.45	5,590	24.30	<10		
02-Dec-08	N	108.3	7.04	5,045	22.51	<10		
	<b>11-Feb-09</b>	<b>N</b>		<b>-45.5</b>	<b>7.31</b>	<b>4,753</b>	<b>21.51</b>	<b>15.0</b>

**Table 2**  
**Summary of Field Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	pH	Specific Conductance (µS/cm)	Temperature (C°)	Hexavalent Chromium Field (µg/L)
PTI-1D	15-Mar-06	N	95-105	-89.9	7.37	13,018	26.04	1,780
	03-Apr-06	N		-87	7.68	13,811	26.07	3,520
	07-May-06	N		43.5	6.99	6,659	27.75	61
	09-May-06	N		124.5	7.25	6,880	29.05	870
	10-May-06	N		181	7.68	13,066	29.78	3,320
	11-May-06	N		159.9	8.13	11,442	27.48	1,140
	12-May-06	N		47.8	6.43	4,888	28.17	122
	13-May-06	N		-6.4	7.35	6,626	26.74	---
	22-May-06	N		154.7	8.08	15,136	27.57	980
	31-May-06	N		-198.3	7.92	12,156	26.32	1,160
	05-Jun-06	N		-210.4	8.51	11,989	28.74	920
	18-Jul-06	N		-138.6	7.94	11,582	26.93	1,700
	07-Aug-06	N		-157.4	7.75	11,815	27.14	1,720
	15-Aug-06	N		-52.8	8.35	7,441	29.07	100
	17-Aug-06	N		-204.8	8.53	8,988	29.38	140
	22-Aug-06	N		-66	8.61	10,398	28.19	160
	24-Aug-06	N		-20.2	8.38	10,670	28.31	220
	29-Aug-06	N		-58.8	8.49	11,102	27.95	186
	05-Sep-06	N		-84.6	8.47	11,337	27.51	240
	12-Sep-06	N		-227.1	7.79	8,409	28.97	74
	19-Sep-06	N		-343.4	8.45	10,698	27.31	30
	28-Sep-06	N		-152.3	7.98	11,585	26.35	<10
	03-Oct-06	N		-170.2	8.02	11,933	26.63	13
	17-Oct-06	N		-173.8	8.01	12,274	27.14	28
	31-Oct-06	N		-142.4	8.03	12,402	25.97	175
	07-Nov-06	N		-293.8	7.26	8,689	26.44	10
	14-Nov-06	N		-225.2	7.61	10,502	26.11	<10
	21-Nov-06	N		-222.2	7.54	11,328	24.75	26
	28-Nov-06	N		-206.1	7.54	12,071	23.86	28
	04-Dec-06	N		-148.6	7.55	12,362	25.68	16
	18-Dec-06	N		-243.3	8.4	12,556	22.72	21
	02-Jan-07	N		-158.5	7.73	13,064	23.65	36
	15-Jan-07	N		-239.6	8.12	12,405	23.35	77
	29-Jan-07	N		-221.7	7.64	12,285	24.06	78
06-Feb-07	N	-188.4	8.40	12,792	24.75	166		
06-Mar-07	N	-152.5	7.88	12,194	25.07	193		
04-Apr-07	N	-151	7.82	12,290	26.15	227		
01-May-07	N	-187.9	7.77	11,572	26.6	219		
15-May-07	N	-223.1	7.08	7,896	29.25	<10		
22-May-07	N	-218.5	6.92	8,967	26.91	<10		
30-May-07	N	-158.9	7.16	16,498	25.57	<10		
05-Jun-07	N	-224.1	7.48	10,185	27.48	<10		
11-Jun-07	N	-235.2	7.49	10,689	26.91	44		
26-Jun-07	N	-235.9	7.63	10,594	26.25	<10		
10-Jul-07	N	-111.9	7.53	10,837	26.75	<10		

**Table 2**  
**Summary of Field Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	pH	Specific Conductance (µS/cm)	Temperature (C°)	Hexavalent Chromium Field (µg/L)
PTI-1D (cont)	24-Jul-07	N		-179.2	6.97	7,274	30.17	<10
	31-Jul-07	N		-144.2	7.14	8,421	28.54	<10
	07-Aug-07	N		-212.9	7.07	8,912	27.25	<10
	14-Aug-07	N		-210.2	7.13	9,482	28.88	<10
	28-Aug-07	N		-101.7	7.19	9,974	27.09	<10
	05-Sep-07	N		-128.3	7.05	10,298	26.74	<10
	02-Oct-07	N		-112.5	7.20	10,809	25.8	<10
	06-Nov-07	N		-8.3	7.26	10,577	25.68	<10
	04-Dec-07	N		-179.8	7.40	10,592	23.23	<10
	04-Mar-08	N		-136.6	7.73	11,860	24.39	<10
	03-Jun-08	N		-82.0	6.70	12,985	25.70	<10
	10-Sep-08	N		-159.6	7.70	11,953	25.20	<10
	02-Dec-08	N		57.7	7.44	12,841	23.04	<10
	<b>11-Feb-09</b>	<b>N</b>		<b>-142.5</b>	<b>7.62</b>	<b>12,019</b>	<b>22.24</b>	<b>&lt;10</b>
PE-1	17-Mar-06	N	79-89	---	---	---	---	115
	05-Apr-06	N		---	---	---	---	144
	01-Jun-06	N		---	---	---	---	116
	17-Jul-06	N		---	---	---	---	59
	07-Aug-06	N		-29.4	6.53	9,401	22.9	99
	06-Sep-06	N		2.2	7.56	9,443	24.78	94
	03-Oct-06	N		160.6	7.50	9,190	27.03	109
	07-Nov-06	N		-94	7.06	9,235	25.01	100
	06-Dec-06	N		-7.5	7.20	9,111	20.16	63
	02-Jan-07	N		209.6	7.31	9,264	20.93	77
	06-Feb-07	N		51.4	7.10	8871	19.31	65
	06-Mar-07	N		-63.5	7.60	8560	25.4	85
	04-Apr-07	N		55.4	7.25	8471	22.6	57
	01-May-07	N		-41.5	7.40	7972	27.48	65
	05-Jun-07	N		150.1	7.52	7853	29.71	60
	10-Jul-07	N		-9.6	7.41	7598	32.74	45
07-Aug-07	N		-117	7.77	7796	36.49	56	
05-Sep-07	N		3.1	7.68	8107	35.12	58	

**Table 2**  
**Summary of Field Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	pH	Specific Conductance (µS/cm)	Temperature (C°)	Hexavalent Chromium Field (µg/L)
TW-2D	17-Mar-06	N	113-148	---	---	---	---	1,620
	05-Apr-06	N		---	---	---	---	1,620
	19-Jul-06	N		---	---	---	---	940
	07-Aug-06	N		-35.5	7.18	7,991	28.10	900
	14-Aug-06	N		54.8	7.45	7,793	30.10	880
	17-Aug-06	N		-202.6	7.72	7,053	30.28	1,480
	22-Aug-06	N		63.1	7.2	7,364	30.14	1,040
	24-Aug-06	N		95.2	7.73	6,605	32.22	1,580
	29-Aug-06	N		163	7.39	7,387	30.71	900
	06-Sep-06	N		16.6	7.49	7,964	28.02	920
	12-Sep-06	N		79.1	7.46	5,675	29.60	1,720
	19-Sep-06	N		81.9	7.09	6,967	29.67	920
	28-Sep-06	N		36.4	7.66	5,605	26.94	1,200
	04-Oct-06	N		-73.6	7.58	8,257	31.39	1,430
	17-Oct-06	N		337	7.50	10,003	27.19	380
	31-Oct-06	N		144.9	7.54	6,974	24.18	1,280
	08-Nov-06	N		61.7	6.97	6,041	24.89	700
	14-Nov-06	N		-59.4	7.36	7,633	24.72	740
	21-Nov-06	N		-86.8	7.50	6,492	25.51	2,980
	28-Nov-06	N		217.0	7.30	6,917	23.42	700
	06-Dec-06	N		-12.3	7.14	6,871	19.51	436
	18-Dec-06	N		-21.8	7.58	7,189	19.62	429
	02-Jan-07	N		-77.6	7.43	8,060	17.02	640
	15-Jan-07	N		-90.4	7.53	7,340	13.98	580
	29-Jan-07	N		-70.9	7.38	5,637	61.20	620
	06-Feb-07	N		41.5	7.47	7,916	19.91	560
	06-Mar-07	N		-57.9	7.41	8,388	25.90	480
	05-Apr-07	N		2.9	7.52	7,032	29.47	358
	01-May-07	N		15.2	7.49	8,941	27.87	350
	16-May-07	N		-16.7	7.27	7,448	33.94	430
	22-May-07	N		27.6	7.09	7,889	30.73	322
	30-May-07	N		-133.0	7.18	8,123	35.66	436
	05-Jun-07	N		-12.6	7.31	7,074	30.20	283
11-Jun-07	N	-18.4	7.42	8,110	35.91	50		
26-Jun-07	N	-126.7	7.50	4,701	29.77	133		
10-Jul-07	N	5.2	7.43	7,330	36.55	232		
25-Jul-07	N	-18.6	7.42	7,085	34.38	278		
31-Jul-07	N	-116.2	7.57	8,560	33.02	219		
07-Aug-07	N	-79.1	7.41	7,130	33.70	214		
14-Aug-07	N	-78.3	7.32	7,387	34.88	172		
28-Aug-07	N	-60.4	7.68	6,172	34.06	285		
05-Sep-07	N	-36.8	7.12	6,827	29.71	205		
03-Oct-07	N	24.4	7.38	8,009	29.10	237		
06-Nov-07	N	215.9	6.75	7,139	24.74	189		
05-Dec-07	N	101.5	7.18	8,739	20.52	275		
05-Mar-08	N	-10.3	7.32	7,663	20.51	116		
05-Jun-08	N	80.7	6.47	7,769	26.12	97		
09-Sep-08	N	203.2	7.47	7,835	29.31	122		
04-Dec-08	N	212.1	7.75	7,830	17.82	95		
	<b>11-Feb-09</b>	<b>N</b>		<b>6.9</b>	<b>7.27</b>	<b>7,256</b>	<b>19.25</b>	<b>80</b>

**Table 2**  
**Summary of Field Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	pH	Specific Conductance (µS/cm)	Temperature (C°)	Hexavalent Chromium Field (µg/L)
TW-3D	17-Mar-06	N	111-156	---	---	---	---	3,660
	05-Apr-06	N		---	---	---	---	3,460
	19-Jul-06	N		---	---	---	---	2,760
	07-Aug-06	N		-45.9	7.45	9,325	28.10	2,300
	14-Aug-06	N		52.1	7.82	9,071	30.04	2,880
	17-Aug-06	N		-195.4	7.69	9,016	30.20	2,740
	22-Aug-06	N		32.9	8.03	8,856	31.02	2,760
	24-Aug-06	N		101.8	7.8	8,663	30.83	2,840
	29-Aug-06	N		199.4	6.88	8,476	30.78	2,800
	06-Sep-06	N		4.9	7.45	8,959	28.64	2,840
	12-Sep-06	N		87	7.48	9,435	29.96	2,820
	19-Sep-06	N		73.4	7.13	8,913	29.35	2,740
	28-Sep-06	N		-86.7	7.27	8,899	30.27	2,780
	04-Oct-06	N		-62.4	7.47	8,411	30.8	3,320
	17-Oct-06	N		350.4	7.31	9,043	26.31	720
	31-Oct-06	N		134.7	7.4	8,896	25.16	2,860
	08-Nov-06	N		65.3	7.11	9,172	25.2	2,740
	14-Nov-06	N		-13.3	7.5	8,843	24.72	2,740
	21-Nov-06	N		-67.6	7.39	9,051	25.92	2,920
	28-Nov-06	N		179.9	7.26	9,038	26.40	2,700
	06-Dec-06	N		-4.3	7.1	8,937	21.78	2,120
	18-Dec-06	N		-27.7	7.69	9,064	20.63	3,260
	02-Jan-07	N		-55	7.45	9,465	16.94	2,580
	15-Jan-07	N		-43.9	7.49	9,131	19.22	2,580
	29-Jan-07	N		-27.8	7.47	8,892	15.82	2,660
	06-Feb-07	N		48.5	7.44	9,153	20.17	2,580
	06-Mar-07	N		-48.3	7.40	9,229	26.70	2,560
	05-Apr-07	N		1.1	7.39	9,325	28.26	2,420
	01-May-07	N		5.2	7.41	8,732	27.85	2,260
	15-May-07	N		16.7	7.11	8,873	30.20	2,420
	22-May-07	N		9.3	7.10	8,775	29.03	2,340
	30-May-07	N		98.4	6.70	8,926	24.13	2,240
	05-Jun-07	N		185	7.34	8,831	31.49	1,900
	11-Jun-07	N		-11.6	7.32	9,182	29.24	1,380
	26-Jun-07	N		-118.6	7.57	8,962	30.45	2,200
	10-Jul-07	N		24.2	7.20	8,930	29.50	1,760
	24-Jul-07	N		-59	7.36	8,952	29.94	2,160
	31-Jul-07	N		-152.8	7.24	9,524	29.86	2,180
	07-Aug-07	N		-65.6	7.58	9,093	33.43	2,200
	14-Aug-07	N		-76.4	7.50	8,908	35.74	2,180
	28-Aug-07	N		-23	7.39	8,627	31.71	2,160
	05-Sep-07	N		3.5	7.38	9,844	34.89	2,320
02-Oct-07	N		-39.0	7.21	8,913	30.25	2,560	
06-Nov-07	N		201.9	7.10	8,644	25.75	1,920	
05-Dec-07	N		160.1	7.09	8,652	22.75	2,280	
05-Mar-08	N		14.1	7.36	9,240	17.98	1,160	
05-Jun-08	N		143.7	6.73	9,957	25.90	1,700	
09-Sep-08	N		47.0	7.25	8,612	28.76	2,180	
04-Dec-08	N		210.0	7.96	9,343	20.06	1,960	
	<b>11-Feb-09</b>	<b>N</b>		<b>11.8</b>	<b>7.39</b>	<b>9,404</b>	<b>14.47</b>	<b>2,100</b>

**Table 2**  
**Summary of Field Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	pH	Specific Conductance (µS/cm)	Temperature (C°)	Hexavalent Chromium Field (µg/L)
INJ_SOLUTION_01	05-May-06	N	NA	---	---	---	---	<10
INJ_SOLUTION_03	06-May-06	N	NA	---	---	---	---	174

Notes:

Injections occurred on May 3 through May 6, 2006, August 11, 2006, September 7, 2006, November 1, 2007, May 7 and 8, 2007 and July 17 and 18, 2007.

Most recent data indicated in **BOLD**

- ft bgs                      Feet below ground surface
- mV                          Millivolts
- µS/cm                      Microsiemens per centimeter
- C°                           Degrees Celsius
- µg/L                        Micrograms per liter
- ORP                        Oxidation Reduction Potential
- <                            Symbol indicates not detected at or above the estimated reporting limit as noted.
- N                            Normal
- 
- 
- 
- NA                         Not applicable
- \*                            Possible anomaly

**Table 3**  
**Summary of Primary Analytical Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
PT-1S	17-Mar-06		N	<1	1.3	<1	<0.5	ND	<0.5	<0.1	3,050	1,930	1,320	198	2.98
	06-Apr-06		N	<0.2	<1	<1	<0.5	ND	<0.5	<0.5	1,910	1,860	779	181	3.04
	04-May-06	a	N	<1 J/HD	---	<1	<1	ND	---	---	---	---	---	---	---
	05-May-06		N	<1	---	<1	<1	ND	---	---	---	---	---	---	---
	06-May-06		N	<1	<1	<1	<0.5	ND	<0.5	<0.1	5,560	2,960	947	90.1	6.66
	07-May-06		N	<1	---	<1	<1	ND	---	---	---	---	---	---	---
	08-May-06		N	<0.2	---	<1	<1	ND	---	---	---	---	---	---	---
	09-May-06		N	<1	<1	<1	0.846	ND	<0.5	<0.1	2,360	4,770	1,070	144	4.16
	10-May-06		N	<0.2	---	<1	<2.5	ND	---	---	---	---	---	---	---
	11-May-06		N	<1	---	<1	<2.5	ND	---	---	---	---	---	---	---
	12-May-06		N	<1 J/HD	---	<1	<1	ND	---	---	---	---	---	---	---
	13-May-06		N	<1 J/HD	4.48	<1	<1	ND	<1	<0.2	3,900	3,220	800	122	4.58
	23-May-06		N	<1	<1	<1	<0.5	ND	<0.5	<0.5	117,000	826	790	157	4.53
	01-Jun-06		N	<1	<1	<1	<0.5	ND	<0.5	<0.1	89,600	2,570	911	126	5.11
	06-Jun-06		N	<1	<1	<1	<0.5	ND	<0.5	<0.5	43,400	3,020	857	125	5.77
	18-Jul-06		N	<0.2	<1	<1	1.96	ND	<0.5	<0.1	28,400	4,610	679	114	6.98
	08-Aug-06		N	<0.2	<1	<0.5	2.26	ND	<0.5	<0.1	42,300	5,870	1,140	79.7	9.38
	06-Sep-06		N	2.2	42.3	<0.5	0.627	0.239	<0.5	<0.1	6,460	34,300	1,560	109	6.61
	04-Oct-06		N	6	<1	<0.5	0.933	0.068	<0.5	<0.1	30,500	3,890	951	101	9.61
	08-Nov-06		N	<0.2	<1	<.5	1.61	0.395	<0.5	<0.1	33,600	16,600	2,250	33.4	55
	05-Dec-06		N	<0.2	<1	<2.5	<2.5	0.262	<2.5	<0.5	36,400	31,700	2,620	7.19	67.9
	03-Jan-07		N	<0.2	<1	<2.5	<2.5	ND	<2.5	<0.5	39,300	21,500	1,840	45.9	12.2
	07-Feb-07		N	<0.2	<1	<0.5	1.08	ND	<0.5	<0.1	25,500	12,600	1,040	149	7.97
	07-Mar-07		N	<0.2	1.38	<0.5	0.685	ND	<0.5	<0.1	12,400	2,950	457	198	4
	05-Apr-07		N	<0.2	1.93	<0.5	0.67	ND	<0.5	<0.1	20,900	4,800	402	205	4.38
	02-May-07		N	<0.2	<1	<0.5	0.882	ND	<0.5	<0.2	18,800	5,270	442	142	5.16
	06-Jun-07		N	<0.2	<1	<0.5	0.719	ND	<0.5	<0.2	14,400	3,910	413	168	4.89
	11-Jul-07		N	<0.2	<1	<0.5	0.998	0.07	<0.5	<0.1	17,200	6,800	425	101	6.87
	08-Aug-07		N	<0.2	<1	<0.5	1.33	ND	<0.5	<0.1	19,200	12,700	790	60.3	11.5
	06-Sep-07		N	<0.2	<1	<0.5	1.15	ND	<0.5	<0.1	16,200	7,530	624	71	7.94

**Table 3**  
**Summary of Primary Analytical Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)	
PT-1M	17-Mar-06		N	<1	<1	<1	<0.5	ND	<0.5	<0.1	<500	<500	1,330	411	1.14	
	06-Apr-06		N	<1	1	<1	<0.5	ND	<0.5	<0.5	591	557	1,350	446	1.1	
	04-May-06		N	<1 J/HD	---	<1	<0.5	ND	---	---	---	---	---	---	---	
	06-May-06		N	<40	<1	<1	258	0.452	<0.5	<0.1	554	535	1,230	397	27.9	
	07-May-06		N	<1	---	<1	390	0.466	---	---	---	---	---	---	---	---
	08-May-06		N	<1	---	<1	377	0.429	---	---	---	---	---	---	---	---
	09-May-06		N	<1	<1	<1	341	0.232	<0.5	<0.1	543	550	2,430	391	25.4	
	10-May-06		N	<1	---	<1	296	0.458	---	---	---	---	---	---	---	---
	11-May-06		N	<1	---	<1	273	0.433	---	---	---	---	---	---	---	---
	12-May-06		N	<1 J/HD	---	<1	245	0.423	---	---	---	---	---	---	---	---
	13-May-06		N	<1 J/HD	3.69	<1	216	0.354	<0.5	<0.1	696	668	4,390	451	5.39	
	24-May-06		N	<1	10.8	<1	96	0.16	<0.5	<0.5	673	6,900	3,560	425	2.02	
	31-May-06		N	<1 J/HD	3.29	<1	48.9	0.101	<0.5	<0.5	7,360	577	3,950	430	2.4	
	06-Jun-06		N	<1	<1	<1	36.7	0.083	<0.5	<0.5	5,230	637	3,450	501	1.82	
	18-Jul-06		N	<0.2	<1	<1	13.4	0.039	<0.5	<0.1	3,430	871	2,810	405	2.47	
	08-Aug-06		N	<0.2	<1	<0.5	5.36	ND	<0.5	<0.1	5,280	744	2,330	452	3.92	
	06-Sep-06		N	<0.2	<1	<0.5	2.55	0.162	<0.5	<0.1	<500	579	2,240	481	2.29	
	04-Oct-06		N	<0.2	<1	<0.5	1.62	ND	<0.5	<0.1	4,810	628	1,820	412	6.06	
	08-Nov-06		N	<0.2	<1	<0.5	0.82	ND	<0.5	<0.1	1,470	682	1,630	390	12.1	
	05-Dec-06		N	<0.2	<1	<0.5	0.66	0.24	<0.5	<0.1	1,350	824	1,250	389	13.7	
	03-Jan-07		N	<0.2	<1	<0.5	0.66	0.486	<0.5	<0.1	13,400	<500	1,240	420	1.66	
	03-Jan-07		FD	<0.2	<1	<0.5	0.66	0.051	<0.5	<0.1	12,300	<500	1,280	418	1.67	
	07-Feb-07		N	<0.2	<1	<0.5	0.55	0.032	<0.5	<0.1	2,550	697	1,180	448	1.17	
	06-Mar-07		N	<0.2	<1	<0.5	0.54	0.043	<0.5	<0.1	1,820	<500	1,090	412	1.37	
	05-Apr-07		N	<0.2	5	<0.5	<0.5	ND	<0.5	<0.1	2,500	584	1,030	431	1.04	
	02-May-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.2	1,820	606	1,070	428	1.35	
	15-May-07		N	---	---	<0.5	---	ND	---	---	---	---	---	---	---	1.13
	22-May-07		N	---	---	<0.5	---	ND	---	---	---	---	---	---	---	1.99
	30-May-07		N	---	---	<0.5	---	ND	---	---	---	---	---	---	---	1.37
	30-May-07		FD	---	---	<0.5	---	0.039	---	---	---	---	---	---	---	1.05
	06-Jun-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.2	1,720	550	1,020	389	1.44	
	11-Jul-07		N	<0.2	<1	<0.5	0.52	ND	<0.5	<0.1	1,380	520	902	420	1.4	
	24-Jul-07		N	---	---	<0.5	---	0.063	---	---	---	---	---	---	---	1.26
	31-Jul-07		N	---	---	<0.5	---	1.34	---	---	---	---	---	---	---	1.62
	31-Jul-07		FD	---	---	<0.5	---	1.28	---	---	---	---	---	---	---	1.5
	08-Aug-07		N	<0.2	<1	<0.5	0.57	ND	<0.5	<0.1	890	555	873	408	1.74	
	14-Aug-07		N	---	---	<0.5	---	ND	---	---	---	---	---	---	---	1.23
	14-Aug-07		FD	---	---	<0.5	---	ND	---	---	---	---	---	---	---	1.61
	06-Sep-07		N	<0.2	<1	<0.5	0.54	ND	<0.5	<0.1	1,200	528	807	406	1.28	
	04-Dec-07		N	<0.2	<0.2	<0.5	1.41	ND	<0.5	<0.5	848	<500	616	405	1.20	
	05-Mar-08		N	<0.2	<0.2	<0.5	0.50	ND	<0.5	<0.5	686	<500	553	398	1.31	
	04-Jun-08		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<1	665	<500	559	371	1.11	
10-Sep-08		N	<0.2	<1	<0.5	0.51	ND	<0.5	<0.5	2,460	<500	535	369	1.60		
03-Dec-08		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.5	3,350	<500	505	397	1.43		
<b>10-Feb-09</b>		<b>a</b>	<b>N</b>	<b>&lt;0.2</b>	<b>&lt;1</b>	<b>0.14</b>	<b>0.42</b>	<b>ND</b>	<b>&lt;0.2</b>	<b>&lt;0.2</b>	<b>7,860</b>	<b>393</b>	<b>465</b>	<b>340</b>	<b>1.40</b>	

**Table 3**  
**Summary of Primary Analytical Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
PT-1D	17-Mar-06		N	2,470	2,270	<1	0.581	ND	1.84	<0.5	<500	<500	88.2	943	1.07
	17-Mar-06		FD	2,460	2,230	<1	<0.5	ND	1.84	<0.5	<500	<500	85.7	941	1.18
	06-Apr-06		N	3,080	2,770	5.45	<0.5	ND	2.27	<0.5	<500	<500	51	978	1.09
	06-Apr-06		FD	2,960	2,690	6.15	<0.5	ND	2.26	<0.5	<500	<500	54.8	963	1.1
	06-May-06		N	4,140	4,350	<1	<0.5	ND	2.64	<0.1	<500	<500	26.7	930	1.24
	07-May-06		N	3,560	---	50.9	<1	ND	---	---	---	---	---	---	---
	08-May-06		N	3,190	---	252	1.26	ND	---	---	---	---	---	---	---
	09-May-06		N	2,870	2,780	441	2.63	0.023	1.18	<0.2	<500	<500	48.9	846	37.5
	10-May-06		N	2,670	---	464	2.92	0.029	---	---	---	---	---	---	---
	11-May-06		N	2,660	---	528	2.87	0.016	---	---	---	---	---	---	---
	12-May-06		N	2,520	---	578	3.01	0.022	---	---	---	---	---	---	---
	13-May-06		N	2,380 J/HD	2,390	613	3	0.016	<1	<0.2	<500	<500	60.1	529	58.4
	24-May-06		N	1,320	1,330	488	2.61	0.164	<0.5	<0.5	<500	<500	507	653	30.7
	31-May-06		N	970 J/HD	896	373	1.86	ND	<0.5	<0.5	<500	<500	992	665	16
	05-Jun-06		N	931	859	371	1.71	ND	<0.5	<0.5	<500	<500	1,270	730	10.1
	17-Jul-06		N	998	1,000	30.4	1.37	ND	0.939	0.869	<500	<500	1,160	731	3.68
	08-Aug-06		N	1,100	1,120	9.79	0.597	ND	1.15	<0.1	<500	<500	1,030	748	3.21
	14-Aug-06		N	---	---	16.7	---	703	---	---	---	---	---	---	52.7
	17-Aug-06		N	---	---	<2.5	---	1,180	---	---	---	---	---	---	50
	21-Aug-06		N	---	---	5.79	---	1,420	---	---	---	---	---	---	36.2
	21-Aug-06		FD	---	---	14.5	---	1,440	---	---	---	---	---	---	36.3
	24-Aug-06		N	---	---	11.3	---	1,360	---	---	---	---	---	---	31.8
	24-Aug-06		FD	---	---	13.3	---	1,450	---	---	---	---	---	---	32.6
	29-Aug-06		N	---	---	8.58	---	1,210	---	---	---	---	---	---	16.3
	05-Sep-06		N	320	363	5.79	<1	1,250	<1	0.359	<500	<500	2,790	671	5.9
	12-Sep-06		N	---	---	333	---	845	---	---	---	---	---	---	46.3
	19-Sep-06		N	---	---	462	---	549	---	---	---	---	---	---	35.2
	19-Sep-06		FD	---	---	462	---	558	---	---	---	---	---	---	33.5
	28-Sep-06		N	---	---	447	---	251	---	---	---	---	---	---	16.4
	04-Oct-06		N	58.7	117	454	0.539	136	<0.5	<0.1	<500	<500	5,790	480	10.3
	17-Oct-06		N	---	---	303	---	84.3	---	---	---	---	---	---	4.91
	31-Oct-06		N	---	---	170	---	40.6	---	---	---	---	---	---	9.23
	08-Nov-06		N	<0.2	60.6	144	<5	1,300	<5	<1	<500	<500	5,390	365	150
	14-Nov-06		N	---	---	<2.5	---	0.546	---	---	---	---	---	---	49.9
	21-Nov-06		N	---	---	<0.5	---	0.492	---	---	---	---	---	---	31.2
	28-Nov-06		N	---	---	59	---	958	---	---	---	---	---	---	41.9
	05-Dec-06		N	<0.2	28.5	52	<2.5	1,460	<2.5	<0.5	<500	<500	4,440	355	49.3
	18-Dec-06		N	---	---	31.4	---	514	---	---	---	---	---	---	3.29
	03-Jan-07		N	<0.2	12.1	22	<1	260	<1	<0.2	1,470	<500	8,120	567	1.55

**Table 3**  
**Summary of Primary Analytical Parameters**

PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
PT-1D (cont)	15-Jan-07		N	---	---	13.9	---	169	---	---	---	---	---	---	1.36
	29-Jan-07		N	---	---	9.87	---	104	---	---	---	---	---	---	1.56
	07-Feb-07		N	2.6	25.5	8.96	<0.5	70.3	<0.5	<0.1	<500	<500	10,000	689	1.1
	06-Mar-07		N	<0.2	3.17	3.65	0.624	32.6	<0.5	<0.1	<500	<500	10,600	678	1.2
	05-Apr-07		N	<0.2	8.44	1.83	0.615	13	<0.5	<0.1	<500	<500	9,260	745	1.01
	02-May-07		N	<2	13.8	1.06	0.74	5.82	<0.5	<0.2	<500	<500	8,970	723	1.02
	15-May-07		N	---	---	282	---	ND	---	---	---	---	---	---	804
	22-May-07		N	---	---	209	---	8.22	---	---	---	---	---	---	609
	30-May-07		N	---	---	166	---	7.35	---	---	---	---	---	---	434
	06-Jun-07		N	<0.2	1.61	135	<0.5	5.07	<0.5	<0.2	2,020	1,100	6,900	285	332
	11-Jun-07		N	---	---	129	---	4.73	---	---	---	---	---	---	264
	26-Jun-07		N	---	---	117	---	3.45	---	---	---	---	---	---	149
	11-Jul-07		N	<0.2	1.1	89.5	0.673	3.15	<0.5	<0.1	963	<500	6,880	357	64.8
	24-Jul-07		N	---	---	55.1	---	1,120	---	---	---	---	---	---	835
	31-Jul-07		N	---	---	47.3	---	1,490	---	---	---	---	---	---	666
	08-Aug-07		N	<0.2	<1	51.0	<2.5	927	<2.5	<0.5	2,340	1,540	4,350	123	333
	14-Aug-07		N	---	---	57.6	---	792	---	---	---	---	---	---	170
	28-Aug-07		N	---	---	53.1	---	641	---	---	---	---	---	---	55.2
	06-Sep-07		N	<0.2	<1	41.5	0.693	670	<0.5	<0.1	1,840	1,250	5,400	297	29
	02-Oct-07		N	<0.2	1.34	24.9	---	448	<0.5	<0.1	2,070	683	7,520	387	7.25
	06-Nov-07		N	<0.2	<1	15.1	---	396	<0.5	<0.1	2,270	1,530	6,870	484	6.69
	04-Dec-07		N	<0.2	<1	13.0	1.65	337	<0.5	<0.5	1,640	1,330	6,860	476	3.79
	05-Mar-08		N	<0.2	<1	2.9	--	67.7	<0.5	<0.5	2,170	1,980	8,330	546	1.52
	03-Jun-08		N	<0.2	<1	1.2	0.756	20.5	<0.5	<2.5	2,230	1,820	8,610	637	<1
	10-Sep-08		N	<1.0	<1	<0.5	--	6.9	<0.5	<0.5	2,230	1,590	8,510	660	1.26
02-Dec-08		N	<0.2	<1	<0.5	--	2.0	<0.5	<1.0	1,970	1,220	8,990	754	<1	
<b>10-Feb-09</b>		<b>a</b>	<b>N</b>	<b>&lt;0.2</b>	<b>&lt;1</b>	<b>0.4</b>	<b>--</b>	<b>0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>1,810</b>	<b>1,400</b>	<b>9,570</b>	<b>660</b>	<b>0.79</b>

**Table 3**  
**Summary of Primary Analytical Parameters**

PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
PT-2S	17-Mar-06		N	<1	<1	<1	0.563	ND	<0.5	<0.1	34,300	976	1,170	11.7	7.42
	06-Apr-06		N	<0.2	<1	<1	<0.5	ND	<0.5	<0.5	30,200	1,850	1,240	8.91	8.57
	24-May-06		N	<1	<1	<1	<0.5	ND	<0.5	<0.5	164,000	<500	1,160	3.02	11
	01-Jun-06		N	<1	<1	<1	<0.5	ND	<0.5	<0.1	91,900	934	1,300	3.06	9.65
	07-Jun-06		N	<1	<1	<1	<0.5	ND	<0.5	<0.5	42,300	950	1,280	2.77	10.8
	18-Jul-06		N	<0.2	<1	<1	1.47	ND	<0.5	<0.1	38,300	2,690	1,330	6.83	12.1
	08-Aug-06		N	<0.2	1.14	<0.5	1.63	ND	<0.5	<0.1	61,300	1,400	1,430	54.1	10.7
	06-Sep-06		N	0.26	<1	<0.5	0.805	ND	<0.5	<0.1	48,400	889	1,460	30.4	10.6
	04-Oct-06		N	<0.2	<1	<0.5	1.02	ND	<0.5	<0.1	25,600	1,750	1,400	12.8	13
	08-Nov-06		N	<0.2	<1	<0.5	1.21	ND	<0.5	<0.1	10,600	1,470	1,770	56	63.6
	05-Dec-06		N	0.5	7.62	<0.5	0.689	0.086	<0.5	<0.1	1,500	<500	226	328	3.88
	03-Jan-07		N	<0.2	<1	<1	1.31	ND	<1	<0.2	5,420	1,310	1,380	24.7	11
	07-Feb-07		N	<0.2	<1	<0.5	1.1	ND	<0.5	<0.1	10,800	1,490	1,430	5.19	11.1
	07-Mar-07		N	<0.2	<1	0.57	1.15	ND	<0.5	<0.1	10,800	1,400	1,410	3.42	12.8
	05-Apr-07		N	<0.2	1.23	<0.5	1.1	ND	<0.5	<0.1	32,700	2,130	1,440	4.46	12.4
	02-May-07		N	<0.2	<1	<0.5	1.16	ND	<0.5	<.2	22,100	2,480	1,510	5.9	12.3
	06-Jun-07		N	<0.2	<1	<0.5	0.89	ND	<0.5	<0.2	29,300	2,850	1,600	6.75	14.3
	11-Jul-07		N	<0.2	<1	<0.5	1.2	ND	<0.5	<0.1	8,160	2,320	1,460	9.28	12.6
	08-Aug-07		N	<0.2	<1	<0.5	1.28	ND	<0.5	<0.1	7,690	2,140	1,590	16.7	13.7
	06-Sep-07		N	<0.2	<1	<0.5	1.22	ND	<0.5	<0.1	7,610	2,490	1,530	8.96	10.8

**Table 3**  
**Summary of Primary Analytical Parameters**  
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 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)	
PT-2M	17-Mar-06		N	<1	8.19	<1	<0.5	ND	<0.5	<0.5	<500	<500	547	474	<1	
	06-Apr-06		N	<0.2	7.58	<1	<0.5	ND	<0.5	<0.1	<500	<500	380	471	<1	
	24-May-06		N	<1	<1	<1	40	0.114	<0.5	<0.5	20,000	<500	431	423	1.76	
	31-May-06		N	<1	<1	<1	12.1	0.033	<0.5	<0.5	3,430	<500	363	438	2.21	
	31-May-06		FD	<1 /J	<1	<1	12	0.038	<0.5	<0.5	4,150	<500	371	429	2.28	
	07-Jun-06		N	<1	<1	<1	5.29	0.024	<0.5	<0.5	1,220	<500	353	487	1.85	
	18-Jul-06		N	<0.2	1.06	<1	0.99	5.65	<0.5	<0.1	1,990	<500	228	377	3.1	
	08-Aug-06		N	<0.2	<1	<0.5	0.64	ND	<0.5	<0.1	1,040	<500	233	412	9.06	
	06-Sep-06		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	811	<500	228	415	2.41	
	04-Oct-06		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	958	<500	203	374	7.88	
	08-Nov-06		N	<0.2	2.79	6.89	<0.5	ND	<0.5	<0.1	<500	<500	212	354	23.1	
	05-Dec-06		N	<0.2	8.58	<0.5	0.64	0.167	<0.5	<0.1	1,120	<500	211	351	14	
	03-Jan-07		N	<0.2	74.4	<0.5	0.61	0.269	<0.5	<0.1	757	<500	1,570	366	1.64	
	07-Feb-07		N	<0.2	6.66	<0.5	0.52	ND	<0.5	<0.1	<500	<500	339	401	1.58	
	07-Mar-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	166	432	1.47	
	05-Apr-07		N	<0.2	<1	<0.5	<0.5	0.039	<0.5	<0.1	1,830	<500	179	390	1.39	
	02-May-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.2	508	<500	161	418	1.3	
	15-May-07		N	---	---	<0.5	---	ND	---	---	---	---	---	---	---	1.09
	22-May-07		N	---	---	<0.5	---	ND	---	---	---	---	---	---	---	1.2
	30-May-07		N	---	---	<0.5	---	ND	---	---	---	---	---	---	---	6.81
	06-Jun-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.2	<500	<500	216	379	1.41	
	11-Jul-07		a	N	<0.2	<1	1.26	0.53	ND	<0.5	<0.1	2,050	<500	607	378	15.6
	11-Jul-07			FD	<0.2	<1	<0.5	0.53	ND	<0.5	<0.1	<500	<500	168	387	1.37
	24-Jul-07			N	---	---	<0.5	---	0.061	---	---	---	---	---	---	1.34
	31-Jul-07			N	---	---	<0.5	---	0.131	---	---	---	---	---	---	1.4
	08-Aug-07			N	<0.2	<1	<0.5	0.60	ND	<0.5	<0.1	<500	<500	183	362	2.3
	14-Aug-07			N	---	---	<0.5	---	ND	---	---	---	---	---	---	1.64
	06-Sep-07			N	<0.2	<1	<0.5	0.68	ND	<0.5	<0.1	555	<500	<5	302	1.42
	05-Dec-07			N	0.50	1.97	<0.5	0.66	ND	<0.5	<0.5	<500	<500	<500	360	1.60
	05-Mar-08			N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<500	391	1.34
	04-Jun-08			N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.5	<500	<500	<500	360	1.09
	10-Sep-08			N	<0.2	<1	<0.5	0.56	ND	<0.5	<0.5	<500	<500	<500	341	1.60
	03-Dec-08			N	<0.2	<1	<0.5	<0.5	0.057	<0.5	<0.5	2,100	<500	<500	392	3.55
	<b>10-Feb-09</b>	<b>a</b>	<b>N</b>	<b>&lt;0.2</b>	<b>&lt;1</b>	<b>0.14</b>	<b>0.44</b>	<b>ND</b>	<b>&lt;0.2</b>	<b>&lt;0.2</b>	<b>1,230</b>	<b>&lt;100</b>	<b>125</b>	<b>340</b>	<b>1.40</b>	

**Table 3**  
**Summary of Primary Analytical Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
PT-2D	17-Mar-06		N	1,660	1,580	<1	<0.5	ND	1.23	<0.5	<500	<500	154	931	1.09
	17-Mar-06		FD	1,670	1,570	<1	<0.5	ND	1.26	<0.5	<500	<500	161	924	1.24
	06-Apr-06		N	2,310	2,160	4.44	<0.5	ND	1.68	<0.5	<500	<500	79.7	924	1.02
	06-Apr-06		FD	2,290	2,170	4.1	<0.5	ND	1.84	<0.5	<500	<500	78.3	946	<1
	24-May-06		N	1,800	1,760	374	2.11	ND	<0.5	<0.5	507	<500	173	691	26.9
	31-May-06		N	1,180	1,170	388	1.85	ND	<0.5	<0.5	1,400	<500	320	689	17.6
	07-Jun-06		N	951	930	390	1.99	ND	<0.5	<0.5	<500	<500	423	724	14.4
	17-Jul-06		N	466	438	110	1.76	ND	<0.5	0.885	<500	<500	622	745	3.98
	07-Aug-06		N	568	495	34	0.687	ND	0.607	<0.1	4,350	<500	597	953	7.94
	14-Aug-06		N	---	---	27.1	---	ND	---	---	---	---	---	---	7.23
	14-Aug-06		FD	---	---	28.9	---	ND	---	---	---	---	---	---	4.8
	17-Aug-06		N	---	---	24.3	---	47	---	---	---	---	---	---	5.1
	17-Aug-06		FD	---	---	23.6	---	49.5	---	---	---	---	---	---	4.34
	21-Aug-06		N	---	---	17.3	---	405	---	---	---	---	---	---	16.2
	24-Aug-06		N	---	---	16.8	---	636	---	---	---	---	---	---	21.8
	29-Aug-06		N	---	---	14.7	---	792	---	---	---	---	---	---	12.6
	06-Sep-06		N	432	512	10.2	<1	905	<1	<0.2	<500	<500	1,270	699	4.54
	12-Sep-06		N	---	---	18.1	---	954	---	---	---	---	---	---	7.24
	19-Sep-06		N	---	---	120	---	1,050	---	---	---	---	---	---	10.3
	28-Sep-06		N	---	---	229	---	610	---	---	---	---	---	---	6.92
	04-Oct-06		N	292	234	303	<2.5	307	<2.5	<0.5	3,090	<500	1,420	455	4
	17-Oct-06		N	---	---	394	---	ND	---	---	---	---	---	---	7.26
	31-Oct-06		N	---	---	367	---	ND	---	---	---	---	---	---	8.51
	31-Oct-06		FD	---	---	366	---	ND	---	---	---	---	---	---	10.1
	08-Nov-06		N	281	229	299	<2.5	ND	<2.5	<0.5	<500	<500	1,710	508	24.3
	14-Nov-06		N	---	---	251	---	106	---	---	---	---	---	---	31.7
	21-Nov-06		N	---	---	218	---	163	---	---	---	---	---	---	22.4
	28-Nov-06		N	---	---	153	---	507	---	---	---	---	---	---	16.2
	05-Dec-06		N	186	183	46.7	<2.5	258	<2.5	<.5	<500	<500	1,380	292	15
	18-Dec-06		N	---	---	65.3	---	332	---	---	---	---	---	---	1.59
	03-Jan-07		N	171	167	31.9	0.722	258	<0.5	<0.1	<500	<500	3,380	490	1.57
	15-Jan-07		N	---	---	19.3	---	260	---	---	---	---	---	---	1.48
	29-Jan-07		N	---	---	9.45	---	162	---	---	---	---	---	---	1.35
	07-Feb-07		N	146	112	7.36	0.736	86.5	<0.5	<0.2	<500	<500	4,780	661	1.28
	07-Mar-07		N	91.8	86.7	1.41	0.683	21.4	<0.5	<0.2	<500	<500	5,150	787	<1
	05-Apr-07		N	85.6	88.5	0.702	0.612	7.02	<0.5	<0.2	<500	<500	4,660	779	<1
	02-May-07		N	87.2	94.2	<0.5	0.74	3.34	<0.5	<0.2	<500	<500	4,580	785	1.03
	15-May-07		N	---	---	73.4	---	4.87	---	---	---	---	---	---	200
	22-May-07		N	---	---	157	---	4.39	---	---	---	---	---	---	466
	30-May-07		N	---	---	176	---	5.2	---	---	---	---	---	---	409
	06-Jun-07		N	<0.2	<1	164	<0.5	4.32	<0.5	<0.2	992	672	5,180	184	313
	11-Jun-07		N	---	---	154	---	5.9	---	---	---	---	---	---	287

**Table 3**  
**Summary of Primary Analytical Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
PT-2D (cont)	26-Jun-07		N	---	---	141	---	2.67	---	---	---	---	---	---	231
	11-Jul-07		N	<0.2	<1	114	0.665	1.92	<0.5	<0.1	1,100	593	5,840	236	122
	24-Jul-07		N	---	---	87.3	---	209	---	---	---	---	---	---	162
	24-Jul-07		FD	---	---	84.7	---	173	---	---	---	---	---	---	161
	31-Jul-07		N	---	---	79.8	---	572	---	---	---	---	---	---	312
	08-Aug-07		N	<0.2	<1	68.9	<1	740	<1	<0.2	1,990	1,120	4,480	31.8	353
	08-Aug-07		FD	<0.2	<1	68.9	<2.5	788	<2.5	<0.5	2,030	1,250	4,630	31	359
	14-Aug-07		N	---	---	68	---	730	---	---	---	---	---	---	248
	28-Aug-07		N	---	---	63	---	554	---	---	---	---	---	---	87.6
	06-Sep-07		N	<0.2	<1	46.3	0.685	531	<0.5	<0.1	2,230	1,420	4,260	131	59
	06-Sep-07		FD	<0.2	3.18	47.2	0.683	552	<0.5	<0.1	2,110	1,420	4,470	142	57.3
	02-Oct-07		N	<0.2	<1	20.7	---	553	<0.5	<0.1	2,410	1,970	5,490	304	10.1
	06-Nov-07		N	<0.2	<1	8.98	---	574	<0.5	<0.1	5,480	2,260	6,620	396	2.85
	06-Nov-07		FD	<0.2	<1	9.81	---	543	<0.5	<0.1	3,360	2,230	6,600	400	2.7
	05-Dec-07		N	<0.2	<1	5.32	0.730	374	<0.5	<0.5	2,700	2,230	7,980	458	2.33
	05-Mar-08		N	<0.2	<1	<0.5	--	91	<0.5	<0.2	2,410	2,190	11,000	592	1.41
	04-Jun-08		N	<0.2	<1	<0.5	--	21.6	<0.5	<2.5	2,270	1,960	10,300	641	<1
	10-Sep-08		N	<1.0	<1	<0.5	--	6.15	<0.5	<0.5	4,080	1,910	10,200	677	1.13
	03-Dec-08		N	<0.2	<1	<0.5	--	1.01	<0.5	<0.5	3,450	1,780	11,000	729	1.04
	<b>10-Feb-09</b>		<b>a</b>	<b>N</b>	<b>&lt;0.2</b>	<b>&lt;1</b>	<b>0.74</b>	<b>0.840</b>	<b>0.31</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>2,020</b>	<b>1,840</b>	<b>11,300</b>	<b>670</b>

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First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
PT-3S	16-Mar-06		N	<1	40.3	<1	<.5	ND	<0.5	<0.1	6,370	4,860	1,160	217	4.27
	03-Apr-06		N	<1	1.48	<1	<.5	ND	<0.5	<0.5	5,510	4,990	988	221	4.66
	04-May-06		N	<0.2 J/HD	---	<1	<1	ND	---	---	---	---	---	---	---
	05-May-06		N	<0.2	---	<1	<1	ND	---	---	---	---	---	---	---
	06-May-06		N	<1	1.46	<1	<0.5	ND	<0.5	<0.1	7,370	5,660	968	80.2	5.05
	06-May-06		FD	<1	1.01	<1	<0.5	ND	<0.5	<0.1	6,500	5,820	950	80.4	5.26
	07-May-06		N	<0.2	---	<1	<1	ND	---	---	---	---	---	---	---
	09-May-06		N	<0.2 J/HD	1.54	<1	<1	9.61	<1	<0.2	7,850	6,280	973	112	5.83
	10-May-06		N	<1	---	<1	19	34.4	---	---	---	---	---	---	---
	11-May-06		N	<1	---	<1	1.07	5.49	---	---	---	---	---	---	---
	12-May-06		N	<0.2	---	<1	64.6	42.3	---	---	---	---	---	---	---
	13-May-06		N	<1 J/HD	2.38	<1	93.7	56	<1	<0.2	6,710	5,890	872	112	14.6
	23-May-06		N	<1	<1	<1	68.1	1,060	<1	<0.5	130,000	1,750	830	30.5	49.9
	30-May-06		N	<1	1.36	<1	470	1,510	<2.5	<0.5	27,600	695	762	24.4	93.5
	06-Jun-06		N	<1 J/HD	<1	<1	749	1,220	<2.5	<0.5	21,900	3,220	750	23.2	119
	19-Jul-06		N	<0.2	<1	<1	212	751	<0.5	<0.5	23,400	4,680	652	12.9	16.4
	08-Aug-06		N	<0.2	<1	<0.5	75.6	578	<0.5	<0.1	38,500	3,000	749	16.3	6.28
	06-Sep-06		N	<0.2	<1	<0.5	35.2	344	<0.5	<0.1	12,900	3,700	883	34.2	6.66
	04-Oct-06		N	<0.2	<1	<2.5	25.1	206	<2.5	<0.5	12,600	4,310	886	36.9	10.7
	08-Nov-06		N	<0.2	<1	<0.5	16.6	53.1	<0.5	<0.1	13,100	3,720	914	36.9	33.9
	05-Dec-06		N	<0.2	<1	<0.5	15	60.8	<0.5	<0.1	6,120	4,470	836	32.3	28.2
	03-Jan-07		N	<0.2	<1	<1	13.3	45.7	<1	<0.2	7,700	4,870	798	25.8	6.45
	07-Feb-07		N	<0.2	<1	<0.5	11.2	46.2	<0.5	<0.1	7,340	3,580	797	26.9	6.82
	07-Mar-07		N	<0.2	<1	<0.5	9.4	18.2	<0.5	<0.1	9,340	3,770	727	26.4	6.78
	07-Mar-07		FD	<0.2	<1	<0.5	9.26	18.7	<0.5	<0.1	7,000	5,820	768	29.4	6.82
	05-Apr-07		N	<0.2	<1	<0.5	6.95	11	<0.5	<0.1	8,150	2,700	659	52.8	6.2
	02-May-07		N	<0.2	<1	<0.5	5.69	62.3	<0.5	<0.2	8,400	3,070	669	35.2	6.61
	06-Jun-07		N	<0.2	<1	<0.5	4.22	33.9	<0.5	<0.2	6,690	3,300	719	21.6	7.08
	11-Jul-07		N	<0.2	<1	<0.5	3.39	9.09	<0.5	<0.1	5,610	2,650	656	27	6.56
	08-Aug-07		N	<0.2	<1	<0.5	3.16	16.9	<0.5	<0.1	5,290	723	681	26.2	7.43
06-Sep-07		N	<0.2	<1	<0.5	2.66	9.73	<0.5	<0.1	5,070	2,210	634	32.9	6.68	

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First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)	
PT-3M	18-Mar-06		N	<1	<1	<1	<0.5	ND	<0.5	<0.5	<500	<500	1,670	571	1.33	
	07-Apr-06		N	<1	<1	<1	<0.5	ND	<0.5	<0.5	<500	<500	2,020	672	1.01	
	04-May-06		N	<1 J/HD	---	<1	<0.5	ND	---	---	---	---	---	---	---	
	05-May-06		N	<1	---	<1	<0.5	ND	---	---	---	---	---	---	---	
	06-May-06		N	<1 J/HD	<1	<1	<0.5	ND	<0.5	<0.1	508	<500	1,720	597	1.11	
	07-May-06		N	<1	---	<1	2.32	0.025	---	---	---	---	---	---	---	---
	09-May-06		N	<0.2 J/HD	<1	<1	28.8	0.075	<0.5	<0.1	518	<500	1,350	559	2.94	
	10-May-06		N	<1	---	<1	60.2	0.148	---	---	---	---	---	---	---	---
	11-May-06		N	<1	---	<1	75.8	0.2	---	---	---	---	---	---	---	---
	12-May-06		N	<1 J/HD	---	<1	87.1	0.223	---	---	---	---	---	---	---	---
	13-May-06		N	<1 J/HD	2.46	<1	72.9	0.135	<0.5	<0.1	620	597	1,250	530	3.22	
	13-May-06		FD	<0.2	9.68	<1	73.3	0.18	<0.5	<0.1	620	589	1,270	517	3.89	
	23-May-06		N	<1	<1	<1	27.4	0.104	<0.5	<0.5	12,000	<500	1,550	573	1.59	
	30-May-06		N	<1	3.09	<1	9.74	0.043	<0.5	<0.5	33,100	<500	1,260	533	1.94	
	06-Jun-06		N	<1	<1	<1	4.86	0.031	<0.5	<0.5	5,140	<500	1,100	583	1.77	
	06-Jun-06		FD	<1	1.61	<1	4.5	0.034	<0.5	<0.5	24,400	<500	1,130	575	2.41	
	19-Jul-06		N	<1 J/HD	<1	<1	1.21	ND	<0.5	<0.5	14,500	588	936	544	4.05	
	08-Aug-06		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	11,800	<500	888	514	2.39	
	06-Sep-06		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	4,070	<500	821	590	2.2	
	04-Oct-06		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	3,570	<500	732	479	1.84	
	08-Nov-06		N	<0.2	1.57	<0.5	15.2	78.5	<0.5	<0.1	6,980	4,230	872	82	33.1	
	05-Dec-06		N	5.5	7.24	3.44	0.712	13	1.67	<0.1	1,070	<500	677	627	9.96	
	03-Jan-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	13,400	<500	582	481	1.32	
	07-Feb-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	3,030	<500	506	496	1.18	
	06-Mar-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	2,860	<500	432	455	1.41	
	04-Apr-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	3,210	<500	349	437	<1	
	02-May-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.2	2,480	<500	373	456	1.23	
	16-May-07		N	---	---	<0.5	---	ND	---	---	---	---	---	---	---	1.05
	23-May-07		N	---	---	<0.5	---	ND	---	---	---	---	---	---	---	1.09
	31-May-07		N	---	---	<0.5	---	ND	---	---	---	---	---	---	---	1.22
	06-Jun-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.2	2,830	<500	409	425	1.22	
	11-Jul-07		N	<0.2	<1	1.31	<0.5	ND	<0.5	<0.1	2,850	<500	418	436	6.27	
	25-Jul-07		N	---	---	<0.5	---	ND	---	---	---	---	---	---	---	1.32
	01-Aug-07		N	---	---	<0.5	---	ND	---	---	---	---	---	---	---	1.26
	08-Aug-07		N	<0.2	<1	<0.5	0.516	ND	<0.5	<0.1	2,460	<500	435	435	1.89	
	15-Aug-07		N	---	---	<0.5	---	ND	---	---	---	---	---	---	---	1.11
	06-Sep-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	2,850	<500	<5	436	1.24	
	05-Dec-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	2,070	<500	<500	412	1.32	
	05-Mar-08		N	0.63	<1	<0.5	<0.5	0.015	<0.5	<0.1	4,530	<500	<500	427	1.24	
	04-Jun-08		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<1	2,350	<500	<500	384	1.18	
11-Sep-08		N	<0.2	396	<0.5	<0.5	ND	<0.5	<0.5	2,340	<500	1,120	387	1.40		
03-Dec-08		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.5	10,400	<500	<500	394	1.30		
11-Feb-09		a	N	<0.2	2.9	0.12	4.4	ND	<0.1	<0.1	23,900	138	288	460	1.10	
11-Feb-09		a	FD	<0.2	<1	0.13	---	ND	<0.2	<0.2	22,600	148	274	450	1.20	

**Table 3**  
**Summary of Primary Analytical Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
PT-3D	18-Mar-06		N	4,390	4,370	<1	<0.5	ND	3.33	<0.5	<500	<500	16.7	984	<1
	05-Apr-06		N	4,440	4,680	8.87	<.5	ND	3.28	<0.5	<500	<500	10.2	966	<1
	05-May-06		N	3,980	---	<1	<1	ND	---	---	---	---	---	---	---
	06-May-06		N	3,090 J/HD	3,420	666	2.93	0.031	1.73	<0.1	<500	<500	28.4	699	80.3
	07-May-06		N	4,140	---	515	3.15	0.023	---	---	---	---	---	---	---
	09-May-06		N	3,900 J/HD	3,920	268	2.1	0.02	2.02	<0.2	<500	<500	42	853	36
	10-May-06		N	3,680	---	199	<2.5	0.013	---	---	---	---	---	---	---
	11-May-06		N	3,700	---	159	---	ND	---	---	---	---	---	---	---
	12-May-06		N	1,940	---	127	<2.5	ND	---	---	---	---	---	---	---
	13-May-06		N	3,550 J/HD	3,630	96.8	3.07	0.151	2.1	<0.2	<500	<500	309	909	9.41
	23-May-06		N	4,380	3,940	21.7	<0.5	ND	2.73	<0.5	671	<500	113	854	2.39
	30-May-06		N	3,880	4,030	<1	<1	ND	2.82	<0.5	<500	<500	83.8	843	2.23
	06-Jun-06		N	3,730	3,770	2.92	<0.5	ND	2.82	<0.5	1,630	<500	67.5	985	1.31
	17-Jul-06		N	3,830	3,920	1.15	0.893	ND	2.92	0.722	<500	<500	22.4	690	3.31
	17-Jul-06		FD	3,730	3,820	<1	1.13	ND	2.93	0.723	<500	<500	22.2	885	3.14
	08-Aug-06		N	3,260	4,180	8.34	0.861	0.123	3.28	<0.1	6,760	<500	27.7	875	2.99
	14-Aug-06		N	---	---	8.97	---	1,190	---	---	---	---	---	---	58
	17-Aug-06		N	---	---	9.65	---	387	---	---	---	---	---	---	10.5
	21-Aug-06		N	---	---	8.24	---	209	---	---	---	---	---	---	3.86
	24-Aug-06		N	---	---	7.09	---	181	---	---	---	---	---	---	8.53
	29-Aug-06		N	---	---	7.51	---	114	---	---	---	---	---	---	2.25
	29-Aug-06		FD	---	---	7.5	---	108	---	---	---	---	---	---	2.35
	05-Sep-06		N	2,930	2,940	8.37	<10	49.9	<10	<2	<500	<500	1,660	801	2.33
	12-Sep-06		N	---	---	270	---	40.9	---	---	---	---	---	---	32.8
	12-Sep-06		FD	---	---	265	---	45.5	---	---	---	---	---	---	31.3
	19-Sep-06		N	---	---	60.8	---	18.6	---	---	---	---	---	---	6.91
	28-Sep-06		N	---	---	25.3	---	7.85	---	---	---	---	---	---	6.16
	04-Oct-06		N	3,100	2,960	25.5	<1	7.04	2.65	<0.2	<500	<500	2,630	741	7.61
	17-Oct-06		N	---	---	4.16	---	2.09	---	---	---	---	---	---	7.08
	17-Oct-06		FD	---	---	4.89	---	ND	---	---	---	---	---	---	8.91
	31-Oct-06		N	---	---	7.27	---	0.597	---	---	---	---	---	---	8.65
	08-Nov-06		N	2,430	2,330	<5	<5	423	<5	<1	<500	<500	3,940	694	43.9
	14-Nov-06		N	---	---	187	---	108	---	---	---	---	---	---	16.7
	21-Nov-06		N	---	---	10	---	88.4	---	---	---	---	---	---	4.15
	28-Nov-06		N	---	---	10	---	62	---	---	---	---	---	---	3.5
	05-Dec-06		N	5,240	4,800	8.25	<1	ND	2.44	<0.2	<500	<500	767	756	2.46
	18-Dec-06		N	---	---	7.1	---	22.7	---	---	---	---	---	---	<1
	03-Jan-07		N	3,190	3,160	7.77	0.829	13.3	2.94	<0.1	<500	<500	2,340	799	1.05
	15-Jan-07		N	---	---	7.03	---	6.28	---	---	---	---	---	---	<1
	29-Jan-07		N	---	---	2.89	---	3.86	---	---	---	---	---	---	<1
	07-Feb-07		N	3,030	3,030	8.4	0.793	4.23	3.29	<0.1	<500	<500	1,820	849	<1
	06-Mar-07		N	3,160	2,930	7.95	0.685	0.99	3.12	<0.1	<500	<500	1,320	798	<1

**Table 3**  
**Summary of Primary Analytical Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
PT-3D (cont)	05-Apr-07		N	2,480	2,680	6.67	0.668	0.305	2.45	<0.1	<500	<500	1,150	769	<1
	02-May-07		N	2,650	2,380	6.19	0.781	0.143	2.61	<0.2	<500	<500	981	798	<1
	16-May-07		N	---	---	107	---	2.56	---	---	---	---	---	---	252
	23-May-07		N	---	---	62.5	---	1.33	---	---	---	---	---	---	133
	31-May-07		N	---	---	31.5	---	0.985	---	---	---	---	---	---	69.1
	06-Jun-07		N	509	780	24.8	0.688	0.562	0.782	<0.2	<500	<500	6,470	614	50
	06-Jun-07		FD	693	757	26.4	0.672	0.404	0.757	<0.5	<500	<500	6,630	638	49.1
	11-Jun-07		N	---	---	23.9	---	0.515	---	---	---	---	---	---	38.7
	11-Jun-07		FD	---	---	24	---	0.515	---	---	---	---	---	---	37.9
	26-Jun-07		N	---	---	16.5	---	0.413	---	---	---	---	---	---	15.4
	26-Jun-07		FD	---	---	19.3	---	0.513	---	---	---	---	---	---	16.6
	11-Jul-07		N	832	1,060	11.7	0.726	1.09	1.25	<0.2	<500	<500	4,480	664	7.56
	25-Jul-07		N	---	---	9.83	---	571	---	---	---	---	---	---	326
	01-Aug-07		N	---	---	7.07	---	287	---	---	---	---	---	---	113
	08-Aug-07		N	<0.2	66.3	3.56	0.818	198	0.529	<0.1	954	<500	6,800	562	67
	15-Aug-07		N	---	---	<5	---	163	---	---	---	---	---	---	42.3
	28-Aug-07		N	---	---	2.62	---	93.1	---	---	---	---	---	---	12.9
	06-Sep-07		N	177	279	1.71	0.823	55.1	0.8	<0.1	590	<500	6,170	692	7.13
	03-Oct-07		N	481 J	531	0.582	---	49.5	1.05	<0.1	<500	<500	4,950	709	1.93
	07-Nov-07		N	721	643	2.26	---	25.2	1.16	<0.1	<500	<500	4,180	731	1.05
	05-Dec-07		N	931	932	2.77	0.883	18.6	1.23	<0.5	<500	<500	2,730	765	<1
	05-Mar-08		N	839	822	<5	---	1.14	1.41	<0.5	<500	<500	2,830	726	<1
	04-Jun-08		N	891	869	0.51	---	0.32	1.15	<2.5	<500	<500	2,310	746	<1
11-Sep-08		N	976	966	<0.5	---	0.09	1.17	<2.5	<500	<500	2,110	810	1.22	
03-Dec-08		N	875	866	<0.5	---	0.12	1.35	<0.5	<500	<500	2,050	839	1.18	
	<b>11-Feb-09</b>		<b>N</b>	<b>788</b>	<b>774</b>	<b>0.28</b>	---	<b>ND</b>	<b>1.6</b>	<b>&lt;0.5</b>	<b>&lt;100</b>	<b>118</b>	<b>2,410</b>	<b>940</b>	<b>&lt;0.5</b>

**Table 3**  
**Summary of Primary Analytical Parameters**

PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
PT-4S	15-Mar-06		N	<1	3.83	0.714 J	<0.5	ND	<0.5	<0.1	4,060	713	919	474	1.69
	06-Apr-06		N	<1	5.84	<1	<0.5	ND	<0.5	<0.5	2,510	1,350	707	450	1.69
	04-May-06		N	<1	---	<1	<1	ND	---	---	---	---	---	---	---
	05-May-06		N	<1	---	<1	<1	ND	---	---	---	---	---	---	---
	09-May-06		N	<0.2 J/HD	<1	<1	<0.5	ND	<0.5	<0.1	10,800	1,490	657	472	2.4
	10-May-06		N	<40	---	<1	<2.5	ND	---	---	---	---	---	---	---
	11-May-06		N	<1	---	<1	<0.5	ND	---	---	---	---	---	---	---
	12-May-06		N	<1	---	<1	<1	ND	---	---	---	---	---	---	---
	13-May-06		N	<1 J/HD	3.18	<1	<1	ND	<1	<0.2	2,320	1,940	673	415	2.02
	23-May-06		N	<1	<1	<1	<0.5	ND	<0.5	<0.5	18,600	<500	683	436	2.29
	30-May-06		N	<1	1.15	<1	<0.5	ND	<0.5	<0.5	20,000	<500	650	426	2.72
	06-Jun-06		N	<1 J/HD	<1	<1	<0.5	0.073	<0.5	<0.5	8,530	1,340	610	492	2.56
	19-Jul-06		N	<0.2	<1	<1	<0.5	ND	<0.5	<0.5	4,710	1,670	545	445	4.86
	08-Aug-06		N	<0.2	<1	<0.5	<0.5	0.165	<0.5	<0.1	4,270	1,710	617	431	4.21
	06-Sep-06		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	4,440	1,260	614	499	3.46
	06-Sep-06		FD	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	3,780	1,360	634	461	3.16
	04-Oct-06		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	4,050	1,600	576	401	5.38
	08-Nov-06		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	3,460	1,530	616	405	17.2
	05-Dec-06		N	<0.2	1.21	<0.5	<0.5	ND	<0.5	<0.1	4,470	2,100	562	347	15.3
	03-Jan-07		N	<0.2	1.29	<0.5	<0.5	ND	<0.5	<0.1	6,190	1,330	492	396	2.57
	07-Feb-07		N	<0.2	1.3	<0.5	0.512	ND	<0.5	<0.1	4,150	1,640	483	431	2.46
	07-Mar-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	2,560	1,040	397	442	2.46
	05-Apr-07		N	<0.2	2.67	<0.5	<0.5	ND	<0.5	<0.1	2,720	1,040	350	445	2.19
02-May-07		N	<0.2	<1	<0.5	0.515	ND	<0.5	<0.2	2,090	899	354	420	2.4	
06-Jun-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.2	2,390	1,060	370	381	2.71	
11-Jul-07		N	<0.2	<1	<0.5	0.514	ND	<0.5	<0.1	1,990	910	344	422	2.41	
08-Aug-07		N	<0.2	<1	<0.5	0.571	ND	<0.5	<0.1	2,060	1,260	435	402	3.01	
06-Sep-07		N	<0.2	<1	<0.5	0.551	ND	<0.5	<0.1	1,830	1,250	<5	402	2.61	

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**Summary of Primary Analytical Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
PT-4M	15-Mar-06		N	<1	<1	0.75 J	<0.5	ND	<0.5	<0.1	<500	<500	966	609	<1
	07-Apr-06		N	<1	1.63	<1	<0.5	ND	<0.5	<0.5	<500	<500	766	722	1.05
	04-May-06		N	<1 J/HD	---	<1	<0.5	ND	---	---	---	---	---	---	---
	08-May-06		N	<1	---	<1	<0.5	ND	---	---	---	---	---	---	---
	09-May-06		N	<0.21 J/HD	<1	<1	<0.5	ND	<0.5	<0.1	723	700	686	504	1.12
	10-May-06		N	<1	---	<1	<0.5	ND	---	---	---	---	---	---	---
	11-May-06		N	<1 J/HD	---	<1	<0.5	ND	---	---	---	---	---	---	---
	12-May-06		N	<1	---	<1	<0.5	ND	---	---	---	---	---	---	---
	13-May-06		N	<1 J/HD	2.05	<1	<0.5	ND	<0.5	<0.1	988	899	612	529	1.22
	23-May-06		N	<1	<1	<1	<0.5	ND	<0.5	<0.5	3,700	<500	613	565	1.58
	30-May-06		N	<1	229	<1	<0.5	ND	<0.5	<0.5	929	<500	492	534	2.05
	06-Jun-06		N	<1 J/HD	2.24	<1	<0.5	ND	<0.5	<0.5	1,330	<500	523	570	1.31
	19-Jul-06		N	<0.2	<1	<1	<0.5	ND	<0.5	<0.5	1,270	892	492	518	5.5
	08-Aug-06		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	1,960	724	535	528	3.22
	06-Sep-06		N	0.29	<1	<0.5	<0.5	ND	<0.5	<0.1	4,780	526	565	565	2.22
	04-Oct-06		N	<0.20	1.73	<0.5	<0.5	ND	<0.5	<0.1	5,070	<500	569	496	2.38
	08-Nov-06		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	2,150	<500	470	464	14.4
	05-Dec-06		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	2,130	775	466	445	9.54
	03-Jan-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	5,940	842	402	465	1.46
	07-Feb-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	456	502	1.19
	07-Mar-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	809	1,080	397	495	1.4
	04-Apr-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	4,840	<500	361	438	1.05
	02-May-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.2	3,920	<500	384	448	1.24
	06-Jun-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.2	4,360	<500	386	394	1.23
	11-Jul-07	a	N	3,800	3,850	<0.5	1.03	ND	3.57	<0.5	<500	<500	5.29	938	1.16
	08-Aug-07		N	<0.2	3.39	<0.5	0.515	ND	<0.5	<0.1	1,290	961	419	404	1.84
	06-Sep-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	1,100	796	<5	422	1.56
	04-Dec-07		N	<0.2	<1	<0.5	1.15	ND	<0.5	<0.5	1,150	573	<500	397	1.17
	05-Mar-08		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	1,530	<500	<500	393	1.28
	04-Jun-08		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.5	2,100	<500	<500	354	1.00
	11-Sep-08		N	<0.2	1.26	<0.5	<0.5	ND	<0.5	<0.5	2,270	<500	<500	365	1.35
03-Dec-08		N	23.4	<1	<0.5	<0.5	ND	<0.5	<0.5	2,800	<500	<500	376	1.49	
<b>11-Feb-09</b>			<b>N</b>	<b>&lt;0.2</b>	<b>1.6</b>	<b>0.15</b>	<b>0.84</b>	<b>ND</b>	<b>&lt;0.2</b>	<b>&lt;0.2</b>	<b>9,440</b>	<b>534</b>	<b>223</b>	<b>410</b>	<b>1.40</b>

**Table 3**  
**Summary of Primary Analytical Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)	
PT-4D	15-Mar-06		N	5,670	5,510	<1	1.32	ND	4.28	<0.5	<500	<500	8.27	1,080	<1	
	05-Apr-06		N	5,960	5,480	12.9	<0.5	ND	4.7	<0.5	<500	<500	<5	1,110	1.05	
	08-May-06		N	5,870	---	<1	<1	ND	---	---	---	---	---	---	---	
	09-May-06		N	5,900 J/HD	5,900	<1	<2.5	ND	4.6	<0.5	<500	<500	<5	1,110	1.16	
	10-May-06		N	5,830	---	<1	<2.5	ND	---	---	---	---	---	---	---	
	11-May-06		N	5,790	---	<1	<1	ND	---	---	---	---	---	---	---	
	12-May-06		N	5,810	---	<1	<1	ND	---	---	---	---	---	---	---	
	13-May-06		N	5,710 J/HD	5,900	<1	<1	ND	4.36	<0.2	<500	<500	<5	1,050	1.21	
	23-May-06		N	5,750	5,880	<1	<0.5	ND	4.91	<0.5	<500	<500	<5	1,010	1.6	
	23-May-06		FD	---	5,970	<1	<0.5	ND	4.89	<0.5	<500	<500	<5	1,010	1.87	
	30-May-06		N	5,730	5,740	<1	<1	ND	4.75	<0.5	2,390	<500	21	989	2.32	
	06-Jun-06		N	5,800 J/HD	5,560	<1	<0.5	0.078	4.7	<0.5	<500	<500	<5	1,130	1.44	
	19-Jul-06		N	5,360	5,830	<1	0.989	ND	4.5	<0.5	<500	<500	<5	957	7.78	
	08-Aug-06		N	5,080	5,800	10.1	0.914	0.024	4.31	<0.1	<500	<500	13.2	989	2.99	
	06-Sep-06		N	5,750	5,720	3.57	0.647	ND	4.76	<0.2	<500	<500	<5	1,030	2.18	
	04-Oct-06		N	5,800	5,710	13	<2.5	ND	4.62	<0.5	<500	<500	11.9	882	1.76	
	04-Oct-06		FD	5,530	6,000	13.3	<2.5	ND	4.78	<0.5	<500	<500	15.2	869	8.18	
	08-Nov-06		N	5,680	5,440	13.6	<2.5	ND	4.68	<0.5	<500	<500	<5	869	8.3	
	05-Dec-06		N	6,130	5,560	13.5	<2.5	ND	4.85	<0.5	<500	<500	<5	875	2.03	
	03-Jan-07		N	5,360	5,320	13.4	<2.5	ND	4.54	<0.5	3,060	<500	<5	916	1.02	
	07-Feb-07		N	5,170	5,090	13.1	0.876	ND	4.99	<0.1	9,350	<500	<5	950	1.04	
	07-Mar-07		N	5,050	4,630	12.4	0.563	ND	4.79	<0.1	<500	<500	9.76	977	<1	
	05-Apr-07		N	4,150	4,370	9	0.846	ND	3.93	<0.1	<500	<500	<5	975	<1	
	02-May-07		N	4,050	4,360	10.3	1.05	ND	3.92	<0.2	<500	<500	170	1,040	1.1	
	16-May-07		N	---	---	10.4	---	0.042	---	---	---	---	---	---	---	2.13
	16-May-07		FD	---	---	10.8	---	0.042	---	---	---	---	---	---	---	1.63
	23-May-07		N	---	---	<0.5	---	ND	---	---	---	---	---	---	---	1.26
	31-May-07		N	---	---	9.3	---	ND	---	---	---	---	---	---	---	1.2
	06-Jun-07		N	3,810	4,210	9.22	0.809	ND	3.77	<0.5	<500	<500	14.2	927	1.1	
	11-Jun-07		N	---	---	9.35	---	ND	---	---	---	---	---	---	---	1.01
	26-Jun-07		N	---	---	<0.5	---	ND	---	---	---	---	---	---	---	1.09
	11-Jul-07		N	3,970	3,910	<0.5	1.05	ND	3.72	<0.5	<500	<500	5.41	953	1.27	
25-Jul-07		N	---	---	<0.5	---	5.18	---	---	---	---	---	---	---	2.56	
01-Aug-07		N	---	---	<0.5	---	2.38	---	---	---	---	---	---	---	1.3	

**Table 3**  
**Summary of Primary Analytical Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
PT-4D (cont)	08-Aug-07		N	3,760	3,500	<0.5	1.13	1.1	3.74	<0.1	<500	<500	124	956	1.82
	15-Aug-07		N	---	---	<0.5	---	0.467	---	---	---	---	---	---	1.52
	28-Aug-07		N	---	---	<0.5	---	0.137	---	---	---	---	---	---	1.21
	06-Sep-07		N	3,970	3,287	<0.5	1.11	0.057	3.65	<0.1	<500	<500	<5	916	1.34
	03-Oct-07		N	3,460	3,310	<0.5	---	0.03	3.57	<0.1	<500	<500	<500	943	1.08
	07-Nov-07		N	3,450	3,270	8.76	---	ND	3.32	<0.1	<500	<500	<500	941	1.15
	05-Dec-07		N	3,300	3,020	8.57	1.1	ND	3.22	<0.5	<500	<500	<500	935	1.12
	05-Dec-07		FD	3,130	3,180	8.54	1.09	ND	3.44	<0.5	<500	<500	<500	933	1.19
	05-Mar-08		N	2,560	2,450	<0.5	--	ND	3.06	<0.5	<500	<500	<500	948	1.19
	05-Mar-08		FD	2,660	2,490	<0.5	--	ND	3.04	<0.5	<500	<500	<500	957	1.34
	04-Jun-08		N	2,480	2,360	<0.5	--	0.03	2.48	<2.5	<500	<500	<500	1,040	1.22
	11-Sep-08		N	2,240	2,060	<1	--	ND	2.10	<2.5	<500	<2,500	<2,500	1,010	1.75
	03-Dec-08		N	2,060	1,800	<1	--	ND	2.39	<2.5	<500	<500	<500	1,080	1.50
	<b>12-Feb-09</b>		<b>N</b>	<b>1,790</b>	<b>1,950</b>	<b>0.12</b>	<b>--</b>	<b>ND</b>	<b>8.10</b>	<b>&lt;0.5</b>	<b>&lt;100</b>	<b>155</b>	<b>9.98</b>	<b>1,100</b>	<b>0.58</b>
	PT-5S	16-Mar-06		N	<1	2.71	<1	<0.5	ND	<0.5	<0.1	949	971	2,440	401
07-Apr-06			N	<1	<1	<1	<0.5	ND	<0.5	<0.5	995	1,030	1,850	490	2.76
01-Jun-06			N	<1	<1	<1	<0.5	ND	<0.5	<0.1	4,250	1,870	1,530	372	4.14
19-Jul-06			N	<1	<1	<1	<0.5	ND	<0.5	<0.5	3,530	2,470	1,400	351	12.7
09-Aug-06			N	<0.2	<1	<0.5	2.26	ND	<0.5	<0.1	3,220	2,410	1,350	375	8.3
08-Sep-06			N	<0.2	<1	<0.5	0.586	ND	<0.5	3.7	4,070	2,840	1,410	340	6.95
05-Oct-06			N	<0.2	1.05	<0.5	0.938	ND	<0.5	<0.1	3,410	2,680	1,280	316	8.13
09-Nov-06			N	<0.2	<1	<0.5	0.717	ND	<0.5	<0.1	3,480	2,710	1,190	315	14.3
06-Dec-06			N	<0.2	32.7	<0.5	1.04	ND	<0.5	<0.1	4,250	3,250	1,280	307	40.7
06-Dec-06			FD	<0.2	<1.0	<10	1.04	ND	<0.5	<0.1	4,170	3,440	1,330	308	38
04-Jan-07			N	<0.2	<1	<0.5	1.05	ND	<0.5	<0.1	7,100	3,640	1,250	339	6.36
08-Feb-07			N	<0.2	<1	<0.5	0.986	ND	<0.5	<0.1	4,810	3,420	1,120	330	6.05
08-Mar-07			N	<0.2	<1	<0.5	1.02	ND	<0.5	<0.1	4,340	3,240	1,060	401	6.59
06-Apr-07			N	<0.2	<1	2.04	0.909	ND	<0.5	<0.1	3,760	3,640	961	398	5.61
03-May-07			N	<0.2	<1	<0.5	0.969	ND	<0.5	<0.1	3,870	3,250	1,010	414	6.12
07-Jun-07			N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.5	4,620	3,770	1,130	433	5.8
12-Jul-07			N	<0.2	<1	<0.5	0.938	ND	<0.5	<0.5	4,100	3,590	1,030	451	5.28
09-Aug-07		N	<0.2	<1	<0.5	1.03	ND	<0.5	<0.1	4,440	3,620	1,080	454	5.05	
07-Sep-07		N	<0.2	<1	<0.5	0.994	ND	<0.5	<0.1	4,500	4,090	1,050	498	5.7	

**Table 3**  
**Summary of Primary Analytical Parameters**

PG&E Topock  
Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
PT-5M	16-Mar-06		N	<1	<1	<1	<0.5	ND	<0.5	<0.1	<500	<500	707	463	1.04
	07-Apr-06		N	<1	<1	<1	<0.5	ND	<0.5	<0.5	1,850	1,820	1,770	443	3.31
	01-Jun-06		N	<1 J/HD	<1	<1	<0.5	ND	<0.5	<0.1	4,570	<500	168	437	1.62
	19-Jul-06		N	<0.2	<1	<1	<0.5	ND	<0.5	<0.5	2,240	<500	109	404	6.53
	09-Aug-06		N	<0.2 J/HD	<1	<0.5	<0.5	ND	<0.5	<0.1	3,770	<500	83.5	372	3.75
	08-Sep-06		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	9,570	<500	82.3	404	2.77
	05-Oct-06		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	2,980	<500	65.4	343	5.79
	09-Nov-06		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	790	<500	59.1	348	18.5
	06-Dec-06		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	958	<500	61.3	353	22.1
	04-Jan-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	4,110	<500	62.2	391	1.68
	08-Feb-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	692	<500	56.4	414	1.35
	07-Mar-07		N	<0.2	2.15	<0.5	<0.5	ND	<0.5	<0.1	1,020	<500	84.8	441	1.84
	06-Apr-07		N	5.7	30.8	<0.5	<0.5	ND	<0.5	<0.1	6,040	<500	44.4	422	1.44
	03-May-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	45	425	1.67
	07-Jun-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	543	<500	32.9	371	1.86
	12-Jul-07		N	<0.2	1.2	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	29.2	344	1.7
	09-Aug-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	26.4	353	1.85
	07-Sep-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<5	354	1.92
	05-Dec-07		N	<0.2	1.75	<0.500	<0.5	ND	<0.5	<0.1	636	<500	<500	335	1.78
	06-Mar-08		N	<0.2	1.39	<0.5	0.554	0.132	<0.5	<0.1	<500	<500	<500	359	1.44
05-Jun-08		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.5	<500	<500	<500	319	1.41	
11-Sep-08		N	3.3	2.12	<0.5	<0.5	ND	<0.5	<0.5	707	<500	<500	298	1.96	
03-Dec-08		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.5	1,180	<500	<500	313	1.67	
	<b>12-Feb-09</b>		<b>N</b>	<b>&lt;0.2</b>	<b>1.9</b>	<b>&lt;0.1</b>	<b>0.19</b>	<b>ND</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>5,600</b>	<b>&lt;100</b>	<b>57.3</b>	<b>340</b>	<b>1.6</b>

**Table 3**  
**Summary of Primary Analytical Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
PT-5D	16-Mar-06		N	6,150	5,650	<1	<0.5	ND	4.86	0.258	<500	<500	355	1,080	<1
	07-Apr-06		N	<0.2	<1	<1	<0.5	ND	<0.5	<0.5	2,280	2,200	1,700	403	3.49
	12-May-06		N	4,250	4,680	<1	1.17	0.02	3.58	<1	<500	<500	209	1,020	1.34
	01-Jun-06		N	3,900	3,930	<1	<0.5	ND	3.18	<0.1	3,550	<500	132	919	1.27
	17-Jul-06		N	3,640	3,890	<1	1.01	ND	2.98	0.613	<500	<500	90.8	882	3.73
	09-Aug-06		N	4,470 J/HD	3,880	6.85	<1	ND	3.12	<0.2	<500	<500	55.8	933	1.74
	08-Sep-06		N	4,420	4,930	9.71	<1	ND	3.61	<0.2	<500	<500	40	923	2.33
	05-Oct-06		N	3,740	3,920	8.72	<1	ND	3.13	<0.2	<500	<500	62.3	860	8.05
	09-Nov-06		N	4,510	4,400	11.6	<2.5	ND	4.01	<0.5	<500	<500	36.6	839	3.59
	06-Dec-06		N	4,700	4,480	11	0.704	ND	3.99	<0.1	<500	<500	33.5	852	4.9
	04-Jan-07		N	4,050	4,690	10.7	1.09	ND	3.95	<0.2	24,100	<500	14.4	876	1.22
	08-Feb-07		N	3,950	3,750	9.95	0.97	ND	3.78	<0.1	<500	<500	27.6	1,000	1.02
	08-Mar-07		N	3,640	3,500	8.8	0.879	ND	3.3	<0.1	<500	<500	31.3	1,020	1.58
	05-Apr-07		N	3,230	3,420	8.45	0.813	ND	2.85	<0.1	523	<500	28.4	978	1.02
	03-May-07		N	3,090	3,140	7.31	0.925	ND	2.81	<0.1	<500	<500	26.4	944	1.21
	07-Jun-07		N	3,370	3,110	9.14	1.07	ND	3.17	<0.2	<500	<500	27.1	888	1.27
	12-Jul-07		N	3,300	3,240	<0.5	0.68	ND	3.02	<0.5	<500	<500	17.6	884	1.2
	09-Aug-07		N	3,250	3,440	<0.5	1.05	ND	3.56	<0.1	1,040	<500	12.9	892	1.05
	07-Sep-07		N	3,430	3,390	<0.5	1.03	ND	3.4	<0.1	<500	<500	<5	994	1.18
	03-Oct-07		N	3,560	3,480	<0.5	---	ND	3.51	<0.1	<500	<500	<500	869	1.01
	07-Nov-07		N	3,590	3,420	9.18	---	ND	3.4	<0.1	<500	<500	<500	906	<1
	05-Dec-07		N	3,300	3,460	8.94	1.08	ND	3.34	<0.5	<500	<500	<500	922	1.24
	06-Mar-08		N	2,350	2,370	6.21	--	ND	2.59	<0.1	<500	<2,500	<2,500	925	1.49
	05-Jun-08		N	2,120	1,950	<0.5	--	ND	2.18	<2.5	<500	<500	<500	858	1.00
	11-Sep-08		N	2,330	2,010	<1	--	ND	2.17	<2.5	1,040	<500	<500	896	1.37
03-Dec-08		N	2,050	2,090	<1	--	ND	2.70	<2.5	1,390	<500	<500	1,010	1.38	
	<b>12-Feb-09</b>		<b>N</b>	<b>1,750</b>	<b>1,900</b>	<b>0.1</b>	<b>--</b>	<b>ND</b>	<b>1.60</b>	<b>&lt;0.5</b>	<b>&lt;100</b>	<b>149</b>	<b>36.8</b>	<b>1,100</b>	<b>0.53</b>

**Table 3**  
**Summary of Primary Analytical Parameters**

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 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
PT-6S	16-Mar-06		N	<1	---	---	---	---	---	---	---	---	---	---	---
	18-Mar-06		N	---	4.6	<1	1.18	ND	<0.5	<1	4,560	3,530	9,260	60	13.4
	04-Apr-06		N	<1	<1	<1	1.3	ND	<0.5	<0.5	11,600	6,310	7,650	57.8	14.2
	13-May-06		N	<1 J/HD	2.83	<1	<1	ND	<1	<0.2	33,000	13,400	4,400	3.03	13
	22-May-06		N	<1 J/HD	26	<1	<0.5	ND	<0.5	<0.5	22,600	1,180	3,710	5.91	13.9
	01-Jun-06		N	<1 J/HD	1.38	<1	<0.5	ND	<0.5	<0.1	17,000	12,600	3,710	6.96	13.4
	06-Jun-06		N	<1 J/HD	1.44	<1	<2.5	ND	<2.5	<0.5	19,000	17,100	3,250	4.57	14.8
	19-Jul-06		N	1.1	17.2	<1	2.72	ND	<0.5	<0.5	19,900	17,200	2,970	2.56	16.9
	09-Aug-06		N	<0.2	1.41	<0.5	2.9	ND	<0.5	<0.1	23,700	16,500	3,170	76.2	16.1
	08-Sep-06		N	<0.2	2.56	<1	<1	ND	<1	<0.2	22,900	15,800	2,810	4.46	16.4
	05-Oct-06		N	<0.2	<1	<2.5	<2.5	ND	<2.5	<0.5	26,400	19,100	2,610	4.66	20.2
	09-Nov-06		N	<0.2	3.65	<0.5	1.7	ND	<0.5	<0.1	27,800	20,000	2,550	6.07	62.2
	06-Dec-06		N	<0.2	<1.0	<0.5	1.9	ND	<0.5	<0.1	36,500	27,700	2,530	9.65	76
	04-Jan-07		N	<0.2	1.23	<1	2.12	ND	<1	<0.2	35,400	30,000	2,220	9.68	20.9
	08-Feb-07		N	<0.2	1.92	<0.5	1.83	ND	<0.5	<0.1	30,300	25,900	1,770	8.25	19.9
	08-Mar-07		N	<0.2	<50	<0.5	1.45	ND	<0.5	<0.1	26,400	20,500	1,540	11.8	16
	06-Apr-07		N	<0.2	<1	<0.5	1.22	ND	<0.5	<0.1	23,400	12,900	1,050	8.43	13
	03-May-07		N	<0.2	1.36	<0.5	1.26	ND	<0.5	<0.1	22,300	16,600	1,250	2.95	14.4
	07-Jun-07		N	<0.2	2.01	<0.5	1.1	ND	<0.5	<0.2	3,360	19,000	1,230	1.45	14.8
	12-Jul-07		N	<0.2	<1	<0.5	1.43	ND	<0.5	<0.5	30,200	22,700	1,090	1.52	15.3
09-Aug-07		N	<0.2	1.88	<0.5	1.64	ND	<0.5	<0.1	33,100	17,800	1,250	0.931	16.4	
07-Sep-07		N	<0.2	<1	<1	1.67	ND	<1	<0.2	38,900	24,900	1,130	1.5	16.1	

**Table 3**  
**Summary of Primary Analytical Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)	
PT-6M	16-Mar-06		N	<1	<1	<1	<0.5	ND	<0.5	<0.1	<500	<500	56.1	486	<1	
	04-Apr-06		N	<1	<1	<1	<0.5	ND	<0.5	<0.5	<500	<500	55.2	498	1.22	
	13-May-06		N	<1 J/HD	4.53	<1	<0.5	ND	<0.5	<0.1	<500	<500	71.2	509	1.7	
	23-May-06		N	<1	<1	<1	<0.5	ND	<0.5	<0.5	1,690	<500	71.2	476	1.11	
	01-Jun-06		N	<1	1.24	<1	<0.5	ND	<0.5	<0.1	1,150	<500	77.6	479	1.4	
	06-Jun-06		N	<1 J/HD	1.66	<1	<0.5	ND	<0.5	<0.5	1,650	<500	76.4	528	3.14	
	19-Jul-06		N	<0.2	2.53	<1	<0.5	ND	<0.5	<0.5	641	<500	89.2	471	4.28	
	09-Aug-06		N	<0.2 J/HD	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	94.1	465	5.44	
	08-Sep-06		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	2,790	<500	108	452	2.97	
	05-Oct-06		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	1,120	<500	104	405	8.61	
	09-Nov-06		N	<0.2	1.15	<0.5	<0.5	ND	<0.5	<0.1	1,990	<500	114	389	12.9	
	06-Dec-06		N	<0.2	1.13	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	116	388	17.1	
	04-Jan-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	1,510	<500	119	391	1.91	
	08-Feb-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	2,180	<500	124	441	1.73	
	07-Mar-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	704	<500	141	433	2.23	
	06-Apr-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	156	406	1.35	
	03-May-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	168	442	1.72	
	16-May-07		N	---	---	<0.5	---	ND	---	---	---	---	---	---	---	1.39
	23-May-07		N	---	---	<0.5	---	ND	---	---	---	---	---	---	---	1.49
	31-May-07		N	---	---	<0.5	---	ND	---	---	---	---	---	---	---	1.49
	07-Jun-07		N	<0.2	1.72	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	200	435	1.82	
	12-Jul-07		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	177	421	1.65	
	25-Jul-07		N	---	---	<0.5	---	ND	---	---	---	---	---	---	---	1.67
	01-Aug-07		N	---	---	<0.5	---	ND	---	---	---	---	---	---	---	1.90
	09-Aug-07		N	<0.2	<1	<0.5	0.559	ND	<0.5	<0.1	<500	<500	194	427	1.81	
	15-Aug-07		N	---	---	<0.5	---	ND	---	---	---	---	---	---	---	2.41
	07-Sep-07		N	<0.2	<1	<0.5	0.515	ND	<0.5	<0.1	<500	<500	<5	427	1.95	
	05-Dec-07		N	<0.2	2.55	<0.5	0.512	ND	<0.5	<0.1	<500	<500	<500	374	2.02	
	06-Mar-08		N	<0.2	1.98	<0.5	0.616	0.058	<0.5	<0.1	<500	<500	<500	348	1.89	
	05-Jun-08		N	<0.2	1.67	<0.5	<0.5	ND	<0.5	<1	<500	<500	<500	390	1.42	
11-Sep-08		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.5	<500	<500	<500	366	2.21		
04-Dec-08		N	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.5	3,240	<500	<500	379	2.21		
<b>12-Feb-09</b>		<b>N</b>	<b>&lt;0.2</b>	<b>1.4</b>	<b>&lt;0.1</b>	<b>0.32</b>	<b>ND</b>	<b>&lt;0.2</b>	<b>&lt;0.2</b>	<b>2,350</b>	<b>&lt;100</b>	<b>281</b>	<b>380</b>	<b>1.9</b>		

**Table 3**  
**Summary of Primary Analytical Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)	
PT-6D	16-Mar-06		N	3,310	3,140	<1	<0.5	ND	2.5	0.218	<500	<500	361	844	<1	
	04-Apr-06		N	2,270	2,180	4.23	<0.5	ND	1.73	<0.5	<500	<500	258	750	<1	
	13-May-06		N	1,760 J/HD	1,720	<1	<1	ND	1.49	<0.2	1,320	<500	169	810	1.16	
	22-May-06		N	1,610 J/HD	1,970	<1	<0.5	ND	1.42	<0.5	2,520	<500	168	719	1.96	
	01-Jun-06		N	1,440	1,420	<1	<0.5	ND	1.2	<0.1	764	<500	152	711	1.08	
	06-Jun-06		N	1,340 J/HD	1,290	<1	1.85	0.105	1.38	<0.5	1,130	<500	134	750	2.45	
	17-Jul-06		N	1,220	1,120	<1	<0.5	ND	0.994	0.917	<500	<500	112	670	3.54	
	09-Aug-06		N	1,320 J/HD	1,440	3.34	0.94	ND	1.27	<0.1	<500	<500	77.2	684	2.67	
	08-Sep-06		N	1,540	1,520	3.54	<0.5	ND	1.55	<0.1	<500	<500	70.6	726	2.17	
	05-Oct-06		N	1,060	1,000	2.44	0.550	ND	1.05	<0.1	612	<500	34.1	667	2.90	
	09-Nov-06		N	1,300	1,160	3.25	0.561	ND	1.36	<0.1	<500	<500	28.8	620	4.61	
	09-Nov-06		FD	1,500	1,130	4.63	0.614	ND	1.75	<0.1	<500	<500	29.0	617	4.20	
	06-Dec-06		N	1,100	1,270	2.97	0.637	ND	1.33	<0.1	<500	<500	25.2	672	7.01	
	04-Jan-07		N	1,320	1,490	3.58	0.724	0.036	1.75	<0.1	1,260	<500	116	634	1.36	
	08-Feb-07		N	1,020	926	2.74	0.620	ND	1.42	<0.1	<500	<500	17.2	711	1.14	
	08-Mar-07		N	781	796	1.87	0.606	ND	1.04	<0.1	<500	<500	71.8	731	1.31	
	05-Apr-07		N	659	735	<0.5	0.619	ND	1.09	<0.1	<500	<500	28.8	684	<1	
	03-May-07		N	583	564	1.44	0.615	ND	0.805	<0.1	<500	<500	20.4	630	<1	
	16-May-07		N	---	---	1.54	---	ND	---	---	---	---	---	---	---	<1
	23-May-07		N	---	---	<0.5	---	ND	---	---	---	---	---	---	---	<1
	31-May-07		N	---	---	1.31	---	ND	---	---	---	---	---	---	---	<1
	07-Jun-07		N	640	847	<0.5	0.623	ND	0.892	<0.2	<500	<500	23.5	650	1.15	
	11-Jun-07		N	---	---	1.42	---	ND	---	---	---	---	---	---	---	<1
	26-Jun-07		N	---	---	<0.5	---	ND	---	---	---	---	---	---	---	<1
	12-Jul-07		N	571	537	<0.5	0.672	ND	0.817	<0.2	<500	<500	20.2	608	<1	
	25-Jul-07		N	---	---	<0.5	---	0.129	---	---	---	---	---	---	---	<1
	01-Aug-07		N	---	---	<0.5	---	0.026	---	---	---	---	---	---	---	1.06
	09-Aug-07		N	671	661	<0.5	0.758	ND	0.998	<0.1	<500	<500	28.6	641	1.08	
	15-Aug-07		N	---	---	<0.5	---	ND	---	---	---	---	---	---	---	<1
	28-Aug-07		N	---	---	<0.5	---	ND	---	---	---	---	---	---	---	<1
	07-Sep-07		N	618	576	<0.5	0.695	ND	0.904	<0.1	<500	<500	<5	681	1.08	
	03-Oct-07		N	484	513	<0.5	---	ND	0.806	<0.1	<500	<500	<500	641	<1	
	03-Oct-07		FD	560 J	522	<0.5	---	0.193	1.11	<0.1	<500	<500	<500	615	<1	
	07-Nov-07		N	601	532	1.47	---	ND	0.951	<0.1	<500	<500	<500	637	<1	
05-Dec-07		N	513	496	1.27	0.683	ND	0.856	<0.5	<500	<500	<500	603	<1		
06-Mar-08		N	268	231	0.752	--	ND	0.754	<0.1	<500	<500	<500	569	1.01		
05-Jun-08		N	238	231	<0.5	--	ND	0.544	<1	<500	<500	<500	577	<1.0		
11-Sep-08		N	254	247	<0.5	--	ND	0.634	<1	888	<500	<500	570	1.08		
04-Dec-08		N	351	333	<0.5	--	ND	1.06	<1	1,350	<500	<500	605	<1		
12-Feb-09		N	158	161	0.1	--	ND	<0.5	<0.5	117	<100	16.3	630	0.6		

**Table 3**  
**Summary of Primary Analytical Parameters**

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First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
PTI-1S	15-Mar-06		N	<1	19.8	0.708 J	<0.5	ND	<0.5	<0.1	7,360	8,350	717	122	4.55
	05-Apr-06		N	<1	<1	<1	<0.5	ND	<0.5	<0.5	7,730	3,320	606	120	4.84
	06-May-06		N	<1 J/HD	4.15	<1	1,130	1,950	<2.5	<0.5	21,500	19,900	980	15	588
	07-May-06		N	<1 J/HD	---	<1	449	3,820	---	---	---	---	---	---	452
	09-May-06		N	<1	---	<1	360	3,820	---	---	---	---	---	---	474
	09-May-06		FD	<0.2	---	<1	360	3,770	---	---	---	---	---	---	467
	10-May-06		N	<1	---	<1	362	3,560	---	---	---	---	---	---	506
	11-May-06		N	<1	---	<1	316	3,760	---	---	---	---	---	---	543
	12-May-06		N	<1	---	<1	284	3,710	---	---	---	---	---	---	558
	13-May-06		N	---	---	<1	288	3,730	---	---	---	---	---	---	525
	23-May-06		N	---	---	<1	213	3,810	---	---	---	---	---	---	214
	31-May-06		N	---	---	<1	56.4	4,090	---	---	---	---	---	---	188
	05-Jun-06		N	---	---	<1	28.7	3,750	---	---	---	---	---	---	136
	18-Jul-06		N	<0.2	---	<1	3.05	647	---	---	---	---	---	---	9.33
	07-Aug-06		N	<0.2	---	<0.5	<0.5	196	---	---	---	---	---	---	11.4
	07-Sep-06		N	<1	---	<1	<1	73.4	---	---	---	---	---	---	8.1
	03-Oct-06		N	<0.2	---	<2.5	<2.5	46	---	---	---	---	---	---	10.8
	07-Nov-06		N	---	---	<0.5	1.03	30.7	---	---	---	---	---	---	26.3
	05-Dec-06		N	---	---	<0.5	0.884	21.6	<0.5	<0.1	---	---	---	4.37	45.4
	02-Jan-07		N	<0.2	---	<0.5	0.974	17.1	---	---	---	---	---	---	7.41
	06-Feb-07		N	<0.2	---	<0.5	0.928	13.9	---	---	---	---	---	---	7.31
	06-Mar-07		N	<0.2	---	<0.5	0.910	11.5	---	---	---	---	---	---	7.31
	04-Apr-07		N	<0.2	---	<0.5	0.806	8.09	---	---	---	---	---	---	7.18
	01-May-07		N	<0.2	---	<0.5	0.968	6.44	---	---	---	---	---	---	7.32
	05-Jun-07		N	<0.2	---	<0.5	0.766	4.44	---	---	---	---	---	---	7.42
	10-Jul-07		N	<0.2	---	<0.5	0.925	3.57	---	---	---	---	---	---	7.09
	07-Aug-07		N	<0.2	---	<0.5	0.984	3.71	---	---	---	---	---	---	7.79
05-Sep-07		N	<0.2	---	<0.5	0.742	3.28	---	---	---	---	---	---	6.92	

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Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
PTI-1M	15-Mar-06		N	3.9	8.2	0.718 J	<0.5	ND	<0.5	<0.1	<500	<500	141	510	<1
	04-Apr-06		N	3.3	11.1	<1	<0.5	ND	<0.5	<0.5	<500	<500	99.5	529	<1
	06-May-06		N	<1 J/HD	<1	<1	1,430	0.853	<0.5	<0.1	<500	<500	1,770	18.7	210
	07-May-06		N	<1 J/HD	---	<1	1,510	0.728	---	---	---	---	---	---	215
	09-May-06		N	<1	---	---	621	0.272	---	---	---	---	---	---	83.4
	10-May-06		N	<1	---	<1	1,080	0.746	---	---	---	---	---	---	111
	11-May-06		N	<1	---	<1	1,130	0.79	---	---	---	---	---	---	101
	12-May-06		N	<1	---	<1	1,090	0.934	---	---	---	---	---	---	77.6
	13-May-06		N	---	---	<1	1,060	1.04	---	---	---	---	---	---	67.6
	23-May-06		N	---	---	<1	1,490	1.58	---	---	---	---	---	---	77.8
	31-May-06		N	---	---	<1	169	0.298	---	---	---	---	---	---	3.56
	05-Jun-06		N	---	---	<1	125	0.281	---	---	---	---	---	---	2.18
	18-Jul-06		N	<1	---	<1	28.4	0.100	---	---	---	---	---	---	3.12
	07-Aug-06		N	<0.2	---	<0.5	18.1	1.57	---	---	---	---	---	---	6.07
	07-Sep-06		N	<0.2	---	<0.5	5.66	0.047	---	---	---	---	---	---	2.42
	03-Oct-06		N	<0.2	---	<0.5	1.96	0.029	---	---	---	---	---	---	7.75
	07-Nov-06		N	---	---	<0.5	0.95	0.079	---	---	---	---	---	---	14.3
	05-Dec-06		N	---	---	<0.5	0.75	ND	<0.5	<0.1	---	---	---	431	19.7
	02-Jan-07		N	<0.2	---	<0.5	0.65	ND	---	---	---	---	---	---	1.51
	06-Feb-07		N	<0.2	---	<0.5	0.51	ND	---	---	---	---	---	---	1.22
	06-Mar-07		N	<0.2	---	<0.5	<0.5	ND	---	---	---	---	---	---	1.37
	04-Apr-07		N	<0.2	---	<0.5	<0.5	ND	---	---	---	---	---	---	1.07
	01-May-07		N	<0.2	---	<0.5	<0.5	ND	---	---	---	---	---	---	1.29
	05-Jun-07		N	<0.2	---	<0.5	<0.5	ND	---	---	---	---	---	---	1.39
	10-Jul-07		N	<0.2	---	<0.5	<0.5	ND	---	---	---	---	---	---	1.24
	07-Aug-07		N	<0.2	---	<0.5	0.56	ND	---	---	---	---	---	---	1.44
	05-Sep-07		N	<0.2	---	<0.5	<0.5	ND	---	---	---	---	---	---	1.59
	04-Dec-07		N	<0.2	---	<0.5	1.37	ND	---	---	---	---	---	---	---
	04-Mar-08		N	<0.2	---	<0.5	<0.5	ND	---	---	---	---	---	---	1.12
	03-Jun-08		N	<0.2	---	<0.5	0.50	ND	---	---	---	---	---	---	1.27
	10-Sep-08		N	<0.2	---	<0.5	0.52	ND	---	---	---	---	---	---	1.56
02-Dec-08		N	<0.2	---	<0.5	<0.5	ND	---	---	---	---	---	---	1.37	
11-Feb-09		N	<b>&lt;0.2</b>	---	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>ND</b>	---	---	---	---	---	---	<b>1.00</b>	

**Table 3**  
**Summary of Primary Analytical Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
PTI-1D	15-Mar-06		N	1,620	1,580	<1	2.63	ND	<0.5	<0.5	<500	<500	1,070	907	1.3
	03-Apr-06		N	3,350	3,370	6.42	<0.5	ND	2.59	<0.5	<500	<500	140	912	<1
	07-May-06		N	<1 J/HD	---	1,640	8.27	0.153	---	---	---	---	---	---	195
	09-May-06		N	<1	---	1,950	19.2	0.794	---	---	---	---	---	---	204
	10-May-06		N	937	---	672	4.56	0.087	---	---	---	---	---	---	46.4
	11-May-06		N	1,050	---	613	3.76	0.059	---	---	---	---	---	---	31.9
	12-May-06		N	<1 J/HD	---	2,400	12.6	0.603	---	---	---	---	---	---	215
	13-May-06		N	---	---	1,760	8.24	0.145	---	---	---	---	---	---	206
	22-May-06		N	---	---	57.9	0.942	ND	---	---	---	---	---	---	2.34
	31-May-06		N	---	---	<1	<0.5	ND	---	---	---	---	---	---	3.26
	05-Jun-06		N	---	---	20	<0.5	ND	---	---	---	---	---	---	2.45
	18-Jul-06		N	1,360	---	1.65	0.512	ND	---	---	---	---	---	---	3.42
	07-Aug-06		N	1,820	---	4.65	<0.5	ND	---	---	---	---	---	---	7.28
	15-Aug-06		N	---	---	<5	---	2,850	---	---	---	---	---	---	117
	17-Aug-06		N	---	---	14.3	---	1,830	---	---	---	---	---	---	53.7
	22-Aug-06		N	---	---	1.50	---	849	---	---	---	---	---	---	13.1
	24-Aug-06		N	---	---	<1	---	629	---	---	---	---	---	---	6.76
	29-Aug-06		N	---	---	<1	---	285	---	---	---	---	---	---	3.53
	05-Sep-06		N	231	---	<0.5	<0.5	168	---	---	---	---	---	---	3.76
	12-Sep-06		N	---	---	873	---	30.4	---	---	---	---	---	---	110
	19-Sep-06		N	---	---	260	---	30	---	---	---	---	---	---	11
	28-Sep-06		N	---	---	80.9	---	15.4	---	---	---	---	---	---	6.94
	28-Sep-06		FD	---	---	80.5	---	15.4	---	---	---	---	---	---	7.51
	03-Oct-06		N	<0.2	---	51.8	0.648	12.3	---	---	---	---	---	---	5.91
	17-Oct-06		N	---	---	20.5	---	6.1	---	---	---	---	---	---	6.70
	31-Oct-06		N	---	---	11.9	---	3.43	---	---	---	---	---	---	9.12
	07-Nov-06		N	---	---	10.7	<5	2,010	---	---	---	---	---	---	206
	14-Nov-06		N	---	---	<5	---	757	---	---	---	---	---	---	35.6
	14-Nov-06		FD	---	---	<5	---	761	---	---	---	---	---	---	35.4
	21-Nov-06		N	---	---	<5	---	362	---	---	---	---	---	---	12.1
	21-Nov-06		FD	---	---	<5	---	351	---	---	---	---	---	---	8.66
	28-Nov-06		N	---	---	0.990	---	185	---	---	---	---	---	---	7.09
	28-Nov-06		FD	---	---	1.02	---	183	---	---	---	---	---	---	6.64
	05-Dec-06		N	---	---	0.577	0.694	70.9	0.610	<0.1	---	---	---	728	8.83
	18-Dec-06		N	---	---	0.571	---	56.7	---	---	---	---	---	---	3.84
	18-Dec-06		FD	---	---	0.568	---	56	---	---	---	---	---	---	3.89
	02-Jan-07		N	29.8	---	1.23	0.761	25	---	---	---	---	---	---	1.86
	15-Jan-07		N	---	---	1.31	---	14.2	---	---	---	---	---	---	1.74
	29-Jan-07		N	---	---	<0.5	---	10.4	---	---	---	---	---	---	2.52
	29-Jan-07		FD	---	---	<0.5	---	10.8	---	---	---	---	---	---	1.96
	06-Feb-07		N	138	---	<0.5	0.741	6.51	---	---	---	---	---	---	1.02
	06-Mar-07		N	164	---	<0.5	0.592	2.67	---	---	---	---	---	---	1.08
	04-Apr-07		N	168	---	<0.5	<0.5	2.52	---	---	---	---	---	---	<1

**Table 3**  
**Summary of Primary Analytical Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)	
PTI-1D (cont)	01-May-07		N	84	---	<0.5	0.712	2.63	---	---	---	---	---	---	---	1.05
	15-May-07		N	---	---	306	---	ND	---	---	---	---	---	---	---	776
	22-May-07		N	---	---	128	---	2.89	---	---	---	---	---	---	---	227
	30-May-07		N	---	---	73.4	---	1.85	---	---	---	---	---	---	---	72.3
	05-Jun-07		N	<0.2	---	38.7	<0.5	1.03	---	---	---	---	---	---	---	38.8
	11-Jun-07		N	---	---	29.9	---	0.845	---	---	---	---	---	---	---	19.8
	26-Jun-07		N	---	---	17.4	---	0.459	---	---	---	---	---	---	---	3.71
	10-Jul-07		N	<0.2	---	10.1	<0.5	0.334	---	---	---	---	---	---	---	1.62
	24-Jul-07		N	---	---	<2.5	---	1,570	---	---	---	---	---	---	---	756
	31-Jul-07		N	---	---	<2.5	---	1,070	---	---	---	---	---	---	---	262
	07-Aug-07		N	<0.2	---	<1	<1	621	---	---	---	---	---	---	---	81.0
	14-Aug-07		N	---	---	1.27	---	470	---	---	---	---	---	---	---	27.1
	28-Aug-07		N	---	---	1.90	---	215	---	---	---	---	---	---	---	2.87
	05-Sep-07		N	<0.2	---	0.79	0.54	155	---	---	---	---	---	---	---	2.04
	02-Oct-07		N	<0.2	---	0.77	0.63	80.5	---	---	---	---	---	---	---	1.78
	06-Nov-07		N	<0.2	---	<0.5	---	31.1	---	---	---	---	---	---	---	1.01
	04-Dec-07		N	<0.2	---	<0.5	2.16	20.2	---	---	---	---	---	---	---	---
	04-Mar-08		N	<0.2	---	<0.5	---	2.37	---	---	---	---	---	---	---	<1
	03-Jun-08		N	<0.2	---	0.69	---	0.86	---	---	---	---	---	---	---	<1
	10-Sep-08		N	<0.2	---	<0.5	---	0.41	---	---	---	---	---	---	---	1.37
02-Dec-08		N	<0.2	---	<0.5	---	0.23	---	---	---	---	---	---	---	<1	
	<b>11-Feb-09</b>		<b>N</b>	<b>&lt;0.2</b>	---	<b>0.2</b>	---	<b>0.09</b>	---	---	---	---	---	---	---	<b>&lt;0.5</b>
PE-1	17-Mar-06		N	148	138	<1	<0.5	ND	<0.5	<0.5	<500	<500	12.7	900	2.14	
	05-Apr-06		N	140	136	<1	<0.5	ND	<0.5	<0.5	<500	<500	12.3	939	1.99	
	01-Jun-06		N	114	111	<1	<0.5	ND	<0.5	<0.1	<500	<500	12.5	773	2.34	
	17-Jul-06		N	97	96.2	<1	1.11	ND	<0.5	1.11	<500	<500	10.7	772	4.16	
	07-Aug-06		N	100	98.6	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	10.5	699	8.83	
	07-Aug-06		FD	104	100	<0.5	0.868	ND	<0.5	<0.1	<500	<500	10.7	692	4.58	
	06-Sep-06		N	94.5	102	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	11.0	751	3.23	
	03-Oct-06		N	90.2	93.6	<0.5	0.624	ND	<0.5	<0.1	<500	<5,000	11.6	683	8.57	
	03-Oct-06		FD	95.8	96.2	<0.5	0.615	ND	<0.5	<0.1	<500	<5,000	11.4	717	6.28	
	07-Nov-06		N	96.6	87.8	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	10.6	709	11.6	
	06-Dec-06		N	99.9	101	<0.5	0.658	ND	<0.5	<0.1	<500	<500	10.4	651	22.7	
	02-Jan-07		N	85.8	91.2	<0.5	0.707	ND	<0.5	<0.1	<500	<500	8.94	681	2.34	
	06-Feb-07		N	82.1	94.3	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	7.43	722	2.11	
	06-Feb-07		FD	79.8	94.5	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	7.49	718	2.10	
	06-Mar-07		N	78.9	74.1	<0.5	0.621	ND	<0.5	<0.1	<500	<500	5.62	725	2.40	
	04-Apr-07		N	64.4	63.9	<0.5	0.602	ND	<0.5	<0.1	<500	<500	5.68	660	2.06	
	04-Apr-07		FD	67.7	62.6	<0.5	0.597	ND	<0.5	<0.1	<500	<500	5.53	657	2.15	
	01-May-07		N	60.6	60.7	<0.5	0.650	ND	<0.5	<0.1	<500	<500	5.87	700	2.23	
	05-Jun-07		N	67.1	51.8	<0.5	0.570	ND	<0.5	<0.5	<500	<500	<5	637	2.27	
	10-Jul-07		N	48.4	48.7	<0.5	0.683	ND	<0.5	<0.1	<500	<500	<5	640	2.35	
07-Aug-07		N	49.4	55.9	<0.5	0.672	ND	<0.5	<0.1	<500	<500	<5	587	2.47		
05-Sep-07		N	55.6	47.3	<0.5	0.636	ND	<0.5	<0.1	<500	<500	<5	680	2.18		

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PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
TW-2D	17-Mar-06		N	1,430	1,530	<1	<0.5	ND	1.67	<0.5	<500	<500	<5	501	<1
	05-Apr-06		N	1,350	1,240	2.55	<0.5	ND	1.51	<0.5	<500	<500	<5	509	<1
	19-Jul-06		N	802	785	7.09	0.55	ND	1.34	<0.5	<500	<500	<5	483	2.88
	07-Aug-06		N	943	797	2.51	0.791	ND	1.79	<0.1	<500	<500	<5	433	6.62
	14-Aug-06		N	---	---	5.29	---	ND	---	---	---	---	---	---	6.29
	17-Aug-06		N	---	---	3.90	---	ND	---	---	---	---	---	---	1.27
	22-Aug-06		N	---	---	4.56	---	ND	---	---	---	---	---	---	1.20
	24-Aug-06		N	---	---	3.88	---	ND	---	---	---	---	---	---	8.17
	29-Aug-06		N	---	---	4.02	---	ND	---	---	---	---	---	---	1.94
	06-Sep-06		N	780	813	2.83	<0.5	ND	2.34	<0.1	<500	<500	<5	398	1.81
	12-Sep-06		N	---	---	1.76	---	ND	---	---	---	---	---	---	2.13
	19-Sep-06		N	---	---	2.56	---	0.114	---	---	---	---	---	---	5.42
	28-Sep-06		N	---	---	2.56	---	ND	---	---	---	---	---	---	3.12
	04-Oct-06		N	733	738	1.41	0.921	ND	1.21	<0.1	<500	<500	<5	491	2.41
	17-Oct-06		N	---	---	<5	---	0.058	---	---	---	---	---	---	6.48
	31-Oct-06		N	---	---	2.57	---	0.093	---	---	---	---	---	---	4.46
	08-Nov-06		N	619	605	7.12	1.19	ND	1.23	<0.1	<500	<500	<5	487	4.72
	14-Nov-06		N	---	---	6.42	---	ND	---	---	---	---	---	---	6.77
	21-Nov-06		N	---	---	2.53	---	0.011	---	---	---	---	---	---	3.44
	28-Nov-06		N	---	---	2.48	---	0.783	---	---	---	---	---	---	3.75
	06-Dec-06		N	739	900	6.30	1.12	ND	1.38	<0.1	<500	<500	<5.0	411	12.4
	18-Dec-06		N	---	---	1.65	---	ND	---	---	---	---	---	---	<1
	02-Jan-07		N	629	513	1.60	0.663	---	2.59	<0.1	<500	<500	<5	315	1.02
	15-Jan-07		N	---	---	1.72	---	0.531	---	---	---	---	---	---	1.11
	15-Jan-07		FD	---	---	2.01	---	0.534	---	---	---	---	---	---	<1
	29-Jan-07		N	---	---	2.08	---	0.351	---	---	---	---	---	---	1.08
	06-Feb-07		N	467	441	1.77	1.23	0.356	2.27	<0.1	<500	<500	<5	388	<1
	06-Mar-07		N	412	405	1.21	0.930	0.054	1.06	<0.1	<500	<500	<5	520	1.19
	05-Apr-07		N	428	320	1.32	0.756	0.217	1.69	<0.1	<500	<500	<5	342	<1
	01-May-07		N	328	323	0.865	0.769	0.236	0.840	<0.2	<500	<500	<5	529	<1
	16-May-07		N	---	---	1.28	---	0.186	---	---	---	---	---	---	<1
	22-May-07		N	---	---	<0.5	---	0.261	---	---	---	---	---	---	2.24
	30-May-07		N	---	---	<0.5	---	0.259	---	---	---	---	---	---	<1
	05-Jun-07		N	290	267	1.07	0.532	0.043	2.21	<0.5	<500	<500	<5	277	1.02
	11-Jun-07		N	---	---	<0.5	---	ND	---	---	---	---	---	---	2.17
	26-Jun-07		N	---	---	<0.5	---	0.18	---	---	---	---	---	---	<1
	10-Jul-07		N	278	224	<0.5	0.773	0.029	1.22	<0.1	<500	<500	<5	408	1.02
	25-Jul-07		N	---	---	<0.5	---	ND	---	---	---	---	---	---	<1
	31-Jul-07		N	---	---	4.67	---	ND	---	---	---	---	---	---	1.16
	07-Aug-07		N	227	230	<0.5	0.756	ND	1.18	<0.1	<500	<500	<5	429	1.05
	14-Aug-07		N	---	---	3.03	---	ND	---	---	---	---	---	---	<1
	28-Aug-07		N	---	---	<0.5	---	0.472	---	---	---	---	---	---	<1

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PG&E Topock  
Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
TW-2D (cont)	28-Aug-07		FD	---	---	<0.5	---	0.124	---	---	---	---	---	---	1.29
	05-Sep-07		N	226	186	0.624	0.707	0.402	1.08	<0.1	<500	<500	<5	518	<1
	03-Oct-07		N	178	204	0.504	---	1.21	0.717	<0.1	<500	<500	<500	442	1.06
	06-Nov-07		N	161	150	<0.5	---	1.69	0.784	<0.1	<500	<500	<500	453	<1
	05-Dec-07		N	267	243	<0.5	0.698	1.11	0.773	<0.5	<500	<500	<500	497	1.23
	05-Mar-08		N	113	99.1	<0.5	--	1.31	0.806	<0.1	<500	<500	<500	499	<1
	05-Jun-08		N	92.5	77.9	<0.5	--	0.359	0.694	<1	<500	<500	<500	446	<1
	09-Sep-08		N	112	110	<0.5	--	0.122	0.554	<1	<500	<500	<500	467	1.17
	09-Sep-08		FD	121	110	<0.5	--	0.123	0.555	<1	<500	<500	<500	469	1.08
	04-Dec-08		N	74.2	77.2	<0.5	--	0.079	0.701	<2.5	<500	<500	<500	651	<1
	<b>11-Feb-09</b>		<b>N</b>	<b>66.4</b>	<b>53.8</b>	<b>&lt;0.1</b>	<b>--</b>	<b>0.024</b>	<b>1.8</b>	<b>&lt;0.2</b>	<b>&lt;100</b>	<b>&lt;100</b>	<b>5.5</b>	<b>380</b>	<b>&lt;0.5</b>
TW-3D	17-Mar-06		N	3,350	3,070	<1	<0.5	ND	4.87	<0.2	<500	<500	<5	613	1.04
	05-Apr-06		N	3,140	2,980	6.12	<0.5	ND	4.61	<0.5	<500	<500	<5	645	<1
	19-Jul-06		N	2,440	2,360	<1	1	ND	3.89	<0.5	<500	<500	<5	637	3
	07-Aug-06		N	2,600	2,580	5.86	0.849	ND	4.08	<0.1	<500	<500	<5	599	5.26
	14-Aug-06		N	---	---	6.23	---	ND	---	---	---	---	---	---	3.31
	17-Aug-06		N	---	---	6.31	---	ND	---	---	---	---	---	---	1.41
	22-Aug-06		N	---	---	6.43	---	ND	---	---	---	---	---	---	1.40
	24-Aug-06		N	---	---	6.21	---	0.288	---	---	---	---	---	---	8.22
	29-Aug-06		N	---	---	6.33	---	0.085	---	---	---	---	---	---	2.08
	06-Sep-06		N	2,570	2,620	6.1	<1	ND	3.94	<0.2	<500	<500	<5	656	2.05
	12-Sep-06		N	---	---	5.19	---	ND	---	---	---	---	---	---	2.43
	19-Sep-06		N	---	---	5.57	---	0.179	---	---	---	---	---	---	4.88
	28-Sep-06		N	---	---	5.80	---	ND	---	---	---	---	---	---	5.07
	04-Oct-06		N	2,350	2,920	6.86	<1	ND	5.21	<0.2	<500	<500	<5	577	3.67
	17-Oct-06		N	---	---	<1.0	---	ND	---	---	---	---	---	---	6.18
	31-Oct-06		N	---	---	8.01	---	ND	---	---	---	---	---	---	10.4
	08-Nov-06		N	2,600	2,330	7.08	0.882	ND	4.24	<0.1	<500	<500	<5	629	4.11
	14-Nov-06		N	---	---	7.52	---	ND	---	---	---	---	---	---	6.34
	21-Nov-06		N	---	---	7.02	---	ND	---	---	---	---	---	---	2.54
	28-Nov-06		N	---	---	7.12	---	0.029	---	---	---	---	---	---	3.48
	06-Dec-06		N	2,690	2,570	7.01	0.853	ND	4.29	<0.1	<500	<500	<5.0	582	8.43
	18-Dec-06		N	---	---	7.18	---	ND	---	---	---	---	---	---	1.47
	02-Jan-07		N	2,480	2,450	6.44	0.915	0.024	4.37	<0.1	<500	<500	<5	601	1.15
	15-Jan-07		N	---	---	6.25	---	0.018	---	---	---	---	---	---	1.12
	29-Jan-07		N	---	---	6.69	---	0.037	---	---	---	---	---	---	1.29
	06-Feb-07		N	2,410	2,560	6.50	0.849	0.057	4.79	<0.1	<500	<500	<5	666	<1
	06-Mar-07		N	2,470	2,260	6.21	0.825	0.05	4.66	<0.1	<500	<500	<5	669	1.23
	05-Apr-07		N	2,110	2,090	5.73	0.712	0.078	4.10	<0.1	<500	<500	<5	651	<1
	01-May-07		N	1,610	2,060	5.11	0.795	0.074	4.11	<0.2	<500	<500	<5	654	1.11
	01-May-07		FD	2,120	2,020	5.07	0.795	0.08	4.12	<0.2	<500	<500	<5	651	1.13
15-May-07		N	---	---	5.20	---	4.1	---	---	---	---	---	---	1.12	
22-May-07		N	---	---	5.22	---	0.059	---	---	---	---	---	---	<1	
22-May-07		FD	---	---	<0.5	---	0.068	---	---	---	---	---	---	1.08	
30-May-07		N	---	---	<0.5	---	0.077	---	---	---	---	---	---	<1	

**Table 3**  
**Summary of Primary Analytical Parameters**  
PG&E Topock  
Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
TW-3D (cont)	05-Jun-07		N	2,040	1,960	4.57	0.694	0.062	3.94	<0.5	<500	<500	<5	596	1.21
	11-Jun-07		N	---	---	4.74	---	0.054	---	---	---	---	---	---	1.14
	26-Jun-07		N	---	---	<0.5	---	0.07	---	---	---	---	---	---	1.00
	10-Jul-07		N	1,970	2,050	<0.5	0.753	0.072	3.93	<0.1	<500	<500	<5	605	1.10
	24-Jul-07		N	---	---	<0.5	---	0.053	---	---	---	---	---	---	1.23
	31-Jul-07		N	---	---	<0.5	---	0.203	---	---	---	---	---	---	1.62
	07-Aug-07		N	1,950	2,130	<0.5	0.870	0.071	4.10	<0.1	<500	<500	<5	577	1.09
	14-Aug-07		N	---	---	<0.5	---	0.068	---	---	---	---	---	---	1.12
	28-Aug-07		N	---	---	<0.5	---	0.146	---	---	---	---	---	---	1.20
	05-Sep-07		N	1,990	1,820	<0.5	0.702	0.160	4.39	<0.1	<500	<500	<5	697	1.02
	02-Oct-07		N	1,720	1,790	<0.5	---	0.416	4.20	<0.1	<500	<500	<500	579	<1
	06-Nov-07		N	1,940	1,780	<0.5	---	0.334	4.22	<0.1	<500	<500	<500	577	1.16
	05-Dec-07		N	2,280	2,190	5.89	0.859	0.134	5.14	<0.5	<500	<500	<500	582	1.34
	05-Mar-08		N	1,780	1,650	<0.5	--	0.156	4.62	<0.5	<500	<500	<500	599	1.2
	05-Jun-08		N	1,630	1,470	<0.5	--	0.059	3.94	<1	<500	<500	<500	584	1.04
	09-Sep-08		N	1,810	1,770	<0.5	--	0.021	4.75	<2.5	<500	<500	<500	550	1.40
04-Dec-08		N	1,550	1,490	<0.5	--	0.047	4.35	<2.5	<500	<500	<500	637	1.33	
04-Dec-08		FD	1,510	1,460	<0.5	--	0.044	4.35	<2.5	<500	<500	<500	631	1.06	
11-Feb-09		N	<b>1,580</b>	<b>1,450</b>	<b>&lt;0.1</b>	--	<b>0.014</b>	<b>5.5</b>	<b>&lt;0.2</b>	<b>&lt;100</b>	<b>156</b>	<b>6.3</b>	<b>750</b>	<b>0.57</b>	
INJ_SOLUTION_01	04-May-06		N	---	---	---	---	5,620	---	---	---	---	---	---	265
	05-May-06		N	---	---	---	<5	---	---	---	---	---	---	---	---
INJ_SOLUTION_02	05-May-06		N	---	---	---	1,790	---	---	---	---	---	---	---	276
INJ_SOLUTION_03	06-May-06		N	---	---	1,960	---	---	---	---	---	---	---	---	258
	11-Aug-06		N	---	---	<5	---	5,140	---	---	---	---	---	---	459
	07-Sep-06		N	<0.2	---	1,670	---	---	---	---	---	---	---	---	466
	01-Nov-06		N	<0.2	---	---	---	4,440	---	---	---	---	---	---	---
	08-May-07		N	<0.2	---	580	---	0.341	---	---	---	---	---	---	1,980
	17-Jul-07		N	<0.2	---	1.64	---	1,240	---	---	---	---	---	---	1,200
Make_Up_Water	05-May-06		N	---	---	<1	<.5	---	---	---	---	---	---	---	---
Equipment Blank	17-Mar-06		EB	<0.2	2.91	<1	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	<1
	07-Apr-06		EB	<0.2	<1	<1	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	<1
	09-May-06		FB	<0.2 J/HD	<1	<1	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	<1
	13-May-06		EB	<0.2	<1	<1	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	1.33
	24-May-06		EB	0.23	<1	<1	<0.5	ND	<0.5	<0.1	<500	<500	<5	2.47	1.17
	01-Jun-06		EB	<0.2	<1	<1	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	<1
	05-Jun-06		EB	<0.2	<1	<1	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	1.03
	17-Jul-06		EB	<0.2	<1	<1	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	2.95
	07-Aug-06		EB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<5	0.539	3.84
	14-Aug-06		EB	---	---	<0.5	---	ND	---	---	---	---	---	---	4.45
	21-Aug-06		EB	---	---	<0.5	---	ND	---	---	---	---	---	---	1.11
	29-Aug-06		EB	---	---	<0.5	---	ND	---	---	---	---	---	---	1.57
	06-Sep-06		EB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<5	4.11	<1
	12-Sep-06		EB	---	---	<0.5	---	ND	---	---	---	---	---	---	2.03

**Table 3**  
**Summary of Primary Analytical Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)	
Equipment Blank (cont)	19-Sep-06		EB	---	---	<0.5	---	---	---	---	---	---	---	---	---	4.38
	28-Sep-06		EB	---	---	<0.5	---	ND	---	---	---	---	---	---	---	4.95
	04-Oct-06		EB	<0.2	7.26	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<5	2.39	---	2.24
	17-Oct-06		EB	---	---	<0.5	---	---	---	---	---	---	---	---	---	3.20
	31-Oct-06		EB	---	---	<0.5	---	ND	---	---	---	---	---	---	---	7.47
	07-Nov-06		EB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	---	<1
	14-Nov-06		EB	---	---	<0.5	---	ND	---	---	---	---	---	---	---	<1
	21-Nov-06		EB	---	---	<0.50	---	ND	---	---	---	---	---	---	---	<1.00
	28-Nov-06		EB	---	---	<0.5	---	0.016	---	---	---	---	---	---	---	<1
	06-Dec-06		EB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	---	7.14
	18-Dec-06		EB	---	---	<0.5	---	ND	---	---	---	---	---	---	---	<1
	03-Jan-07		EB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	---	<1
	15-Jan-07		EB	---	---	<0.5	---	ND	---	---	---	---	---	---	---	<1
	29-Jan-07		EB	---	---	<0.5	---	ND	---	---	---	---	---	---	---	<1
	06-Feb-07		EB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<5	0.683	---	<1
	06-Mar-07		EB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	---	<1
	04-Apr-07		EB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	---	<1
	01-May-07		EB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	---	<1
	15-May-07		EB	---	---	<0.5	---	0.074	---	---	---	---	---	---	---	<1
	22-May-07		EB	---	---	<0.5	---	ND	---	---	---	---	---	---	---	<1
	30-May-07		EB	---	---	<0.5	---	ND	---	---	---	---	---	---	---	<1
	05-Jun-07		EB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<5	<.5	---	<1
	11-Jun-07		EB	---	---	<0.5	---	ND	---	---	---	---	---	---	---	<1
	26-Jun-07		EB	---	---	<0.5	---	ND	---	---	---	---	---	---	---	<1
	10-Jul-07		EB	<0.2	<1	<0.5	<0.5	ND	0.814	<0.1	<500	<500	<5	20.6	---	<1
	25-Jul-07		EB	---	---	<0.5	---	ND	---	---	---	---	---	---	---	<1
	31-Jul-07		EB	---	---	<0.5	---	ND	---	---	---	---	---	---	---	<1
	07-Aug-07		EB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	---	<1
	14-Aug-07		EB	---	---	<0.5	---	ND	---	---	---	---	---	---	---	<1
	28-Aug-07		EB	---	---	<0.5	---	ND	---	---	---	---	---	---	---	<1
	05-Sep-07		EB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<5	<.5	---	<1
	03-Oct-07		EB	0.4	<1	<0.5	---	ND	<0.5	<0.1	<500	<500	<500	0.547	---	<1
	06-Nov-07		EB	0.45	<1	<0.5	---	ND	<0.5	<0.1	<500	<500	<500	<0.5	---	<1
	05-Dec-07		EB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<500	<0.5	---	<1
	05-Mar-08		EB	<0.2	<1	<0.5	--	ND	<0.5	<0.1	<500	<500	<500	<0.5	---	<1
	03-Jun-08		EB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.5	<500	<500	<500	<0.5	---	<1
	09-Sep-08		EB	<0.2	<1	<0.5	--	ND	<0.5	<0.5	<500	<500	<500	<0.5	---	<1
	04-Dec-08		EB	11.6	11.6	<0.5	--	ND	0.625	<0.5	<500	<500	<500	22.1	---	<1
	<b>10-Feb-09</b>		<b>EB</b>	<b>&lt;0.2</b>	<b>&lt;1</b>	<b>&lt;0.1</b>	--	<b>ND</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;100</b>	<b>&lt;100</b>	<b>&lt;1</b>	<b>2.0</b>	---	<b>&lt;0.5</b>

**Table 3**  
**Summary of Primary Analytical Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
Field Blank	17-Mar-06		FB	<0.2	<1	<1	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	<1
	04-Apr-06		FB	<0.2	<1	<1	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	<1
	09-May-06		EB	<0.2 J/HD	<1	<1	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	<1
	13-May-06		FB	<0.2	<1	<1	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	<1
	24-May-06		FB	0.25	<1	<1	<0.5	ND	<0.5	<0.1	<500	<500	<5	2.45	1.53
	01-Jun-06		FB	<0.2	<1	<1	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	21.4
	05-Jun-06		FB	<0.2	<1	<1	<0.5	0.027	<0.5	<0.1	<500	<500	<5	<0.5	<1
	17-Jul-06		FB	<0.2	<1	<1	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	2.51
	07-Aug-06		FB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	5.16
	14-Aug-06		FB	---	---	<0.5	---	ND	---	---	---	---	---	---	4.04
	21-Aug-06		FB	---	---	<0.5	---	0.033	---	---	---	---	---	---	1.08
	29-Aug-06		FB	---	---	<0.5	---	ND	---	---	---	---	---	---	1.49
	06-Sep-06		FB	<0.2	<1	<0.5	<.5	ND	<.5	<0.1	<500	<500	<5	4.47	1.85
	12-Sep-06		FB	---	---	<0.5	---	ND	---	---	---	---	---	---	1.69
	19-Sep-06		FB	---	---	<0.5	---	ND	---	---	---	---	---	---	4.04
	28-Sep-06		FB	---	---	<0.5	---	ND	---	---	---	---	---	---	5.13
	03-Oct-06		FB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	7.03
	17-Oct-06		FB	---	---	<0.5	---	ND	---	---	---	---	---	---	4.51
	31-Oct-06		FB	---	---	<0.5	---	0.298	---	---	---	---	---	---	7.78
	07-Nov-06		FB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	<1
	14-Nov-06		FB	---	---	<0.5	---	ND	---	---	---	---	---	---	1.05
	21-Nov-06		FB	---	---	<0.5	---	ND	---	---	---	---	---	---	<1.00
	28-Nov-06		FB	---	---	<0.5	---	ND	---	---	---	---	---	---	<1
	05-Dec-06		FB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	<1
	18-Dec-06		FB	---	---	<0.5	---	ND	---	---	---	---	---	---	1.06
	03-Jan-07		FB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	<1
	15-Jan-07		FB	---	---	<0.5	---	ND	---	---	---	---	---	---	<1
	29-Jan-07		FB	---	---	<0.5	---	ND	---	---	---	---	---	---	<1
	06-Feb-07		FB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<5	0.784	<1
	06-Mar-07		FB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	<1
	04-Apr-07		FB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	<1
	01-May-07		FB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	<1
	15-May-07		FB	---	---	<0.5	---	ND	---	---	---	---	---	---	<1
	22-May-07		FB	---	---	<0.5	---	ND	---	---	---	---	---	---	<1
	30-May-07		FB	---	---	<0.5	---	ND	---	---	---	---	---	---	1.28
	05-Jun-07		FB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	<1
	11-Jun-07		FB	---	---	<0.5	---	ND	---	---	---	---	---	---	<1
	26-Jun-07		FB	---	---	<0.5	---	ND	---	---	---	---	---	---	<1
	10-Jul-07		FB	<0.2	<1	<0.5	<0.5	ND	0.821	<0.1	<500	<500	<5	19.8	1.27
	25-Jul-07		FB	---	---	<0.5	---	ND	---	---	---	---	---	---	<1
	31-Jul-07		FB	---	---	<0.5	---	ND	---	---	---	---	---	---	<1

**Table 3**  
**Summary of Primary Analytical Parameters**  
 PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
Field Blank (cont)	07-Aug-07		FB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<5	<0.5	<1
	14-Aug-07		FB	---	---	<0.5	---	ND	---	---	---	---	---	---	<1
	28-Aug-07		FB	---	---	<0.5	---	ND	---	---	---	---	---	---	<1
	05-Sep-07		FB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<5	<.5	<1
	02-Oct-07		FB	<0.2	<1	<0.5	---	ND	<0.5	<0.1	<500	<500	<500	1.28	<1
	06-Nov-07		FB	0.46	<1	<0.5	---	ND	<0.5	<0.1	<500	<500	<500	<0.5	<1
	05-Dec-07		FB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.1	<500	<500	<500	<0.5	<1
	05-Mar-08		FB	<0.2	1.63	<0.5	--	ND	<0.5	<0.1	<500	<500	<500	1.59	<1
	03-Jun-08		FB	<0.2	<1	<0.5	<0.5	ND	<0.5	<0.5	<500	<500	<500	<0.5	<1
	09-Sep-08		FB	<0.2	<1	<0.5	--	ND	<0.5	<0.5	<500	<500	<500	<0.5	<1
	03-Dec-08		FB	<0.2	<1	<0.5	--	ND	<0.5	<0.5	<500	<500	<500	<0.5	<1
	<b>10-Feb-09</b>		<b>FB</b>	<b>&lt;0.2</b>	<b>&lt;1</b>	<b>&lt;0.1</b>	--	<b>ND</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;100</b>	<b>&lt;100</b>	<b>&lt;1</b>	<b>1.7</b>	<b>0.5</b>

Notes:

Injections occurred on May 3 through May 6, 2006, August 11, 2006, September 7, 2006, November 1, 2007, May 7 and 8, 2007 and July 17 and 18, 2007.

Most recent data indicated in **BOLD**

- ft bgs surface
- mg/L Milligrams per liter
- µg/L Micrograms per liter
- ppb Parts per billion
- < above laboratory detection limit as
- N Normal
- EB Equipment blank
- FB Field blank
- FD Field duplicate
- J estimated
- J/HD recommended holding time.
- NA Not applicable
- ND Not detected
- Nitrate-N Nitrate as Nitrogen
- Nitrite-N Nitrite as Nitrogen
- available
- USEPA United States Environmental Protection Agency
- a Results are anomalous

The data package containing the 12/4/08 Equipment Blank (EB) result was reviewed and the QC was verified. The likely explanation is that the equipment was not rinsed thoroughly and therefore led to hits in the EB. The data package containing the 12/4/08 PT-6M result was reviewed and the QC was sufficiently verified, and the sample was used as the QC sample (MS/MSD/AS/SD); the elevated iron appears to be an anomaly. Starting with the February 2009 results, Calscience Laboratories was used for analysis, not EMAX laboratories.

**Table 4**  
**Summary of Secondary Analytical Parameters**  
 PG&E Topock  
 Needles, California  
 First Quarter 2009 Monitoring Report for the Floodplain Reactive In-Situ Pilot Test

Location Name	Sample Date	Notes	Sample Type	Screen Interval (ft bgs)	Dissolved Calcium (µg/L)	Dissolved Magnesium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Potassium (µg/L)	Dissolved Sodium (µg/L)	Alkalinity bicarbonate (mg/L)	Alkalinity carbonate (mg/L)	Chloride-Cl (mg/L)	Ortho phosphate-P (mg/L)	Sulfide (mg/L)	Total Dissolved Solids (mg/L)
PT-1S	17-Mar-06		N	35-45	262,000	74,700	<5	15,400	1,040,000	367	<5	1,710	<0.5	<2	---
	06-Apr-06		N		267,000	70,500	<5	14,400	1,090,000	368	<5	1,740	<0.5	<2	3,860
	06-May-06		N		287,000	83,200	<5	14,800	1,110,000	437	<5	2,180	<0.5	<2	4,680
	09-May-06		N		298,000	89,100	<5	14,500	1,110,000	405	<5	1,910	<0.5	<2	---
	10-May-06		N		---	---	---	---	---	---	---	---	---	---	4,340
	13-May-06		N		260,000	79,100	<5	13,900	1,080,000	423	<5	2,140	<1	<2	---
	23-May-06		N		---	---	---	---	---	---	---	---	---	<2	---
	01-Jun-06		N		---	---	---	---	---	---	---	---	---	<2	---
	06-Jun-06		N		278,000	83,600	10.4	14,600	1,060,000	461	<5	1,960	<0.5	<2	---
	18-Jul-06		N		277,000	76,700	7.51	14,000	1,080,000	424	<5	1,570	<0.5	<2	4,000
	08-Aug-06		N		328,000	107,000	9.3	16,300	1,190,000	464	<5	2,170	<0.5	<2	4,430
	06-Sep-06		N		312,000	80,400	18.2	16,700	1,030,000	475	<5	1,990	<0.5	<2	3,830
	04-Oct-06		N		327,000	92,900	9.27	15,300	1,210,000	445	<5	2,110	<0.5	<2	4,080
	08-Nov-06		N		396,000	152,000	12.2	17,300	1,410,000	515	<5	2,960	<0.5	<2	5,170
	05-Dec-06		N		432,000	181,000	14.6	17,500	1,530,000	570	<5	3,120	<2.5	<2.0	5,410
	03-Jan-07		N		381,000	151,000	12.3	15,400	1,350,000	485	<5	2,830	<2.5	<2	5,260
	07-Feb-07		N		297,000	114,000	12.6	13,900	1,060,000	410	<5	2,260	<0.5	<2	4,110
	07-Mar-07		N		265,000	76,200	8.28	12,600	1,010,000	350	<5	1,920	<0.5	3.20	3,450
	05-Apr-07		N		261,000	81,400	12.3	13,100	1,030,000	360	<5	1,890	<0.5	<2	3,680
	02-May-07		N		253,000	88,000	14.2	12,400	1,070,000	428	<5	2,030	<0.5	<2	3,550
06-Jun-07		N		280,000	79,700	13.1	13,000	1,160,000	415	<5	1,880	<0.5	2.00	3,740	
11-Jul-07		N		268,000	91,200	17.3	12,600	1,073,000	460	<5	1,990	<0.5	<2	3,790	
08-Aug-07		N		336,000	123,000	16.2	14,300	1,230,000	505	<5	2,740	<0.5	<2	4,380	
06-Sep-07		N		311,000	115,000	17.1	13,200	1,190,000	500	<5	2,290	<0.5	<2	4,070	

**Table 4**  
**Summary of Secondary Analytical Parameters**  
 PG&E Topock  
 Needles, California  
 First Quarter 2009 Monitoring Report for the Floodplain Reactive In-Situ Pilot Test

Location Name	Sample Date	Notes	Sample Type	Screen Interval (ft bgs)	Dissolved Calcium (µg/L)	Dissolved Magnesium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Potassium (µg/L)	Dissolved Sodium (µg/L)	Alkalinity bicarbonate (mg/L)	Alkalinity carbonate (mg/L)	Chloride-Cl (mg/L)	Ortho phosphate-P (mg/L)	Sulfide (mg/L)	Total Dissolved Solids (mg/L)
PT-1M	17-Mar-06		N	60-70	229,000	40,100	<5	15,700	1,230,000	145	<5	1,790	<0.5	<2	---
	06-Apr-06		N		242,000	40,600	<5	15,000	1,290,000	144	<5	1,840	<0.5	<2	4,250
	06-May-06		N		233,000	36,600	<5	13,200	1,370,000	168	<5	1,820	<0.5	<2	4,340
	09-May-06		N		214,000	34,700	6.56	12,800	1,280,000	125	<5	1,790	<0.5	<2	---
	10-May-06		N		---	---	---	---	---	---	---	---	---	---	3,470
	13-May-06		N		207,000	35,800	9.84	12,500	1,380,000	192	<5	1,880	<0.5	<2	---
	24-May-06		N		---	---	---	---	---	---	---	---	---	<2	---
	31-May-06		N		---	---	---	---	---	---	---	---	---	<2	---
	06-Jun-06		N		221,000	38,900	7.14	12,700	1,290,000	191	<5	2,140	<0.5	<2	---
	18-Jul-06		N		235,000	38,700	5.53	12,600	1,350,000	197	<5	1,730	<0.5	<2	4,130
	08-Aug-06		N		218,000	37,900	5.49	12,100	1,230,000	209	<5	1,870	<0.5	<2	4,120
	06-Sep-06		N		230,000	40,200	5.96	13,300	1,320,000	239	<5	1,840	<0.5	<2	3,920
	04-Oct-06		N		215,000	33,400	6.06	12,700	1,330,000	205	<5	1,890	<0.5	<2	3,940
	08-Nov-06		N		203,000	34,800	5.90	11,800	1,220,000	225	<5	1,740	<0.5	<2	3,810
	05-Dec-06		N		205,000	35,400	5.13	11,500	1,170,000	233	<5	1,760	<0.5	<2.0	3,740
	03-Jan-07		N		187,000	32,600	5.07	11,100	1,170,000	230	<5	1,740	<0.5	<2	3,680
	03-Jan-07		FD		190,000	33,500	5.21	11,100	1,190,000	230	<5	1,750	<0.5	<2	3,660
	07-Feb-07		N		177,000	32,500	<5	10,500	996,000	233	<5	1,690	<0.5	<2	3,580
	06-Mar-07		N		178,000	30,400	<5	10,600	1,110,000	245	<5	1,320	<0.5	<2	3,430
	05-Apr-07		N		170,000	29,900	<5	11,000	1,110,000	228	<5	1,650	<0.5	<2	3,570
	02-May-07		N		158,000	30,700	<5	9,780	1,070,000	235	<5	1,660	<0.5	<2	3,320
	06-Jun-07		N		180,000	29,000	<5	10,500	1,190,000	230	<5	1,560	<0.5	<2	3,360
	11-Jul-07		N		170,000	29,700	<5	10,500	1,090,000	235	<5	1,560	<0.5	<2	3,430
	08-Aug-07		N		183,000	30,100	<5	10,600	1,120,000	215	<5	1,630	<0.5	<2	3,480
	06-Sep-07		N		176,000	32,200	<5	10,200	1,090,000	220	<5	1,680	<0.5	<2	3,490
	04-Dec-07		N		---	---	<5	---	---	243	<5	---	---	<2	3,250
	05-Mar-08		N		---	---	<5	---	---	243	<5	---	---	V	3,330
	04-Jun-08		N		---	---	<5	---	---	225	<5	---	---	<2	3,010
	10-Sep-08		N		---	---	<5	---	---	225	<5	---	---	<2	3,150
	03-Dec-08		N		---	---	<5	---	---	240	<5	---	---	<2	3,010
<b>10-Feb-09</b>			<b>N</b>		---	---	<b>2.49</b>	---	---	<b>238</b>	<b>&lt;1</b>	---	---	<b>&lt;0.05</b>	<b>2,830</b>

**Table 4**  
**Summary of Secondary Analytical Parameters**  
 PG&E Topock  
 Needles, California  
 First Quarter 2009 Monitoring Report for the Floodplain Reactive In-Situ Pilot Test

Location Name	Sample Date	Notes	Sample Type	Screen Interval (ft bgs)	Dissolved Calcium (µg/L)	Dissolved Magnesium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Potassium (µg/L)	Dissolved Sodium (µg/L)	Alkalinity bicarbonate (mg/L)	Alkalinity carbonate (mg/L)	Chloride-Cl (mg/L)	Ortho phosphate-P (mg/L)	Sulfide (mg/L)	Total Dissolved Solids (mg/L)	
PT-1D	17-Mar-06		N	95-105	321,000	24,900	<5	24,600	2,540,000	107	<5	3,650	<0.5	<2	---	
	17-Mar-06		FD		316,000	24,900	<5	24,800	2,550,000	110	<5	3,610	<0.5	<2	---	
	06-Apr-06		N		332,000	24,000	<5	25,300	2,680,000	101	<5	3,780	<0.5	<2	8,070	
	06-Apr-06		FD		334,000	23,600	<5	25,100	2,700,000	98.1	<5	3,700	<0.5	<2	8,260	
	06-May-06		N		357,000	24,300	<5	25,300	2,930,000	85.2	<5	4,230	<0.5	<2	8,260	
	09-May-06		N		260,000	17,700	<5	20,800	2,360,000	130	<5	3,170	<1	<2	6,960	
	10-May-06		N		---	---	---	---	---	---	---	---	---	---	---	7,070
	13-May-06		N		---	223,000	16,600	<5	20,700	2,340,000	160	<5	2,170	<1	<2	---
	24-May-06		N		---	---	---	---	---	---	---	---	---	---	<2	---
	31-May-06		N		---	---	---	---	---	---	---	---	---	---	<2	---
	05-Jun-06		N		---	220,000	17,400	5.38	26,300	2,160,000	127	<5	3,210	<0.5	<2	---
	17-Jul-06		N		---	287,000	21,500	<5	36,200	2,500,000	109	<5	3,160	<0.5	<2	7,010
	08-Aug-06		N		---	264,000	21,000	<5	36,700	2,410,000	110	<5	3,350	<0.5	<2	6,860
	05-Sep-06		N		---	178,000	14,600	6.23	28,900	2,180,000	126	<5	2,810	<1	<2	5,540
	04-Oct-06		N		---	153,000	13,700	8.99	28,700	1,980,000	110	<5	2,670	<0.5	<2	5,710
	08-Nov-06		N		---	145,000	13,600	10.5	34,100	1,920,000	338	<5	2,770	<0.5	<2	5,580
	05-Dec-06		N		---	130,000	12,300	11.2	32,300	1,910,000	163	<5	2,870	<2.5	<2	5,060
	03-Jan-07		N		---	168,000	17,500	5.91	39,700	2,180,000	90.0	<5	3,210	<1	<2	6,130
	07-Feb-07		N		---	191,000	21,200	5.76	43,100	2,100,000	97.5	<5	3,500	<0.5	<2	6,750
	06-Mar-07		N		---	220,000	27,300	5.52	47,000	2,350,000	115	<5	2,960	<0.5	<2	6,630
	05-Apr-07		N		---	218,000	22,700	5.66	52,400	2,470,000	92.5	<5	3,470	<0.5	<2	6,760
	02-May-07		N		---	194,000	21,500	5.55	45,000	2,370,000	100	<5	3,520	<0.5	<2	6,900
	06-Jun-07		N		---	115,000	12,200	12.5	35,100	2,080,000	620	<5	2,540	<0.5	<2	5,870
	11-Jul-07		N		---	105,000	12,000	15.8	35,800	1,990,000	233	<5	2,940	<0.5	<2	5,590
	08-Aug-07		N		---	85,400	9,580	15.9	30,100	1,940,000	745	<5	2,350	<2.5	<2	5,330
	06-Sep-07		N		---	87,500	11,300	18.3	26,700	2,050,000	385	<5	2,740	<0.5	<2	5,120
	02-Oct-07		N		---	---	---	13.8	---	---	285	<5	---	---	<2	5,390
	06-Nov-07		N		---	---	---	14.2	---	---	225	<5	---	---	<2	---
	04-Dec-07		N		---	---	---	11.4	---	---	193	<5	---	---	<2	6,010
	05-Mar-08		N		---	---	---	10.2	---	---	160	<5	---	---	<2	6,590
	03-Jun-08		N		---	---	---	7.88	---	---	108	<5	---	---	<2	5,850
	10-Sep-08		N		---	---	---	7.76	---	---	115	<5	---	---	<2	6,770
02-Dec-08		N	---	---	---	8.03	---	---	102	<5	---	---	<2	7,250		
	<b>10-Feb-09</b>		<b>N</b>		---	---	<b>6.04</b>	---	---	<b>92</b>	<b>&lt;1</b>	---	---	<b>&lt;0.05</b>	<b>7,300</b>	

**Table 4**  
**Summary of Secondary Analytical Parameters**  
 PG&E Topock  
 Needles, California  
 First Quarter 2009 Monitoring Report for the Floodplain Reactive In-Situ Pilot Test

Location Name	Sample Date	Notes	Sample Type	Screen Interval (ft bgs)	Dissolved Calcium (µg/L)	Dissolved Magnesium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Potassium (µg/L)	Dissolved Sodium (µg/L)	Alkalinity bicarbonate (mg/L)	Alkalinity carbonate (mg/L)	Chloride-Cl (mg/L)	Ortho phosphate-P (mg/L)	Sulfide (mg/L)	Total Dissolved Solids (mg/L)
PT-2S	17-Mar-06		N	35-45	273,000	92,700	<5	12,500	929,000	613	<5	1,630	<0.5	<2	---
	06-Apr-06		N		300,000	99,800	<5	12,100	1,030,000	635	<5	1,670	<0.5	<2	3,810
	24-May-06		N		---	---	---	---	---	---	---	---	---	<2	---
	01-Jun-06		N		---	---	---	---	---	---	---	---	---	<2	---
	07-Jun-06		N		324,000	105,000	5.77	11,600	1,000,000	691	<5	1,900	<0.5	<2	---
	18-Jul-06		N		336,000	103,000	6.66	10,500	1,040,000	646	<5	1,740	<0.5	<2	4,230
	08-Aug-06		N		353,000	110,000	8.48	10,900	1,040,000	574	<5	1,960	<0.5	<2	4,170
	06-Sep-06		N		335,000	113,000	7.21	11,500	1,060,000	667	<5	1,940	<0.5	<2	4,020
	04-Oct-06		N		360,000	102,000	5.97	11,400	1,050,000	610	<5	1,890	<0.5	<2	3,770
	08-Nov-06		N		418,000	131,000	<5	11,700	1,100,000	640	<5	2,200	<0.5	<2	4,430
	05-Dec-06		N		268,000	50,700	<5	13,000	1,220,000	265	<5	1,930	<0.5	<2	3,660
	03-Jan-07		N		368,000	116,000	<5	10,800	1,050,000	660	<5	1,970	<1	<2	3,900
	07-Feb-07		N		361,000	121,000	<5	10,500	890,000	605	<5	1,970	<0.5	<2	3,900
	07-Mar-07		N		357,000	116,000	<5	10,300	941,000	650	<5	2,060	<0.5	<2	3,660
	05-Apr-07		N		394,000	124,000	5.50	11,300	959,000	700	<5	2,020	<0.5	<2	3,820
	02-May-07		N		370,000	133,000	<5	10,400	956,000	710	<5	1,980	<0.5	<2	3,700
	06-Jun-07		N		374,000	115,000	<5	10,900	1,040,000	695	<5	1,950	<0.5	16.0	4,160
11-Jul-07		N		330,000	111,000	<5	10,200	902,000	660	<5	1,910	<0.5	<2	3,750	
08-Aug-07		N		400,000	126,000	5.18	11,200	954,000	620	<5	2,040	<0.5	<2	4,180	
06-Sep-07		N		360,000	129,000	<5	10,600	958,000	675	<5	2,050	<0.5	<2	3,900	

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 First Quarter 2009 Monitoring Report for the Floodplain Reactive In-Situ Pilot Test

Location Name	Sample Date	Notes	Sample Type	Screen Interval (ft bgs)	Dissolved Calcium (µg/L)	Dissolved Magnesium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Potassium (µg/L)	Dissolved Sodium (µg/L)	Alkalinity bicarbonate (mg/L)	Alkalinity carbonate (mg/L)	Chloride-Cl (mg/L)	Ortho phosphate-P (mg/L)	Sulfide (mg/L)	Total Dissolved Solids (mg/L)
PT-2M	17-Mar-06		N	60-70	227,000	35,600	<5	14,700	1,340,000	264	<5	1,880	<0.5	<2	---
	06-Apr-06		N		232,000	35,600	<5	13,400	1,400,000	204	<5	1,920	<0.5	<2	4,430
	24-May-06		N		---	---	---	---	---	---	---	---	---	<2	---
	31-May-06		N		---	---	---	---	---	---	---	---	---	<2	---
	31-May-06		FD		---	---	---	---	---	---	---	---	---	<2	---
	07-Jun-06		N		220,000	36,500	<5	12,600	1,360,000	212	<5	2,020	<0.5	<2	---
	18-Jul-06		N		221,000	35,900	<5	11,900	1,320,000	237	<5	1,870	<0.5	<2	4,050
	08-Aug-06		N		218,000	36,200	<5	11,900	1,280,000	228	<5	1,810	<0.5	<2	3,920
	06-Sep-06		N		225,000	38,400	<5	13,200	1,280,000	241	<5	1,810	<0.5	<2	3,820
	04-Oct-06		N		231,000	36,600	<5	12,900	1,270,000	225	<5	1,850	<0.5	<2	3,090
	08-Nov-06		N		232,000	42,500	<5	12,000	1,210,000	248	<5	1,830	<0.5	<2	3,740
	05-Dec-06		N		263,000	50,400	<5	12,500	1,130,000	248	<5	1,850	<0.5	<2	3,850
	03-Jan-07		N		209,000	31,900	<5	18,300	1,630,000	245	<5	1,740	<0.5	<2	3,730
	07-Feb-07		N		204,000	39,900	<5	11,900	1,060,000	230	<5	1,720	<0.5	<2	3,470
	07-Mar-07		N		186,000	33,900	<5	10,300	1,060,000	210	<5	1,730	<0.5	<2	3,380
	05-Apr-07		N		182,000	34,200	<5	10,900	1,100,000	248	<5	1,650	<0.5	<2	3,390
	02-May-07		N		161,000	32,400	<5	10,000	1,080,000	255	<5	1,620	<0.5	<2	3,290
	06-Jun-07		N		168,000	29,200	<5	10,500	1,200,000	235	<5	1,540	<0.5	2.00	3,280
	11-Jul-07		N		165,000	35,300	<5	10,400	1,030,000	233	<5	1,540	<0.5	<2	3,400
	11-Jul-07		FD		162,000	29,700	<5	9,770	1,010,000	270	<5	1,540	<0.5	<2	3,360
	08-Aug-07		N		187,000	31,900	<5	10,800	1,090,000	240	<5	1,540	<0.5	<2	3,320
	06-Sep-07		N		184,000	35,800	<5	10,600	1,090,000	305	<5	1,720	<0.5	<2	3,610
	05-Dec-07		N		---	---	<5	---	---	263	<5	---	---	<2	3,590
	05-Mar-08		N		---	---	<5	---	---	235	<5	---	---	<2	3,170
	04-Jun-08		N		---	---	<5	---	---	240	<5	---	---	<2	3,040
	10-Sep-08		N		---	---	<5	---	---	245	<5	---	---	<2	3,070
03-Dec-08		N		---	---	<5	---	---	257	<5	---	---	<2	3,430	
	<b>10-Feb-09</b>		<b>N</b>		---	---	<b>1.35</b>	---	---	<b>246</b>	<b>&lt;1</b>	---	---	<b>&lt;0.05</b>	<b>2,890</b>

**Table 4**  
**Summary of Secondary Analytical Parameters**  
 PG&E Topock  
 Needles, California  
 First Quarter 2009 Monitoring Report for the Floodplain Reactive In-Situ Pilot Test

Location Name	Sample Date	Notes	Sample Type	Screen Interval (ft bgs)	Dissolved Calcium (µg/L)	Dissolved Magnesium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Potassium (µg/L)	Dissolved Sodium (µg/L)	Alkalinity bicarbonate (mg/L)	Alkalinity carbonate (mg/L)	Chloride-Cl (mg/L)	Ortho phosphate-P (mg/L)	Sulfide (mg/L)	Total Dissolved Solids (mg/L)
PT-2D	17-Mar-06		N	95-105	314,000	25,700	<5	24,900	2,530,000	125	<5	3,530	<0.5	<2	---
	17-Mar-06		FD		315,000	26,300	<5	25,200	2,560,000	112	<5	3,560	<0.5	<2	---
	06-Apr-06		N		338,000	25,600	<5	25,100	2,640,000	109	<5	3,550	<0.5	<2	8,120
	06-Apr-06		FD		338,000	25,800	<5	25,300	2,650,000	109	<5	3,660	<0.5	<2	8,040
	24-May-06		N		---	---	---	---	---	---	---	---	---	<2	---
	31-May-06		N		---	---	---	---	---	---	---	---	---	<2	---
	07-Jun-06		N		231,000	18,100	5.36	21,700	2,310,000	154	<5	3,120	<0.5	<2	---
	17-Jul-06		N		261,000	20,300	<5	22,800	2,320,000	102	<5	3,300	<0.5	<2	7,090
	07-Aug-06		N		266,000	21,600	<5	23,600	2,460,000	99.2	<5	3,550	<0.5	<2	7,190
	06-Sep-06		N		227,000	18,900	5.34	24,300	2,300,000	134	<5	2,980	<1	<2	6,000
	04-Oct-06		N		157,000	11,700	<5	21,000	2,010,000	150	<5	2,730	<2.5	<2	5,600
	08-Nov-06		N		186,000	15,500	<5	23,500	2,150,000	115	<5	3,080	<2.5	<2	6,090
	05-Dec-06		N		174,000	14,000	<5	22,400	2,160,000	258	<5	2,710	<2.5	<2	5,760
	03-Jan-07		N		179,000	16,300	<5	23,900	2,150,000	100	<5	3,250	<0.5	<2	6,290
	07-Feb-07		N		236,000	23,700	<5	29,900	2,350,000	65.0	<5	3,830	<0.5	<2	6,900
	07-Mar-07		N		256,000	23,800	<5	32,800	2,500,000	72.5	<5	4,040	<0.5	<2	7,230
	05-Apr-07		N		262,000	24,800	<5	36,000	2,570,000	72.5	<5	4,050	<0.5	<2	7,410
	02-May-07		N		223,000	24,200	<5	32,200	2,440,000	85.0	<5	3,850	<0.5	<2	6,370
	06-Jun-07		N		121,000	13,600	12.8	26,400	2,200,000	715	<5	2,600	<0.5	<2	5,970
	11-Jul-07		N		78,900	11,700	14.0	21,100	1,870,000	373	<5	2,650	<0.5	<2	5,130
	08-Aug-07		N		85,600	12,300	18.2	21,700	1,960,000	880	<5	2,360	<1	<2	5,560
	08-Aug-07		FD		95,600	15,200	20.8	24,700	2,060,000	810	<5	2,410	<2.5	<2	5,380
	06-Sep-07		N		78,900	13,000	16.1	20,600	1,920,000	480	<5	2,840	<0.5	<2	5,300
	06-Sep-07		FD		81,100	13,300	17.0	21,400	2,070,000	480	<5	2,690	<0.5	<2	5,080
	02-Oct-07		N		---	---	18.6	---	---	390	<5	---	---	1.60 J	5,280
	06-Nov-07		N		---	---	16.3	---	---	328	<5	---	---	<2	---
	06-Nov-07		FD		---	---	16.3	---	---	305	<5	---	---	<2	---
05-Dec-07		N		---	---	12.8	---	---	250	<5	---	---	<2	6,360	
05-Mar-08		N		---	---	10.1	---	---	165	<5	---	---	<2	6,900	
04-Jun-08		N		---	---	8.51	---	---	118	<5	---	---	<2	6,880	
10-Sep-08		N		---	---	8.32	---	---	113	<5	---	---	<2	6,900	
03-Dec-08		N		---	---	7.68	---	---	105	<5	---	---	<2	6,910	
	<b>10-Feb-09</b>		<b>N</b>		---	---	<b>6.13</b>	---	---	<b>96</b>	<b>&lt;1</b>	---	---	<b>&lt;0.05</b>	<b>7,270</b>

**Table 4**  
**Summary of Secondary Analytical Parameters**  
 PG&E Topock  
 Needles, California  
 First Quarter 2009 Monitoring Report for the Floodplain Reactive In-Situ Pilot Test

Location Name	Sample Date	Notes	Sample Type	Screen Interval (ft bgs)	Dissolved Calcium (µg/L)	Dissolved Magnesium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Potassium (µg/L)	Dissolved Sodium (µg/L)	Alkalinity bicarbonate (mg/L)	Alkalinity carbonate (mg/L)	Chloride-Cl (mg/L)	Ortho phosphate-P (mg/L)	Sulfide (mg/L)	Total Dissolved Solids (mg/L)
PT-3S	16-Mar-06		N	35-45	244,000	85,600	<5	10,000	942,000	334	<5	1,740	<0.5	<2	---
	03-Apr-06		N		236,000	80,600	5.08	10,300	930,000	369	<5	1,800	<0.5	<2	4,080
	06-May-06		N		270,000	86,300	6.06	10,100	1,080,000	378	<5	1,900	<0.5	<2	3,770
	06-May-06		FD		265,000	85,100	5.96	10,100	1,060,000	367	<5	1,860	<0.5	<2	3,610
	09-May-06		N		281,000	93,100	6.28	11,100	1,150,000	367	<5	1,850	<1	<2	4,030
	10-May-06		N		---	---	---	---	---	---	---	---	---	---	3,950
	13-May-06		N		238,000	79,500	6.32	9,840	1,050,000	365	<5	1,820	<1	<2	---
	23-May-06		N		---	---	---	---	---	---	---	---	---	<2	---
	30-May-06		N		---	---	---	---	---	---	---	---	---	<2	---
	06-Jun-06		N		189,000	63,000	8.17	9,260	9,170,000	505	<5	1,250	<2.5	<2	---
	19-Jul-06		N		181,000	59,300	8.6	12,100	1,010,000	507	<5	1,530	<0.5	<2	3,470
	08-Aug-06		N		203,000	64,100	8.97	14,100	1,040,000	477	<5	1,620	<0.5	<2	3,560
	06-Sep-06		N		227,000	71,600	8.21	17,700	1,080,000	480	<5	1,750	<0.5	<2	3,430
	04-Oct-06		N		232,000	64,600	7.91	17,800	1,120,000	410	<5	1,710	<2.5	<2	3,470
	08-Nov-06		N		230,000	72,100	7.24	16,200	1,070,000	423	<5	1,860	<0.5	<2	3,620
	05-Dec-06		N		225,000	67,100	7.07	15,900	1,070,000	473	<5	1,810	<0.5	<2	3,610
	03-Jan-07		N		235,000	73,200	7.00	15,600	1,050,000	463	<5	1,890	<1	<2	3,530
	07-Feb-07		N		236,000	76,600	6.65	14,500	975,000	430	<5	1,950	<0.5	<2	3,570
	07-Mar-07		N		239,000	69,400	6.53	13,900	1,010,000	460	<5	1,980	<0.5	3.20	3,410
	07-Mar-07		FD		242,000	70,500	7.26	14,100	1,020,000	460	<5	1,990	<0.5	3.20	3,480
	05-Apr-07		N		227,000	69,600	5.76	13,600	1,020,000	473	<5	1,900	<0.5	<2	3,510
	02-May-07		N		223,000	73,200	6.63	12,500	1,040,000	510	<5	1,820	<0.5	<2	3,510
	06-Jun-07		N		257,000	68,800	6.00	13,700	1,150,000	525	<5	1,820	<0.5	2.00	3,590
11-Jul-07		N		222,000	65,300	5.69	11,800	989,000	508	<5	1,790	<0.5	<2	3,570	
08-Aug-07		N		274,000	81,500	5.27	13,600	1,080,000	533	<5	1,840	<0.5	<2	3,450	
06-Sep-07		N		237,000	72,900	5.57	12,100	1,020,000	495	<5	1,920	<0.5	<2	3,500	

**Table 4**  
**Summary of Secondary Analytical Parameters**  
 PG&E Topock  
 Needles, California  
 First Quarter 2009 Monitoring Report for the Floodplain Reactive In-Situ Pilot Test

Location Name	Sample Date	Notes	Sample Type	Screen Interval (ft bgs)	Dissolved Calcium (µg/L)	Dissolved Magnesium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Potassium (µg/L)	Dissolved Sodium (µg/L)	Alkalinity bicarbonate (mg/L)	Alkalinity carbonate (mg/L)	Chloride-Cl (mg/L)	Ortho phosphate-P (mg/L)	Sulfide (mg/L)	Total Dissolved Solids (mg/L)
PT-3M	18-Mar-06		N	60-70	162,000	32,600	<5	19,900	1,360,000	112	<5	1,830	<0.5	<2	---
	07-Apr-06		N		184,000	30,500	<5	18,300	1,510,000	131	<5	1,910	<0.5	<2	4,420
	06-May-06		N		194,000	28,900	<5	15,100	1,490,000	157	<5	2,050	<0.5	<2	4,120
	09-May-06		N		186,000	28,800	<5	14,100	1,440,000	170	<5	2,020	<0.5	<2	4,410
	10-May-06		N		---	---	---	---	---	---	---	---	---	---	4,370
	13-May-06		N		193,000	28,300	<5	13,800	1,500,000	176	<5	2,040	<0.5	<2	---
	13-May-06		FD		193,000	28,300	<5	13,700	1,490,000	184	<5	1,970	<0.5	<2	---
	23-May-06		N		---	---	---	---	---	---	---	---	---	<2	---
	30-May-06		N		---	---	---	---	---	---	---	---	---	<2	---
	06-Jun-06		N		184,000	27,100	<5	12,900	1,360,000	172	<5	2,170	<0.5	<2	---
	06-Jun-06		FD		189,000	27,900	<5	13,400	1,410,000	196	<5	2,160	<0.5	<2	---
	19-Jul-06		N		177,000	26,400	<5	12,600	1,370,000	180	<5	1,930	<0.5	<2	4,230
	08-Aug-06		N		182,000	26,400	<5	13,100	1,430,000	193	<5	1,770	<0.5	<2	4,190
	06-Sep-06		N		178,000	26,100	<5	13,200	1,400,000	209	<5	1,860	<0.5	<2	3,970
	04-Oct-06		N		170,000	22,300	<5	12,900	1,470,000	203	<5	1,820	<0.5	<2	3,830
	08-Nov-06		N		226,000	70,100	6.97	16,000	1,040,000	438	<5	1,950	<0.5	<2	3,610
	05-Dec-06		N		149,000	20,900	<5	11,100	1,310,000	143	<5	3,430	<0.5	<2	5,890
	03-Jan-07		N		139,000	20,800	<5	10,600	1,190,000	213	<5	1,630	<0.5	<2	3,510
	07-Feb-07		N		134,000	20,400	<5	10,300	1,090,000	190	<5	1,580	<0.5	<2	3,380
	06-Mar-07		N		131,000	18,400	<5	10,000	1,150,000	228	<5	1,630	<0.5	<2	3,240
	04-Apr-07		N		126,000	19,000	<5	10,100	1,130,000	225	<5	1,470	<0.5	<2	3,450
	02-May-07		N		122,000	18,600	<5	9,560	1,110,000	230	<5	1,530	<0.5	<2	3,270
	06-Jun-07		N		139,000	18,700	<5	10,200	1,230,000	230	<5	1,530	<0.5	<2	3,480
	11-Jul-07		N		128,000	18,000	<5	9,460	1,060,000	255	<5	1,470	<0.5	<2	3,140
	08-Aug-07		N		152,000	21,800	<5	10,700	1,180,000	210	<5	1,460	<0.5	<2	3,320
	06-Sep-07		N		133,000	19,800	<5	9,870	1,120,000	220	<5	1,510	<0.5	<2	3,250
	05-Dec-07		N		---	---	<5	---	---	225	<5	---	---	<2	3,010
	05-Mar-08		N		---	---	<5	---	---	250	<5	---	---	<2	2,940
	04-Jun-08		N		---	---	<5	---	---	228	<5	---	---	<2	3,000
	11-Sep-08		N		---	---	<5	---	---	220	<5	---	---	<2	2,720
03-Dec-08		N		---	---	<5	---	---	238	<5	---	---	<2	2,860	
11-Feb-09		N		---	---	3.26	---	---	238	<1	---	---	<0.05	2,560	
11-Feb-09		FD		---	---	3.28	---	---	238	<1	---	---	<0.05	2,540	

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**Summary of Secondary Analytical Parameters**  
 PG&E Topock  
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Location Name	Sample Date	Notes	Sample Type	Screen Interval (ft bgs)	Dissolved Calcium (µg/L)	Dissolved Magnesium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Potassium (µg/L)	Dissolved Sodium (µg/L)	Alkalinity bicarbonate (mg/L)	Alkalinity carbonate (mg/L)	Chloride-Cl (mg/L)	Ortho phosphate-P (mg/L)	Sulfide (mg/L)	Total Dissolved Solids (mg/L)
PT-3D	18-Mar-06		N	95-105	273,000	19,200	<5	22,900	2,570,000	104	<5	3,920	<0.5	<2	---
	05-Apr-06		N		277,000	18,200	<5	22,200	2,720,000	87.2	<5	3,760	<0.5	<2	8,130
	06-May-06		N		218,000	13,400	<5	19,500	2,300,000	117	<5	3,080	<0.5	<2	6,950
	09-May-06		N		243,000	16,000	<5	21,200	2,620,000	114	<5	3,330	<1	<2	7,500
	10-May-06		N		---	---	---	---	---	---	---	---	---	---	7,070
	13-May-06		N		234,000	16,700	5.06	20,700	2,590,000	112	<5	3,660	<1	<2	---
	23-May-06		N		---	---	---	---	---	---	---	---	---	<2	---
	30-May-06		N		---	---	---	---	---	---	---	---	---	<2	---
	06-Jun-06		N		249,000	17,100	<5	22,000	2,670,000	98.1	<5	3,990	<0.5	<2	---
	17-Jul-06		N		258,000	16,500	5.03	22,200	2,740,000	99.3	<5	2,550	<0.5	<2	7,550
	17-Jul-06		FD		256,000	16,200	<5	22,000	2,690,000	99.3	<5	3,480	<0.5	<2	7,400
	08-Aug-06		N		241,000	16,200	<5	21,500	2,700,000	93.8	<5	3,510	<0.5	<2	7,240
	05-Sep-06		N		236,000	16,800	5.66	22,600	2,890,000	100	<5	3,460	<10	<2	7,290
	04-Oct-06		N		237,000	14,500	5.45	22,400	2,800,000	97.5	<5	3,820	<1	<2	7,580
	08-Nov-06		N		204,000	14,700	8.80	19,800	2,720,000	138	<5	3,910	<5	<2	7,220
	05-Dec-06		N		251,000	14,000	6.05	23,200	3,360,000	67.5	<5	4,110	<1	<2	8,650
	03-Jan-07		N		242,000	16,000	6.82	22,300	2,950,000	70.0	<5	4,200	<0.5	<2	8,040
	07-Feb-07		N		234,000	16,200	6.20	21,200	2,730,000	27.5	<5	4,400	<0.5	<2	7,690
	06-Mar-07		N		244,000	16,000	5.52	21,200	2,800,000	85.0	<5	4,360	<0.5	<2	8,270
	05-Apr-07		N		242,000	16,200	5.79	21,200	2,760,000	87.5	<5	4,060	<0.5	<2	7,940
	02-May-07		N		211,000	15,200	5.72	19,000	2,580,000	87.5	<5	4,180	<0.5	<2	7,540
	06-Jun-07		N		200,000	13,100	8.25	18,900	2,660,000	155	<5	3,420	<0.5	<2	6,920
	06-Jun-07		FD		201,000	13,300	8.22	19,200	2,690,000	160	<5	3,510	<0.5	<2	6,890
	11-Jul-07		N		177,000	12,500	6.46	17,200	2,340,000	110	<5	3,590	<0.5	<2	6,750
	08-Aug-07		N		191,000	13,300	11.2	18,800	2,460,000	188	<5	3,450	<0.5	<2	7,020
	06-Sep-07		N		183,000	14,600	6.43	17,700	2,470,000	118	<5	3,740	<0.5	<2	6,510
	03-Oct-07		N		---	---	5.61	---	---	113	<5	---	---	2.00	6,730
	07-Nov-07		N		---	---	5.46	---	---	92.5	<5	---	---	<2	7,350
	05-Dec-07		N		---	---	6.01	---	---	82.5	<5	---	---	<2	7,830
	05-Mar-08		N		---	---	6.69	---	---	125	<5	---	---	<2	7,550
	04-Jun-08		N		---	---	6.22	---	---	113	<5	---	---	<2	7,360
11-Sep-08		N		---	---	5.76	---	---	110	<5	---	---	<2	7,880	
03-Dec-08		N		---	---	5.43	---	---	95.9	<5	---	---	<2	8,310	
	<b>11-Feb-09</b>		<b>N</b>		---	---	<b>4.03</b>	---	---	<b>115</b>	<b>&lt;1</b>	---	---	<b>&lt;0.05</b>	<b>7,260</b>

**Table 4**  
**Summary of Secondary Analytical Parameters**  
 PG&E Topock  
 Needles, California  
 First Quarter 2009 Monitoring Report for the Floodplain Reactive In-Situ Pilot Test

Location Name	Sample Date	Notes	Sample Type	Screen Interval (ft bgs)	Dissolved Calcium (µg/L)	Dissolved Magnesium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Potassium (µg/L)	Dissolved Sodium (µg/L)	Alkalinity bicarbonate (mg/L)	Alkalinity carbonate (mg/L)	Chloride-Cl (mg/L)	Ortho phosphate-P (mg/L)	Sulfide (mg/L)	Total Dissolved Solids (mg/L)
PT-4S	15-Mar-06		N	35-45	261,000	64,300	6.22	14,100	1,180,000	184	<5	1,800	1.35	<2	---
	06-Apr-06		N		282,000	61,800	6.56	13,400	1,300,000	188	<5	2,020	<0.5	<2	4,470
	09-May-06		N		276,000	61,500	7.84	12,100	1,270,000	197	<5	2,110	<0.5	<2	4,580
	10-May-06		N		---	---	---	---	---	---	---	---	---	---	4,510
	13-May-06		N		267,000	61,100	7.59	12,300	1,300,000	181	<5	2,210	<1	<2	---
	23-May-06		N		---	---	---	---	---	---	---	---	---	<2	---
	30-May-06		N		---	---	---	---	---	---	---	---	---	<2	---
	06-Jun-06		N		263,000	60,200	8.38	12,000	1,200,000	211	<5	2,270	<0.5	<2	---
	19-Jul-06		N		260,000	59,100	8.44	12,300	1,250,000	208	<5	1,970	<0.5	<2	4,600
	08-Aug-06		N		264,000	60,800	9.45	11,900	1,260,000	201	<5	1,960	<0.5	<2	4,240
	06-Sep-06		N		269,000	61,700	8.91	13,100	1,300,000	222	<5	2,080	<0.5	<2	4,260
	06-Sep-06		FD		275,000	63,600	9.67	13,400	1,320,000	207	<5	2,120	<0.5	<2	4,370
	04-Oct-06		N		267,000	55,300	9.38	12,700	1,370,000	220	<5	2,110	<0.5	<2	4,280
	08-Nov-06		N		265,000	60,200	9.64	11,600	1,280,000	215	<5	2,260	<0.5	<2	4,420
	05-Dec-06		N		244,000	53,600	9.43	11,000	1,250,000	238	<5	1,980	<0.5	<2	3,880
	03-Jan-07		N		242,000	53,200	9.19	10,900	1,240,000	230	<5	1,960	<0.5	<2	4,220
	07-Feb-07		N		233,000	53,800	9.12	10,900	1,230,000	225	<5	2,000	<0.5	<2	4,070
	07-Mar-07		N		221,000	45,500	6.88	10,200	1,160,000	118	<5	1,950	<0.5	<2	3,740
	05-Apr-07		N		208,000	44,300	6.94	10,400	1,163,000	245	<5	1,930	<0.5	<2	3,750
	02-May-07		N		189,000	40,800	7.45	9,450	1,130,000	280	<5	1,820	<0.5	<2	3,570
06-Jun-07		N		209,000	38,600	7.29	10,200	1,240,000	265	<5	1,710	<0.5	<2	3,840	
11-Jul-07		N		185,000	37,200	7.48	9,490	1,110,000	245	<5	1,720	<0.5	<2	3,770	
08-Aug-07		N		251,000	51,100	9.75	11,600	1,230,000	265	<5	1,740	<0.5	<2	3,700	
06-Sep-07		N		191,000	41,100	8.17	9,710	1,160,000	253	<5	1,810	<0.5	<2	3,700	

**Table 4**  
**Summary of Secondary Analytical Parameters**  
 PG&E Topock  
 Needles, California  
 First Quarter 2009 Monitoring Report for the Floodplain Reactive In-Situ Pilot Test

Location Name	Sample Date	Notes	Sample Type	Screen Interval (ft bgs)	Dissolved Calcium (µg/L)	Dissolved Magnesium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Potassium (µg/L)	Dissolved Sodium (µg/L)	Alkalinity bicarbonate (mg/L)	Alkalinity carbonate (mg/L)	Chloride-Cl (mg/L)	Ortho phosphate-P (mg/L)	Sulfide (mg/L)	Total Dissolved Solids (mg/L)
PT-4M	15-Mar-06		N	60-70	148,000	25,700	<5	18,700	1,370,000	144	<5	1,800	<0.5	<2	---
	07-Apr-06		N		155,000	28,900	<5	20,400	1,480,000	117	<5	1,800	<0.5	<2	4,190
	09-May-06		N		176,000	27,200	<5	15,400	1,490,000	168	<5	2,020	<0.5	<2	4,250
	10-May-06		N		---	---	---	---	---	---	---	---	---	---	3,870
	13-May-06		N		174,000	25,700	<5	14,000	1,460,000	178	<5	2,010	<0.5	<2	---
	23-May-06		N		---	---	---	---	---	---	---	---	---	<2	---
	30-May-06		N		---	---	---	---	---	---	---	---	---	<2	---
	06-Jun-06		N		176,000	25,900	<5	13,400	1,380,000	184	<5	2,170	<0.5	<2	---
	19-Jul-06		N		170,000	26,700	<5	13,300	1,370,000	188	<5	1,870	<0.5	<2	4,290
	08-Aug-06		N		166,000	25,000	<5	13,200	1,390,000	188	<5	1,830	<0.5	<2	4,100
	06-Sep-06		N		176,000	27,100	<5	14,300	1,440,000	207	<5	1,940	<0.5	<2	3,900
	04-Oct-06		N		162,000	22,700	<5	13,600	1,400,000	210	<5	1,800	<0.5	<2	3,980
	08-Nov-06		N		137,000	21,300	<5	10,800	1,280,000	215	<5	1,660	<0.5	<2	3,700
	05-Dec-06		N		133,000	19,300	<5	11,200	1,210,000	233	<5	1,560	<0.5	<2	9,360
	03-Jan-07		N		123,000	18,500	<5	10,600	1,130,000	240	<5	1,530	<0.5	<2	3,490
	07-Feb-07		N		119,000	19,700	<5	10,400	1,080,000	230	<5	1,480	<0.5	<2	3,310
	07-Mar-07		N		114,000	17,000	<5	9,590	1,050,000	250	<5	1,440	<0.5	<2	3,060
	04-Apr-07		N		105,000	16,800	<5	9,620	1,060,000	238	<5	1,330	<0.5	<2	3,010
	02-May-07		N		101,000	16,600	<5	9,010	1,020,000	230	<5	1,380	<0.5	<2	2,940
	06-Jun-07		N		116,000	16,200	<5	10,200	1,170,000	230	<5	1,340	<0.5	2.00	3,170
	11-Jul-07		N		308,000	17,800	5.05	23,200	3,090,000	80.0	<5	4,660	<0.5	<2	9,030
	08-Aug-07		N		137,000	20,300	<5	10,700	1,120,000	223	<5	1,430	<0.5	<2	3,150
	06-Sep-07		N		114,000	17,400	<5	9,520	1,070,000	225	<5	1,400	<0.5	<2	2,950
	04-Dec-07		N		---	---	<5	---	---	250	<5	---	---	<2	2,690
	05-Mar-08		N		---	---	<5	---	---	315	<5	---	---	<2	2,560
	04-Jun-08		N		---	---	<5	---	---	228	<5	---	---	<2	2,690
	11-Sep-08		N		---	---	<5	---	---	235	<5	---	---	<2	2,630
	03-Dec-08		N		---	---	<5	---	---	254	<5	---	---	<2	2,460
	<b>11-Feb-09</b>		<b>N</b>		---	---	<b>4.23</b>	---	---	<b>262</b>	<b>&lt;1</b>	---	---	<b>&lt;0.05</b>	<b>2,170</b>

**Table 4**  
**Summary of Secondary Analytical Parameters**  
 PG&E Topock  
 Needles, California  
 First Quarter 2009 Monitoring Report for the Floodplain Reactive In-Situ Pilot Test

Location Name	Sample Date	Notes	Sample Type	Screen Interval (ft bgs)	Dissolved Calcium (µg/L)	Dissolved Magnesium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Potassium (µg/L)	Dissolved Sodium (µg/L)	Alkalinity bicarbonate (mg/L)	Alkalinity carbonate (mg/L)	Chloride-Cl (mg/L)	Ortho phosphate-P (mg/L)	Sulfide (mg/L)	Total Dissolved Solids (mg/L)
PT-4D	15-Mar-06		N	95-105	334,000	20,700	5.13	24,800	3,150,000	79.4	<5	4,350	<0.5	<2	---
	05-Apr-06		N		339,000	21,100	<5	24,000	3,060,000	68.1	<5	4,450	<0.5	<2	9,150
	09-May-06		N		339,000	21,100	5.36	24,300	3,200,000	69.2	<5	4,500	<2.5	<2	9,040
	10-May-06		N		---	---	---	---	---	---	---	---	---	---	9,290
	13-May-06		N		339,000	21,000	5.19	24,500	3,200,000	69.2	<5	4,380	<1	<2	---
	23-May-06		N		---	---	---	---	---	---	---	---	---	<2	---
	23-May-06		FD		---	---	---	---	---	---	---	---	---	<2	---
	30-May-06		N		---	---	---	---	---	---	---	---	---	<2	---
	06-Jun-06		N		325,000	20,200	5.27	24,200	2,970,000	66.2	<5	4,850	<0.5	<2	---
	19-Jul-06		N		341,000	20,800	5.44	25,800	3,230,000	71	<5	4,000	<0.5	<2	8,770
	08-Aug-06		N		340,000	20,500	5.07	24,000	3,560,000	67	<5	4,230	<0.5	<2	9,060
	06-Sep-06		N		336,000	19,600	5.41	25,600	3,130,000	63.8	<5	4,610	<0.5	<2	8,710
	04-Oct-06		N		341,000	16,800	5.29	26,300	3,270,000	62.5	<5	4,630	<2.5	<2	8,770
	04-Oct-06		FD		353,000	17,500	5.66	26,900	3,560,000	65.0	<5	4,560	<2.5	<2	8,680
	08-Nov-06		N		311,000	18,700	5.44	24,100	3,080,000	57.5	<5	4,630	<2.5	<2	8,900
	05-Dec-06		N		299,000	16,600	5.33	24,700	3,560,000	50.0	<5	4,910	<2.5	<2	3,340
	03-Jan-07		N		340,000	17,800	5.91	24,800	3,380,000	52.5	<5	4,820	<2.5	<2	9,030
	07-Feb-07		N		328,000	19,200	5.48	24,400	3,230,000	55.0	<5	4,850	<0.5	<2	9,070
	07-Mar-07		N		342,000	19,700	<5	24,900	3,230,000	75.0	<5	5,130	<0.5	<2	8,990
	05-Apr-07		N		351,000	20,300	<5	25,100	3,322,000	62.5	<5	4,920	<0.5	<2	9,120
	02-May-07		N		309,000	21,100	<5	23,300	3,160,000	72.5	<5	4,970	<0.5	<2	9,090
	06-Jun-07		N		373,000	20,500	<5	26,100	3,640,000	62.5	<5	4,850	<0.5	<2	9,220
	11-Jul-07		N		310,000	18,000	5.05	23,100	3,070,000	70.0	<5	4,910	<0.5	<2	9,110
	08-Aug-07		N		395,000	22,100	5.56	27,300	3,350,000	60.0	<5	5,210	<0.5	<2	9,650
	06-Sep-07		N		327,000	20,300	5.17	24,500	3,220,000	60.0	<5	5,140	<0.5	<2	9,140
	03-Oct-07		N		---	---	<5	---	---	57.5	<5	---	---	<2	9,550
	07-Nov-07		N		---	---	5.17	---	---	62.5	<5	---	---	<2	9,870
	05-Dec-07		N		---	---	5.47	---	---	67.5	<5	---	---	<2	9,040
	05-Dec-07		FD		---	---	5.78	---	---	65.0	<5	---	---	<2	9,700
	05-Mar-08		N		---	---	6.23	---	---	105	<5	---	---	<2	10,400
	05-Mar-08		FD		---	---	5.77	---	---	85	<5	---	---	<2	9,920
	04-Jun-08		N		---	---	<5	---	---	90.0	<5	---	---	<2	10,300
11-Sep-08		N		---	---	<25	---	---	85.0	<5	---	---	<2	10,300	
03-Dec-08		N		---	---	<5	---	---	82.4	<5	---	---	<2	10,700	
	<b>12-Feb-09</b>		<b>N</b>		---	---	<b>0.58</b>	---	---	<b>98.0</b>	<b>&lt;1</b>	---	---	<b>&lt;0.05</b>	<b>10,300</b>

**Table 4**  
**Summary of Secondary Analytical Parameters**  
 PG&E Topock  
 Needles, California  
 First Quarter 2009 Monitoring Report for the Floodplain Reactive In-Situ Pilot Test

Location Name	Sample Date	Notes	Sample Type	Screen Interval (ft bgs)	Dissolved Calcium (µg/L)	Dissolved Magnesium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Potassium (µg/L)	Dissolved Sodium (µg/L)	Alkalinity bicarbonate (mg/L)	Alkalinity carbonate (mg/L)	Chloride-Cl (mg/L)	Ortho phosphate-P (mg/L)	Sulfide (mg/L)	Total Dissolved Solids (mg/L)
PT-5S	16-Mar-06		N	35-45	315,000	72,300	8.86	14,200	1,320,000	279	<5	2,050	<0.5	<2	---
	07-Apr-06		N		323,000	65,700	9.36	13,800	1,460,000	237	<5	2,170	<0.5	<2	5,080
	01-Jun-06		N		---	---	---	---	---	---	---	---	---	<2	---
	19-Jul-06		N		386,000	84,300	12.7	13,800	1,450,000	375	<5	2,580	<0.5	<2	5,460
	09-Aug-06		N		399,000	87,500	13.4	14,100	1,470,000	393	<5	2,670	<0.5	<2	5,490
	08-Sep-06		N		427,000	99,100	14.3	15,600	1,540,000	421	<5	2,610	<0.5	<2	5,090
	05-Oct-06		N		417,000	87,100	14.5	14,500	1,580,000	398	<5	2,880	<0.5	<2	5,380
	09-Nov-06		N		392,000	85,100	15.3	13,300	1,440,000	395	<5	2,760	<0.5	<2	5,680
	06-Dec-06		N		413,000	100,000	15.7	13,500	1,540,000	425	<5	2,700	<0.5	<2	5,480
	06-Dec-06		FD		432,000	104,000	15.8	14,100	1,590,000	443	<5	2,720	<0.5	<2	5,510
	04-Jan-07		N		430,000	111,000	17.1	14,900	1,540,000	433	<5	2,840	<0.5	<2	5,500
	08-Feb-07		N		427,000	98,300	15.4	14,400	1,500,000	405	<5	2,760	<0.5	<2	5,340
	08-Mar-07		N		397,000	85,900	15.3	13,400	1,500,000	418	<5	2,930	<0.5	<2	5,490
	06-Apr-07		N		423,000	86,800	15.1	14,500	1,540,000	410	<5	2,740	<0.5	<2	5,150
	03-May-07		N		385,000	88,900	14.6	13,700	1,520,000	408	<5	2,760	<0.5	<2	5,690
	07-Jun-07		N		428,000	89,700	16	14,200	1,660,000	385	<5	2,800	<0.5	<2	5,410
	12-Jul-07		N		393,000	90,100	16.7	14,100	1,570,000	398	<5	2,730	<0.5	<2	5,620
	09-Aug-07		N		424,000	90,900	18.8	14,400	1,670,000	370	<5	2,870	<0.5	<2	5,620
	07-Sep-07		N		400,000	91,600	18.1	14,300	1,730,000	353	<5	3,010	<0.5	<2	5,640
PT-5M	16-Mar-06		N	60-70	196,000	33,000	<5	11,000	1,220,000	237	<5	1,740	<0.5	<2	---
	07-Apr-06		N		332,000	72,200	11.1	14,500	1,420,000	270	<5	2,210	<0.5	<2	5,050
	01-Jun-06		N		---	---	---	---	---	---	---	---	---	<2	---
	19-Jul-06		N		132,000	21,900	<5	9,330	1,030,000	276	<5	1,290	<0.5	<2	2,940
	09-Aug-06		N		109,000	18,800	<5	8,700	905,000	266	<5	1,150	<0.5	<2	2,830
	08-Sep-06		N		119,000	20,800	<5	9,720	995,000	311	<5	1,180	<0.5	<2	2,780
	05-Oct-06		N		110,000	17,700	<5	9,030	9,590,000	265	<5	1,100	<0.5	<2	2,660
	09-Nov-06		N		99,900	16,600	<5	8,170	870,000	255	<5	1,090	<0.5	<2	2,620
	06-Dec-06		N		122,000	20,700	<0.5	8,370	947,000	270	<5	1,160	<0.5	<2	2,660
	04-Jan-07		N		143,000	24,400	<5	9,230	980,000	230	<5	1,270	<0.5	<2	3,080
	08-Feb-07		N		148,000	25,100	<5	9,790	997,000	255	<5	1,430	<0.5	<2	3,210
	07-Mar-07		N		157,000	25,600	<5	9,400	981,000	200	<5	1,500	<0.5	<2	3,150
	06-Apr-07		N		155,000	25,900	<5	10,200	1,050,000	245	<5	1,410	<0.5	<2	3,240
	03-May-07		N		151,000	25,500	<5	9,110	958,000	248	<5	1,300	<0.5	<2	2,990
	07-Jun-07		N		113,000	18,200	<5	7,600	836,000	263	<5	1,000	<0.5	2.00	2,510
	12-Jul-07		N		94,700	15,800	<5	7,080	773,000	275	<5	867	<0.5	<2	2,230
	09-Aug-07		N		86,800	14,200	<5	6,740	739,000	265	<5	867	<0.5	<2	2,120
	07-Sep-07		N		87,800	15,300	<5	6,920	769,000	235	<5	864	<0.5	<2	2,140
	05-Dec-07		N		---	---	<5	---	---	263	<5	---	---	<2	2,270
	06-Mar-08		N		---	---	<5	---	---	258	<5	---	---	<2	2,630
05-Jun-08		N	---	---	<5	---	---	283	<5	---	---	<2	2,400		
11-Sep-08		N	---	---	<5	---	---	250	<5	---	---	<2	1,820		
03-Dec-08		N	---	---	<5	---	---	250	<5	---	---	<2	1,830		
	<b>12-Feb-09</b>		<b>N</b>		---	---	<b>1.9</b>	---	---	<b>220</b>	<b>&lt;1</b>	---	---	<b>&lt;0.05</b>	<b>1,840</b>

**Table 4**  
**Summary of Secondary Analytical Parameters**  
 PG&E Topock  
 Needles, California  
 First Quarter 2009 Monitoring Report for the Floodplain Reactive In-Situ Pilot Test

Location Name	Sample Date	Notes	Sample Type	Screen Interval (ft bgs)	Dissolved Calcium (µg/L)	Dissolved Magnesium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Potassium (µg/L)	Dissolved Sodium (µg/L)	Alkalinity bicarbonate (mg/L)	Alkalinity carbonate (mg/L)	Chloride-Cl (mg/L)	Ortho phosphate-P (mg/L)	Sulfide (mg/L)	Total Dissolved Solids (mg/L)
PT-5D	16-Mar-06		N	95-105	317,000	21,000	<5	24,500	3,150,000	62.3	<5	4,460	<0.5	<2	---
	07-Apr-06		N		337,000	73,200	11.5	14,500	1,400,000	289	<5	2,190	<0.5	<2	5,030
	12-May-06		N		298,000	20,900	<5	24,400	3,300,000	93.2	<5	4,160	<0.5	<2	---
	01-Jun-06		N		---	---	---	---	---	---	---	---	---	<2	---
	17-Jul-06		N		283,000	17,900	<5	23,100	2,980,000	96.7	<5	4,030	<0.5	<2	8,150
	09-Aug-06		N		249,000	17,600	<5	22,100	2,690,000	82.7	<5	3,880	<1	<2	8,230
	08-Sep-06		N		275,000	18,600	<5	24,700	3,110,000	68.6	<5	4,300	<1	<2	8,580
	05-Oct-06		N		277,000	17,300	<5	24,000	3,040,000	87.5	<5	4,570	<1	<2	8,250
	09-Nov-06		N		262,000	16,600	5.46	22,700	2,970,000	70.0	<5	4,320	<2.5	<2	8,600
	06-Dec-06		N		296,000	15,700	<5	22,300	3,300,000	67.5	<5	4,500	<0.5	<2	8,480
	04-Jan-07		N		324,000	20,700	5.14	24,300	3,400,000	75.0	<5	4,890	<1	<2	9,030
	08-Feb-07		N		319,000	17,700	<5	24,800	309,000	82.5	<5	4,740	<0.5	<2	8,710
	08-Mar-07		N		344,000	21,600	<5	24,700	3,230,000	110	<5	4,810	<0.5	<2	8,650
	05-Apr-07		N		333,000	20,600	<5	23,900	3,190,000	97.5	<5	4,540	<0.5	<2	8,100
	03-May-07		N		307,000	21,700	<5	23,500	3,000,000	103	<5	4,170	<0.5	<2	8,680
	07-Jun-07		N		290,000	19,800	<5	23,700	2,960,000	92.5	<5	4,560	<0.5	<2	8,420
	12-Jul-07		N		268,000	17,500	<5	21,900	2,860,000	90.0	<5	4,320	<0.5	<2	8,090
	09-Aug-07		N		279,000	17,300	<5	22,600	308,000	80.0	<5	4,790	<0.5	<2	8,880
	07-Sep-07		N		288,000	17,700	<5	22,500	3,150,000	82.5	<5	4,450	<0.5	<2	8,630
	03-Oct-07		N		---	---	<5	---	---	82.5	<5	---	---	<2	8,710
	07-Nov-07		N		---	---	<5	---	---	77.5	<5	---	---	<2	8,930
	05-Dec-07		N		---	---	<5	---	---	77.5	<5	---	---	<2	9,160
	06-Mar-08		N		---	---	<5	---	---	125	<5	---	---	<2	9,060
05-Jun-08		N		---	---	<5	---	---	140	<5	---	---	<2	8,500	
11-Sep-08		N		---	---	<5	---	---	108	<5	---	---	<2	9,010	
03-Dec-08		N		---	---	<5	---	---	87.7	<5	---	---	<2	10,100	
	<b>12-Feb-09</b>		<b>N</b>		---	---	<b>2.62</b>	---	---	<b>106</b>	<b>&lt;1</b>	---	---	<b>&lt;0.05</b>	<b>9,240</b>

**Table 4**  
**Summary of Secondary Analytical Parameters**  
 PG&E Topock  
 Needles, California  
 First Quarter 2009 Monitoring Report for the Floodplain Reactive In-Situ Pilot Test

Location Name	Sample Date	Notes	Sample Type	Screen Interval (ft bgs)	Dissolved Calcium (µg/L)	Dissolved Magnesium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Potassium (µg/L)	Dissolved Sodium (µg/L)	Alkalinity bicarbonate (mg/L)	Alkalinity carbonate (mg/L)	Chloride-Cl (mg/L)	Ortho phosphate-P (mg/L)	Sulfide (mg/L)	Total Dissolved Solids (mg/L)
PT-6S	18-Mar-06		N	35-45	269,000	157,000	12.6	21,400	1,490,000	501	<5	2,870	<0.5	<2	---
	04-Apr-06		N		296,000	153,000	15.2	20,300	1,540,000	451	<5	2,900	<0.5	<2	5,940
	13-May-06		N		297,000	147,000	25.5	16,600	1,500,000	538	<5	2,740	<1	<2	---
	22-May-06		N		---	---	---	---	---	---	---	---	---	<2	---
	01-Jun-06		N		---	---	---	---	---	---	---	---	---	<2	---
	06-Jun-06		N		310,400	148,000	29.9	16,400	1,360,000	505	<5	2,820	<2.5	<2	---
	19-Jul-06		N		311,000	148,000	30.9	16,700	1,380,000	507	<5	2,520	<0.5	<2	5,480
	09-Aug-06		N		318,000	165,000	27.6	17,400	1,440,000	474	<5	2,680	<0.5	<2	5,500
	08-Sep-06		N		323,000	156,000	25.5	18,000	1,600,000	573	<5	2,940	<1	<2	5,560
	05-Oct-06		N		322,000	147,000	33.9	16,500	1,550,000	550	<5	2,890	<2.5	<2	5,170
	09-Nov-06		N		337,000	170,000	34.0	16,700	1,620,000	565	<5	3,200	<0.5	2.00	6,200
	06-Dec-06		N		372,000	214,000	37.0	16,900	1,840,000	575	<5	<.5	<0.5	<2	6,330
	04-Jan-07		N		382,000	206,000	39.6	17,900	1,900,000	575	<5	3,720	<1	<2	6,920
	08-Feb-07		N		353,000	192,000	36.1	17,300	1,700,000	585	<5	3,700	<0.5	<2	7,090
	08-Mar-07		N		324,000	159,000	37.1	15,800	1,560,000	485	<5	3,040	<0.5	<2	5,510
	06-Apr-07		N		279,000	118,000	29.2	14,100	1,280,000	500	<5	2,490	<0.5	<2	4,560
	03-May-07		N		282,000	137,000	39.2	14,400	1,310,000	560	<5	2,570	<0.5	<2	4,540
07-Jun-07		N		285,000	138,000	42.4	14,500	1,370,000	550	<5	2,550	<0.5	<2	4,540	
12-Jul-07		N		294,000	139,000	46.5	14,500	1,330,000	515	<5	2,620	<0.5	<2	4,750	
09-Aug-07		N		328,000	151,000	38.2	16,100	1,510,000	560	<5	2,880	<0.5	<2	4,770	
07-Sep-07		N		320,000	150,000	49.4	15,400	1,540,000	710	<5	2,930	<1	3.20	5,000	

**Table 4**  
**Summary of Secondary Analytical Parameters**  
 PG&E Topock  
 Needles, California  
 First Quarter 2009 Monitoring Report for the Floodplain Reactive In-Situ Pilot Test

Location Name	Sample Date	Notes	Sample Type	Screen Interval (ft bgs)	Dissolved Calcium (µg/L)	Dissolved Magnesium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Potassium (µg/L)	Dissolved Sodium (µg/L)	Alkalinity bicarbonate (mg/L)	Alkalinity carbonate (mg/L)	Chloride-Cl (mg/L)	Ortho phosphate-P (mg/L)	Sulfide (mg/L)	Total Dissolved Solids (mg/L)
PT-6M	16-Mar-06		N	60-70	230,000	39,700	<5	11,800	1,300,000	227	<5	1,840	<0.5	<2	---
	04-Apr-06		N		238,000	43,400	<5	12,800	1,392,000	227	<5	1,980	<0.5	<2	4,340
	13-May-06		N		224,000	39,100	<5	12,300	1,390,000	210	<5	2,030	<0.5	<2	---
	23-May-06		N		---	---	---	---	---	---	---	---	---	<2	---
	01-Jun-06		N		---	---	---	---	---	---	---	---	---	<2	---
	06-Jun-06		N		228,000	38,700	<5	12,400	1,300,000	226	<5	2,080	<0.5	<2	---
	19-Jul-06		N		212,000	36,800	<5	12,300	1,290,000	241	<5	1,730	<0.5	<2	4,020
	09-Aug-06		N		188,000	35,300	<5	11,800	1,190,000	237	<5	1,660	<0.5	<2	3,940
	08-Sep-06		N		192,000	36,400	<5	12,300	1,230,000	264	<5	1,670	<0.5	<2	3,630
	05-Oct-06		N		186,000	31,000	<5	11,200	1,210,000	243	<5	1,660	<0.5	<2	3,780
	09-Nov-06		N		173,000	31,300	<5	10,800	1,090,000	248	<5	1,610	<0.5	<2	3,620
	06-Dec-06		N		192,000	35,700	<5.0	10,600	1,190,000	240	<5	1,610	<0.5	<2	3,510
	04-Jan-07		N		189,000	35,200	<5	10,800	1,140,000	250	<5	1,630	<0.5	<2	3,650
	08-Feb-07		N		180,000	33,200	<5	10,900	1,100,000	235	<5	1,700	<0.5	<2	3,530
	07-Mar-07		N		185,000	31,400	<5	10,500	1,100,000	238	<5	1,740	<0.5	<2	3,450
	06-Apr-07		N		206,000	34,000	<5	11,500	1,180,000	240	<5	1,650	<0.5	<2	3,440
	03-May-07		N		198,000	35,800	<5	11,000	1,120,000	238	<5	1,720	<0.5	<2	3,740
	07-Jun-07		N		198,000	35,200	<5	10,900	1,190,000	255	<5	1,670	<0.5	<2	3,520
	12-Jul-07		N		173,000	30,900	<5	9,960	1,050,000	265	<5	1,520	<0.5	<2	3,580
	09-Aug-07		N		191,000	32,600	<5	10,600	1,150,000	245	<5	1,660	<0.5	<2	3,320
	07-Sep-07		N		184,000	33,500	<5	10,500	1,140,000	248	<5	1,550	<0.5	<2	3,320
	05-Dec-07		N		---	---	<5	---	---	260	<5	---	---	<2	3,390
	06-Mar-08		N		---	---	<5	---	---	295	<5	---	---	<2	3,480
05-Jun-08		N		---	---	<5	---	---	275	<5	---	---	<2	3,360	
11-Sep-08		N		---	---	<5	---	---	265	<5	---	---	<2	3,160	
04-Dec-08		N		---	---	<5	---	---	281	<5	---	---	<2	2,940	
	<b>12-Feb-09</b>		<b>N</b>		---	---	<b>2.89</b>	---	---	<b>256</b>	<b>&lt;1</b>	---	---	<b>&lt;0.05</b>	<b>2,940</b>

**Table 4**  
**Summary of Secondary Analytical Parameters**  
 PG&E Topock  
 Needles, California  
 First Quarter 2009 Monitoring Report for the Floodplain Reactive In-Situ Pilot Test

Location Name	Sample Date	Notes	Sample Type	Screen Interval (ft bgs)	Dissolved Calcium (µg/L)	Dissolved Magnesium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Potassium (µg/L)	Dissolved Sodium (µg/L)	Alkalinity bicarbonate (mg/L)	Alkalinity carbonate (mg/L)	Chloride-Cl (mg/L)	Ortho phosphate-P (mg/L)	Sulfide (mg/L)	Total Dissolved Solids (mg/L)
PT-6D	16-Mar-06		N	95-105	245,000	16,200	<5	19,900	2,600,000	102	<5	3,630	<0.5	<2	---
	04-Apr-06		N		239,000	17,500	<5	19,800	2,620,000	97.3	<5	3,420	<0.5	<2	7,140
	13-May-06		N		216,000	14,900	<5	19,100	2,590,000	104	<5	3,310	<1	<2	---
	22-May-06		N		---	---	---	---	---	---	---	---	---	<2	---
	01-Jun-06		N		---	---	---	---	---	---	---	---	---	<2	---
	06-Jun-06		N		187,000	13,200	<5	17,300	2,210,000	118	<5	3,380	<0.5	<2	---
	17-Jul-06		N		188,000	12,100	<5	17,000	2,220,000	120	<5	2,790	<0.5	<2	6,210
	09-Aug-06		N		184,000	13,300	<5	18,200	2,240,000	116	<5	3,050	<0.5	<2	6,480
	08-Sep-06		N		234,000	16,500	<5	21,000	2,580,000	90.6	<5	3,600	<0.5	<2	7,040
	05-Oct-06		N		199,000	12,400	<5	19,300	2,470,000	110	<5	3,350	<0.5	<2	6,330
	09-Nov-06		N		189,000	12,400	<5	18,100	2,250,000	110	<5	3,260	<0.5	<2	6,470
	09-Nov-06		FD		190,000	12,400	<5	18,100	2,290,000	108	<5	3,480	<0.5	<2	6,650
	06-Dec-06		N		208,000	13,800	<5.0	17,300	2,410,000	108	<5	3,570	<0.5	<2	6,620
	04-Jan-07		N		245,000	22,000	<5	19,700	2,580,000	108	<5	3,590	<0.5	<2	7,170
	08-Feb-07		N		203,000	11,700	<5	18,900	2,370,000	105	<5	3,540	<0.5	<2	6,630
	08-Mar-07		N		200,000	16,600	<5	17,600	2,310,000	110	<5	3,400	<0.5	<2	6,220
	05-Apr-07		N		189,000	12,400	<5	18,000	2,340,000	123	<5	3,260	<0.5	<2	5,960
	03-May-07		N		162,000	11,000	<5	16,000	2,120,000	135	<5	2,930	<0.5	<2	5,930
	07-Jun-07		N		181,000	12,000	<5	17,600	2,360,000	125	<5	3,100	<0.5	<2	6,080
	12-Jul-07		N		152,000	10,000	<5	15,500	2,090,000	165	<5	2,980	<0.5	<2	6,020
	09-Aug-07		N		169,000	10,700	<5	17,000	2,350,000	120	<5	3,250	<0.5	<2	6,100
	07-Sep-07		N		171,000	10,700	<5	16,800	2,360,000	130	<5	3,300	<0.5	<2	6,370
	03-Oct-07		N		---	---	<5	---	---	143	<5	---	---	<2	5,910
	03-Oct-07		FD		---	---	<5	---	---	125	<5	---	---	<2	6,430
	07-Nov-07		N		---	---	<5	---	---	123	<5	---	---	<2	6,480
	05-Dec-07		N		---	---	<5	---	---	125	<5	---	---	<2	6,260
06-Mar-08		N		---	---	<5	---	---	160	<5	---	---	<2	6,050	
05-Jun-08		N		---	---	<5	---	---	195	<5	---	---	<2	5,760	
11-Sep-08		N		---	---	<5	---	---	170	<5	---	---	<2	5,980	
04-Dec-08		N		---	---	<5	---	---	120	<5	---	---	<2	6,620	
12-Feb-09		N		---	---	3.12	---	---	162	<1	---	---	<0.05	5,780	

**Table 4**  
**Summary of Secondary Analytical Parameters**  
 PG&E Topock  
 Needles, California  
 First Quarter 2009 Monitoring Report for the Floodplain Reactive In-Situ Pilot Test

Location Name	Sample Date	Notes	Sample Type	Screen Interval (ft bgs)	Dissolved Calcium (µg/L)	Dissolved Magnesium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Potassium (µg/L)	Dissolved Sodium (µg/L)	Alkalinity bicarbonate (mg/L)	Alkalinity carbonate (mg/L)	Chloride-Cl (mg/L)	Ortho phosphate-P (mg/L)	Sulfide (mg/L)	Total Dissolved Solids (mg/L)
PTI-1S	15-Mar-06		N	35-45	266,000	88,200	13.2	11,600	980,000	375	<5	1,730	<0.5	<2	---
	05-Apr-06		N		266,000	88,200	7.18	11,200	996,000	357	<5	1,760	<0.5	<2	3,810
	06-May-06		N		155,000	14,100	<5	30,900	992,000	602	<5	798	<2.5	<2	3,930
	10-May-06		N		---	---	---	---	z	---	---	---	---	---	3,040
	18-Jul-06		N		---	---	---	---	---	---	---	---	---	---	3,770
	07-Aug-06		N		---	---	---	---	---	---	---	---	---	---	4,080
	07-Sep-06		N		---	---	---	---	---	---	---	---	---	---	3,940
	03-Oct-06		N		---	---	---	---	---	---	---	---	---	---	3,830
	07-Nov-06		N		---	---	---	---	---	---	---	---	---	---	4,120
	05-Dec-06		N		---	---	---	---	---	500	<5	2,050	<0.5	---	3,890
	02-Jan-07		N		---	---	---	---	---	---	---	---	---	---	3,740
	06-Feb-07		N		---	---	---	---	---	---	---	---	---	---	3,890
	06-Mar-07		N		---	---	---	---	---	---	---	---	<0.5	---	3,870
	04-Apr-07		N		---	---	---	---	---	---	---	---	---	---	3,590
	01-May-07		N		---	---	---	---	---	---	---	---	---	---	3,860
	05-Jun-07		N		---	---	---	---	---	---	---	---	---	---	3,740
	10-Jul-07		N		---	---	---	---	---	---	---	---	---	---	3,610
07-Aug-07		N		---	---	---	---	---	---	---	---	---	---	3,910	
05-Sep-07		N		---	---	---	---	---	---	---	---	---	---	3,590	
PTI-1M	15-Mar-06		N	60-70	223,000	33,200	<5	12,200	1,360,000	179	<5	1,910	<0.5	<2	---
	04-Apr-06		N		226,000	37,700	<5	12,800	1,480,000	180	<5	2,050	<0.5	<2	4,450
	06-May-06		N		130,000	17,700	26.5	20,400	1,320,000	383	<5	1,080	<0.5	<2	4,450
	10-May-06		N		---	---	---	---	---	---	---	---	---	---	4,480
	18-Jul-06		N		---	---	---	---	---	---	---	---	---	---	4,160
	07-Aug-06		N		---	---	---	---	---	---	---	---	---	---	4,190
	07-Sep-06		N		---	---	---	---	---	---	---	---	---	---	3,980
	03-Oct-06		N		---	---	---	---	---	---	---	---	---	---	3,860
	07-Nov-06		N		---	---	---	---	---	---	---	---	---	---	3,670
	05-Dec-06		N		---	---	---	---	---	225	<5	1,670	<0.5	---	3,650
	02-Jan-07		N		---	---	---	---	---	---	---	---	---	---	3,490
	06-Feb-07		N		---	---	---	---	---	---	---	---	---	---	3,300
	06-Mar-07		N		---	---	---	---	---	---	---	---	<0.5	---	3,250
	04-Apr-07		N		---	---	---	---	---	---	---	---	---	---	3,240
	01-May-07		N		---	---	---	---	---	---	---	---	---	---	3,320
	05-Jun-07		N		---	---	---	---	---	---	---	---	---	---	3,420
	10-Jul-07		N		---	---	---	---	---	---	---	---	---	---	3,330
	07-Aug-07		N		---	---	---	---	---	---	---	---	---	---	3,240
	05-Sep-07		N		---	---	---	---	---	---	---	---	---	---	3,200
	04-Dec-07		N		---	---	---	---	---	---	---	---	---	---	3,140
04-Mar-08		N		---	---	---	---	---	---	---	---	---	---	2,850	
03-Jun-08		N		---	---	---	---	---	---	---	---	---	---	2,710	
10-Sep-08		N		---	---	---	---	---	---	---	---	---	---	3,040	
02-Dec-08		N		---	---	---	---	---	---	---	---	---	---	3,030	
11-Feb-09		N		---	---	---	---	---	---	---	---	---	---	2,670	

**Table 4**  
**Summary of Secondary Analytical Parameters**  
 PG&E Topock  
 Needles, California  
 First Quarter 2009 Monitoring Report for the Floodplain Reactive In-Situ Pilot Test

Location Name	Sample Date	Notes	Sample Type	Screen Interval (ft bgs)	Dissolved Calcium (µg/L)	Dissolved Magnesium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Potassium (µg/L)	Dissolved Sodium (µg/L)	Alkalinity bicarbonate (mg/L)	Alkalinity carbonate (mg/L)	Chloride-Cl (mg/L)	Ortho phosphate-P (mg/L)	Sulfide (mg/L)	Total Dissolved Solids (mg/L)
PTI-1D	15-Mar-06		N	95-105	289,000	21,500	<5	23,600	2,470,000	134	<5	3,420	<0.5	<2	---
	03-Apr-06		N		267,000	18,000	<5	21,700	2,600,000	99.7	<5	3,620	<0.5	<2	8,080
	10-May-06		N		---	---	---	---	---	---	---	---	---	---	7,530
	18-Jul-06		N		---	---	---	---	---	---	---	---	---	---	6,730
	07-Aug-06		N		---	---	---	---	---	---	---	---	---	---	7,300
	05-Sep-06		N		---	---	---	---	---	---	---	---	---	---	6,790
	03-Oct-06		N		---	---	---	---	---	---	---	---	---	---	7,310
	07-Nov-06		N		---	---	---	---	---	---	---	---	---	---	4,840
	05-Dec-06		N		---	---	---	---	---	72.5	<5	4,580	<0.5	---	8,710
	02-Jan-07		N		---	---	---	---	---	---	---	---	---	---	7,200
	06-Feb-07		N		---	---	---	---	---	---	---	---	---	---	7,370
	06-Mar-07		N		---	---	---	---	---	---	---	---	<0.5	---	7,170
	04-Apr-07		N		---	---	---	---	---	---	---	---	---	---	6,960
	01-May-07		N		---	---	---	---	---	---	---	---	---	---	6,830
	05-Jun-07		N		---	---	---	---	---	---	---	---	---	---	5,870
	10-Jul-07		N		---	---	---	---	---	---	---	---	---	---	6,190
	07-Aug-07		N		---	---	---	---	---	---	---	---	---	---	5,030
	05-Sep-07		N		---	---	---	---	---	---	---	---	---	---	5,620
	02-Oct-07		N		---	---	---	---	---	---	---	---	---	---	5,920
	06-Nov-07		N		---	---	---	---	---	---	---	---	---	---	6,660
	04-Dec-07		N		---	---	---	---	---	---	---	---	---	---	6,470
	04-Mar-08		N		---	---	---	---	---	---	---	---	---	---	6,890
	03-Jun-08		N		---	---	---	---	---	---	---	---	---	---	5,790
10-Sep-08		N		---	---	---	---	---	---	---	---	---	---	6,690	
02-Dec-08		N		---	---	---	---	---	---	---	---	---	---	6,900	
<b>11-Feb-09</b>			<b>N</b>		---	---	---	---	---	---	---	---	---	---	<b>6,720</b>

**Table 4**  
**Summary of Secondary Analytical Parameters**  
 PG&E Topock  
 Needles, California  
 First Quarter 2009 Monitoring Report for the Floodplain Reactive In-Situ Pilot Test

Location Name	Sample Date	Notes	Sample Type	Screen Interval (ft bgs)	Dissolved Calcium (µg/L)	Dissolved Magnesium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Potassium (µg/L)	Dissolved Sodium (µg/L)	Alkalinity bicarbonate (mg/L)	Alkalinity carbonate (mg/L)	Chloride-Cl (mg/L)	Ortho phosphate-P (mg/L)	Sulfide (mg/L)	Total Dissolved Solids (mg/L)
PE-1	17-Mar-06		N	79 - 89	261,000	37,400	<5	19,700	2,200,000	277	<5	2,990	<0.5	<2	---
	05-Apr-06		N		263,000	36,400	<5	19,600	2,090,000	256	<5	3,110	<0.5	<2	6,580
	01-Jun-06		N		---	---	---	---	---	---	---	---	---	<2	---
	17-Jul-06		N		252,000	35,200	<5	18,300	2,020,000	267	<5	2,710	<0.5	<2	5,910
	07-Aug-06		N		230,000	34,800	<5	18,100	1,970,000	255	<5	2,570	<0.5	<2	5,910
	07-Aug-06		FD		235,000	35,600	<5	17,900	2,000,000	274	<5	2,550	<0.5	<2	5,960
	06-Sep-06		N		227,000	34,700	<5	18,400	1,930,000	268	<5	2,670	<0.5	<2	5,370
	03-Oct-06		N		234,000	32,800	<50	18,400	1,860,000	268	<5	2,630	<0.5	<2	5,710
	03-Oct-06		FD		242,000	34,000	<50	18,900	1,920,000	263	<5	2,750	<0.5	<2	5,580
	07-Nov-06		N		204,000	30,300	<5	16,200	1,790,000	263	<5	2,750	<0.5	<2	3,180
	06-Dec-06		N		225,000	35,200	<5.0	16,200	1,860,000	275	<5	2,400	<0.5	<2	5,340
	02-Jan-07		N		211,000	32,800	<5	16,300	1,800,000	275	<5	2,430	<0.5	<2	5,370
	06-Feb-07		N		212,000	34,400	<5	16,300	1,670,000	270	<5	2,550	<0.5	<2	5,200
	06-Feb-07		FD		211,000	34,600	<5	16,500	1,670,000	265	<5	2,550	<0.5	<2	5,210
	06-Mar-07		N		208,000	32,700	<5	15,800	1,730,000	260	<5	2,540	<0.5	<2	5,220
	04-Apr-07		N		204,000	34,300	<5	15,800	1,710,000	260	<5	2,310	<0.5	<2	5,070
	04-Apr-07		FD		200,000	33,600	<5	15,500	1,710,000	255	<5	2,320	<0.5	<2	4,700
	01-May-07		N		197,000	32,300	<5	15,200	1,690,000	278	<5	2,260	<0.5	<2	4,810
	05-Jun-07		N		193,000	30,200	<5	14,800	1,670,000	278	<5	2,170	<0.5	<2	4,640
	10-Jul-07		N		164,000	26,700	<5	13,500	1,440,000	265	<5	2,070	<0.5	<2	4,370
07-Aug-07		N		185,000	29,500	5.53	15,300	1,620,000	273	<5	2,010	<0.5	<2	4,390	
05-Sep-07		N		159,000	25,200	<5	13,300	149,000	270	<5	2,020	<0.5	<2	4,190	

**Table 4**  
**Summary of Secondary Analytical Parameters**  
 PG&E Topock  
 Needles, California  
 First Quarter 2009 Monitoring Report for the Floodplain Reactive In-Situ Pilot Test

Location Name	Sample Date	Notes	Sample Type	Screen Interval (ft bgs)	Dissolved Calcium (µg/L)	Dissolved Magnesium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Potassium (µg/L)	Dissolved Sodium (µg/L)	Alkalinity bicarbonate (mg/L)	Alkalinity carbonate (mg/L)	Chloride-Cl (mg/L)	Ortho phosphate-P (mg/L)	Sulfide (mg/L)	Total Dissolved Solids (mg/L)	
TW-2D	17-Mar-06		N	113 - 148	207,000	23,600	<5	13,200	1,240,000	110	<5	1,920	<0.5	<2	---	
	05-Apr-06		N		231,000	25,800	<5	14,700	1,400,000	112	<5	2,070	<0.5	<2	4,390	
	19-Jul-06		N		241,000	29,900	<5	15,000	1,460,000	119	<5	1,980	<0.5	<2	4,580	
	07-Aug-06		N		242,000	29,700	<5	14,600	1,450,000	102	<5	1,690	<0.5	<2	3,900	
	06-Sep-06		N		262,000	32,500	<5	16,400	1,580,000	122	<5	1,470	<0.5	<2	4,420	
	04-Oct-06		N		261,000	27,600	<5	16,100	1,720,000	115	<5	2,480	<0.5	<2	4,900	
	08-Nov-06		N		243,000	30,000	<5	14,300	1,500,000	110	<5	2,190	<0.5	<2	3,850	
	06-Dec-06		N		258,000	41,300	<5	11,700	954,000	110	<5	1,950	<0.5	<2	290	
	02-Jan-07		N		248,000	33,300	<5	14,100	1,450,000	97.5	<5	1,370	<0.5	<2	3,480	
	06-Feb-07		N		261,000	36,100	<5	14,100	1,320,000	110	<5	1,630	<0.5	<2	4,220	
	06-Mar-07		N		280,000	37,600	<5	15,100	1,590,000	130	<5	2,500	<0.5	<2	4,790	
	05-Apr-07		N		260,000	36,200	<5	14,700	1,460,000	115	<5	1,700	<0.5	<2	4,320	
	01-May-07		N		250,000	31,200	<5	14,000	1,510,000	138	<5	2,250	<0.5	<2	4,730	
	05-Jun-07		N		242,000	31,900	<5	13,600	1,460,000	133	<5	1,390	<0.5	<2	3,930	
	10-Jul-07		N		203,000	27,600	<5	13,100	1,310,000	150	<5	1,750	<0.5	<2	3,850	
	07-Aug-07		N		246,000	31,700	<5	15,000	1,390,000	140	<5	1,870	<0.5	<2	3,990	
	05-Sep-07		N		212,000	28,300	<5	13,400	140,000	133	<5	1,970	<0.5	<2	3,860	
	03-Oct-07		N			---	---	<5	---	---	153	<5	---	---	<2	4,470
	06-Nov-07		N			---	---	<5	---	---	138	<5	---	---	<2	---
	05-Dec-07		N			---	---	<5	---	---	123	<5	---	---	<2	5,070
	05-Mar-08		N			---	---	<5	---	---	170	<5	---	---	<2	4,450
	05-Jun-08		N			---	---	<5	---	---	148	<5	---	---	<2	4,350
	09-Sep-08		N			---	---	<5	---	---	150	<5	---	---	<2	4,450
09-Sep-08		FD		---	---	<5	---	---	145	<5	---	---	<2	4,530		
04-Dec-08		N		---	---	<5	---	---	146	<5	---	---	<2	4,520		
11-Feb-09		N		---	---	2.17	---	---	80	<1	---	---	<0.05	3,570		

**Table 4**  
**Summary of Secondary Analytical Parameters**  
 PG&E Topock  
 Needles, California  
 First Quarter 2009 Monitoring Report for the Floodplain Reactive In-Situ Pilot Test

Location Name	Sample Date	Notes	Sample Type	Screen Interval (ft bgs)	Dissolved Calcium (µg/L)	Dissolved Magnesium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Potassium (µg/L)	Dissolved Sodium (µg/L)	Alkalinity bicarbonate (mg/L)	Alkalinity carbonate (mg/L)	Chloride-Cl (mg/L)	Ortho phosphate-P (mg/L)	Sulfide (mg/L)	Total Dissolved Solids (mg/L)
TW-3D	17-Mar-06		N	111 - 156	254,000	27,700	<5	15,900	1,540,000	97.3	<5	2,190	<0.5	<2	---
	05-Apr-06		N		283,000	28,800	<5	17,900	1,740,000	89.9	<5	2,580	<0.5	<2	5,580
	19-Jul-06		N		265,000	29,100	<5	17,200	1,720,000	98.9	<5	2,610	<0.5	<2	5,410
	07-Aug-06		N		272,000	28,800	<5	16,900	1,790,000	96.5	<5	2,480	<0.5	<2	5,490
	06-Sep-06		N		274,000	29,400	<5	18,400	1,800,000	102	<5	2,670	<1	<2	5,240
	04-Oct-06		N		272,000	26,800	<5	18,100	1,700,000	175	<5	2,430	<1	<2	4,880
	08-Nov-06		N		257,000	26,900	<5	16,500	1,690,000	92.5	<5	2,790	<0.5	<2	5,280
	06-Dec-06		N		277,000	30,000	<5	16,400	1,760,000	97.5	<5	2,470	<0.5	<2	5,220
	02-Jan-07		N		269,000	29,700	<5	16,800	1,690,000	95.0	<5	2,580	<0.5	<2	5,210
	06-Feb-07		N		277,000	31,500	<5	17,100	1,610,000	105	<5	2,740	<0.5	<2	5,370
	06-Mar-07		N		280,000	32,100	<5	16,700	1,740,000	100	<5	2,840	<0.5	<2	5,660
	05-Apr-07		N		279,000	31,900	<5	17,500	1,750,000	110	<5	2,740	<0.5	<2	5,400
	01-May-07		N		269,000	29,100	<5	16,500	1,720,000	108	<5	2,630	<0.5	<2	5,320
	01-May-07		FD		261,000	28,000	<5	16,100	1,660,000	113	<5	2,640	<0.5	<2	5,120
	05-Jun-07		N		269,000	29,100	<5	16,500	1,760,000	115	<5	2,630	<0.5	<2	5,300
	10-Jul-07		N		266,000	29,400	<5	17,200	1,710,000	115	<5	2,610	<0.5	<2	5,120
	07-Aug-07		N		308,000	32,500	<5	18,800	1,750,000	115	<5	2,590	<0.5	<2	5,140
	05-Sep-07		N		267,000	29,000	<5	17,000	177,000	110	<5	2,710	<0.5	<2	4,960
	02-Oct-07		N		---	---	<5	---	---	115	<5	---	---	<2	5,040
	06-Nov-07		N		---	---	<5	---	---	115	<5	---	---	<2	---
	05-Dec-07		N		---	---	<5	---	---	113	<5	---	---	<2	4,980
	05-Mar-08		N		---	---	<5	---	---	150	<5	---	---	<2	5,680
	05-Jun-08		N		---	---	<5	---	---	120	<5	---	---	<2	5,430
	09-Sep-08		N		---	---	<5	---	---	110	<5	---	---	<2	5,150
	04-Dec-08		N		---	---	<5	---	---	120	<5	---	---	<2	5,130
	04-Dec-08		FD		---	---	<5	---	---	120	<5	---	---	<2	5,410
	<b>11-Feb-09</b>		<b>N</b>		---	---	<b>2.64</b>	---	---	<b>122</b>	<b>&lt;1</b>	---	---	<b>&lt;0.05</b>	<b>5,460</b>

**Table 4**  
**Summary of Secondary Analytical Parameters**  
PG&E Topock  
Needles, California  
First Quarter 2009 Monitoring Report for the Floodplain Reactive In-Situ Pilot Test

Location Name	Sample Date	Notes	Sample Type	Screen Interval (ft bgs)	Dissolved Calcium (µg/L)	Dissolved Magnesium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Potassium (µg/L)	Dissolved Sodium (µg/L)	Alkalinity bicarbonate (mg/L)	Alkalinity carbonate (mg/L)	Chloride-Cl (mg/L)	Ortho phosphate-P (mg/L)	Sulfide (mg/L)	Total Dissolved Solids (mg/L)
INJ_SOLUTION_01	04-May-06		N		---	---	---	---	---	---	---	---	---	---	2,240
INJ_SOLUTION_02	05-May-06		N		---	---	---	---	---	---	---	---	---	---	4,650
INJ_SOLUTION_03	06-May-06		N		---	---	---	---	---	---	---	---	---	---	4,460
	11-Aug-06		N		---	---	---	---	---	---	---	---	---	---	<10
	07-Sep-06		N		---	---	---	---	---	---	---	---	---	---	4,950
	08-May-07		N		---	---	---	---	---	---	---	---	---	---	7,780
	17-Jul-07		N		---	---	---	---	---	---	---	---	---	---	5,460
Equipment Blank	17-Mar-06		EB		<1,000	<1,000	<5	<1,000	5,360	<5	<5	<0.5	<0.5	<2	---
	07-Apr-06		EB		<1,000	<1,000	<5	<1,000	1,500	<5	<5	<0.5	<0.5	<2	<10
	09-May-06		FB		<1,000	<1,000	<5	<1,000	<1,000	<5	<5	<0.5	<0.5	<2	---
	13-May-06		EB		<1,000	<1,000	<5	<1,000	<1,000	<5	<5	<0.5	<0.5	<2	---
	24-May-06		EB		---	---	---	---	---	---	---	---	---	<2	---
	01-Jun-06		EB		---	---	---	---	---	---	---	---	---	<2	---
	05-Jun-06		EB		<1,000	<1,000	<5	<1,000	<1,000	<5	<5	<0.5	<0.5	<2	---
	17-Jul-06		EB		<1,000	<1,000	<5	<1,000	<1,000	<5	<5	<0.5	<0.5	<2	15
	07-Aug-06		EB		3,700	1,100	<5	<1,000	1,370	12.9	<5	0.83	<0.5	<2	20
	06-Sep-06		EB		2,860	<1,000	<5	<1,000	7,800	7.79	<5	9.62	<0.5	<2	<10
	04-Oct-06		EB		9,340	<1,000	<5	<1,000	5,440	<5	<5	14.9	<0.5	<2	35
	07-Nov-06		EB		<1,000	<1,000	<5	<1,000	<1,000	<5	<5	<0.5	<0.5	<2	---
	06-Dec-06		EB		<1,000	<1,000	<5	<1,000	38,800	75	<5	5.84	<0.5	<2	120
	03-Jan-07		EB		<1,000	<1,000	<5	<1,000	1,860	<5	<5	0.77	<0.5	<2	35.0
	06-Feb-07		EB		<1,000	<1,000	<5	<1,000	<1,000	<5	<5	<0.5	<0.5	<2	10.00
	06-Mar-07		EB		<1,000	<1,000	<5	<1,000	1,490	<5	<5	<0.5	<0.5	<2	10.0
	04-Apr-07		EB		<1,000	<1,000	<5	<1,000	1,660	<5	<5	<0.5	<0.5	<2	<10
	01-May-07		EB		<1,000	<1,000	<5	<1,000	<1,000	<5	<5	<0.5	<0.5	<2	<10
	05-Jun-07		EB		<1,000	<1,000	<5	<1,000	<1,000	<5	<5	<0.5	<0.5	<2	<10
	10-Jul-07		EB		<1,000	<1,000	<5	<1,000	<1,000	80.0	<5	13.0	<0.5	<2	<10
	07-Aug-07		EB		<1,000	<1,000	<5	<1,000	<1,000	<5	<5	<0.5	<0.5	<2	<10
	05-Sep-07		EB		<1,000	<1,000	<5	<1,000	<1,000	<5	<5	<0.5	<0.5	<2	<10
	03-Oct-07		EB		---	---	<5	---	---	<5	<5	---	---	<2	<10
	06-Nov-07		EB		---	---	<5	---	---	<5	<5	---	---	<2	---
	05-Dec-07		EB		---	---	<5	---	---	<5	<5	---	---	<2	<10
	05-Mar-08		EB		---	---	<5	---	---	<5	<5	---	---	<2	<10
	03-Jun-08		EB		---	---	---	---	---	<5	<5	---	---	<2	<10
	09-Sep-08		EB		---	---	<5	---	---	<5	<5	---	---	<2	<10
	04-Dec-08		EB		---	---	5.58	---	---	78.3	<5	---	---	<2	21
	<b>10-Feb-09</b>		<b>EB</b>		---	---	<b>&lt;0.5</b>	---	---	<b>&lt;1</b>	<b>&lt;1</b>	---	---	<b>&lt;0.05</b>	<b>38</b>

**Table 4**  
**Summary of Secondary Analytical Parameters**  
 PG&E Topock  
 Needles, California  
 First Quarter 2009 Monitoring Report for the Floodplain Reactive In-Situ Pilot Test

Location Name	Sample Date	Notes	Sample Type	Screen Interval (ft bgs)	Dissolved Calcium (µg/L)	Dissolved Magnesium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Potassium (µg/L)	Dissolved Sodium (µg/L)	Alkalinity bicarbonate (mg/L)	Alkalinity carbonate (mg/L)	Chloride-Cl (mg/L)	Ortho phosphate-P (mg/L)	Sulfide (mg/L)	Total Dissolved Solids (mg/L)
Field Blank	17-Mar-06		FB		<1,000	<1,000	<5	<1,000	2,040	<5	<5	<0.5	<0.5	<2	---
	04-Apr-06		FB		<1,000	<1,000	<5	<1,000	<1,000	<5	<5	<0.5	<0.5	<2	<10
	09-May-06		EB		<1,000	<1,000	<5	<1,000	<1,000	<5	<5	<0.5	<0.5	<2	---
	13-May-06		FB		<1,000	<1,000	<5	<1,000	<1,000	<5	<5	<0.5	<0.5	<2	---
	24-May-06		FB		---	---	---	---	---	---	---	---	---	<2	---
	01-Jun-06		FB		---	---	---	---	---	---	---	---	---	<2	---
	05-Jun-06		FB		<1,000	<1,000	<5	<1,000	<1,000	<5	<5	<0.5	<0.5	<2	---
	17-Jul-06		FB		<1,000	<1,000	<5	<1,000	<1,000	<5	<5	<0.5	<0.5	<2	10
	07-Aug-06		FB		<1,000	<1,000	<5	<1,000	<1,000	<5	<5	<0.5	<0.5	<2	25
	06-Sep-06		FB		2,930	<1,000	<5	<1,000	7,980	8.28	<5	10.4	<0.5	<2	15
	03-Oct-06		FB		<1,000	<1,000	<5	<1,000	2,440	<5	<5	<0.5	<0.5	<2	30
	07-Nov-06		FB		<1,000	<1,000	<5	<1,000	<1,000	<5	<5	<0.5	<0.5	<2	---
	05-Dec-06		FB		<1,000	<1,000	<5	<1,000	<1,000	<5	<5	<0.5	<0.5	<2	25.0
	03-Jan-07		FB		<1,000	<1,000	<5	<1,000	2,340	<5	<5	0.789	<0.5	<2	50.0
	06-Feb-07		FB		<1,000	<1,000	<5	<1,000	<1,000	<5	<5	<0.5	<0.5	<2	<10
	06-Mar-07		FB		<1,000	<1,000	<5	<1,000	1,480	<5	<5	<0.5	<0.5	<2	10.0
	04-Apr-07		FB		<1,000	<1,000	<5	<1,000	1,040	<5	<5	<0.5	<0.5	<2	<10
	01-May-07		FB		<1,000	<1,000	<5	<1,000	<1,000	<5	<5	<0.5	<0.5	<2	<10
	05-Jun-07		FB		<1,000	<1,000	<5	<1,000	<1,000	<5	<5	0.837	<0.5	<2	<10
	10-Jul-07		FB		<1,000	<1,000	<5	<1,000	<1,000	75.0	<5	12.4	<0.5	<2	<10
	07-Aug-07		FB		<1,000	<1,000	<5	<1,000	<1,000	<5	<5	<0.5	<0.5	<2	<10
	05-Sep-07		FB		<1,000	<1,000	<5	<1,000	<1,000	<5	<5	<0.5	<0.5	<2	<10
	02-Oct-07		FB		---	---	<5	---	---	1.50 J	<5	---	---	<2	39.0
	06-Nov-07		FB		---	---	<5	---	---	<5	<5	---	---	<2	---
	05-Dec-07		FB		---	---	<5	---	---	<5	<5	---	---	<2	<10
	05-Mar-08		FB		---	---	<5	---	---	<5	<5	---	---	<2	<10
	03-Jun-08		FB		---	---	---	---	---	<5	<5	---	---	<2	<10
	09-Sep-08		FB		---	---	<5	---	---	<5	<5	---	---	<2	<10
	03-Dec-08		FB		---	---	<5	---	---	<5	<5	---	---	<2	<10
	<b>10-Feb-09</b>		<b>FB</b>		---	---	<b>&lt;0.5</b>	---	---	<b>&lt;1</b>	<b>&lt;1</b>	---	---	<b>&lt;0.05</b>	<b>30</b>

**Table 4**  
**Summary of Secondary Analytical Parameters**

PG&E Topock  
 Needles, California

First Quarter 2009 Monitoring Report for the Floodplain Reactive In-Situ Pilot Test

Location Name	Sample Date	Notes	Sample Type	Screen Interval (ft bgs)	Dissolved Calcium (µg/L)	Dissolved Magnesium (µg/L)	Dissolved Arsenic (µg/L)	Dissolved Potassium (µg/L)	Dissolved Sodium (µg/L)	Alkalinity bicarbonate (mg/L)	Alkalinity carbonate (mg/L)	Chloride-Cl (mg/L)	Ortho phosphate-P (mg/L)	Sulfide (mg/L)	Total Dissolved Solids (mg/L)
---------------	-------------	-------	-------------	--------------------------	--------------------------	----------------------------	--------------------------	----------------------------	-------------------------	-------------------------------	-----------------------------	--------------------	--------------------------	----------------	-------------------------------

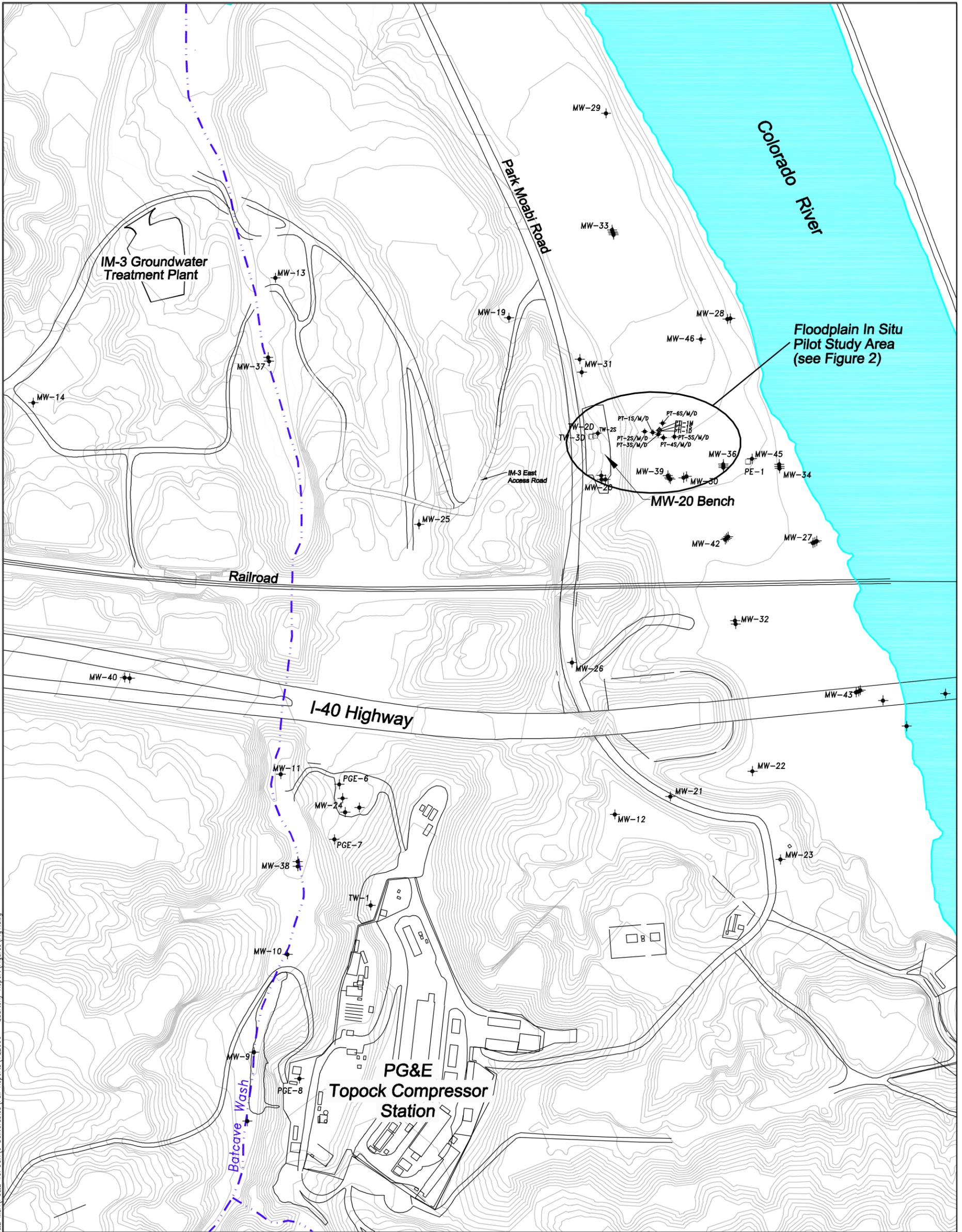
Notes:

Injections occurred on May 3 through May 6, 2006, August 11, 2006, September 7, 2006, November 1, 2007, May 7 and 8, 2007 and July 17 and 18, 2007.

Most recent data indicated in **BOLD**

- ft bgs Feet below ground surface
- mg/L Milligrams per liter
- µg/L Micrograms per liter
- < Symbol indicates not detected at or above laboratory detection limit as noted.
- EB Equipment blank
- FB Field blank
- FD Field duplicate
- J Reported Value is estimated.
- N Normal
- NA Not applicable
- Dissolved Samples were field filtered with a 0.45 micron filter.
- Not analyzed/not sampled

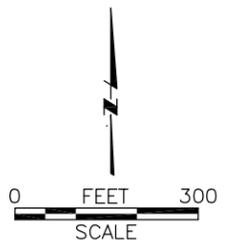
Starting with the February 2009 results, Calscience Laboratories was used for analysis, not EMAX laboratories.



Source: MWH Draft In-Situ Hexavalent Chromium Reduction Pilot Test Work Plan, Upland Plume Treatment, 2006.

**Legend**

- ✦ Monitoring Well Locations
- Extraction Well Locations
- ◇ Injection Well Locations



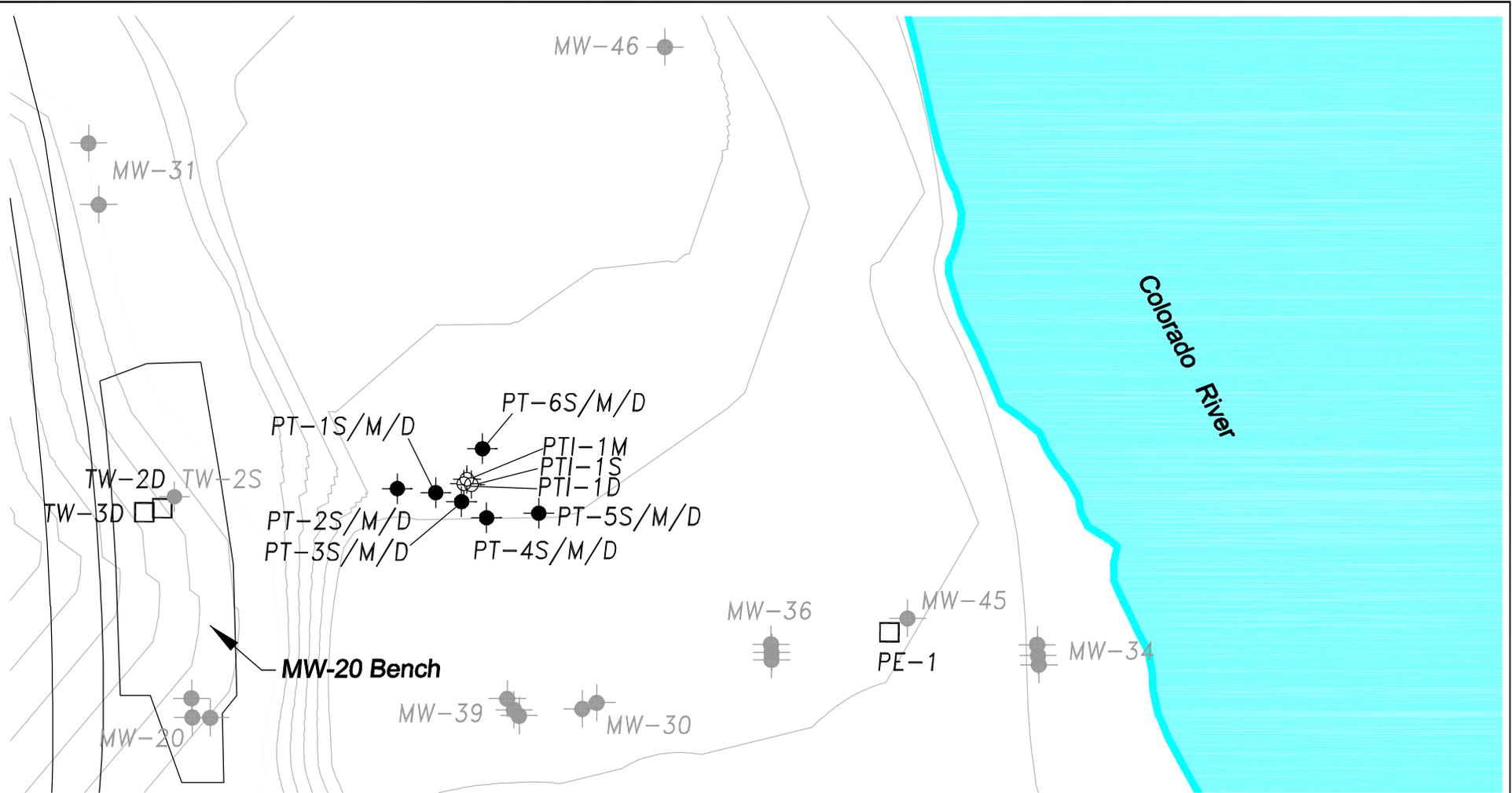
Date/Time : Mon, 17 Apr 2006 - 9:30am  
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 Acad Version : R16.1s (LMS Tech)  
 User Name : mchiu  
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Project Director <b>N. MORGAN-BUTCHER</b>	Area Manager <b>J. PETERS</b>
Task Manager <b>H. VOSCOTT</b>	Technical Review
Drawing Date <b>05 APR 06</b>	Drawn By <b>M. CHIU</b>

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**SITE PLAN**  
**PG&E TOPOCK FACILITY**  
**NEEDLES, CALIFORNIA**

Project Number <b>RC000689.0001</b>
Figure <b>1</b>



Source: MWH Draft In-Situ Hexavalent Chromium Reduction Pilot Test Work Plan, Upland Plume Treatment, 2006.

**Legend**

- Monitoring Well Locations
- Extraction Well Locations
- Injection Well Locations



Project Director <b>N. MORGAN-BUTCHER</b>	Area Manager <b>J. PETERS</b>
Task Manager <b>H. VOSCOTT</b>	Technical Review
Drawing Date <b>05 APR 06</b>	Drawn By <b>M. CHIU</b>



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**SAMPLE LOCATION MAP**  
 PG&E TOPOCK FACILITY  
 NEEDLES, CALIFORNIA

Project Number <b>RC000689.0001</b>
Figure <b>2</b>

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**Appendix A**

Calibration Logs for Field  
Monitoring Instruments

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MULTIPARAMETER INSTRUMENT CALIBRATION RECORD

Project No.: RC 689.0004

Location: TOPOCK, CA

Instrument: YSE-556 MPS

Serial Number: 06F1362 45

Date	Calibrated by	Parameter	Standards Used	Calibrated Achieved (Y/N)	Remarks
2-10-09	CE	6.84	7.0	Y	
↓	↓	4.17	4.0	Y	
↓	↓	10.43	10.0	Y	
↓	↓	5986	COND 3.9	Y	
↓	↓	253.5	ORP 247	Y	
↓	↓	68.1%	DO 98.5%	Y	
2-11-09	CE	6.82	7.0	Y	
↓	↓	4.17	4.0	Y	
↓	↓	10.43	10.0	Y	
↓	↓	3986	COND 3.9	Y	
↓	↓	284.0	ORP 260.0	Y	
↓	↓	159.0%	98.6%	Y	
2-12-09	CE	7.05	7.0	Y	
		4.19	4.0	Y	
		10.33	10.0	Y	
		3945	3900	Y	
		258.0	257.0	Y	
		100.5%	98.0%	Y	

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**Appendix B**

Groundwater Sampling Logs

**ARCADIS**

**Groundwater Sampling Form**

Project Number: RC000689.0001. Task: 00006 Well ID: PT-1M  
 Date: 02-10-09 Sampled By: GC  
 Weather: SUNNY / MILD Recorded By: CR  
 Coded Duplicate No.: ✓

**Instrument Identification**

Model	PID	Water Quality Meter(s)
Serial #:	—	YSI-556 MPS 06F1362 AS

**Purging Information**

Casing Material: PVC  
 Casing Diameter: 2"  
 Total Depth: 70'  
 Depth to Water: 21.55  
 Water Column: 48.45  
 Gallons/Foot: .16  
 Gallons in Well: 7.8

Purge Technique (circle one): Low-Flow Remove 3 Well Volumes Bail Dry  
 Purge Equipment (circle one): Submersible Centrifugal Bladder Peristaltic Bailer  
 Screen Interval: From: \_\_\_\_\_ To: \_\_\_\_\_  
 Pump Intake Setting: 65'  
 Volumes to be Purged: 3 casing  
 Total Volume Purged: 24.0 GAL  
 Pump on: 1118 Off: 1159

Well Casing Volumes (gal/ft):	<u>2" = 0.16</u>	3" = 0.37
	<u>3 1/2" = 0.50</u>	4" = 0.65
	6" = 1.46	

CR + 6  
(1560) .007 mg/L

**Field Parameter Measurements Taken During Purging**

Time	Minutes Elapsed	Flow Rate (GAL GPM)	Volume Purged (GAL)	DTW (ft btoc)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Spec Cond (umhos/cm)	Temp (°C)	DO (mg/L)	Comments
1118	0	1.5	0	/	203	177.8	7.20	5050	22.90	1.27	
1121	3	1.0	4		168	53.0	7.35	5085	23.02	2.45	
1125	7	1.0	8		339	-30.4	7.28	5083	23.25	2.15	
1129	11	1.0	12		387	-55.6	7.26	5097	23.08	1.99	
1133	15	1.0	16		370	-63.8	7.28	5062	23.03	2.15	
1137	19	1.0	20		267	-73.2	7.28	5101	22.72	2.28	
1141	23	1.0	24		242	-80.5	7.26	5082	22.75	2.05	
1143	25	1.0	26		234	-83.0	7.28	5080	22.78	2.17	

**Observations During Sampling**

Well Condition: GOOD Purge Water Disposal: TANK  
 Color: CLEAR Turbidity(qualitative): CLOUDY  
 Odor: NO Other (OVA, HNU, etc.): —

Sample ID: PT-1M Sample Date & Time: 2-10-09 @ 1145  
 Samples Analyzed For: See the COC

**ARCADIS**

**Groundwater Sampling Form**

Project Number: RC000689.0001.  
 Date: 02-10-09  
 Weather: SUNNY/MILD

Task: 00006 Well ID: PT-1D  
 Sampled By: GC  
 Recorded By: GE  
 Coded Duplicate No.: —

**Instrument Identification**

	PID	Water Quality Meter(s)
Model	—	<u>YSI-556 mps</u>
Serial #:	—	<u>06F1362 AS</u>

**Purging Information**

Casing Material: PVC  
 Casing Diameter: 2"  
 Total Depth: 105'  
 Depth to Water: 21.69  
 Water Column: 83.31  
 Gallons/Foot: -16  
 Gallons in Well: 13.3

Purge Technique (circle one): Low-Flow Remove 3 Well Volumes Bail Dry  
 Purge Equipment (circle one): Submersible Centrifugal Bladder Peristaltic Bailer  
 Screen Interval: From: \_\_\_\_\_ To: \_\_\_\_\_  
 Pump Intake Setting: 100'  
 Volumes to be Purged: 3 Casing  
 Total Volume Purged: 40.0  
 Pump on: 1214 Off: 1255

CRT6  
(560) .006 mg/L

Well Casing Volumes (gal/ft):	<u>2" = 0.16</u>	3" = 0.37
	3 1/2" = 0.50	4" = 0.65
	6" = 1.46	

**Field Parameter Measurements Taken During Purging**

Time	Minutes Elapsed	Flow Rate (GPM)	Volume Purged (GAL)	DTW (ft btoc)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Spec Cond (µmhos/cm)	Temp (°C)	DO (mg/L)	Comments
1214	0	2.0	0	/	14	-108.0	7.09	12530	22.64	2.32	
1218	4	2.0	7	/	6	-120.8	7.08	13230	23.15	1.88	
1221	7	2.0	14	/	3	-135.9	7.14	13320	22.89	0.87	
1225	11	2.0	21	/	2	-142.0	7.18	13215	23.19	0.88	
1228	14	2.0	28	/	1	-137.2	7.24	13072	22.69	1.56	
1232	18	2.0	34	/	1	-130.7	7.24	12908	23.21	1.70	
1235	21	2.0	40	/	1	-131.6	7.27	12920	23.14	1.75	

**Observations During Sampling**

Well Condition: GOOD  
 Color: NO  
 Odor: NO

Purge Water Disposal: TANK  
 Turbidity(qualitative): CLEAR  
 Other (OVA, HNU, etc.): —

Sample ID: PT-1D Sample Date & Time: 2-10-09 @ 1240  
 Samples Analyzed For: See the COC

**ARCADIS**

**Groundwater Sampling Form**

Project Number: RC000689.0001. Task: 00006 Well ID: PT-2M  
 Date: 02-10-09 Sampled By: GC  
 Weather: CLEAR | MILD Recorded By: CE  
 Coded Duplicate No.: ✓

**Instrument Identification**

	PID	Water Quality Meter(s)
Model	<u>—</u>	<u>YSI-556 mps</u>
Serial #:	<u>—</u>	<u>06F1382 AS</u>

**Purging Information**

Casing Material: PVC  
 Casing Diameter: 2"  
 Total Depth: 70'  
 Depth to Water: 20.80  
 Water Column: 49.20  
 Gallons/Foot: .16  
 Gallons in Well: 7.9

Purge Technique (circle one): Low-Flow Remove 3 Well Volumes Bail Dry  
 Purge Equipment (circle one): Submersible Centrifugal Bladder Peristaltic Bailer  
 Screen Interval: From: 60' To: 70'  
 Pump Intake Setting: 65'  
 Volumes to be Purged: 3 casing  
 Total Volume Purged: 24 GAL  
 Pump on: 1335 Off: 1415

Well Casing Volumes (gal/ft):	<u>2" = 0.16</u>	3" = 0.37
	<u>3 1/2" = 0.50</u>	4" = 0.65
	6" = 1.46	

CNH  
(1560) .013 mg/L

**Field Parameter Measurements Taken During Purging**

Time	Minutes Elapsed	Flow Rate (GPM)	Volume Purged (GAL)	DTW (ft btoc)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Spec Cond (µmhos/cm)	Temp (°C)	DO (mg/L)	Comments
1335	0	1.0	0	/	26	-95.6	8.20	5869	24.26	2.30	
1339	4	1.0	4	/	119	-82.0	7.37	5382	24.12	2.02	
1343	8	1.0	8	/	122	-67.1	7.30	5376	23.98	2.30	
1347	12	1.0	12	/	74	-58.8	7.25	5305	23.91	2.00	
1351	16	1.0	16	/	41	-40.5	7.26	5263	23.66	2.07	
1355	20	1.0	20	/	28	-36.9	7.25	5225	23.73	2.22	
1359	24	1.0	24	/	20	-34.0	7.24	5209	23.39	2.30	

**Observations During Sampling**

Well Condition: GOOD Purge Water Disposal: TANK  
 Color: CLEAR Turbidity(qualitative): CLEAR  
 Odor: NO Other (OVA, HNU, etc.): —

Sample ID: PT-2M Sample Date & Time: 2-10-09 @ 1400  
 Samples Analyzed For: See the COC

**ARCADIS**

**Groundwater Sampling Form**

Project Number: RC000689.0001.  
 Date: 02-12-09  
 Weather: SUNNY / WARM

Task: 00006 Well ID: PT-6M  
 Sampled By: GC  
 Recorded By: GC  
 Coded Duplicate No.: —

**Instrument Identification**

	PID	Water Quality Meter(s)
Model:	—	YSI-556 mps
Serial #:	—	06F1362AS

**Purging Information**

Casing Material: PVC  
 Casing Diameter: 2"  
 Total Depth: 70'  
 Depth to Water: 22.35'  
 Water Column: 47.65'  
 Gallons/Foot: .16  
 Gallons in Well: 7.7

Purge Technique (circle one): Low-Flow Remove 3 Well Volumes Bail Dry  
 Purge Equipment (circle one): Submersible Centrifugal Bladder Peristaltic Bailer  
 Screen Interval: From: \_\_\_\_\_ To: \_\_\_\_\_  
 Pump Intake Setting: \_\_\_\_\_  
 Volumes to be Purged: 3 casing  
 Total Volume Purged: 22.9  
 Pump on: 1045 Off: 1120

CAT6 (1500) .013 mg/L

Well Casing Volumes (gal/ft):	<u>2" = 0.16</u>	3" = 0.37
	3 1/2" = 0.50	4" = 0.65
	6" = 1.46	

**Field Parameter Measurements Taken During Purging**

Time	Minutes Elapsed	Flow Rate (GPM)	Volume Purged (GAL)	DTW (ft btoc)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Spec Cond (µmhos/cm)	Temp (°C)	DO (mg/L)	Comments
1045	0	1.0	0	/	60	-57.3	7.34	5452	22.53	0.74	
1049	4	1.0	4		147	-27.0	7.34	5293	22.97	0.63	
1053	8	1.0	8		103	-5.0	7.30	5276	23.03	0.58	
1057	12	1.0	12		88	-4.3	7.29	5267	23.06	0.57	
1101	16	1.0	16		65	1.0	7.30	5249	23.30	0.62	
1105	20	1.0	20		54	0.9	7.28	5267	22.90	0.77	
1109	24	1.0	24		47	0.5	7.28	5283	23.07	0.54	

**Observations During Sampling**

Well Condition: GOOD  
 Color: NO  
 Odor: NO

Purge Water Disposal: TANK  
 Turbidity(qualitative): CLEAR  
 Other (OVA, HNU, etc.): \_\_\_\_\_

Sample ID: PT-6M  
 Samples Analyzed For: See the COC

Sample Date & Time: 2-12-09 @ 1110

**ARCADIS**

**Groundwater Sampling Form**

Project Number: RC000689.0001.  
 Date: 02-12-09  
 Weather: SUNNY / WARM

Task: 00006 Well ID: PT-5D  
 Sampled By: GC  
 Recorded By: LP  
 Coded Duplicate No.: —

**Instrument Identification**

Model	PID	Water Quality Meter(s)
Serial #:		<u>YSI - 556 MPS</u> <u>06F1362 AS</u>

**Purging Information**

Casing Material: PVC  
 Casing Diameter: 2"  
 Total Depth: 105'  
 Depth to Water: 20.31  
 Water Column: 84.69  
 Gallons/Foot: -1.6  
 Gallons in Well: 13.6

Purge Technique (circle one): Low-Flow Remove 3 Well Volumes Bail Dry  
 Purge Equipment (circle one): Submersible Centrifugal Bladder Peristaltic Bailer  
 Screen Interval: From: 95' To: 105'  
 Pump Intake Setting: \_\_\_\_\_  
 Volumes to be Purged: 3 casing  
 Total Volume Purged: 40.7  
 Pump on: 0951 Off: 1025

C176  
(1560) 2.28 mg/L

Well Casing Volumes (gal/ft):	<u>2" = 0.16</u>	3" = 0.37
	3 1/2" = 0.50	4" = 0.65
	6" = 1.46	

**Field Parameter Measurements Taken During Purging**

Time	Minutes Elapsed	Flow Rate (GPM)	Volume Purged (GAL)	DTW (ft btoc)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Spec Cond (umhos/cm)	Temp (°C)	DO (mg/L)	Comments
0951	0	2.0	0	/	175	98.3	7.65	16599	22.24	0.45	
0955	4	2.0	7		34	93.6	7.55	17798	22.53	0.45	
0958	7	2.0	14		14	87.8	7.25	17285	22.47	0.90	
1002	11	2.0	21		4	82.5	7.16	16740	22.65	0.45	
1005	14	2.0	28		3	80.2	7.19	16261	22.66	0.54	
1009	18	2.0	35		2	77.1	7.16	16109	22.57	0.50	
1012	21	2.0	41		2	76.4	7.16	16143	22.47	0.47	

**Observations During Sampling**

Well Condition: BROKEN HINGE  
 Color: LIGHT YELLOW  
 Odor: Ne

Purge Water Disposal: TRUCK  
 Turbidity(qualitative): CLEAR  
 Other (OVA, HNU, etc.): \_\_\_\_\_

Sample ID: PT-5D  
 Samples Analyzed For: See the COC

Sample Date & Time: 2-12-09 @ 1015

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Groundwater Sampling Form

Project Number: RC000689.0001. Task: 00006 Well ID: PT-6D
Date: 02-12-09 Sampled By: GC
Weather: SUNNY/WARM Recorded By: [Signature]
Coded Duplicate No.:

Instrument Identification

Table with columns: Model, PID, Serial #, Water Quality Meter(s). Contains handwritten entries: Model: [Blank], PID: [Blank], Serial #: [Blank], Water Quality Meter(s): YSI-556 mps, 06F136245.

Purging Information

Casing Material: PVC
Casing Diameter: 2"
Total Depth: 105'
Depth to Water: 22.65
Water Column: 82.35
Gallons/Foot: 16
Gallons in Well: 13.2
Purge Technique: Low-Flow Remove 3 Well Volumes Bail Dry
Purge Equipment: Submersible Centrifugal Bladder Peristaltic Bailer
Screen Interval: From: To:
Pump Intake Setting:
Volumes to be Purged: 3 CAS/1g
Total Volume Purged: 39.6
Pump on: 1153 Off:

CMP (1500) 174 mg/L

Well Casing Volumes (gal/ft): 2" = 0.16, 3" = 0.37, 3 1/2" = 0.50, 4" = 0.65, 6" = 1.46

Field Parameter Measurements Taken During Purging

Table with 12 columns: Time, Minutes Elapsed, Flow Rate, Volume Purged, DTW (ft btoc), Turbidity (NTUs), ORP (mV), pH (SI Units), Spec Cond (umhos/cm), Temp (°C), DO (mg/L), Comments. Contains data rows from 1153 to 1223.

Observations During Sampling

Well Condition: Good
Color:
Odor:
Purge Water Disposal: TRNK
Turbidity(qualitative):
Other (OVA, HNU,etc.):

Sample ID: PT-6M Sample Date & Time: 2-12-09 @ 1225
Samples Analyzed For: See the COC

**ARCADIS**

**Groundwater Sampling Form**

Project Number: RC000689.0001.  
 Date: 02-10-09  
 Weather: CLEAR/MILD

Task: 00006 Well ID: PT-2D  
 Sampled By: GC  
 Recorded By: A  
 Coded Duplicate No.: ✓

**Instrument Identification**

	PID	Water Quality Meter(s)
Model	<u>—</u>	<u>YSI - 556 MPS</u>
Serial #:	<u>—</u>	<u>06F1362 AS</u>

**Purging Information**

Casing Material: PVC  
 Casing Diameter: 2"  
 Total Depth: 105'  
 Depth to Water: 20.62  
 Water Column: 84.38  
 Gallons/Foot: 2.16  
 Gallons in Well: 13.6

Purge Technique (circle one): Low-Flow Remove 3 Well Volumes Bail Dry  
 Purge Equipment (circle one): Submersible Centrifugal Bladder Peristaltic Bailer  
 Screen Interval: From: 95' To: 105'  
 Pump Intake Setting: \_\_\_\_\_  
 Volumes to be Purged: 3 CASING  
 Total Volume Purged: 40.5  
 Pump on: 1429 Off: 1505

CNT6  
(1560) 0.012 mg/L

Well Casing Volumes (gal/ft):	<u>2" = 0.16</u>	3" = 0.37
	3 1/2" = 0.50	4" = 0.65
	6" = 1.46	

**Field Parameter Measurements Taken During Purging**

Time	Minutes Elapsed	Flow Rate (GPM)	Volume Purged (GAL)	DTW (ft btoc)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Spec Cond (umhos/cm)	Temp (°C)	DO (mg/L)	Comments
1429	0	2.0	0		85	-60.9	7.35	8080	23.47	0.96	
1433	4	2.0	7		13	-108.9	7.08	13115	23.70	0.97	
1436	7	2.0	14		8	-122.8	7.06	13223	23.23	0.82	
1440	11	2.0	20		2	-128.7	7.07	12752	23.52	0.79	
1443	14	2.0	27		1	-129.6	7.13	12639	23.41	0.66	
1447	18	2.0	34		1	-131.2	7.14	12574	23.26	0.77	
1450	21	2.0	41		1	-124.1	7.16	12510	23.17	0.86	

**Observations During Sampling**

Well Condition: GOOD  
 Color: NO  
 Odor: NO

Purge Water Disposal: TANK  
 Turbidity(qualitative): CLEAR  
 Other (OVA, HNU, etc.): \_\_\_\_\_

Sample ID: PT-2D Sample Date & Time: 2-10-09 @ 1455  
 Samples Analyzed For: See the COC

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\* TRANSducer out @ 1422 IN @ 1506

**ARCADIS**

**Groundwater Sampling Form**

Project Number: RC000689.0001. Task: 00006 Well ID: PTI-1M  
 Date: 02- 11 -09 Sampled By: GC  
 Weather: SUNNY / COLD Recorded By: CF  
 Coded Duplicate No.:                     

**Instrument Identification**

	PID	Water Quality Meter(s)
Model	<u>                    </u>	<u>YSI-550 MPS</u>
Serial #:	<u>                    </u>	<u>06F1362AS</u>

**Purging Information**

Casing Material: PVC  
 Casing Diameter: 4"  
 Total Depth: 70'  
 Depth to Water: 21.62  
 Water Column: 48.38  
 Gallons/Foot: .65  
 Gallons in Well: 31.5

Purge Technique (circle one): Low-Flow Remove 3 Well Volumes Bail Dry  
 Purge Equipment (circle one): Submersible Centrifugal Bladder Peristaltic Bailor  
 Screen Interval: From:                      To:                       
 Pump Intake Setting:                       
 Volumes to be Purged: 3 CASING  
 Total Volume Purged: 94.4  
 Pump on: 0306 Off: 0925

Well Casing Volumes (gal/ft):	2" = 0.16	3" = 0.37
	3 1/2" = 0.50	<u>4" = 0.65</u>
	6" = 1.46	

CMH6  
(1560) .015 mg/L

**Field Parameter Measurements Taken During Purging**

Time	Minutes Elapsed	Flow Rate (GPM)	Volume Purged (GAL)	DTW (ft btoc)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Spec Cond (umhos/cm)	Temp (°C)	DO (mg/L)	Comments
0806	0	2.0	0	/	10	201.3	7.28	5037	19.00	1.97	
0814	8	2.0	16	/	40	130.4	7.25	4800	21.35	0.69	
0822	16	2.0	32	/	52	78.0	7.26	4829	20.70	0.62	
0830	24	2.0	48	/	66	30.0	7.27	4801	21.50	0.72	
0838	42	2.0	64	/	48	-48.0	7.26	4812	20.94	0.70	PUMP STOP - OFF LOAD
0907	61	2.0	79	/	54	-39.2	7.30	4742	21.23	0.79	START - 0900
0914	68	2.0	95	/	62	-45.5	7.31	4753	21.51	0.87	

**Observations During Sampling**

Well Condition: GOOD Purge Water Disposal: TANK  
 Color: NO Turbidity(qualitative): CLEAR  
 Odor: NO Other (OVA, HNU, etc.):                     

Sample ID: PTI-1M Sample Date & Time: 2-11-09 @ 0915  
 Samples Analyzed For: See the COC

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 2/4/2009

# ARCADIS

## Groundwater Sampling Form

Project Number: RC000689.0001. Task: 00006 Well ID: TW-3D  
 Date: 02-11-09 Sampled By: GC  
 Weather: SUNNY / COOL Recorded By: ET  
 Coded Duplicate No.: —

### Instrument Identification

	PID	Water Quality Meter(s)
Model	—	<u>YSI-556 MPS</u>
Serial #:	—	<u>06F1362 AS</u>

### Purging Information

Casing Material: \_\_\_\_\_  
 Casing Diameter: \_\_\_\_\_  
 Total Depth: \_\_\_\_\_  
 Depth to Water: \_\_\_\_\_  
 Water Column: \_\_\_\_\_  
 Gallons/Foot: \_\_\_\_\_  
 Gallons in Well: \_\_\_\_\_

Purge Technique (circle one): Low-Flow Remove 3 Well Volumes Bail Dry  
 Purge Equipment (circle one): Submersible Centrifugal Bladder Peristaltic Bailer  
 Screen Interval: From: \_\_\_\_\_ To: \_\_\_\_\_  
 Pump Intake Setting: \_\_\_\_\_  
 Volumes to be Purged: \_\_\_\_\_  
 Total Volume Purged: \_\_\_\_\_  
 Pump on: \_\_\_\_\_ Off: \_\_\_\_\_

Well Casing Volumes (gal/ft):	2" = 0.16	3" = 0.37
	3 1/2" = 0.50	4" = 0.65
	6" = 1.46	

CMT6  
(1500) 2.10 mg/L

### Field Parameter Measurements Taken During Purging

Time	Minutes Elapsed	Flow Rate ( )	Volume Purged ( )	DTW (ft btoc)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Spec Cond (µmhos/cm)	Temp (°C)	DO (mg/L)	Comments
<u>0830</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>3</u>	<u>11.8</u>	<u>7.39</u>	<u>9404</u>	<u>14.47</u>	<u>3.35</u>	

### Observations During Sampling

Well Condition:   Purge Water Disposal: TANK  
 Color: LIGHT GREEN Turbidity(qualitative): CLEAR  
 Odor: NO Other (OVA, HNU, etc.):  

Sample ID: TW-3D Sample Date & Time: 2-11-09 @ 0830  
 Samples Analyzed For: See the COC

ARCADIS

Groundwater Sampling Form

Project Number: RC000689.0001.
Date: 02-11-09
Weather: SUNNY/COOL

Task: 00006 Well ID: TW-2D
Sampled By: GC
Recorded By: [Signature]
Coded Duplicate No.: [Signature]

Instrument Identification

Table with 2 columns: Instrument ID (PID, Model, Serial #) and Water Quality Meter(s) (YSI-556 MPS, OGF1362 AS)

Purging Information

Casing Material:
Casing Diameter:
Total Depth:
Depth to Water:
Water Column:
Gallons/Foot:
Gallons in Well:

Purge Technique (circle one): Low-Flow Remove 3 Well Volumes Bail Dry
Purge Equipment (circle one): Submersible Centrifugal Bladder Peristaltic Bailer
Screen Interval: From: To:
Pump Intake Setting:
Volumes to be Purged:
Total Volume Purged:
Pump on: Off:

Handwritten: CR# (1560) .080 mg/L

Well Casing Volumes (gal/ft): 2" = 0.16, 3" = 0.37, 3 1/2" = 0.50, 4" = 0.65, 6" = 1.46

Field Parameter Measurements Taken During Purging

Table with 12 columns: Time, Minutes Elapsed, Flow Rate, Volume Purged, DTW (ft btoc), Turbidity (NTUs), ORP (mV), pH (SI Units), Spec Cond (umhos/cm), Temp (°C), DO (mg/L), Comments. Row 1 contains handwritten data: 0920, -, -, -, -, 2, 6.9, 7.27, 7256, 19.25, 1.48.

Observations During Sampling

Well Condition:
Color: NO
Odor: NO

Purge Water Disposal: TRNK
Turbidity(qualitative): CLEAR
Other (OVA, HNU, etc.):

Sample ID: TW-2D
Samples Analyzed For: See the COC

Sample Date & Time: 2-11-09 @ 0920

ARCADIS

Groundwater Sampling Form

Project Number: RC000689.0001.
Date: 02-11-09
Weather: SUNNY/COLD

Task: 00006 Well ID: PT-3M
Sampled By: GC
Recorded By: AT
Coded Duplicate No.: DUP-101252

Instrument Identification

Table with 3 columns: Model, PID, Water Quality Meter(s). Model: YSI-556 MPS, PID: [blank], Water Quality Meter(s): 06F1362 AS

Purging Information

Casing Material: PVC
Casing Diameter: 2"
Total Depth: 70'
Depth to Water: 21.62 20.40
Water Column: 49.6
Gallons/Foot: .16
Gallons in Well: 8.0

Purge Technique (circle one): Low-Flow Remove 3 Well Volumes Bail Dry
Purge Equipment (circle one): Submersible Centrifugal Bladder Peristaltic Bailer
Screen Interval: From: To:
Pump Intake Setting:
Volumes to be Purged: 3 CASING
Total Volume Purged: 24.0
Pump on: 1219 Off: 1255

Cr+6 (1560) .009 mg/L

Well Casing Volumes (gal/ft): 2" = 0.16, 3" = 0.37, 3 1/2" = 0.50, 4" = 0.65, 6" = 1.46

Field Parameter Measurements Taken During Purging

Table with 12 columns: Time, Minutes Elapsed, Flow Rate (GPM), Volume Purged (GAL), DTW (ft btoc), Turbidity (NTUs), ORP (mV), pH (SI Units), Spec Cond (umhos/cm), Temp (°C), DO (mg/L), Comments. Data rows from 1219 to 1243.

Observations During Sampling

Well Condition: BROKEN HINGE
Color: NO
Odor: NO

Purge Water Disposal: TANK
Turbidity(qualitative): CLOUDY
Other (OVA, HNU, etc.):

Sample ID: PT-3M
Samples Analyzed For: See the COC

Sample Date & Time: 2-11-09 @ 1245

(HINGE IS BROKEN)

**ARCADIS**

**Groundwater Sampling Form**

Project Number: RC000689.0001. Task: 00006 Well ID: PTI-1D  
 Date: 02-11-09 Sampled By: GC  
 Weather: SUNNY/COOL Recorded By: CR  
 Coded Duplicate No.: —

**Instrument Identification**

	PID	Water Quality Meter(s)
Model	<u>—</u>	<u>YSI-556 MPS</u>
Serial #:	<u>—</u>	<u>06F1362 AS</u>

**Purging Information**

Casing Material: PVC  
 Casing Diameter: 4"  
 Total Depth: 105'  
 Depth to Water: 21.61  
 Water Column: 83.39  
 Gallons/Foot: .65  
 Gallons in Well: 54.3

Purge Technique (circle one): Low-Flow Remove 3 Well Volumes Bail Dry  
 Purge Equipment (circle one): Submersible Centrifugal Bladder Peristaltic Bailor  
 Screen Interval: From: \_\_\_\_\_ To: \_\_\_\_\_  
 Pump Intake Setting: \_\_\_\_\_  
 Volumes to be Purged: 3 CASING  
 Total Volume Purged: 162.7  
 Pump on: 0951 Off: 1125

Well Casing Volumes (gal/ft):	2" = 0.16	3" = 0.37
	3 1/2" = 0.50	<u>4" = 0.65</u>
	6" = 1.46	

C76  
(1560) .007 mg/L

**Field Parameter Measurements Taken During Purging**

Time	Minutes Elapsed	Flow Rate (GPM)	Volume Purged (GAL)	DTW (ft btoc)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Spec Cond (µmhos/cm)	Temp (°C)	DO (mg/L)	Comments
<u>0951</u>	<u>0</u>	<u>3.0</u>	<u>0</u>	/	<u>2</u>	<u>-166.0</u>	<u>7.52</u>	<u>12330</u>	<u>21.93</u>	<u>0.46</u>	
<u>1000</u>	<u>9</u>	<u>3.0</u>	<u>27</u>	/	<u>7</u>	<u>-167.4</u>	<u>7.57</u>	<u>13616</u>	<u>22.88</u>	<u>0.60</u>	<u>STOP PURG</u>
<u>1046</u>	<u>18</u>	<u>4.0</u>	<u>55</u>	/	<u>8</u>	<u>-28.4</u>	<u>7.73</u>	<u>12737</u>	<u>21.36</u>	<u>0.76</u>	<u>START - 1037</u>
<u>1052</u>	<u>24</u>	<u>4.0</u>	<u>82</u>	/	<u>3</u>	<u>-106.6</u>	<u>7.67</u>	<u>12306</u>	<u>22.76</u>	<u>0.73</u>	
<u>1058</u>	<u>30</u>	<u>4.0</u>	<u>110</u>	/	<u>2</u>	<u>-132.8</u>	<u>7.64</u>	<u>12137</u>	<u>22.44</u>	<u>0.98</u>	
<u>1104</u>	<u>36</u>	<u>4.0</u>	<u>137</u>	/	<u>3</u>	<u>-140.1</u>	<u>7.62</u>	<u>12158</u>	<u>22.45</u>	<u>0.60</u>	
<u>1110</u>	<u>42</u>	<u>4.0</u>	<u>163</u>	/	<u>2</u>	<u>-142.5</u>	<u>7.62</u>	<u>12019</u>	<u>22.24</u>	<u>0.67</u>	

**Observations During Sampling**

Well Condition: HINGE BROKEN  
 Color: NU  
 Odor: NU

Purge Water Disposal: TANK  
 Turbidity(qualitative): CLEAR  
 Other (OVA, HNU, etc.): —

Sample ID: PTI-1D Sample Date & Time: 2-11-09 @ 1115  
 Samples Analyzed For: See the COC

(HINGE IS BROKEN)

ARCADIS

Groundwater Sampling Form

Project Number: RC000689.0001.
Date: 02-11-09
Weather: SUNNY/MILD

Task: 00006 Well ID: PT-4M
Sampled By: GC
Recorded By: JA
Coded Duplicate No.:

Instrument Identification

Table with 3 columns: Model, Serial #, Water Quality Meter(s). Model: YSI 556 MPS, Serial #: 06F1362AS

Purging Information

Casing Material: PVC
Casing Diameter: 2"
Total Depth: 70'
Depth to Water: 21.21
Water Column: 48.79
Gallons/Foot: .16
Gallons in Well: 7.9

Purge Technique (circle one): Low-Flow Remove 3 Well Volumes Bail Dry
Purge Equipment (circle one): Submersible Centrifugal Bladder Peristaltic Bailer
Screen Interval: From: To:
Pump Intake Setting:
Volumes to be Purged: 3 casing
Total Volume Purged: 23.5
Pump on: 1442 Off: 1520

CM76 (1560) -006 mg/L

Well Casing Volumes (gal/ft): 2" = 0.16, 3" = 0.37, 3 1/2" = 0.50, 4" = 0.65, 6" = 1.46

Field Parameter Measurements Taken During Purging

Table with 12 columns: Time, Minutes Elapsed, Flow Rate (GPM), Volume Purged, DTW (ft btoc), Turbidity (NTUs), ORP (mV), pH (SI Units), Spec Cond (umhos/cm), Temp (°C), DO (mg/L), Comments. Data rows from 1442 to 1506.

Observations During Sampling

Well Condition: GOOD
Color: NO
Odor: NO

Purge Water Disposal: TANK
Turbidity(qualitative): CLOUDY
Other (OVA, HNU, etc.):

Sample ID: PT-4M Sample Date & Time: 2-11-09 @ 1510
Samples Analyzed For: See the COC

**ARCADIS**

**Groundwater Sampling Form**

Project Number: RC000689.0001.  
 Date: 02-11-09  
 Weather: SUNNY / COOL

Task: 00006 Well ID: PT-3D  
 Sampled By: GC  
 Recorded By: GC  
 Coded Duplicate No.:     

**Instrument Identification**

Model	PID	Water Quality Meter(s)
Serial #:		<u>YSI-556 MPS</u> <u>06F1362 AS</u>

**Purging Information**

Casing Material: PVC  
 Casing Diameter: 2"  
 Total Depth: 105'  
 Depth to Water: 20.60  
 Water Column: 84.4  
 Gallons/Foot: .16  
 Gallons in Well: 13.6

Purge Technique (circle one): Low-Flow Remove 3 Well Volumes Bail Dry  
 Purge Equipment (circle one): Submersible Centrifugal Bladder Peristaltic Bailer  
 Screen Interval: From: \_\_\_\_\_ To: \_\_\_\_\_  
 Pump Intake Setting: \_\_\_\_\_  
 Volumes to be Purged: 3 casing  
 Total Volume Purged: 40.6  
 Pump on: 1332 Off: 1405

CM6  
(1560) .738 mg/L

Well Casing Volumes (gal/ft):	<u>2" = 0.16</u>	3" = 0.37
	3 1/2" = 0.50	4" = 0.65
	6" = 1.46	

**Field Parameter Measurements Taken During Purging**

Time	Minutes Elapsed	Flow Rate ( )	Volume Purged ( )	DTW (ft btoc)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Spec Cond (µmhos/cm)	Temp (°C)	DO (mg/L)	Comments
1332	0	2.0	0	/	5	-270.8	7.08	14370	24.41	0.38	
1335	3	2.0	7	/	2	-223.7	7.68	14873	23.60	0.34	
1339	7	2.0	14	/	2	-203.1	7.73	14374	23.47	0.36	
1342	10	2.0	21	/	2	-170.2	7.70	14192	23.35	0.39	
1346	14	2.0	28	/	2	-151.4	7.66	13977	23.41	0.38	
1349	17	2.0	35	/	2	-148.0	7.63	13868	23.34	0.38	
1353	21	2.0	41	/	2	-143.7	7.61	13901	23.14	0.40	

**Observations During Sampling**

Well Condition: BROKEN HINGE  
 Color: LIGHT GREEN  
 Odor: NO

Purge Water Disposal: TMK  
 Turbidity(qualitative): CLAR  
 Other (OVA, HNU, etc.):     

Sample ID: PT-3D  
 Samples Analyzed For: See the COC

Sample Date & Time: 2-11-09 @ 1355

**ARCADIS**

**Groundwater Sampling Form**

Project Number: RC000689.0001.  
 Date: 02-12-09  
 Weather: Cloudy / Cool

Task: 00006 Well ID: PT-4D  
 Sampled By: GC  
 Recorded By: CE  
 Coded Duplicate No.:     

**Instrument Identification**

	PID	Water Quality Meter(s)
Model	—	YSI-556 MPS
Serial #:	—	06F1362 AS

**Purging Information**

Casing Material: PVC  
 Casing Diameter: 2"  
 Total Depth: 105'  
 Depth to Water: 21.00  
 Water Column: 84  
 Gallons/Foot: .16  
 Gallons in Well: 13.5

Purge Technique (circle one): Low-Flow Remove 3 Well Volumes Bail Dry  
 Purge Equipment (circle one): Submersible Centrifugal Bladder Peristaltic Bailer  
 Screen Interval: From:      To:       
 Pump Intake Setting:       
 Volumes to be Purged: 3 CASING  
 Total Volume Purged: 40.4  
 Pump on: 0748 Off: 0820

Well Casing Volumes (gal/ft):	<u>2" = 0.16</u>	3" = 0.37
	3 1/2" = 0.50	4" = 0.65
	6" = 1.46	

CNT6 (1560) 2.46 2/12

**Field Parameter Measurements Taken During Purging**

Time	Minutes Elapsed	Flow Rate ( )	Volume Purged ( )	DTW (ft btoc)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Spec Cond (µmhos/cm)	Temp (°C)	DO (mg/L)	Comments
0748	0	2.0	0	/	36	227.2	7.02	17814	20.85	0.11	
0751	3	2.0	7	/	14	216.2	7.03	18263	22.00	0.53	
0755	7	2.0	14	/	6	210.3	7.08	18290	22.51	0.56	
0759	11	2.0	21	/	3	206.1	7.09	18080	22.81	0.66	
0802	14	2.0	28	/	2	203.7	7.10	18050	23.27	0.66	
0808	18	2.0	34	/	2	198.5	7.10	17943	22.91	0.61	
0809	21	2.0	41	/	1	194.6	7.11	17878	22.78	0.56	

**Observations During Sampling**

Well Condition: GOOD  
 Color: ND  
 Odor: ND

Purge Water Disposal: TANK  
 Turbidity(qualitative): CLEAR  
 Other (OVA, HNU, etc.):     

Sample ID: PT-4D

Sample Date & Time: 2-12-09 @ 0810

Samples Analyzed For: See the COC

**ARCADIS**

**Groundwater Sampling Form**

Project Number: RC000689.0001. Task: 00006 Well ID: PT-5M  
 Date: 02-12-09 Sampled By: GC  
 Weather: SUNNY/MILD Recorded By: CE  
 Coded Duplicate No.: \_\_\_\_\_

**Instrument Identification**

Model	PID	Water Quality Meter(s)
Serial #:	—	YSI-556 MPS 06F1362 AS

**Purging Information**

Casing Material: PVC  
 Casing Diameter: 2"  
 Total Depth: 70'  
 Depth to Water: 19.60  
 Water Column: 50.40  
 Gallons/Foot: 16  
 Gallons in Well: 8.1

Purge Technique (circle one): Low-Flow Remove 3 Well Volumes Bail Dry  
 Purge Equipment (circle one): Submersible Centrifugal Bladder Peristaltic Bailer  
 Screen Interval: From: 60' To: 70'  
 Pump Intake Setting: \_\_\_\_\_  
 Volumes to be Purged: 3 CASING  
 Total Volume Purged: 24.2  
 Pump on: 0847 Off: 0925

Well Casing Volumes (gal/ft):	<u>2" = 0.16</u>	3" = 0.37
	3 1/2" = 0.50	4" = 0.65
	6" = 1.46	

CMH  
(1560) 0.012 mg/L

**Field Parameter Measurements Taken During Purging**

Time	Minutes Elapsed	Flow Rate (GPM)	Volume Purged ( )	DTW (ft btoc)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Spec Cond (µmhos/cm)	Temp (°C)	DO (mg/L)	Comments
0847	40	1.0	40	/	25	-44.9	7.49	3430	21.11	1.20	
0851	84	1.0	84		176	-23.5	7.43	3246	21.61	0.91	
0855	128	1.0	128		172	3.5	7.41	3283	20.95	0.77	
0859	172	1.0	172		160	14.2	7.41	3281	20.84	0.81	
0903	216	1.0	216		152	23.7	7.40	3286	20.97	0.91	
0907	260	1.0	260		162	24.3	7.41	3266	21.40	0.88	
0911	25	1.0	25		165	24.0	7.40	3281	21.15	0.83	

Observations During Sampling  
 Well Condition: BROKEN HINGE  
 Color: NO  
 Odor: NO

Purge Water Disposal: TANK  
 Turbidity(qualitative): CLEAR CLOUDY  
 Other (OVA, HNU,etc.): \_\_\_\_\_

Sample ID: PT-5M Sample Date & Time: 2-12-09 @ 0915  
 Samples Analyzed For: See the COC

**Appendix C**

Analytical Reports and  
Chain-of-Custody Documentation  
(on Compact Disc)