Topock Project Executive Abstract

Document Title: 2010 Annual Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

Submitting Agency/Authored by: PG&E

Final Document? ☐ Yes ☒ No

Date of Document: October 19, 2010

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

PG&E

Document ID: PGE20101015B

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

Action Required:
☒ Information Only ☐ Review & Comment
Return to: _____

By Date:_____
☐ Other / Explain:

Type of Document:
☐ Draft ☒ Report ☐ Letter ☐ Memo

☐ Other / Explain:

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

Is this a Regulatory Requirement?
☐ Yes
☒ No
If no, why is the document needed? Document is needed to document post-test conditions in the Floodplain.

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.

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

Brief Summary of attached document:
The report summarizes the activities conducted during the last year (October 2009 through September 2010) for the Floodplain In-Situ Pilot Test. The report presents data received since the last report was submitted.

Written by: ARCADIS on behalf of PG&E

Recommendations: None

How is this information related to the Final Remedy or Regulatory Requirements: The report follows up on work performed under the rescinded Waste Discharge Requirement Permit Order No. R7-2007-0015. The results of the pilot test will be used in the evaluation of in situ remedies as a potential component of the final groundwater remedy.

Other requirements of this information?
None.

Pacific Gas and Electric Company

Yvonne Meeks
Manager

Environmental Remediation
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October 19, 2010

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
2010 Annual Monitoring Report
(Rescinded Board Orders R7-2006-0008 and R7-2007-0014)

Dear Mr. Perdue:

Enclosed is the 2010 Annual Monitoring Report for the Pacific Gas and Electric Company (PG&E) Topock Compressor Station, Floodplain reductive zone in situ pilot test. PG&E is planning to continue the current quarterly monitoring and sampling program of the Floodplain test zone. Based on a review of the results and the incremental nature of the changes that are occurring, we will be continuing to report on an annual basis. All data will of course be available for review by your staff or other agencies in the interim if needed.

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

Sincerely,

Yvonne Meeks
Topock Project Manager

Enclosures:
2010 Annual Monitoring Report for the Floodplain Reductive Zone In Situ Pilot Test.

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

Pacific Gas and Electric Company

2010 Annual Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

PG&E Topock Compressor Station
San Bernardino County, California

19 October 2010

Document ID: PGE20101015B

ARCADIS

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

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2010 Annual Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

PG&E Topock Compressor Station
San Bernardino County, California

Document ID: PGE20101015B

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Our Ref.:
RC000753.0001.00004

Date:
19 October 2010

Table of Contents

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	*Sampling, Analysis, and Field Procedures Manual, PG&E Topock Program, Revision 1*
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	*In-Situ Hexavalent Chromium Reduction Plan, Floodplain Reductive Zone Enhancement* (August 2005)
Work Plan Addendum	*Final Addendum to the In-Situ Hexavalent Chromium Reduction Plan, Floodplain Reductive Zone Enhancement* (December 5, 2005)
Work Plan Addendum 2	*Addendum 2 to the In-Situ Hexavalent Chromium Reduction Plan, Floodplain Reductive Zone Enhancement* (April 14, 2006)
Work Plan Addendum 3	*Addendum 3 to the In-Situ Hexavalent Chromium Reduction Plan, Floodplain Reductive Zone Enhancement (November 30, 2006)*

ARCADIS

2010 Annual Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

PG&E Topock Compressor Station
San Bernardino County, California

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) during the May 2006 to July 2007 time period 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 with similar treatment concepts began in March 2008; the location is also shown on Figure 1.

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, 2009, and 2010 to monitor the long-term effectiveness of the test. Starting in 2010, the reporting frequency was reduced to annual report; therefore, this report describes monitoring activities related to the Floodplain ISPT for the last year (October 2009 through September 2010).

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. The sampling list was optimized after the Water Board Order was rescinded in November 2008; the list was reduced to the following wells: PT-1D, PT-2D, PT-3D, PT-4D, and PTI-1D. In addition to a reduced number of wells, laboratory analyses was also reduced to only include the following analytes: hexavalent chromium, total dissolved chromium, dissolved iron, dissolved manganese, dissolved arsenic, alkalinity bicarbonate, nitrate, total dissolved solids, and in-house hexavalent chromium analyses.

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).

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 the past year, ARCADIS completed four sampling rounds associated with the floodplain ISPT. 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 four sampling events were conducted in October 2009, January 2010, April 2010, and July 2010. The July 2010 event was the eleventh quarterly sampling round since the ISPT was completed in December 2007. Data from this event, and the three proceeding quarterly events are included in this report.

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); dissolved iron, dissolved manganese and dissolved arsenic (USEPA Method 200.8), nitrate (USEPA Method 300), bicarbonate alkalinity (USEPA Method

SM 2320B), and total dissolved solids (USEPA Method SM 2540C) by Calscience Environmental Laboratories, Inc. (Calscience).

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.

The samples were stored in coolers at 4 degrees Celsius and transported to Truesdail and Calscience 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 at select wells (PT-1D, PT-2D, PT-3D, PT-4D, and PTI-1D) 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
- Sampler name
- Sample date
- Sample time
- Laboratory performing the analysis
- Analysis method
- Analysis date
- Laboratory technician

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.

Over the past year, lab results for hexavalent chromium concentrations remained below the reporting limit (0.2 μg/L) in PT-1D and PT-2D. The concentration at PTI-1D increased to above reporting levels (1.2 μg/L), but is still well below pre-pilot levels (1,620 μg/L). The hexavalent chromium concentrations are maintained at non-detect in these wells by the reducing capacity created in the aquifer by the TOC injections. Hexavalent chromium concentrations at PT-3D have steadily declined over the last year to 584 μg/L, which is below pre-test concentrations of 2,000 to 4,000 μg/L. Likewise, hexavalent chromium concentrations at PT-4D have declined over the last year from 1,320 μg/L in October 2009 to 974 μg/L in July 2010. These reductions likely reflect a continued inflow of upgradient water into the area as a result of pumping from extraction wells TW-2D and TW-3D. Figure 3 illustrates the sustained reducing capacity of wells PT-1D and PT-2D three years after the last injection event.

During the pilot test, concentrations of arsenic, iron, and manganese were consistent with the formation of reducing conditions. Following the pilot test injections, the rate of attenuation of metals varied among locations depending on carbon loading at each location. At PT-3D, arsenic concentrations rapidly returned to close to baseline after organic carbon injections ceased. Wells PT-1D and PT-2D, where more carbon was delivered, were slower to attenuate, but have returned to baseline arsenic concentrations after a year following the last injection and remained at these background level through the most recent sampling round. Manganese concentrations are below historical maximums but continue to be elevated within the reducing zone at PT-1D and PT-2D, possibly due to a difference in the primary mechanisms of attenuation between arsenic and manganese (arsenic association with various reduced iron minerals that form in the IRZ) and due to the elevated concentration of TOC delivered to this location at the very end of the operation of the IRZ. Attenuation of manganese at PT-3D has been quicker, where carbon loading was lower.

6.0 Conclusions

This report summarizes the results of the sampling activities conducted during the past year (October 2009 through September 2010). The ISPT was completed in December 2007, but quarterly post-test monitoring is continuing to assess longer term trends. July 2010 results demonstrated that hexavalent chromium continued to be reduced more than three years after the seventh and final ISPT injection event in July 2007.

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.

_____, 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.

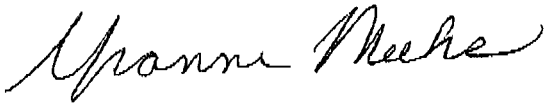
MWH, 2005. In-Situ Hexavalent Chromium Reduction Plan, Floodplain Reductive Zone Enhancement (Work Plan), Waste Discharge Requirements, Order No. R7-2006-0008, PG&E Topock Compressor Station, San Bernardino County, California, August 8.

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.

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: October 15, 2010

Table 1
Boring and Well Construction Detail Summary
PG&E Topock
Needles, California
2010 Annual 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	34º 43' 10.3"	114º 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	34º 43' 10.3"	114º 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	34º 43' 10.3"	114º 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	34º 43' 10.3"	114º 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	34º 43' 10.3 "	114º 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	34º 43' 10.3"	114º 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	34º 43' 10.2"	114º 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	34º 43' 10.2"	114º 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	34º 43' 10.2"	114º 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	34º 43' 10.1"	114º 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	34º 43' 10.1"	114º 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	34º 43' 10.1"	114º 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	34º 43' 10.1"	114º 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	34º 43' 10.2"	114º 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	34º 43' 10.2"	114º 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	34º 43' 10.6"	114º 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	34º 43' 10.6"	114º 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	34º 43' 10.6"	114º 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	34º 43' 10.4"	114º 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	34º 43' 10.4"	114º 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	34º 43' 10.4"	114º 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	34º 43' 10.3"	114º 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	34º 43' 10.2"	114º 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	34º 43' 9.3"	114º 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
2010 Annual 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

Table 2
Summary of Field Parameters
PG&E Topock
Needles, California
2010 Annual 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
	10-Feb-09	N		-83	7.28	5,080	22.78	<10

Table 2
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PG&E Topock
Needles, California
2010 Annual 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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PG&E Topock
Needles, California
2010 Annual 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 (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
	10-Feb-09	N		-131.6	7.27	12,920	23.14	<10
	20-May-09	N		-176.4	7.64	11,628	24.11	<10
	06-Aug-09	N		-162.4	7.47	12,408	23.83	<10
	26-Oct-09	**N**		**-113.4**	**7.2**	**11,932**	**22.83**	**<10**
	14-Jan-10	**N**		**-94.8**	**7.43**	**12,024**	**21.39**	**<10**
	06-Apr-10	**N**		**-106.2**	**7.57**	**12,420**	**21.1**	**16.0**
	15-Jul-10	**N**		**-128.7**	**7.56**	**11,684**	**23.5**	**<10**
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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PG&E Topock
Needles, California
2010 Annual 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-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-04	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
	10-Feb-09	N		-34	7.24	5,209	23.39	13.0

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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

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PG&E Topock
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)
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
	10-Feb-09	N		-124.1	7.16	12,510	23.17	12.0
	19-May-09	N		-159.8	7.61	10,874	24.06	<10
	06-Aug-09	N		-122.5	7.32	11,423	24.20	<10
	26-Oct-09	**N**		**-112.4**	**7.41**	**11,117**	**23.01**	**11.0**
	14-Jan-10	**N**		**-127.7**	**7.54**	**11,588**	**22.40**	**<10**
	06-Apr-10	**N**		**-112.9**	**7.46**	**12,045**	**22.35**	**<10**
	15-Jul-10	**N**		**-105.3**	**7.53**	**10,487**	**23.40**	**<10**

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PG&E Topock
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)
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
2010 Annual 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
	11-Feb-09	N		-117.4	7.38	4,522	23.28	<10

Table 2
Summary of Field Parameters
PG&E Topock
Needles, California
2010 Annual 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

Table 2
Summary of Field Parameters
PG&E Topock
Needles, California
2010 Annual 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
	11-Feb-09	N		-143.7	7.61	13,901	23.14	738
	19-May-09	N		-177.3	7.80	12,761	23.7	1,020
	06-Aug-09	N		-83.8	7.63	13,450	23.44	646
	27-Oct-09	**N**		**-100.2**	**7.66**	**13,890**	**21.87**	**615**
	14-Jan-10	**N**		**-185.4**	**7.72**	**13,480**	**22.53**	**539**
	05-Apr-10	**N**		**-46.4**	**7.54**	**13,858**	**22.9**	**622**
	15-Jul-10	**N**		**-32.4**	**7.54**	**13,172**	**23.3**	**610**

Table 2
Summary of Field Parameters
PG&E Topock
Needles, California
2010 Annual 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

Table 2
Summary of Field Parameters
PG&E Topock
Needles, California
2010 Annual 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
	11-Feb-09	N		-142.8	7.49	3,741	22.09	<10

Table 2
Summary of Field Parameters
PG&E Topock
Needles, California
2010 Annual 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
	12-Feb-09	N		194.6	7.11	17,878	22.78	2,460
	19-May-09	N		-61.7	7.54	17,016	23.91	1,960
	06-Aug-09	N		160.5	7.20	17,375	23.55	1,580
	27-Oct-09	**N**		**12.4**	**7.25**	**17,204**	**22.42**	**1,540**
	14-Jan-10	**N**		**-134.5**	**7.33**	**17,375**	**22.71**	**1,140**
	06-Apr-10	**N**		**44.1**	**7.23**	**18,025**	**23.96**	**1,140**
	15-Jul-10	**N**		**43.8**	**7.23**	**16,622**	**23.70**	**1,220**

Table 2
Summary of Field Parameters
PG&E Topock
Needles, California
2010 Annual 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
	12-Feb-09	N		24.0	7.40	3,281	21.15	12.0

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PG&E Topock
Needles, California
2010 Annual 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
	03-Dec-08	N		276	7.89	16,991	21.58	2,840
	12-Feb-09	N		76.4	7.16	16,143	22.47	2,280
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
2010 Annual 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
	04-Dec-08	N		195.7	8.59	5,376	22.48	<10
	12-Feb-09	N		0.5	7.28	5,283	23.07	13.0

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PG&E Topock
Needles, California
2010 Annual 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
	04-Dec-08	N		205.5	8.54	12,116	21.32	386
	12-Feb-09	N		20.3	7.43	10,524	23.26	174

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PG&E Topock
Needles, California
2010 Annual 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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Summary of Field Parameters
PG&E Topock
Needles, California
2010 Annual 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-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
	11-Feb-09	N		-45.5	7.31	4,753	21.51	15.0

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PG&E Topock
Needles, California
2010 Annual Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

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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
2010 Annual 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
	11-Feb-09	N		-142.5	7.62	12,019	22.24	<10
	20-May-09	N		-188.6	7.96	10,986	23.54	<10
	05-Aug-09	N		-122.4	7.70	11,582	24.85	<10
	26-Oct-09	N		-65.3	6.91	10,989	23.40	<10
	13-Jan-10	N		-98.6	7.57	11,256	22.48	<10
	05-Apr-10	**N**		**-93.4**	**7.60**	**11,288**	**23.53**	**<10**
	15-Jul-10	**N**		**-63.9**	**7.68**	**10,842**	**23.50**	**12.0**
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

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PG&E Topock
Needles, California
2010 Annual 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
	11-Feb-09	N		6.9	7.27	7,256	19.25	80

Table 2
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PG&E Topock
Needles, California
2010 Annual 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
	11-Feb-09	N		11.8	7.39	9,404	14.47	2,100

Table 2
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PG&E Topock
Needles, California
2010 Annual 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 (Cº)	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
Cº	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
---	Not available/Not analyzed
NA	Not applicable
*	Possible anomaly

Table 3
Summary of Primary Analytical Parameters
PG&E Topock
Needles, California
2010 Annual 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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved 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	0.63	0.18	<0.5	<0.1	6,460	34,300	1,560	109	6.61
	04-Oct-06		N	6	<1	<0.5	0.93	0.05	<0.5	<0.1	30,500	3,890	951	101	9.61
	08-Nov-06		N	<0.2	<1	<.5	1.61	0.30	<0.5	<0.1	33,600	16,600	2,250	33.4	55
	05-Dec-06		N	<0.2	<1	<2.5	<2.5	0.20	<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	0.88	ND	<0.5	<0.2	18,800	5,270	442	142	5.16
	06-Jun-07		N	<0.2	<1	<0.5	0.72	ND	<0.5	<0.2	14,400	3,910	413	168	4.89
	11-Jul-07		N	<0.2	<1	<0.5	1.00	0.05	<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
2010 Annual 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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved 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	0.34	<0.5	<0.1	554	535	1,230	397	27.9
	07-May-06		N	<1	---	<1	390	0.35	---	---	---	---	---	---	---
	08-May-06		N	<1	---	<1	377	0.32	---	---	---	---	---	---	---
	09-May-06		N	<1	<1	<1	341	0.17	<0.5	<0.1	543	550	2,430	391	25.4
	10-May-06		N	<1	---	<1	296	0.34	---	---	---	---	---	---	---
	11-May-06		N	<1	---	<1	273	0.32	---	---	---	---	---	---	---
	12-May-06		N	<1 J/HD	---	<1	245	0.32	---	---	---	---	---	---	---
	13-May-06		N	<1 J/HD	3.69	<1	216	0.27	<0.5	<0.1	696	668	4,390	451	5.39
	24-May-06		N	<1	10.8	<1	96	0.12	<0.5	<0.5	673	6,900	3,560	425	2.02
	31-May-06		N	<1 J/HD	3.29	<1	48.9	0.08	<0.5	<0.5	7,360	577	3,950	430	2.4
	06-Jun-06		N	<1	<1	<1	36.7	0.06	<0.5	<0.5	5,230	637	3,450	501	1.82
	18-Jul-06		N	<0.2	<1	<1	13.4	0.03	<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	0.12	<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	0.18	<0.5	<0.1	1,350	824	1,250	389	13.7
	03-Jan-07		N	<0.2	<1	<0.5	0.66	0.36	<0.5	<0.1	13,400	<500	1,240	420	1.66
	03-Jan-07		FD	<0.2	<1	<0.5	0.66	0.04	<0.5	<0.1	12,300	<500	1,280	418	1.67
	07-Feb-07		N	<0.2	<1	<0.5	0.55	0.02	<0.5	<0.1	2,550	697	1,180	448	1.17
	06-Mar-07		N	<0.2	<1	<0.5	0.54	0.03	<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	---	0.03	---	---	---	---	---	---	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	---	0.05	---	---	---	---	---	---	1.26
	31-Jul-07		N	---	---	<0.5	---	1.01	---	---	---	---	---	---	1.62
	31-Jul-07		FD	---	---	<0.5	---	0.96	---	---	---	---	---	---	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
	10-Feb-09	a	N	<0.2	<1	0.14	0.42	ND	<0.2	<0.2	7,860	393	465	340	1.40

Table 3
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PG&E Topock
Needles, California
2010 Annual 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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved 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	0.02	1.18	<0.2	<500	<500	48.9	846	37.5
	10-May-06		N	2,670	---	464	2.92	0.02	---	---	---	---	---	---	---
	11-May-06		N	2,660	---	528	2.87	0.01	---	---	---	---	---	---	---
	12-May-06		N	2,520	---	578	3.01	0.02	---	---	---	---	---	---	---
	13-May-06		N	2,380 J/HD	2,390	613	3	0.01	<1	<0.2	<500	<500	60.1	529	58.4
	24-May-06		N	1,320	1,330	488	2.61	0.12	<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	---	527.25	---	---	---	---	---	---	52.7
	17-Aug-06		N	---	---	<2.5	---	885.00	---	---	---	---	---	---	50
	21-Aug-06		N	---	---	5.79	---	1065.00	---	---	---	---	---	---	36.2
	21-Aug-06		FD	---	---	14.5	---	1080.00	---	---	---	---	---	---	36.3
	24-Aug-06		N	---	---	11.3	---	1020.00	---	---	---	---	---	---	31.8
	24-Aug-06		FD	---	---	13.3	---	1087.50	---	---	---	---	---	---	32.6
	29-Aug-06		N	---	---	8.58	---	907.50	---	---	---	---	---	---	16.3
	05-Sep-06		N	320	363	5.79	<1	937.50	<1	0.359	<500	<500	2,790	671	5.9
	12-Sep-06		N	---	---	333	---	633.75	---	---	---	---	---	---	46.3
	19-Sep-06		N	---	---	462	---	411.75	---	---	---	---	---	---	35.2
	19-Sep-06		FD	---	---	462	---	418.50	---	---	---	---	---	---	33.5
	28-Sep-06		N	---	---	447	---	188.25	---	---	---	---	---	---	16.4
	04-Oct-06		N	58.7	117	454	0.539	102.00	<0.5	<0.1	<500	<500	5,790	480	10.3
	17-Oct-06		N	---	---	303	---	63.23	---	---	---	---	---	---	4.91
	31-Oct-06		N	---	---	170	---	30.45	---	---	---	---	---	---	9.23
	08-Nov-06		N	<0.2	60.6	144	<5	975.00	<5	<1	<500	<500	5,390	365	150
	14-Nov-06		N	---	---	<2.5	---	0.41	---	---	---	---	---	---	49.9
	21-Nov-06		N	---	---	<0.5	---	0.37	---	---	---	---	---	---	31.2
	28-Nov-06		N	---	---	59	---	718.50	---	---	---	---	---	---	41.9
	05-Dec-06		N	<0.2	28.5	52	<2.5	1095.00	<2.5	<0.5	<500	<500	4,440	355	49.3
	18-Dec-06		N	---	---	31.4	---	385.50	---	---	---	---	---	---	3.29
	03-Jan-07		N	<0.2	12.1	22	<1	195.00	<1	<0.2	1,470	<500	8,120	567	1.55

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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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
PT-1D (cont)	15-Jan-07		N	---	---	13.9	---	126.75	---	---	---	---	---	---	1.36
	29-Jan-07		N	---	---	9.87	---	78.00	---	---	---	---	---	---	1.56
	07-Feb-07		N	2.6	25.5	8.96	<0.5	52.73	<0.5	<0.1	<500	<500	10,000	689	1.1
	06-Mar-07		N	<0.2	3.17	3.65	0.624	24.45	<0.5	<0.1	<500	<500	10,600	678	1.2
	05-Apr-07		N	<0.2	8.44	1.83	0.615	9.75	<0.5	<0.1	<500	<500	9,260	745	1.01
	02-May-07		N	<2	13.8	1.06	0.74	4.37	<0.5	<0.2	<500	<500	8,970	723	1.02
	15-May-07		N	---	---	282	---	ND	---	---	---	---	---	---	804
	22-May-07		N	---	---	209	---	6.17	---	---	---	---	---	---	609
	30-May-07		N	---	---	166	---	5.51	---	---	---	---	---	---	434
	06-Jun-07		N	<0.2	1.61	135	<0.5	3.80	<0.5	<0.2	2,020	1,100	6,900	285	332
	11-Jun-07		N	---	---	129	---	3.55	---	---	---	---	---	---	264
	26-Jun-07		N	---	---	117	---	2.59	---	---	---	---	---	---	149
	11-Jul-07		N	<0.2	1.1	89.5	0.673	2.36	<0.5	<0.1	963	<500	6,880	357	64.8
	24-Jul-07		N	---	---	55.1	---	840.00	---	---	---	---	---	---	835
	31-Jul-07		N	---	---	47.3	---	1,117.50	---	---	---	---	---	---	666
	08-Aug-07		N	<0.2	<1	51.0	<2.5	695.25	<2.5	<0.5	2,340	1,540	4,350	123	333
	14-Aug-07		N	---	---	57.6	---	594.00	---	---	---	---	---	---	170
	28-Aug-07		N	---	---	53.1	---	480.75	---	---	---	---	---	---	55.2
	06-Sep-07		N	<0.2	<1	41.5	0.693	502.50	<0.5	<0.1	1,840	1,250	5,400	297	29
	02-Oct-07		N	<0.2	1.34	24.9	---	336.00	<0.5	<0.1	2,070	683	7,520	387	7.25
	06-Nov-07		N	<0.2	<1	15.1	---	297.00	<0.5	<0.1	2,270	1,530	6,870	484	6.69
	04-Dec-07		N	<0.2	<1	13.0	1.65	252.75	<0.5	<0.5	1,640	1,330	6,860	476	3.79
	05-Mar-08		N	<0.2	<1	2.9	**---**	50.78	<0.5	<0.5	2,170	1,980	8,330	546	1.52
	03-Jun-08		N	<0.2	<1	1.2	0.756	20.48	<0.5	<2.5	2,230	1,820	8,610	637	<1
	10-Sep-08		N	<1.0	<1	<0.5	**---**	6.86	<0.5	<0.5	2,230	1,590	8,510	660	1.26
	02-Dec-08		N	<0.2	<1	<0.5	**---**	2.02	<0.5	<1.0	1,970	1,220	8,990	754	<1
	10-Feb-09	a	N	<0.2	<1	0.4	**---**	0.49	<0.5	<0.5	1,810	1,400	9,570	660	0.79
	19-May-09		N	2.0	2.0	---	---	---	1.3	--	--	<937	8,170	--	--
	19-May-09		FD	<0.2	<1	---	---	---	1.5	--	--	<100	4,530 J	--	--
	06-Aug-09		N	<0.2	<1	--	--	--	<0.5	--	--	1,420	8,430	--	--
	26-Oct-09		**N**	**<0.2**	**1.15**	**--**	**--**	**--**	**<0.1**	**--**	**--**	**922**	**7,210**	**--**	**--**
	14-Jan-10		**N**	**<0.2**	**<1**	**--**	**--**	**--**	**<0.5**	**--**	**--**	**742**	**6,530**	**--**	**--**
	06-Apr-10		**N**	**<0.2**	**<1**	**--**	**--**	**--**	**<0.5**	**--**	**--**	**843**	**7,030**	**--**	**--**
	15-Jul-10		**N**	**<0.2**	**1.1**	--	--	--	**<0.2**	--	--	**684**	**6,420**	--	--

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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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved 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	0.06	<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

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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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved 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	0.09	<0.5	<0.5	20,000	<500	431	423	1.76
	31-May-06		N	<1	<1	<1	12.1	0.02	<0.5	<0.5	3,430	<500	363	438	2.21
	31-May-06		FD	<1 /J	<1	<1	12	0.03	<0.5	<0.5	4,150	<500	371	429	2.28
	07-Jun-06		N	<1	<1	<1	5.29	0.02	<0.5	<0.5	1,220	<500	353	487	1.85
	18-Jul-06		N	<0.2	1.06	<1	0.99	4.24	<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	0.66	8.58	<0.5	0.64	0.13	<0.5	<0.1	1,120	<500	211	351	14
	03-Jan-07		N	3.4	74.4	<0.5	0.61	0.20	<0.5	<0.1	757	<500	1,570	366	1.64
	07-Feb-07		N	0.35	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	0.03	<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	---	0.05	---	---	---	---	---	---	1.34
	31-Jul-07		N	---	---	<0.5	---	0.10	---	---	---	---	---	---	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	0.06	<0.5	<0.5	2,100	<500	<500	392	3.55
	10-Feb-09	a	N	<0.2	<1	0.14	0.44	ND	<0.2	<0.2	1,230	<100	125	340	1.40

Table 3
Summary of Primary Analytical Parameters
PG&E Topock
Needles, California
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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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved 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	---	35.25	---	---	---	---	---	---	5.1
	17-Aug-06		FD	---	---	23.6	---	37.13	---	---	---	---	---	---	4.34
	21-Aug-06		N	---	---	17.3	---	303.75	---	---	---	---	---	---	16.2
	24-Aug-06		N	---	---	16.8	---	477.00	---	---	---	---	---	---	21.8
	29-Aug-06		N	---	---	14.7	---	594.00	---	---	---	---	---	---	12.6
	06-Sep-06		N	432	512	10.2	<1	678.75	<1	<0.2	<500	<500	1,270	699	4.54
	12-Sep-06		N	---	---	18.1	---	715.50	---	---	---	---	---	---	7.24
	19-Sep-06		N	---	---	120	---	787.50	---	---	---	---	---	---	10.3
	28-Sep-06		N	---	---	229	---	457.50	---	---	---	---	---	---	6.92
	04-Oct-06		N	292	234	303	<2.5	230.25	<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	---	79.50	---	---	---	---	---	---	31.7
	21-Nov-06		N	---	---	218	---	122.25	---	---	---	---	---	---	22.4
	28-Nov-06		N	---	---	153	---	380.25	---	---	---	---	---	---	16.2
	05-Dec-06		N	186	183	46.7	<2.5	193.50	<2.5	<.5	<500	<500	1,380	292	15
	18-Dec-06		N	---	---	65.3	---	249.00	---	---	---	---	---	---	1.59
	03-Jan-07		N	171	167	31.9	0.722	193.50	<0.5	<0.1	<500	<500	3,380	490	1.57
	15-Jan-07		N	---	---	19.3	---	195.00	---	---	---	---	---	---	1.48
	29-Jan-07		N	---	---	9.45	---	121.50	---	---	---	---	---	---	1.35
	07-Feb-07		N	146	112	7.36	0.736	64.88	<0.5	<0.2	<500	<500	4,780	661	1.28
	07-Mar-07		N	91.8	86.7	1.41	0.683	16.05	<0.5	<0.2	<500	<500	5,150	787	<1
	05-Apr-07		N	85.6	88.5	0.702	0.612	5.27	<0.5	<0.2	<500	<500	4,660	779	<1
	02-May-07		N	87.2	94.2	<0.5	0.74	2.51	<0.5	<0.2	<500	<500	4,580	785	1.03
	15-May-07		N	---	---	73.4	---	3.65	---	---	---	---	---	---	200
	22-May-07		N	---	---	157	---	3.29	---	---	---	---	---	---	466
	30-May-07		N	---	---	176	---	3.90	---	---	---	---	---	---	409
	06-Jun-07		N	<0.2	<1	164	<0.5	3.24	<0.5	<0.2	992	672	5,180	184	313
	11-Jun-07		N	---	---	154	---	4.43	---	---	---	---	---	---	287

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Summary of Primary Analytical Parameters
PG&E Topock
Needles, California
2010 Annual 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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
PT-2D (cont)	26-Jun-07		N	---	---	141	---	2.00	---	---	---	---	---	---	231
	11-Jul-07		N	<0.2	<1	114	0.665	1.44	<0.5	<0.1	1,100	593	5,840	236	122
	24-Jul-07		N	---	---	87.3	---	156.75	---	---	---	---	---	---	162
	24-Jul-07		FD	---	---	84.7	---	129.75	---	---	---	---	---	---	161
	31-Jul-07		N	---	---	79.8	---	429.00	---	---	---	---	---	---	312
	08-Aug-07		N	<0.2	<1	68.9	<1	555.00	<1	<0.2	1,990	1,120	4,480	31.8	353
	08-Aug-07		FD	<0.2	<1	68.9	<2.5	591.00	<2.5	<0.5	2,030	1,250	4,630	31	359
	14-Aug-07		N	---	---	68	---	547.50	---	---	---	---	---	---	248
	28-Aug-07		N	---	---	63	---	415.50	---	---	---	---	---	---	87.6
	06-Sep-07		N	<0.2	<1	46.3	0.685	398.25	<0.5	<0.1	2,230	1,420	4,260	131	59
	06-Sep-07		FD	<0.2	3.18	47.2	0.683	414.00	<0.5	<0.1	2,110	1,420	4,470	142	57.3
	02-Oct-07		N	<0.2	<1	20.7	---	414.75	<0.5	<0.1	2,410	1,970	5,490	304	10.1
	06-Nov-07		N	<0.2	<1	8.98	---	430.50	<0.5	<0.1	5,480	2,260	6,620	396	2.85
	06-Nov-07		FD	<0.2	<1	9.81	---	407.25	<0.5	<0.1	3,360	2,230	6,600	400	2.7
	05-Dec-07		N	<0.2	<1	5.32	0.730	280.50	<0.5	<0.5	2,700	2,230	7,980	458	2.33
	05-Mar-08		N	<0.2	<1	<0.5	---	68.25	<0.5	<0.2	2,410	2,190	11,000	592	1.41
	04-Jun-08		N	<0.2	<1	<0.5	---	21.60	<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
	10-Feb-09	a	N	<0.2	<1	0.74	0.840	0.31	<0.5	<0.5	2,020	1,840	11,300	670	<0.5
	19-May-09		N	<0.2	<1	---	---	---	<0.5	---	---	1,350	9,080	---	---
	06-Aug-09		N	<0.2	<1	---	---	---	<0.5	---	---	1,510	8,530	---	---
	26-Oct-09		**N**	**<0.2**	**<1**	**---**	**---**	**---**	**<0.1**	**---**	**---**	**1,090**	**7,730**	**---**	**---**
	26-Oct-09		**FD**	**<0.2**	**<1**	**---**	**---**	**---**	**<0.1**	**---**	**---**	**946**	**7,280**	**---**	**---**
	14-Jan-10		**N**	**<0.2**	**<1**	**---**	**---**	**---**	**<0.5**	**---**	**---**	**959**	**7,180**	**---**	**---**
	06-Apr-10		**N**	**<0.2**	**<1**	**---**	**---**	**---**	**<0.5**	**---**	**---**	**944**	**7,560**	**---**	**---**
	15-Jul-10		**N**	**<0.2**	**<1**	---	---	---	**<0.2**	---	---	**803**	**6,420**	---	---
	15-Jul-10		**FD**	**<0.2**	**<1**	---	---	---	**<0.2**	---	---	**681**	**5,760**	---	---

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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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved 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	7.21	<1	<0.2	7,850	6,280	973	112	5.83
	10-May-06		N	<1	---	<1	19	25.80	---	---	---	---	---	---	---
	11-May-06		N	<1	---	<1	1.07	4.12	---	---	---	---	---	---	---
	12-May-06		N	<0.2	---	<1	64.6	31.73	---	---	---	---	---	---	---
	13-May-06		N	<1 J/HD	2.38	<1	93.7	42.00	<1	<0.2	6,710	5,890	872	112	14.6
	23-May-06		N	<1	<1	<1	68.1	795.00	<1	<0.5	130,000	1,750	830	30.5	49.9
	30-May-06		N	<1	1.36	<1	470	1132.50	<2.5	<0.5	27,600	695	762	24.4	93.5
	06-Jun-06		N	<1 J/HD	<1	<1	749	915.00	<2.5	<0.5	21,900	3,220	750	23.2	119
	19-Jul-06		N	<0.2	<1	<1	212	563.25	<0.5	<0.5	23,400	4,680	652	12.9	16.4
	08-Aug-06		N	<0.2	<1	<0.5	75.6	433.50	<0.5	<0.1	38,500	3,000	749	16.3	6.28
	06-Sep-06		N	<0.2	<1	<0.5	35.2	258.00	<0.5	<0.1	12,900	3,700	883	34.2	6.66
	04-Oct-06		N	<0.2	<1	<2.5	25.1	154.50	<2.5	<0.5	12,600	4,310	886	36.9	10.7
	08-Nov-06		N	<0.2	<1	<0.5	16.6	39.83	<0.5	<0.1	13,100	3,720	914	36.9	33.9
	05-Dec-06		N	<0.2	<1	<0.5	15	45.60	<0.5	<0.1	6,120	4,470	836	32.3	28.2
	03-Jan-07		N	<0.2	<1	<1	13.3	34.28	<1	<0.2	7,700	4,870	798	25.8	6.45
	07-Feb-07		N	<0.2	<1	<0.5	11.2	34.65	<0.5	<0.1	7,340	3,580	797	26.9	6.82
	07-Mar-07		N	<0.2	<1	<0.5	9.4	13.65	<0.5	<0.1	9,340	3,770	727	26.4	6.78
	07-Mar-07		FD	<0.2	<1	<0.5	9.26	14.03	<0.5	<0.1	7,000	5,820	768	29.4	6.82
	05-Apr-07		N	<0.2	<1	<0.5	6.95	8.25	<0.5	<0.1	8,150	2,700	659	52.8	6.2
	02-May-07		N	<0.2	<1	<0.5	5.69	46.73	<0.5	<0.2	8,400	3,070	669	35.2	6.61
	06-Jun-07		N	<0.2	<1	<0.5	4.22	25.43	<0.5	<0.2	6,690	3,300	719	21.6	7.08
	11-Jul-07		N	<0.2	<1	<0.5	3.39	6.82	<0.5	<0.1	5,610	2,650	656	27	6.56
	08-Aug-07		N	<0.2	<1	<0.5	3.16	12.68	<0.5	<0.1	5,290	723	681	26.2	7.43
	06-Sep-07		N	<0.2	<1	<0.5	2.66	7.30	<0.5	<0.1	5,070	2,210	634	32.9	6.68

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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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved 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	0.02	---	---	---	---	---	---	---
	09-May-06		N	<0.2 J/HD	<1	<1	28.8	0.06	<0.5	<0.1	518	<500	1,350	559	2.94
	10-May-06		N	<1	---	<1	60.2	0.11	---	---	---	---	---	---	---
	11-May-06		N	<1	---	<1	75.8	0.15	---	---	---	---	---	---	---
	12-May-06		N	<1 J/HD	---	<1	87.1	0.17	---	---	---	---	---	---	---
	13-May-06		N	<1 J/HD	2.46	<1	72.9	0.10	<0.5	<0.1	620	597	1,250	530	3.22
	13-May-06		FD	<0.2	9.68	<1	73.3	0.14	<0.5	<0.1	620	589	1,270	517	3.89
	23-May-06		N	<1	<1	<1	27.4	0.08	<0.5	<0.5	12,000	<500	1,550	573	1.59
	30-May-06		N	<1	3.09	<1	9.74	0.03	<0.5	<0.5	33,100	<500	1,260	533	1.94
	06-Jun-06		N	<1	<1	<1	4.86	0.02	<0.5	<0.5	5,140	<500	1,100	583	1.77
	06-Jun-06		FD	<1	1.61	<1	4.5	0.03	<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	58.88	<0.5	<0.1	6,980	4,230	872	82	33.1
	05-Dec-06		N	5.5	7.24	3.44	0.712	9.75	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	0.01	<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

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PG&E Topock
Needles, California
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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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved 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	0.02	1.73	<0.1	<500	<500	28.4	699	80.3
	07-May-06		N	4,140	---	515	3.15	0.02	---	---	---	---	---	---	---
	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	0.01	---	---	---	---	---	---	---
	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	0.11	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	0.09	3.28	<0.1	6,760	<500	27.7	875	2.99
	14-Aug-06		N	---	---	8.97	---	892.50	---	---	---	---	---	---	58
	17-Aug-06		N	---	---	9.65	---	290.25	---	---	---	---	---	---	10.5
	21-Aug-06		N	---	---	8.24	---	156.75	---	---	---	---	---	---	3.86
	24-Aug-06		N	---	---	7.09	---	135.75	---	---	---	---	---	---	8.53
	29-Aug-06		N	---	---	7.51	---	85.50	---	---	---	---	---	---	2.25
	29-Aug-06		FD	---	---	7.5	---	81.00	---	---	---	---	---	---	2.35
	05-Sep-06		N	2,930	2,940	8.37	<10	37.43	<10	<2	<500	<500	1,660	801	2.33
	12-Sep-06		N	---	---	270	---	30.68	---	---	---	---	---	---	32.8
	12-Sep-06		FD	---	---	265	---	34.13	---	---	---	---	---	---	31.3
	19-Sep-06		N	---	---	60.8	---	13.95	---	---	---	---	---	---	6.91
	28-Sep-06		N	---	---	25.3	---	5.89	---	---	---	---	---	---	6.16
	04-Oct-06		N	3,100	2,960	25.5	<1	5.28	2.65	<0.2	<500	<500	2,630	741	7.61
	17-Oct-06		N	---	---	4.16	---	1.57	---	---	---	---	---	---	7.08
	17-Oct-06		FD	---	---	4.89	---	ND	---	---	---	---	---	---	8.91
	31-Oct-06		N	---	---	7.27	---	0.45	---	---	---	---	---	---	8.65
	08-Nov-06		N	2,430	2,330	<5	<5	317.25	<5	<1	<500	<500	3,940	694	43.9
	14-Nov-06		N	---	---	187	---	81.00	---	---	---	---	---	---	16.7
	21-Nov-06		N	---	---	10	---	66.30	---	---	---	---	---	---	4.15
	28-Nov-06		N	---	---	10	---	46.50	---	---	---	---	---	---	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	---	17.03	---	---	---	---	---	---	<1
	03-Jan-07		N	3,190	3,160	7.77	0.829	9.98	2.94	<0.1	<500	<500	2,340	799	1.05
	15-Jan-07		N	---	---	7.03	---	4.71	---	---	---	---	---	---	<1
	29-Jan-07		N	---	---	2.89	---	2.90	---	---	---	---	---	---	<1
	07-Feb-07		N	3,030	3,030	8.4	0.793	3.17	3.29	<0.1	<500	<500	1,820	849	<1
	06-Mar-07		N	3,160	2,930	7.95	0.685	0.74	3.12	<0.1	<500	<500	1,320	798	<1

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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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved 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	0.23	2.45	<0.1	<500	<500	1,150	769	<1
	02-May-07		N	2,650	2,380	6.19	0.781	0.11	2.61	<0.2	<500	<500	981	798	<1
	16-May-07		N	---	---	107	---	1.92	---	---	---	---	---	---	252
	23-May-07		N	---	---	62.5	---	1.00	---	---	---	---	---	---	133
	31-May-07		N	---	---	31.5	---	0.74	---	---	---	---	---	---	69.1
	06-Jun-07		N	509	780	24.8	0.688	0.42	0.782	<0.2	<500	<500	6,470	614	50
	06-Jun-07		FD	693	757	26.4	0.672	0.30	0.757	<0.5	<500	<500	6,630	638	49.1
	11-Jun-07		N	---	---	23.9	---	0.39	---	---	---	---	---	---	38.7
	11-Jun-07		FD	---	---	24	---	0.39	---	---	---	---	---	---	37.9
	26-Jun-07		N	---	---	16.5	---	0.31	---	---	---	---	---	---	15.4
	26-Jun-07		FD	---	---	19.3	---	0.38	---	---	---	---	---	---	16.6
	11-Jul-07		N	832	1,060	11.7	0.726	0.82	1.25	<0.2	<500	<500	4,480	664	7.56
	25-Jul-07		N	---	---	9.83	---	428.25	---	---	---	---	---	---	326
	01-Aug-07		N	---	---	7.07	---	215.25	---	---	---	---	---	---	113
	08-Aug-07		N	<0.2	66.3	3.56	0.818	148.50	0.529	<0.1	954	<500	6,800	562	67
	15-Aug-07		N	---	---	<.5	---	122.25	---	---	---	---	---	---	42.3
	28-Aug-07		N	---	---	2.62	---	69.83	---	---	---	---	---	---	12.9
	06-Sep-07		N	177	279	1.71	0.823	41.33	0.8	<0.1	590	<500	6,170	692	7.13
	03-Oct-07		N	481 J	531	0.582	---	37.13	1.05	<0.1	<500	<500	4,950	709	1.93
	07-Nov-07		N	721	643	2.26	---	18.90	1.16	<0.1	<500	<500	4,180	731	1.05
	05-Dec-07		N	931	932	2.77	0.883	13.95	1.23	<0.5	<500	<500	2,730	765	<1
	05-Mar-08		N	839	822	<.5	---	0.86	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
	11-Feb-09		N	788	774	0.28	---	ND	1.6	<0.5	<100	118	2,410	940	<0.5
	19-May-09		N	852	962	---	---	---	1.0	---	---	<100	2,230	---	---
	06-Aug-09		N	714	683	---	---	---	0.9	---	---	593	2,160	---	---
	06-Aug-09		FD	756	732	---	---	---	0.9	---	---	630	2,160	---	---
	27-Oct-09		**N**	**671**	**598**	**---**	**---**	**---**	**0.2**	**---**	**---**	**<100**	**2,200**	**---**	**---**
	14-Jan-10		**N**	**520**	**536**	**---**	**---**	**---**	**0.8**	**---**	**---**	**<100**	**2,090**	**---**	**---**
	14-Jan-10		**FD**	**568**	**513**	**---**	**---**	**---**	**0.8**	**---**	**---**	**<100**	**2,140**	**---**	**---**
	05-Apr-10		**N**	**554**	**533**	**---**	**---**	**---**	**1.0**	**---**	**---**	**<100**	**1,980**	**---**	**---**
	05-Apr-10		**FD**	**547**	**501**	**---**	**---**	**---**	**0.9**	**---**	**---**	**<100**	**2,090**	**---**	**---**
	15-Jul-10		**N**	**584**	**554**	---	---	---	**0.9**	---	---	**<500**	**1,590**	---	---

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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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved 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	0.05	<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	0.12	<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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Location Name:	Sample Date:	Notes	Sample Type	Hexavalent Chromium (µg/L)	Dissolved Chromium (µg/L)	Iodide (mg/L)	Bromide (mg/L)	Fluorescein (ppb dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved 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
	11-Feb-09		N	<0.2	1.6	0.15	0.84	ND	<0.2	<0.2	9,440	534	223	410	1.40

Table 3
Summary of Primary Analytical Parameters
PG&E Topock
Needles, California
2010 Annual 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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved 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	0.06	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	0.02	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	---	0.03	---	---	---	---	---	---	2.13
	16-May-07		FD	---	---	10.8	---	0.03	---	---	---	---	---	---	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	---	3.89	---	---	---	---	---	---	2.56
	01-Aug-07		N	---	---	<0.5	---	1.79	---	---	---	---	---	---	1.3

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Needles, California
2010 Annual 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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved 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	0.83	3.74	<0.1	<500	<500	124	956	1.82
	15-Aug-07		N	---	---	<0.5	---	0.35	---	---	---	---	---	---	1.52
	28-Aug-07		N	---	---	<0.5	---	0.10	---	---	---	---	---	---	1.21
	06-Sep-07		N	3,970	3,287	<0.5	1.11	0.04	3.65	<0.1	<500	<500	<5	916	1.34
	03-Oct-07		N	3,460	3,310	<0.5	---	0.02	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
	12-Feb-09		N	1,790	1,950	0.12	--	ND	8.10	<0.5	<100	155	9.98	1,100	0.58
	19-May-09		N	1,680	1,760	---	---	---	1.50	---	---	<100	9.62	---	---
	06-Aug-09		N	1,490	1,490	---	---	---	1.40	---	---	949	10.4	---	---
	27-Oct-09		**N**	**1,320**	**1,170**	**---**	**---**	**---**	**0.90**	**---**	**---**	**<100**	**10.2**	**---**	**---**
	14-Jan-10		**N**	**954**	**1,130**	**---**	**---**	**---**	**1.30**	**---**	**---**	**<100**	**84.6**	**---**	**---**
	06-Apr-10		**N**	**1,060**	**976**	**---**	**---**	**---**	**1.20**	**---**	**---**	**<500**	**9.45**	**---**	**---**
	15-Jul-10		**N**	**974**	**890**	---	---	---	**1.2**	---	---	**<500**	**18.4**	---	---
PT-5S	16-Mar-06		N	<1	2.71	<1	<0.5	ND	<0.5	<0.1	949	971	2,440	401	3.2
	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

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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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved 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	0.10	<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
	12-Feb-09		N	<0.2	1.9	<0.1	0.19	ND	<0.1	<0.1	5,600	<100	57.3	340	1.6

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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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved 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
	12-Feb-09		N	1,750	1,900	0.1	--	ND	1.60	<0.5	<100	149	36.8	1,100	0.53

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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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved 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

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Summary of Primary Analytical Parameters
PG&E Topock
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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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved 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	0.04	<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
	12-Feb-09		N	<0.2	1.4	<0.1	0.32	ND	<0.2	<0.2	2,350	<100	281	380	1.9

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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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved 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	0.08	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	0.55	ND	1.05	<0.1	612	<500	34.1	667	2.9
	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	617	4.2
	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	0.03	1.75	<0.1	1,260	<500	116	634	1.36
	08-Feb-07		N	1,020	926	2.74	0.62	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	---	0.10	---	---	---	---	---	---	<1
	01-Aug-07		N	---	---	<0.5	---	0.02	---	---	---	---	---	---	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	---	0.14	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

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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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved 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	1,462.50	<2.5	<0.5	21,500	19,900	980	15	588
	07-May-06		N	<1 J/HD	---	<1	449	2,865.00	---	---	---	---	---	---	452
	09-May-06		N	<1	---	<1	360	2,865.00	---	---	---	---	---	---	474
	09-May-06		FD	<0.2	---	<1	360	2,827.50	---	---	---	---	---	---	467
	10-May-06		N	<1	---	<1	362	2,670.00	---	---	---	---	---	---	506
	11-May-06		N	<1	---	<1	316	2,820.00	---	---	---	---	---	---	543
	12-May-06		N	<1	---	<1	284	2,782.50	---	---	---	---	---	---	558
	13-May-06		N	---	---	<1	288	2,797.50	---	---	---	---	---	---	525
	23-May-06		N	---	---	<1	213	2,857.50	---	---	---	---	---	---	214
	31-May-06		N	---	---	<1	56.4	3,067.50	---	---	---	---	---	---	188
	05-Jun-06		N	---	---	<1	28.7	2,812.50	---	---	---	---	---	---	136
	18-Jul-06		N	<0.2	---	<1	3.05	485.25	---	---	---	---	---	---	9.33
	07-Aug-06		N	<0.2	---	<0.5	<0.5	147.00	---	---	---	---	---	---	11.4
	07-Sep-06		N	<1	---	<1	<1	55.05	---	---	---	---	---	---	8.1
	03-Oct-06		N	<0.2	---	<2.5	<2.5	34.50	---	---	---	---	---	---	10.8
	07-Nov-06		N	---	---	<0.5	1.03	23.03	---	---	---	---	---	---	26.3
	05-Dec-06		N	---	---	<0.5	0.884	16.20	<0.5	<0.1	---	---	---	4.37	45.4
	02-Jan-07		N	<0.2	---	<0.5	0.974	12.83	---	---	---	---	---	---	7.41
	06-Feb-07		N	<0.2	---	<0.5	0.928	10.43	---	---	---	---	---	---	7.31
	06-Mar-07		N	<0.2	---	<0.5	0.910	8.63	---	---	---	---	---	---	7.31
	04-Apr-07		N	<0.2	---	<0.5	0.806	6.07	---	---	---	---	---	---	7.18
	01-May-07		N	<0.2	---	<0.5	0.968	4.83	---	---	---	---	---	---	7.32
	05-Jun-07		N	<0.2	---	<0.5	0.766	3.33	---	---	---	---	---	---	7.42
	10-Jul-07		N	<0.2	---	<0.5	0.925	2.68	---	---	---	---	---	---	7.09
	07-Aug-07		N	<0.2	---	<0.5	0.984	2.78	---	---	---	---	---	---	7.79
	05-Sep-07		N	<0.2	---	<0.5	0.742	2.46	---	---	---	---	---	---	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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved 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	0.64	<0.5	<0.1	<500	<500	1,770	18.7	210
	07-May-06		N	<1 J/HD	---	<1	1,510	0.55	---	---	---	---	---	---	215
	09-May-06		N	<1	---	---	621	0.20	---	---	---	---	---	---	83.4
	10-May-06		N	<1	---	<1	1,080	0.56	---	---	---	---	---	---	111
	11-May-06		N	<1	---	<1	1,130	0.59	---	---	---	---	---	---	101
	12-May-06		N	<1	---	<1	1,090	0.70	---	---	---	---	---	---	77.6
	13-May-06		N	---	---	<1	1,060	0.78	---	---	---	---	---	---	67.6
	23-May-06		N	---	---	<1	1,490	1.19	---	---	---	---	---	---	77.8
	31-May-06		N	---	---	<1	169	0.22	---	---	---	---	---	---	3.56
	05-Jun-06		N	---	---	<1	125	0.21	---	---	---	---	---	---	2.18
	18-Jul-06		N	<1	---	<1	28.4	0.08	---	---	---	---	---	---	3.12
	07-Aug-06		N	<0.2	---	<0.5	18.1	1.18	---	---	---	---	---	---	6.07
	07-Sep-06		N	<0.2	---	<0.5	5.66	0.04	---	---	---	---	---	---	2.42
	03-Oct-06		N	<0.2	---	<0.5	1.96	0.02	---	---	---	---	---	---	7.75
	07-Nov-06		N	---	---	<0.5	0.95	0.06	---	---	---	---	---	---	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	<0.2	---	<0.1	<0.1	ND	---	---	---	---	---	---	1.00

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PG&E Topock
Needles, California
2010 Annual 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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved 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	0.11	---	---	---	---	---	---	195
	09-May-06		N	<1	---	1,950	19.2	0.60	---	---	---	---	---	---	204
	10-May-06		N	937	---	672	4.56	0.07	---	---	---	---	---	---	46.4
	11-May-06		N	1,050	---	613	3.76	0.04	---	---	---	---	---	---	31.9
	12-May-06		N	<1 J/HD	---	2,400	12.6	0.45	---	---	---	---	---	---	215
	13-May-06		N	---	---	1,760	8.24	0.11	---	---	---	---	---	---	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	---	2,137.50	---	---	---	---	---	---	117
	17-Aug-06		N	---	---	14.3	---	1,372.50	---	---	---	---	---	---	53.7
	22-Aug-06		N	---	---	1.50	---	636.75	---	---	---	---	---	---	13.1
	24-Aug-06		N	---	---	<1	---	471.75	---	---	---	---	---	---	6.76
	29-Aug-06		N	---	---	<1	---	213.75	---	---	---	---	---	---	3.53
	05-Sep-06		N	231	---	<0.5	<0.5	126.00	---	---	---	---	---	---	3.76
	12-Sep-06		N	---	---	873	---	22.80	---	---	---	---	---	---	110
	19-Sep-06		N	---	---	260	---	22.50	---	---	---	---	---	---	11
	28-Sep-06		N	---	---	80.9	---	11.55	---	---	---	---	---	---	6.94
	28-Sep-06		FD	---	---	80.5	---	11.55	---	---	---	---	---	---	7.51
	03-Oct-06		N	<0.2	---	51.8	0.648	9.23	---	---	---	---	---	---	5.91
	17-Oct-06		N	---	---	20.5	---	4.58	---	---	---	---	---	---	6.70
	31-Oct-06		N	---	---	11.9	---	2.57	---	---	---	---	---	---	9.12
	07-Nov-06		N	---	---	10.7	<5	1,507.50	---	---	---	---	---	---	206
	14-Nov-06		N	---	---	<5	---	567.75	---	---	---	---	---	---	35.6
	14-Nov-06		FD	---	---	<5	---	570.75	---	---	---	---	---	---	35.4
	21-Nov-06		N	---	---	<5	---	271.5	---	---	---	---	---	---	12.1
	21-Nov-06		FD	---	---	<5	---	263.25	---	---	---	---	---	---	8.66
	28-Nov-06		N	---	---	0.990	---	138.75	---	---	---	---	---	---	7.09
	28-Nov-06		FD	---	---	1.02	---	137.25	---	---	---	---	---	---	6.64
	05-Dec-06		N	---	---	0.577	0.694	53.18	0.610	<0.1	---	---	---	728	8.83
	18-Dec-06		N	---	---	0.571	---	42.53	---	---	---	---	---	---	3.84
	18-Dec-06		FD	---	---	0.568	---	42.00	---	---	---	---	---	---	3.89
	02-Jan-07		N	29.8	---	1.23	0.761	18.75	---	---	---	---	---	---	1.86
	15-Jan-07		N	---	---	1.31	---	10.65	---	---	---	---	---	---	1.74
	29-Jan-07		N	---	---	<0.5	---	7.80	---	---	---	---	---	---	2.52
	29-Jan-07		FD	---	---	<0.5	---	8.10	---	---	---	---	---	---	1.96
	06-Feb-07		N	138	---	<0.5	0.741	4.88	---	---	---	---	---	---	1.02
	06-Mar-07		N	164	---	<0.5	0.592	2.00	---	---	---	---	---	---	1.08
	04-Apr-07		N	168	---	<0.5	<0.5	1.89	---	---	---	---	---	---	<1

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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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
PTI-1D (cont)	01-May-07		N	84	---	<0.5	0.712	1.97	---	---	---	---	---	---	1.05
	15-May-07		N	---	---	306	---	ND	---	---	---	---	---	---	776
	22-May-07		N	---	---	128	---	2.17	---	---	---	---	---	---	227
	30-May-07		N	---	---	73.4	---	1.39	---	---	---	---	---	---	72.3
	05-Jun-07		N	<0.2	---	38.7	<0.5	0.77	---	---	---	---	---	---	38.8
	11-Jun-07		N	---	---	29.9	---	0.63	---	---	---	---	---	---	19.8
	26-Jun-07		N	---	---	17.4	---	0.34	---	---	---	---	---	---	3.71
	10-Jul-07		N	<0.2	---	10.1	<0.5	0.25	---	---	---	---	---	---	1.62
	24-Jul-07		N	---	---	<2.5	---	1,177.50	---	---	---	---	---	---	756
	31-Jul-07		N	---	---	<2.5	---	802.50	---	---	---	---	---	---	262
	07-Aug-07		N	<0.2	---	<1	<1	465.75	---	---	---	---	---	---	81.0
	14-Aug-07		N	---	---	1.27	---	352.50	---	---	---	---	---	---	27.1
	28-Aug-07		N	---	---	1.90	---	161.25	---	---	---	---	---	---	2.87
	05-Sep-07		N	<0.2	---	0.79	0.54	116.25	---	---	---	---	---	---	2.04
	02-Oct-07		N	<0.2	---	0.77	0.63	60.38	---	---	---	---	---	---	1.78
	06-Nov-07		N	<0.2	---	<0.5	---	23.33	---	---	---	---	---	---	1.01
	04-Dec-07		N	<0.2	---	<0.5	2.16	15.15	---	---	---	---	---	---	---
	04-Mar-08		N	<0.2	---	<0.5	---	1.78	---	---	---	---	---	---	<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
	11-Feb-09		N	<0.2	---	0.2	---	0.09	---	---	---	---	---	---	<0.5
	20-May-09		N	<0.2	<1	---	---	---	<0.5	---	---	<347	4,980	---	---
	05-Aug-09		N	<0.2	<1	---	---	---		---	---	---	---	---	---
	27-Oct-09		N	<1.05	1.01	---	---	---		---	---	---	---	---	---
	13-Jan-10		N	0.52	1.82	---	---	---		---	---	---	---	---	---
	05-Apr-10		N	<1.05	1.6	---	---	---	---	---	---	---	---	---	---
	15-Jul-10		**N**	**1.2**	**2.3**	**---**	**---**	**---**	**<0.2**	**---**	**---**	**<500**	**3,150**	**---**	**---**

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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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
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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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	---	0.09	---	---	---	---	---	---	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	---	0.04	---	---	---	---	---	---	6.48
	31-Oct-06		N	---	---	2.57	---	0.07	---	---	---	---	---	---	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	---	0.01	---	---	---	---	---	---	3.44
	28-Nov-06		N	---	---	2.48	---	0.59	---	---	---	---	---	---	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	---	0.40	---	---	---	---	---	---	1.11
	15-Jan-07		FD	---	---	2.01	---	0.40	---	---	---	---	---	---	<1
	29-Jan-07		N	---	---	2.08	---	0.26	---	---	---	---	---	---	1.08
	06-Feb-07		N	467	441	1.77	1.23	0.27	2.27	<0.1	<500	<500	<5	388	<1
	06-Mar-07		N	412	405	1.21	0.930	0.04	1.06	<0.1	<500	<500	<5	520	1.19
	05-Apr-07		N	428	320	1.32	0.756	0.16	1.69	<0.1	<500	<500	<5	342	<1
	01-May-07		N	328	323	0.865	0.769	0.18	0.840	<0.2	<500	<500	<5	529	<1
	16-May-07		N	---	---	1.28	---	0.14	---	---	---	---	---	---	<1
	22-May-07		N	---	---	<0.5	---	0.20	---	---	---	---	---	---	2.24
	30-May-07		N	---	---	<0.5	---	0.19	---	---	---	---	---	---	<1
	05-Jun-07		N	290	267	1.07	0.532	0.03	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	---	0.14	---	---	---	---	---	---	<1
	10-Jul-07		N	278	224	<0.5	0.773	0.02	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	---	0.35	---	---	---	---	---	---	<1
	28-Aug-07		FD	---	---	<0.5	---	0.09	---	---	---	---	---	---	1.29
	05-Sep-07		N	226	186	0.624	0.707	0.30	1.08	<0.1	<500	<500	<5	518	<1
	03-Oct-07		N	178	204	0.504	---	0.91	0.717	<0.1	<500	<500	<500	442	1.06
	06-Nov-07		N	161	150	<0.5	---	1.27	0.784	<0.1	<500	<500	<500	453	<1

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TW-2D (cont)	05-Dec-07		N	267	243	<0.5	0.698	0.83	0.773	<0.5	<500	<500	<500	497	1.23
	05-Mar-08		N	113	99.1	<0.5	--	0.98	0.806	<0.1	<500	<500	<500	499	<1
	05-Jun-08		N	92.5	77.9	<0.5	--	0.36	0.694	<1	<500	<500	<500	446	<1
	09-Sep-08		N	112	110	<0.5	--	0.12	0.554	<1	<500	<500	<500	467	1.17
	09-Sep-08		FD	121	110	<0.5	--	0.12	0.555	<1	<500	<500	<500	469	1.08
	04-Dec-08		N	74.2	77.2	<0.5	--	0.08	0.701	<2.5	<500	<500	<500	651	<1
	11-Feb-09		N	66.4	53.8	<0.1	--	0.02	1.8	<0.2	<100	<100	5.5	380	<0.5
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	---	0.22	---	---	---	---	---	---	8.22
	29-Aug-06		N	---	---	6.33	---	0.06	---	---	---	---	---	---	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	---	0.13	---	---	---	---	---	---	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	---	0.02	---	---	---	---	---	---	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	0.02	4.37	<0.1	<500	<500	<5	601	1.15
	15-Jan-07		N	---	---	6.25	---	0.01	---	---	---	---	---	---	1.12
	29-Jan-07		N	---	---	6.69	---	0.03	---	---	---	---	---	---	1.29
	06-Feb-07		N	2,410	2,560	6.50	0.849	0.04	4.79	<0.1	<500	<500	<5	666	<1
	06-Mar-07		N	2,470	2,260	6.21	0.825	0.04	4.66	<0.1	<500	<500	<5	669	1.23
	05-Apr-07		N	2,110	2,090	5.73	0.712	0.06	4.10	<0.1	<500	<500	<5	651	<1
	01-May-07		N	1,610	2,060	5.11	0.795	0.06	4.11	<0.2	<500	<500	<5	654	1.11
	01-May-07		FD	2,120	2,020	5.07	0.795	0.06	4.12	<0.2	<500	<500	<5	651	1.13
	15-May-07		N	---	---	5.20	---	3.08	---	---	---	---	---	---	1.12
	22-May-07		N	---	---	5.22	---	0.04	---	---	---	---	---	---	<1
	22-May-07		FD	---	---	<0.5	---	0.05	---	---	---	---	---	---	1.08
	30-May-07		N	---	---	<0.5	---	0.06	---	---	---	---	---	---	<1
	05-Jun-07		N	2,040	1,960	4.57	0.694	0.05	3.94	<0.5	<500	<500	<5	596	1.21
	11-Jun-07		N	---	---	4.74	---	0.04	---	---	---	---	---	---	1.14
	26-Jun-07		N	---	---	<0.5	---	0.05	---	---	---	---	---	---	1.00
	10-Jul-07		N	1,970	2,050	<0.5	0.753	0.05	3.93	<0.1	<500	<500	<5	605	1.10

Table 3
Summary of Primary Analytical Parameters
PG&E Topock
Needles, California
2010 Annual 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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
TW-3D (cont)	24-Jul-07		N	---	---	<0.5	---	0.04	---	---	---	---	---	---	1.23
	31-Jul-07		N	---	---	<0.5	---	0.15	---	---	---	---	---	---	1.62
	07-Aug-07		N	1,950	2,130	<0.5	0.870	0.05	4.10	<0.1	<500	<500	<5	577	1.09
	14-Aug-07		N	---	---	<0.5	---	0.05	---	---	---	---	---	---	1.12
	28-Aug-07		N	---	---	<0.5	---	0.11	---	---	---	---	---	---	1.20
	05-Sep-07		N	1,990	1,820	<0.5	0.702	0.12	4.39	<0.1	<500	<500	<5	697	1.02
	02-Oct-07		N	1,720	1,790	<0.5	---	0.31	4.20	<0.1	<500	<500	<500	579	<1
	06-Nov-07		N	1,940	1,780	<0.5	---	0.25	4.22	<0.1	<500	<500	<500	577	1.16
	05-Dec-07		N	2,280	2,190	5.89	0.859	0.10	5.14	<0.5	<500	<500	<500	582	1.34
	05-Mar-08		N	1,780	1,650	<0.5	--	0.12	4.62	<0.5	<500	<500	<500	599	1.2
	05-Jun-08		N	1,630	1,470	<0.5	--	0.06	3.94	<1	<500	<500	<500	584	1.04
	09-Sep-08		N	1,810	1,770	<0.5	--	0.02	4.75	<2.5	<500	<500	<500	550	1.40
	04-Dec-08		N	1,550	1,490	<0.5	--	0.05	4.35	<2.5	<500	<500	<500	637	1.33
	04-Dec-08		FD	1,510	1,460	<0.5	--	0.04	4.35	<2.5	<500	<500	<500	631	1.06
	11-Feb-09		N	1,580	1,450	<0.1	--	0.01	5.5	<0.2	<100	156	6.3	750	0.57
INJ_SOLUTION_01	04-May-06		N	---	---	---	---	4,215	---	---	---	---	---	---	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	---	3,855	---	---	---	---	---	---	459
	07-Sep-06		N	<0.2	---	1,670	---	---	---	---	---	---	---	---	466
	01-Nov-06		N	<0.2	---	---	---	3,330	---	---	---	---	---	---	---
	08-May-07		N	<0.2	---	580	---	0.26	---	---	---	---	---	---	1,980
	17-Jul-07		N	<0.2	---	1.64	---	930	---	---	---	---	---	---	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
	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

Table 3
Summary of Primary Analytical Parameters
PG&E Topock
Needles, California
2010 Annual 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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
Equipment Blank (cont)	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	---	0.01	---	---	---	---	---	---	<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	---	0.06	---	---	---	---	---	---	<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
	10-Feb-09		EB	<0.2	<1	<0.1	---	ND	<0.1	<0.1	<100	<100	<1	2.0	<0.5
	20-May-09		EB	<0.2	<1	---	---	---	<0.1	---	---	124	<1	---	---
	06-Aug-09		EB	<0.2	<1	---	---	---	<0.1	---	---	<100	<1	---	---
	28-Oct-09		EB	<0.2	<1	---	---	---	<0.1	---	---	<100	<1	---	---
	14-Jan-10		EB	<0.2	<1	---	---	---	<0.1	---	---	<100	<1	---	---
	06-Apr-10		EB	<0.2	<1	---	---	---	<0.1	---	---	<100	<1	---	---
	15-Jul-10		**EB**	**0.22**	**<1**	---	---	---	**<0.1**	---	---	**<100**	**<1**	---	---

Table 3
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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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved 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	0.02	<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	---	0.02	---	---	---	---	---	---	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	---	0.22	---	---	---	---	---	---	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

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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 dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved 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
	10-Feb-09		FB	<0.2	<1	<0.1	---	ND	<0.1	<0.1	<100	<100	<1	1.7	0.5
	19-May-09		FB	<0.2	<1	---	---	---	<0.1	--	--	<100	<1	--	--
	06-Aug-09		FB	<0.2	<1	---	---	---	<0.1	---	---	<100	<1	---	---
	28-Oct-09		FB	0.23	<1	---	---	---	<0.1	---	---	<100	<1	---	---
	14-Jan-10		FB	<0.2	<1	---	---	---	<0.1	---	---	<100	<1	---	---
	06-Apr-10		FB	<0.2	<1	---	---	---	<0.1	---	---	<100	<1	---	---
	15-Jul-10		**FB**	**0.22**	**<1**	---	---	---	**<0.1**	---	---	**<100**	**<1**	---	---

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
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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-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

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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-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
	10-Feb-09		N		---	---	2.49	---	---	238	<1	---	---	<0.05	2,830

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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-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
	10-Feb-09		N		---	---	6.04	---	---	92	<1	---	---	<0.05	7,300
	19-May-09		N		---	---	10.4	---	---	70.6	--	---	---	---	5,380
	19-May-09		FD		---	---	6.15 J	---	---	71.8	--	---	---	---	5,580
	06-Aug-09		N		---	---	1.43	---	---	120	---	---	---	---	7,400
	26-Oct-09		**N**		**---**	**---**	**3.69**	**---**	**---**	**128**	**---**	**---**	**---**	**---**	**7,200**
	14-Jan-10		**N**		**---**	**---**	**0.79**	**---**	**---**	**130**	**---**	**---**	**---**	**---**	**7,520**
	06-Apr-10		**N**		**---**	**---**	**<2.5**	**---**	**---**	**124**	**---**	**---**	**---**	**---**	**7,360**
	15-Jul-10		**N**		---	---	**<2.5**	---	---	**140**	---	---	---	---	**6,360**

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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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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
	10-Feb-09		N		---	---	1.35	---	---	246	<1	---	---	<0.05	2,890

Table 4
Summary of Secondary Analytical Parameters
PG&E Topock
Needles, California
2010 Annual 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
	10-Feb-09		N		---	---	6.13	---	---	96	<1	---	---	<0.05	7,270
	19-May-09		N		---	---	6.69	---	---	120	--	---	---	---	6,400
	06-Aug-09		N		---	---	1.60	---	---	134	---	---	---	---	6,560
	26-Oct-09		**N**		**---**	**---**	**3.77**	**---**	**---**	**129**	**---**	**---**	**---**	**---**	**6,860**
	26-Oct-09		**FD**		**---**	**---**	**3.41**	**---**	**---**	**123**	**---**	**---**	**---**	**---**	**7,220**
	14-Jan-10		**N**		**---**	**---**	**<0.5**	**---**	**---**	**126**	**---**	**---**	**---**	**---**	**7,140**
	06-Apr-10		**N**		**---**	**---**	**<0.5**	**---**	**---**	**128**	**---**	**---**	**---**	**---**	**6,800**
	15-Jul-10		**N**		---	---	**<2.5**	---	---	**152**	---	---	---	---	**5,900**
	15-Jul-10		**FD**		---	---	**<2.5**	---	---	**156**	---	---	---	---	**5,880**

Table 4
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PG&E Topock
Needles, California
2010 Annual 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
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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-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

Table 4
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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
	11-Feb-09		N		---	---	4.03	---	---	115	<1	---	---	<0.05	7,260
	19-May-09		N		---	---	5.72	---	---	127	--	---	---	---	8,640
	06-Aug-09		N		---	---	<0.5	---	---	132	---	---	---	---	8,180
	06-Aug-09		FD		---	---	<0.5	---	---	132	---	---	---	---	8,040
	27-Oct-09		**N**		**---**	**---**	**3.6**	**---**	**---**	**127**	**---**	**---**	**---**	**---**	**8,380**
	14-Jan-10		**N**		**---**	**---**	**<0.5**	**---**	**---**	**132**	**---**	**---**	**---**	**---**	**8,020**
	14-Jan-10		**FD**		**---**	**---**	**<0.5**	**---**	**---**	**134**	**---**	**---**	**---**	**---**	**7,740**
	05-Apr-10		**N**		**---**	**---**	**<0.5**	**---**	**---**	**130**	**---**	**---**	**---**	**---**	**8,840**
	05-Apr-10		**FD**		**---**	**---**	**<0.5**	**---**	**---**	**128**	**---**	**---**	**---**	**---**	**8,800**
	15-Jul-10		**N**		---	---	**<5**	---	---	**152**	---	---	---	---	**9,260**

Table 4
Summary of Secondary Analytical Parameters
PG&E Topock
Needles, California
2010 Annual 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

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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-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
	11-Feb-09		N		---	---	4.23	---	---	262	<1	---	---	<0.05	2,170

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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-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	<5	---	---	<2	10,300
	11-Sep-08		N		---	---	<25	---	---	85	<5	---	---	<2	10,300
	03-Dec-08		N		---	---	<5	---	---	82	<5	---	---	<2	10,700
	12-Feb-09		N		---	---	0.58	---	---	98	<1	---	---	<0.05	10,300
	19-May-09		N		---	---	4.36	---	---	116	--	---	---	---	11,400
	06-Aug-09		N		---	---	<0.5	---	---	110	---	---	---	---	10,500
	27-Oct-09		**N**		**---**	**---**	**0.67**	**---**	**---**	**112**	**---**	**---**	**---**	**---**	**10,500**
	14-Jan-10		**N**		**---**	**---**	**<0.5**	**---**	**---**	**110**	**---**	**---**	**---**	**---**	**11,000**
	06-Apr-10		**N**		**---**	**---**	**<2.5**	**---**	**---**	**120**	**---**	**---**	**---**	**---**	**9,320**
	15-Jul-10		**N**		---	---	**2.70**	---	---	**132**	---	---	---	---	**9,260**

Table 4
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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-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
	12-Feb-09		N		---	---	1.9	---	---	220	<1	---	---	<0.05	1,840

Table 4
Summary of Secondary Analytical Parameters
PG&E Topock
Needles, California
2010 Annual 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
	12-Feb-09		N		---	---	2.62	---	---	106	<1	---	---	<0.05	9,240

Table 4
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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-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

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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-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
	12-Feb-09		N		---	---	2.89	---	---	256	<1	---	---	<0.05	2,940

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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-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

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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)
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
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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)
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
	11-Feb-09		N		---	---	---	---	---	---	---	---	---	---	6,720
	20-May-09		N		---	---	7.42	---	---	148	---	---	---	---	7,240
	05-Aug-05		N		---	---	---	---	---	---	---	---	---	---	6,980
	26-Oct-09		N		---	---	---	---	---	---	---	---	---	---	7,000
	13-Jan-10		N		---	---	---	---	---	---	---	---	---	---	6,820
	05-Apr-10		N		---	---	---	---	---	---	---	---	---	---	8,060
	15-Jul-10		**N**		---	---	**<2.5**	---	---	**174**	---	---	---	---	**6,100**

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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)
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

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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

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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)
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
	11-Feb-09		N		---	---	2.64	---	---	122	<1	---	---	<0.05	5,460

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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	21.0
	10-Feb-09		EB		---	---	<0.5	---	---	<1	<1	---	---	<0.05	38.0
	20-May-09		EB		---	---	<0.5	---	---	2.0	---	---	---	---	4.0
	06-Aug-09		EB		---	---	<0.5	---	---	<1	---	---	---	---	<1
	28-Oct-09		EB		---	---	<0.5	---	---	<1	---	---	---	---	<1
	14-Jan-10		EB		---	---	<0.5	---	---	<1	---	---	---	---	<1
	06-Apr-10		EB		---	---	<0.5	---	---	<1	---	---	---	---	<1
	15-Jul-10		**EB**		---	---	**<0.5**	---	---		---	---	---	---	

Table 4
Summary of Secondary Analytical Parameters
PG&E Topock
Needles, California
2010 Annual 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	10.0
	07-Aug-06		FB		<1,000	<1,000	<5	<1,000	<1,000	<5	<5	<0.5	<0.5	<2	25.0
	06-Sep-06		FB		2,930	<1,000	<5	<1,000	7,980	8.28	<5	10.4	<0.5	<2	15.0
	03-Oct-06		FB		<1,000	<1,000	<5	<1,000	2,440	<5	<5	<0.5	<0.5	<2	30.0
	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
	10-Feb-09		FB		---	---	<0.5	---	---	<1	<1	---	---	<0.05	30.0
	19-May-09		FB		---	---	<0.5	---	---	<1	---	---	---	---	4.0
	06-Aug-09		FB		---	---	<0.5	---	---	<1	---	---	---	---	1.0
	28-Oct-09		FB		---	---	<0.5	---	---	<1	---	---	---	---	1.0
	14-Jan-10		FB		---	---	<0.5	---	---	<1	---	---	---	---	<1
	06-Apr-10		FB		---	---	<0.5	---	---	<1	---	---	---	---	<1
	15-Jul-10		**FB**		---	---	**<0.5**	---	---		---	---	---	---	

Table 4
Summary of Secondary Analytical Parameters
PG&E Topock
Needles, California
2010 Annual 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.

Table 5
Summary of Information
PG&E Topock
Needles, California
2010 Annual Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

sys_loc_code	sys_sample_code	sampler	sample_date	smp_time	lab_name_code	lab_anl_method_name	chemical_name	analysis_date	analyst_name
PT-01D	PT-1D-0910	Gary Clift	10/26/2009	14:13	Calscience	A2540C	Total Dissolved Solids	11/2/2009	170
					Calscience	E200.8	Arsenic	10/28/2009	43
					Calscience	E200.8	Iron-Dissolved	10/28/2009	43
					Calscience	E200.8	Manganese	10/28/2009	43
					Truesdail	E218.6	Chromium, hexavalent	10/29/2009	Sonya Bersudsky
					Calscience	E300	Nitrate-n	10/28/2009	92
					Calscience	SM2320B	Alkalinity bicarbonate	10/30/2009	688
					Truesdail	SW6020	Chromium	10/28/2009	Daniel Kang
	PT-1D-0910D	Gary Clift	10/26/2009	14:13	Calscience	A2540C	Total Dissolved Solids	11/2/2009	170
					Calscience	E200.8	Arsenic	10/28/2009	43
					Calscience	E200.8	Iron-Dissolved	10/28/2009	43
					Calscience	E200.8	Manganese	10/28/2009	43
					Truesdail	E218.6	Chromium, hexavalent	10/29/2009	Sonya Bersudsky
					Calscience	E300	Nitrate-n	10/28/2009	92
					Calscience	SM2320B	Alkalinity bicarbonate	10/30/2009	688
					Truesdail	SW6020	Chromium	10/28/2009	Daniel Kang
PT-02D	PT-2D-0910	Gary Clift	10/26/2009	15:21	Calscience	A2540C	Total Dissolved Solids	11/2/2009	170
					Calscience	E200.8	Arsenic	10/28/2009	43
					Calscience	E200.8	Iron-Dissolved	10/28/2009	43
					Calscience	E200.8	Manganese	10/28/2009	43
					Truesdail	E218.6	Chromium, hexavalent	10/29/2009	Sonya Bersudsky
					Calscience	E300	Nitrate-n	10/28/2009	92
					Calscience	SM2320B	Alkalinity bicarbonate	10/30/2009	688
					Truesdail	SW6020	Chromium	10/28/2009	Daniel Kang
PT-03D	PT-3D-0910	Gary Clift	10/27/2009	8:49	Calscience	A2540C	Total Dissolved Solids	11/2/2009	170
					Calscience	E200.8	Arsenic	10/29/2009	43
					Calscience	E200.8	Iron-Dissolved	10/29/2009	43
					Calscience	E200.8	Manganese	10/29/2009	43
					Truesdail	E218.6	Chromium, hexavalent	10/29/2009	Sonya Bersudsky
					Calscience	E300	Nitrate-n	10/28/2009	92
					Calscience	SM2320B	Alkalinity bicarbonate	10/30/2009	688
					Truesdail	SW6020	Chromium	10/28/2009	Daniel Kang
PT-04D	PT-4D-0910	Gary Clift	10/27/2009	9:35	Calscience	A2540C	Total Dissolved Solids	11/2/2009	170
					Calscience	E200.8	Arsenic	10/28/2009	43
					Calscience	E200.8	Iron-Dissolved	10/28/2009	43
					Calscience	E200.8	Manganese	10/28/2009	43
					Truesdail	E218.6	Chromium, hexavalent	10/29/2009	Sonya Bersudsky
					Calscience	E300	Nitrate-n	10/28/2009	92
					Calscience	SM2320B	Alkalinity bicarbonate	10/30/2009	688
					Truesdail	SW6020	Chromium	10/28/2009	Daniel Kang
PTI-01D	PTI-1D-0910	Gary Clift	10/26/2009	11:37	Calscience	A2540C	Total Dissolved Solids	11/2/2009	170
					Truesdail	E218.6	Chromium, hexavalent	10/29/2009	Sonya Bersudsky
					Truesdail	SW6020	Chromium	10/28/2009	Daniel Kang

Table 5
Summary of Information
PG&E Topock
Needles, California
2010 Annual Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

sys_loc_code	sys_sample_code	sampler	sample_date	smp_time	lab_name_code	lab_anl_method_name	chemical_name	analysis_date	analyst_name
PT-01D	PT-1D-0910	Gary Clift	10/26/2009	14:13	Calscience	A2540C	Total Dissolved Solids	11/2/2009	170
					Calscience	E200.8	Arsenic	10/28/2009	43
					Calscience	E200.8	Iron-Dissolved	10/28/2009	43
					Calscience	E200.8	Manganese	10/28/2009	43
					Truesdail	E218.6	Chromium, hexavalent	10/29/2009	Sonya Bersudsky
					Calscience	E300	Nitrate-n	10/28/2009	92
					Calscience	SM2320B	Alkalinity bicarbonate	10/30/2009	688
					Truesdail	SW6020	Chromium	10/28/2009	Daniel Kang
	PT-1D-0910D	Gary Clift	10/26/2009	14:13	Calscience	A2540C	Total Dissolved Solids	11/2/2009	170
					Calscience	E200.8	Arsenic	10/28/2009	43
					Calscience	E200.8	Iron-Dissolved	10/28/2009	43
					Calscience	E200.8	Manganese	10/28/2009	43
					Truesdail	E218.6	Chromium, hexavalent	10/29/2009	Sonya Bersudsky
					Calscience	E300	Nitrate-n	10/28/2009	92
					Calscience	SM2320B	Alkalinity bicarbonate	10/30/2009	688
					Truesdail	SW6020	Chromium	10/28/2009	Daniel Kang
PT-02D	PT-2D-0910	Gary Clift	10/26/2009	15:21	Calscience	A2540C	Total Dissolved Solids	11/2/2009	170
					Calscience	E200.8	Arsenic	10/28/2009	43
					Calscience	E200.8	Iron-Dissolved	10/28/2009	43
					Calscience	E200.8	Manganese	10/28/2009	43
					Truesdail	E218.6	Chromium, hexavalent	10/29/2009	Sonya Bersudsky
					Calscience	E300	Nitrate-n	10/28/2009	92
					Calscience	SM2320B	Alkalinity bicarbonate	10/30/2009	688
					Truesdail	SW6020	Chromium	10/28/2009	Daniel Kang
PT-04D	PT-4D-0910	Gary Clift	10/27/2009	9:35	Calscience	A2540C	Total Dissolved Solids	11/2/2009	170
					Calscience	E200.8	Arsenic	10/28/2009	43
					Calscience	E200.8	Iron-Dissolved	10/28/2009	43
					Calscience	E200.8	Manganese	10/28/2009	43
					Truesdail	E218.6	Chromium, hexavalent	10/29/2009	Sonya Bersudsky
					Calscience	E300	Nitrate-n	10/28/2009	92
					Calscience	SM2320B	Alkalinity bicarbonate	10/30/2009	688
					Truesdail	SW6020	Chromium	10/28/2009	Daniel Kang
PTI-01D	PTI-1D-0910	Gary Clift	10/26/2009	11:37	Calscience	A2540C	Total Dissolved Solids	11/2/2009	170
					Truesdail	E218.6	Chromium, hexavalent	10/29/2009	Sonya Bersudsky
					Truesdail	SW6020	Chromium	10/28/2009	Daniel Kang
EB-Floodplain Wells	EB-1-0910	Gary Clift	10/27/2009	9:00	Calscience	A2540C	Total Dissolved Solids	11/2/2009	170
					Calscience	E200.8	Arsenic	10/28/2009	43
					Calscience	E200.8	Iron-Dissolved	10/28/2009	43
					Calscience	E200.8	Manganese	10/28/2009	43
					Truesdail	E218.6	Chromium, hexavalent	10/29/2009	Sonya Bersudsky
					Calscience	E300	Nitrate-n	10/28/2009	92
					Calscience	SM2320B	Alkalinity bicarbonate	10/30/2009	688
					Truesdail	SW6020	Chromium	10/30/2009	Daniel Kang

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Summary of Information
PG&E Topock
Needles, California
2010 Annual Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

sys_loc_code	sys_sample_code	sampler	sample_date	smp_time	lab_name_code	lab_anl_method_name	chemical_name	analysis_date	analyst_name
FB-Floodplain Wells	FB-1-0910	Gary Clift	10/27/2009		Calscience	A2540C	Total Dissolved Solids	11/2/2009	170
					Calscience	E200.8	Arsenic	10/28/2009	43
					Calscience	E200.8	Iron-Dissolved	10/28/2009	43
					Calscience	E200.8	Manganese	10/28/2009	43
					Truesdail	E218.6	Chromium, hexavalent	10/29/2009	Sonya Bersudsky
					Calscience	E300	Nitrate-n	10/28/2009	92
					Calscience	SM2320B	Alkalinity bicarbonate	10/30/2009	688
					Truesdail	SW6020	Chromium	10/30/2009	Daniel Kang
PT-01D	PT-1D-100114	Gary Clift	1/14/2010	9:10	Calscience	A2540C	Total Dissolved Solids	1/19/2010	722
					Calscience	E200.8	Arsenic	1/15/2010	43
					Calscience	E200.8	Iron-Dissolved	1/15/2010	43
					Calscience	E200.8	Manganese	1/15/2010	43
					Truesdail	E218.6	Chromium, hexavalent	1/15/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	1/15/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	1/21/2010	688
					Truesdail	SW6020	Chromium	1/15/2010	Daniel Kang/ Romuel Chaves
PT-02D	PT-2D-100114	Gary Clift	1/14/2010	10:20	Calscience	A2540C	Total Dissolved Solids	1/19/2010	722
					Calscience	E200.8	Arsenic	1/15/2010	43
					Calscience	E200.8	Iron-Dissolved	1/15/2010	43
					Calscience	E200.8	Manganese	1/15/2010	43
					Truesdail	E218.6	Chromium, hexavalent	1/15/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	1/15/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	1/21/2010	688
					Truesdail	SW6020	Chromium	1/15/2010	Daniel Kang/ Romuel Chaves
PT-03D	PT-3D-100114	Gary Clift	1/14/2010	11:30	Calscience	A2540C	Total Dissolved Solids	1/19/2010	722
					Calscience	E200.8	Arsenic	1/15/2010	43
					Calscience	E200.8	Iron-Dissolved	1/15/2010	43
					Calscience	E200.8	Manganese	1/15/2010	43
					Truesdail	E218.6	Chromium, hexavalent	1/15/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	1/15/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	1/21/2010	688
					Truesdail	SW6020	Chromium	1/15/2010	Daniel Kang/ Romuel Chaves
	PT-3D-100114D	Gary Clift	1/14/2010		Calscience	A2540C	Total Dissolved Solids	1/19/2010	722
					Calscience	E200.8	Arsenic	1/15/2010	43
					Calscience	E200.8	Iron-Dissolved	1/15/2010	43
					Calscience	E200.8	Manganese	1/15/2010	43
					Truesdail	E218.6	Chromium, hexavalent	1/15/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	1/15/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	1/21/2010	688
					Truesdail	SW6020	Chromium	1/25/2010	Daniel Kang/ Romuel Chaves

Table 5
Summary of Information
PG&E Topock
Needles, California
2010 Annual Monitoring Report for the Floodplain Reductive Zone In-Situ Pilot Test

sys_loc_code	sys_sample_code	sampler	sample_date	smp_time	lab_name_code	lab_anl_method_name	chemical_name	analysis_date	analyst_name
PT-04D	PT-4D-100114	Gary Clift	1/14/2010	12:25	Calscience	A2540C	Total Dissolved Solids	1/19/2010	722
					Calscience	E200.8	Arsenic	1/15/2010	43
					Calscience	E200.8	Iron-Dissolved	1/15/2010	43
					Calscience	E200.8	Manganese	1/15/2010	43
					Truesdail	E218.6	Chromium, hexavalent	1/15/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	1/15/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	1/21/2010	688
					Truesdail	SW6020	Chromium	1/15/2010	Daniel Kang/ Romuel Chaves
PTI-01D	PTI-1D-100113	Gary Clift	1/13/2010	14:35	Calscience	A2540C	Total Dissolved Solids	1/19/2010	689
					Truesdail	E218.6	Chromium, hexavalent	1/15/2010	Sonya Bersudsky
					Truesdail	SW6020	Chromium	1/15/2010	Romuel Chaves
PT-01D	PT-1D-100114	Gary Clift	1/14/2010	9:10	Calscience	A2540C	Total Dissolved Solids	1/19/2010	722
					Calscience	E200.8	Arsenic	1/15/2010	43
					Calscience	E200.8	Iron-Dissolved	1/15/2010	43
					Calscience	E200.8	Manganese	1/15/2010	43
					Truesdail	E218.6	Chromium, hexavalent	1/15/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	1/15/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	1/21/2010	688
					Truesdail	SW6020	Chromium	1/15/2010	Daniel Kang/ Romuel Chaves
PT-02D	PT-2D-100114	Gary Clift	1/14/2010	10:20	Calscience	A2540C	Total Dissolved Solids	1/19/2010	722
					Calscience	E200.8	Arsenic	1/15/2010	43
					Calscience	E200.8	Iron-Dissolved	1/15/2010	43
					Calscience	E200.8	Manganese	1/15/2010	43
					Truesdail	E218.6	Chromium, hexavalent	1/15/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	1/15/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	1/21/2010	688
					Truesdail	SW6020	Chromium	1/15/2010	Daniel Kang/ Romuel Chaves
PT-04D	PT-4D-100114	Gary Clift	1/14/2010	12:25	Calscience	A2540C	Total Dissolved Solids	1/19/2010	722
					Calscience	E200.8	Arsenic	1/15/2010	43
					Calscience	E200.8	Iron-Dissolved	1/15/2010	43
					Calscience	E200.8	Manganese	1/15/2010	43
					Truesdail	E218.6	Chromium, hexavalent	1/15/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	1/15/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	1/21/2010	688
					Truesdail	SW6020	Chromium	1/15/2010	Daniel Kang/ Romuel Chaves
PTI-01D	PTI-1D-100113	Gary Clift	1/13/2010	14:35	Calscience	A2540C	Total Dissolved Solids	1/19/2010	689
					Truesdail	E218.6	Chromium, hexavalent	1/15/2010	Sonya Bersudsky
					Truesdail	SW6020	Chromium	1/15/2010	Romuel Chaves

Table 5
Summary of Information
PG&E Topock
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sys_loc_code	sys_sample_code	sampler	sample_date	smp_time	lab_name_code	lab_anl_method_name	chemical_name	analysis_date	analyst_name
EB-Floodplain Wells	EB-1-100114	Gary Clift	1/14/2010	9:00	Calscience	A2540C	Total Dissolved Solids	1/19/2010	722
					Calscience	E200.8	Arsenic	1/15/2010	43
					Calscience	E200.8	Iron-Dissolved	1/15/2010	43
					Calscience	E200.8	Manganese	1/15/2010	43
					Truesdail	E218.6	Chromium, hexavalent	1/15/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	1/15/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	1/21/2010	688
					Truesdail	SW6020	Chromium	1/15/2010	Daniel Kang/ Romuel Chaves
FB-Floodplain Wells	FB-1-100114	Gary Clift	1/14/2010	9:20	Calscience	A2540C	Total Dissolved Solids	1/19/2010	722
					Calscience	E200.8	Arsenic	1/15/2010	43
					Calscience	E200.8	Iron-Dissolved	1/15/2010	43
					Calscience	E200.8	Manganese	1/15/2010	43
					Truesdail	E218.6	Chromium, hexavalent	1/15/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	1/15/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	1/21/2010	688
					Truesdail	SW6020	Chromium	1/15/2010	Daniel Kang/ Romuel Chaves
PT-01D	PT-1D-100406	Gary Clift	4/6/2010	8:50	Calscience	A2540C	Total Dissolved Solids	4/20/2010	689
					Calscience	E200.8	Arsenic	4/8/2010	43
					Calscience	E200.8	Iron-Dissolved	4/8/2010	43
					Calscience	E200.8	Manganese	4/8/2010	43
					Truesdail	E218.6	Chromium, hexavalent	4/9/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	4/7/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	4/15/2010	688
					Calscience	SM2320B	CACO3)	4/15/2010	688
					Truesdail	SW6020	Chromium	4/7/2010	Daniel Kang
PT-02D	PT-2D-100406	Gary Clift	4/6/2010	9:45	Calscience	A2540C	Total Dissolved Solids	4/20/2010	689
					Calscience	E200.8	Arsenic	4/8/2010	43
					Calscience	E200.8	Iron-Dissolved	4/8/2010	43
					Calscience	E200.8	Manganese	4/8/2010	43
					Truesdail	E218.6	Chromium, hexavalent	4/9/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	4/7/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	4/15/2010	688
					Calscience	SM2320B	CACO3)	4/15/2010	688
					Truesdail	SW6020	Chromium	4/7/2010	Daniel Kang

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sys_loc_code	sys_sample_code	sampler	sample_date	smp_time	lab_name_code	lab_anl_method_name	chemical_name	analysis_date	analyst_name
PT-03D	PT-3D-100405	Gary Clift	4/5/2010	14:50	Calscience	A2540C	Total Dissolved Solids	4/20/2010	689
					Calscience	E200.8	Arsenic	4/8/2010	43
					Calscience	E200.8	Iron-Dissolved	4/8/2010	43
					Calscience	E200.8	Manganese	4/8/2010	43
					Truesdail	E218.6	Chromium, hexavalent	4/9/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	4/6/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	4/15/2010	688
					Calscience	SM2320B	CACO3)	4/15/2010	688
					Truesdail	SW6020	Chromium	4/7/2010	Daniel Kang
	PT-3D-100405D	Gary Clift	4/5/2010		Calscience	A2540C	Total Dissolved Solids	4/20/2010	689
					Calscience	E200.8	Arsenic	4/8/2010	43
					Calscience	E200.8	Iron-Dissolved	4/8/2010	43
					Calscience	E200.8	Manganese	4/8/2010	43
					Truesdail	E218.6	Chromium, hexavalent	4/9/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	4/6/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	4/15/2010	688
					Calscience	SM2320B	CACO3)	4/15/2010	688
					Truesdail	SW6020	Chromium	4/7/2010	Daniel Kang
PT-04D	PT-4D-100406	Gary Clift	4/6/2010	11:05	Calscience	A2540C	Total Dissolved Solids	4/20/2010	689
					Calscience	E200.8	Arsenic	4/8/2010	43
					Calscience	E200.8	Iron-Dissolved	4/8/2010	43
					Calscience	E200.8	Manganese	4/8/2010	43
					Truesdail	E218.6	Chromium, hexavalent	4/9/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	4/7/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	4/15/2010	688
					Calscience	SM2320B	CACO3)	4/15/2010	688
					Truesdail	SW6020	Chromium	4/7/2010	Daniel Kang
PTI-01D	PTI-1D-100405	Gary Clift	4/5/2010	12:20	Calscience	A2540C	Total Dissolved Solids	4/20/2010	689
					Truesdail	E218.6	Chromium, hexavalent	4/8/2010	Sonya Bersudsky
					Truesdail	SW6020	Chromium	4/7/2010	Daniel Kang
PT-01D	PT-1D-100406	Gary Clift	4/6/2010	8:50	Calscience	A2540C	Total Dissolved Solids	4/20/2010	689
					Calscience	E200.8	Arsenic	4/8/2010	43
					Calscience	E200.8	Iron-Dissolved	4/8/2010	43
					Calscience	E200.8	Manganese	4/8/2010	43
					Truesdail	E218.6	Chromium, hexavalent	4/9/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	4/7/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	4/15/2010	688
					Calscience	SM2320B	CACO3)	4/15/2010	688
					Truesdail	SW6020	Chromium	4/7/2010	Daniel Kang

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sys_loc_code	sys_sample_code	sampler	sample_date	smp_time	lab_name_code	lab_anl_method_name	chemical_name	analysis_date	analyst_name
PT-02D	PT-2D-100406	Gary Clift	4/6/2010	9:45	Calscience	A2540C	Total Dissolved Solids	4/20/2010	689
					Calscience	E200.8	Arsenic	4/8/2010	43
					Calscience	E200.8	Iron-Dissolved	4/8/2010	43
					Calscience	E200.8	Manganese	4/8/2010	43
					Truesdail	E218.6	Chromium, hexavalent	4/9/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	4/7/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	4/15/2010	688
					Calscience	SM2320B	CACO3)	4/15/2010	688
					Truesdail	SW6020	Chromium	4/7/2010	Daniel Kang
PT-04D	PT-4D-100406	Gary Clift	4/6/2010	11:05	Calscience	A2540C	Total Dissolved Solids	4/20/2010	689
					Calscience	E200.8	Arsenic	4/8/2010	43
					Calscience	E200.8	Iron-Dissolved	4/8/2010	43
					Calscience	E200.8	Manganese	4/8/2010	43
					Truesdail	E218.6	Chromium, hexavalent	4/9/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	4/7/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	4/15/2010	688
					Calscience	SM2320B	CACO3)	4/15/2010	688
					Truesdail	SW6020	Chromium	4/7/2010	Daniel Kang
PTI-01D	PTI-1D-100405	Gary Clift	4/5/2010	12:20	Calscience	A2540C	Total Dissolved Solids	4/20/2010	689
					Truesdail	E218.6	Chromium, hexavalent	4/8/2010	Sonya Bersudsky
					Truesdail	SW6020	Chromium	4/7/2010	Daniel Kang
EB-Floodplain Wells	EB-100406	Gary Clift	4/6/2010	10:00	Calscience	A2540C	Total Dissolved Solids	4/20/2010	689
					Calscience	E200.8	Arsenic	4/8/2010	43
					Calscience	E200.8	Iron-Dissolved	4/8/2010	43
					Calscience	E200.8	Manganese	4/8/2010	43
					Truesdail	E218.6	Chromium, hexavalent	4/8/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	4/7/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	4/15/2010	688
					Calscience	SM2320B	CACO3)	4/15/2010	688
					Truesdail	SW6020	Chromium	4/7/2010	Daniel Kang
FB-Floodplain Wells	FB-100406	Gary Clift	4/6/2010	10:15	Calscience	A2540C	Total Dissolved Solids	4/20/2010	689
					Calscience	E200.8	Arsenic	4/8/2010	43
					Calscience	E200.8	Iron-Dissolved	4/8/2010	43
					Calscience	E200.8	Manganese	4/8/2010	43
					Truesdail	E218.6	Chromium, hexavalent	4/9/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	4/7/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	4/15/2010	688
					Calscience	SM2320B	CACO3)	4/15/2010	688
					Truesdail	SW6020	Chromium	4/7/2010	Daniel Kang

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sys_loc_code	sys_sample_code	sampler	sample_date	smp_time	lab_name_code	lab_anl_method_name	chemical_name	analysis_date	analyst_name
PT-01D	PT-1D-100715	Gary Clift	7/15/2010	10:06	Calscience	A2540C	Total Dissolved Solids	7/21/2010	721
					Calscience	E200.8	Arsenic	7/19/2010	43
					Calscience	E200.8	Iron	7/19/2010	43
					Calscience	E200.8	Manganese	7/19/2010	43
					Truesdail	E218.6	Chromium, hexavalent	7/22/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	7/16/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	7/19/2010	144
					Truesdail	SW6020	Chromium	7/21/2010	Linda Saetern
PT-02D	PT-2D-100715	Gary Clift	7/15/2010	9:09	Calscience	A2540C	Total Dissolved Solids	7/21/2010	721
					Calscience	E200.8	Arsenic	7/19/2010	43
					Calscience	E200.8	Iron	7/19/2010	43
					Calscience	E200.8	Manganese	7/19/2010	43
					Truesdail	E218.6	Chromium, hexavalent	7/22/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	7/16/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	7/19/2010	144
					Truesdail	SW6020	Chromium	7/21/2010	Linda Saetern
	PT-2D-100715D	Gary Clift	7/15/2010		Calscience	A2540C	Total Dissolved Solids	7/21/2010	721
					Calscience	E200.8	Arsenic	7/19/2010	43
					Calscience	E200.8	Iron	7/19/2010	43
					Calscience	E200.8	Manganese	7/19/2010	43
					Truesdail	E218.6	Chromium, hexavalent	7/22/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	7/16/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	7/19/2010	144
					Truesdail	SW6020	Chromium	7/21/2010	Linda Saetern
PT-03D	PT-3D-100715	Gary Clift	7/15/2010	10:54	Calscience	A2540C	Total Dissolved Solids	7/21/2010	721
					Calscience	E200.8	Arsenic	7/19/2010	43
					Calscience	E200.8	Iron	7/19/2010	43
					Calscience	E200.8	Manganese	7/19/2010	43
					Truesdail	E218.6	Chromium, hexavalent	7/22/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	7/16/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	7/19/2010	144
					Truesdail	SW6020	Chromium	7/21/2010	Linda Saetern
PT-04D	PT-4D-100715	Gary Clift	7/15/2010	14:13	Calscience	A2540C	Total Dissolved Solids	7/21/2010	721
					Calscience	E200.8	Arsenic	7/19/2010	43
					Calscience	E200.8	Iron	7/19/2010	43
					Calscience	E200.8	Manganese	7/19/2010	43
					Truesdail	E218.6	Chromium, hexavalent	7/22/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	7/16/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	7/19/2010	144
					Truesdail	SW6020	Chromium	7/21/2010	Linda Saetern

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sys_loc_code	sys_sample_code	sampler	sample_date	smp_time	lab_name_code	lab_anl_method_name	chemical_name	analysis_date	analyst_name
PTI-01D	PTI-1D-100715	Gary Clift	7/15/2010	01:12 PM	Calscience	A2540C	Total Dissolved Solids	7/21/2010	721
					Calscience	E200.8	Arsenic	7/19/2010	43
					Calscience	E200.8	Iron	7/19/2010	43
					Calscience	E200.8	Manganese	7/19/2010	43
					Truesdail	E218.6	Chromium, hexavalent	7/22/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	7/16/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	7/19/2010	144
					Truesdail	SW6020	Chromium	7/21/2010	Linda Saetern
PT-01D	PT-1D-100715	Gary Clift	7/15/2010	10:06	Calscience	A2540C	Total Dissolved Solids	7/21/2010	721
					Calscience	E200.8	Arsenic	7/19/2010	43
					Calscience	E200.8	Iron	7/19/2010	43
					Calscience	E200.8	Manganese	7/19/2010	43
					Truesdail	E218.6	Chromium, hexavalent	7/22/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	7/16/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	7/19/2010	144
					Truesdail	SW6020	Chromium	7/21/2010	Linda Saetern
PT-02D	PT-2D-100715	Gary Clift	7/15/2010	9:09	Calscience	A2540C	Total Dissolved Solids	7/21/2010	721
					Calscience	E200.8	Arsenic	7/19/2010	43
					Calscience	E200.8	Iron	7/19/2010	43
					Calscience	E200.8	Manganese	7/19/2010	43
					Truesdail	E218.6	Chromium, hexavalent	7/22/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	7/16/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	7/19/2010	144
					Truesdail	SW6020	Chromium	7/21/2010	Linda Saetern
	PT-2D-100715D	Gary Clift	7/15/2010		Calscience	A2540C	Total Dissolved Solids	7/21/2010	721
					Calscience	E200.8	Arsenic	7/19/2010	43
					Calscience	E200.8	Iron	7/19/2010	43
					Calscience	E200.8	Manganese	7/19/2010	43
					Truesdail	E218.6	Chromium, hexavalent	7/22/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	7/16/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	7/19/2010	144
					Truesdail	SW6020	Chromium	7/21/2010	Linda Saetern
PT-04D	PT-4D-100715	Gary Clift	7/15/2010	14:13	Calscience	A2540C	Total Dissolved Solids	7/21/2010	721
					Calscience	E200.8	Arsenic	7/19/2010	43
					Calscience	E200.8	Iron	7/19/2010	43
					Calscience	E200.8	Manganese	7/19/2010	43
					Truesdail	E218.6	Chromium, hexavalent	7/22/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	7/16/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	7/19/2010	144
					Truesdail	SW6020	Chromium	7/21/2010	Linda Saetern

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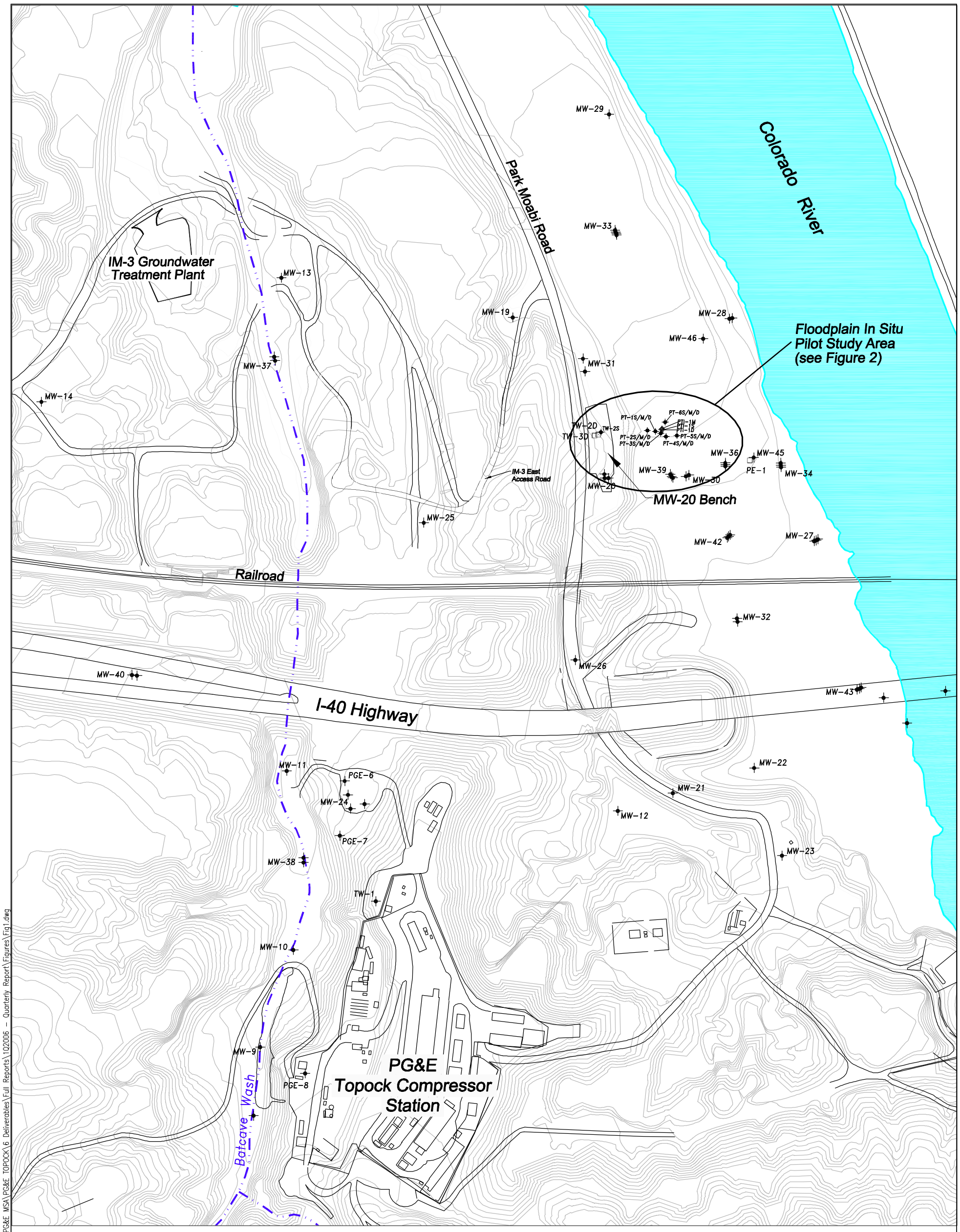
sys_loc_code	sys_sample_code	sampler	sample_date	smp_time	lab_name_code	lab_anl_method_name	chemical_name	analysis_date	analyst_name
PTI-01D	PTI-1D-100715	Gary Clift	7/15/2010	13:12	Calscience	A2540C	Total Dissolved Solids	7/21/2010	721
					Calscience	E200.8	Arsenic	7/19/2010	43
					Calscience	E200.8	Iron	7/19/2010	43
					Calscience	E200.8	Manganese	7/19/2010	43
					Truesdail	E218.6	Chromium, hexavalent	7/22/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	7/16/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	7/19/2010	144
					Truesdail	SW6020	Chromium	7/21/2010	Linda Saetern
EB-Floodplain Wells	EB-1-100715	Gary Clift	7/15/2010	12:00	Calscience	A2540C	Total Dissolved Solids	7/21/2010	721
					Calscience	E200.8	Arsenic	7/19/2010	43
					Calscience	E200.8	Iron	7/19/2010	43
					Calscience	E200.8	Manganese	7/19/2010	43
					Truesdail	E218.6	Chromium, hexavalent	7/22/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	7/16/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	7/19/2010	144
					Truesdail	SW6020	Chromium	7/21/2010	Linda Saetern
FB-Floodplain Wells	FB-1-100715	Gary Clift	7/15/2010	11:00	Calscience	A2540C	Total Dissolved Solids	7/21/2010	721
					Calscience	E200.8	Arsenic	7/19/2010	43
					Calscience	E200.8	Iron	7/19/2010	43
					Calscience	E200.8	Manganese	7/19/2010	43
					Truesdail	E218.6	Chromium, hexavalent	7/22/2010	Sonya Bersudsky
					Calscience	E300	Nitrate-n	7/16/2010	92
					Calscience	SM2320B	Alkalinity bicarbonate	7/19/2010	144
					Truesdail	SW6020	Chromium	7/21/2010	Linda Saetern



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

N

0 FEET 300

SCALE

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

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SITE PLAN
PG&E TOPOCK FACILITY
NEEDLES, CALIFORNIA

Project Number: RC000689.0001

Figure: 1

Acad Version : R16.1s (LMS Tech)
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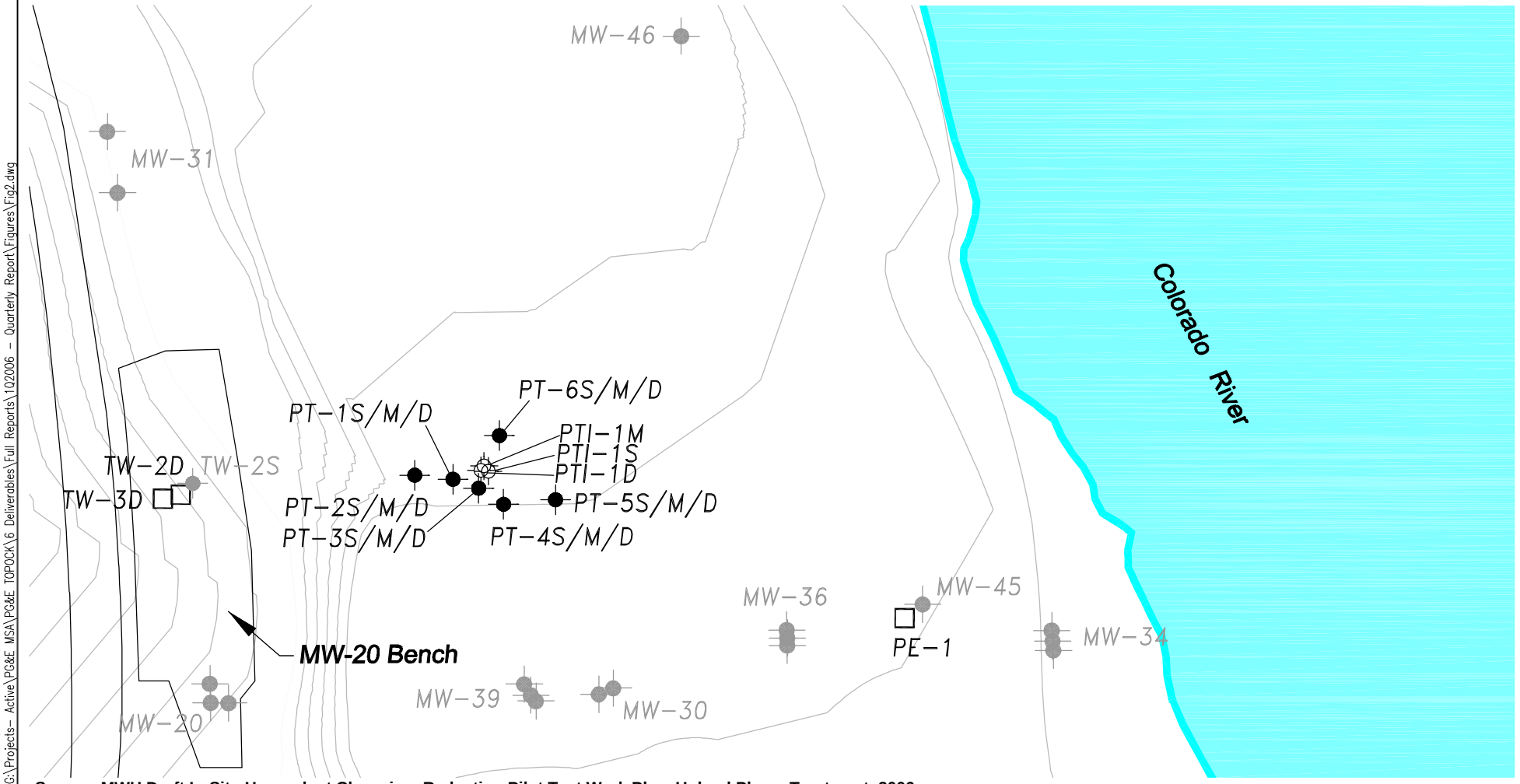
Path\Name : G:\Projects- Active\PG&E MSA\PG&E TOPOCK\6 Deliverables\Full Reports\102006 - Quarterly Report\Figures\Fig1.dwg



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

N

0 FEET 100
SCALE

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

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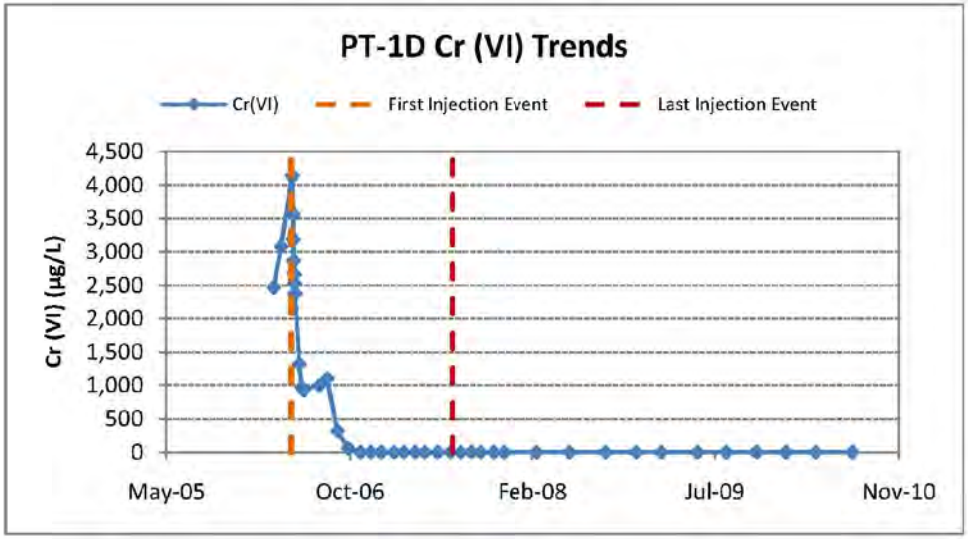
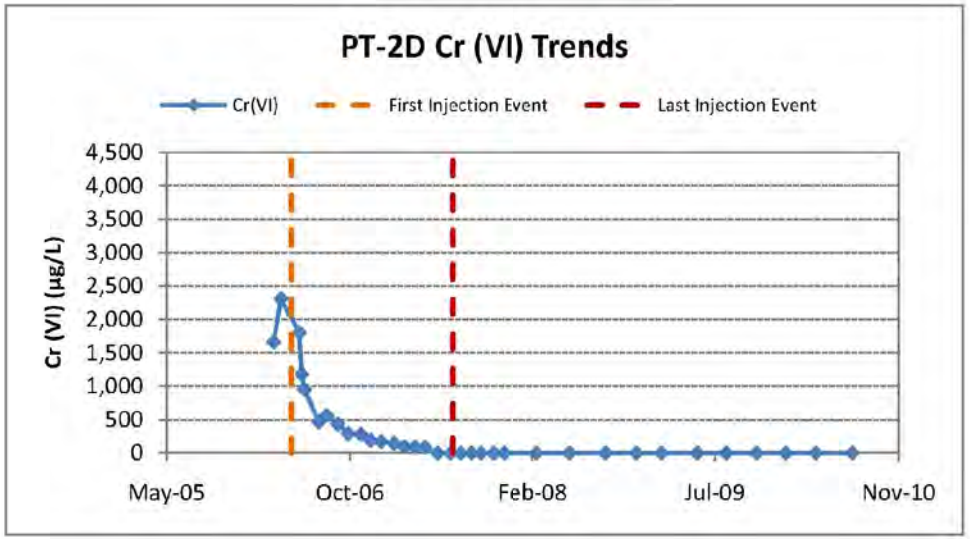
SAMPLE LOCATION MAP
PG&E TOPOCK FACILITY
NEEDLES, CALIFORNIA

Project Number: RC000689.0001

Figure: 2





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User Name : MHoefer
Date\Time : Fri, 01 Oct 2010 - 8:50am
Path\Name : P:\Project\PG&E - Topock\MCW\COCMT-0315.dwg

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HEXAVELENT CHROMIUM TRENDS
IN FLOODPLAIN AREA
PG&E TOPOCK FACILITY
NEEDLES, CALIFORNIA

Project Number
RC000689.0001

Figure
3

ARCADIS

Appendix A

Calibration Logs for Field Monitoring Instruments

ARCADIS

MULTIPARAMETER INSTRUMENT CALIBRATION RECORD

Project No.: RC000689.0007.00002 Location: Topock, CA

Instrument: YSI 556 Serial Number: 05C1520AK

Date	Calibrated by	~~Parameter~~ Standards Used	~~Standards Used~~ Parameters	Calibrated Achieved (Y/N)	Remarks
10/26/09	CE	7.0	7.35	Y	
		4.0	3.95		
		10.0	9.64		
		COND 3.9	3922		
		ORP 237.5	222.7		
		DO 98.8 %	91.8 %		
10/27/09	CE	7.0	6.84	Y	
		4.0	3.81		
		10.0	9.85		
		COND 3.9	3811		
		ORP 249.0	260.9		
		DO 97.2 %	99.5 %		
10/28/09	CE	7.0	6.94	Y	
		4.0	3.95		
		10.0	9.92		
		COND 3.9	3909		
		ORP 249.0	247.8		
		DO 97.3 %	97.5 %		

ARCADIS

MULTIPARAMETER INSTRUMENT CALIBRATION RECORD

Project No.: RC000689.0007 Location: TOPOCK CA

Instrument: YSI-556 Serial Number: 09D101246

Date	Calibrated by	Parameter	Standards Used	Calibrated Achieved (Y/N)	Remarks
1/11/10	DAVE M.	SPEC COND.	3900 µS/cm	Y	
		pH	7.00	Y	
		↓	4.00	Y	
		↓	10.00	Y	
		O.R.P.	244mV@15°C	Y	
↓		D.O. % SAT	ambient	Y	
1/12/10		pH	7.00	Y	
		↓	10.00	Y	
		↓	4.00	Y	
		SPEC COND	3900uS/cm	Y	
		O.R.P.	253mV@8°C	Y	
↓		D.O.% SAT	ambient	Y	
1/13/10		pH	7.00	Y	
		↓	4.00	Y	
		↓	10.00	Y	
		SPEC. COND.	3900µS/cm	Y	
		O.R.P.	253mV@8°C	Y	
↓		D.O. % SAT	ambient	Y	
1/14/10		pH	7.00	Y	
		↓	4.00	Y	
		↓	10.00	Y	
↓	↓	Spec. Cond	3900uS/cm	Y	
		~~3900 uS/cm~~ ORP	mV@ °C	Y	
		D.O.% SAT	(ambient)	Y	

ARCADIS

MULTIPARAMETER INSTRUMENT CALIBRATION RECORD

Project No.: RC 000689.0007.00002 Location: TOPOCK, CA

Instrument: YSI-556 MPS Serial Number: 07L100894

Date	Calibrated by	Parameter	Standards Used	Calibrated Achieved (Y/N)	(TEMP) Remarks
4/5/10	CI	~~Ph 7.07.14~~	PH 7.0	Yes	16.75°C
		3.18	pH 4.0		17.61°C
		9.91	pH 10.0		16.23°C
		3543	COND 3.9		17.97°C
		247.9	ORP 273.5		20.45°C
↓	↓	98.2 %	DO 97.9 %	↓	25.27°C
4/6/10	CI	7.01	pH 7.0	Yes	12.60°C
		3.92	4.0		12.21°C
		9.88	10.0		12.81°C
		3802	COND 3.9		12.85°C
		246.8	ORP @ ~~250.5~~ 220.5		11.70°C
↓	↓	112.4 %	DO 98.8%	↓	17.45°C
4/7/10	CI	707	pH 7.0	Yes	16.70°C
		3.92	4.0		15.54°C
		9.85	10.0		16.93°C
		3950	COND 3.9		16.57°C
		241.7	ORP 244.0		17.01°C
↓	↓	93.1 %	DO 99.2 %	↓	18.93°C

ARCADIS

MULTIPARAMETER INSTRUMENT CALIBRATION RECORD

Project No.: RC000753.0001 Location: TOPOCK

Instrument: YSI 556 MPS Serial Number: 10B100316

Date	Calibrated by	Parameter	Standards Used	Calibrated Achieved (Y/N)	TEMP °C Remarks
7/12/10	CI	7.09	7.0		34.3
		3.92	4.0		32.5
		9.95	10.0		34.3
		4242	COND 3.9		34.5
		215.1	ORP 216.8		35.1
		92.7%	DO 98.4%		37.3
7/13/10		6.96	7.0	YES	34.5
		9.86	10.0		35.1
		4.00	4.0		33.5
		3991	COND 3.9		34.6
		216.4	ORP		34.4
		99.7%	DO %		32.4
7/14/10		7.01	7.0	YES	33.9
		9.90	10.0		34.8
		4.06	4.0		34.4
		3947	COND 3.9		34.2
		217.4	ORP		35.1
		81.5%	DO %		37.9
7/15/10		6.97	7.0	YES	36.0
		3.99	4.0		34.5
		9.87	10.0		36.8

ARCADIS

MULTIPARAMETER INSTRUMENT CALIBRATION RECORD

Project No.:

Location: TOPOCK

Instrument: YSI 556 MPS

Serial Number: 10B100316

Date	Calibrated by	Parameter	Standards Used	Calibrated Achieved (Y/N)	TEMP °C Remarks
7/15/10 CAT	CE	~~COND 3.9~~	COND. 3.9		35.9
↓	↓	216.2	ORP		37.6
↓	↓	85.4 %	DO %	↓	45.9

ARCADIS

Appendix B

Groundwater Sampling Logs

ARCADIS

Groundwater Sampling Form

Project Number: RC000689.0007. Task: 00002 Well ID: PTI-1D

Date: 10- 26 -09 Sampled By: GC

Weather: WARM Recorded By: CE

Coded Duplicate No.: —

Instrument Identification

	PID	Water Quality Meter(s)
Model	—	YSI 556
Serial #:	—	05C1520 AK

Purging Information

Casing Material: PVC

Casing Diameter: 4"

Total Depth: 105'

Depth to Water: 21.80

Water Column: 83.2

Gallons/Foot: .65

Gallons in Well: 54.08

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: 162.24

Pump on: 1041 Off: 1148

CN+6 (1560) .004 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

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
1041	0	3	~~280~~	/	9	57.9	7.15	11087	24.19	1.46	
1051	10	3	~~5528~~	/	16	-29.9	7.03	12020	23.70	1.39	
1100	19	3	~~8355~~	/	7	-38.7	6.92	11465	23.25	1.46	
1110	29	3	~~11083~~	/	4	-47.5	6.83	11200	23.35	1.69	
1118	37	3	~~13810~~	/	3	-59.7	6.86	11140	23.60	1.34	
1127	46	3	~~16538~~	/	4	-63.7	6.89	11060	23.33	1.38	
1136	55	3	165	/	3	-65.3	6.91	10989	23.40	1.45	

Observations During Sampling

Well Condition: HINGE BROKEN

Color: CLEAR/NONE

Odor: SLIGHT

Purge Water Disposal: TANK

Turbidity(qualitative): —

Other (OVA, HNU,etc.): _____

Sample ID: PTI-1D-0910 **Sample Date & Time:** 10/26/09 @ ~~10~~ @ 1137

Samples Analyzed For: See the COC

ARCADIS

Groundwater Sampling Form

Project Number: RC000689.0007. Task: 00002 Well ID: PT-1D

Date: 10- 26 -09 Sampled By: GC

Weather: WARM Recorded By: CR

Coded Duplicate No.: DUP-1-0910

Instrument Identification

	PID	Water Quality Meter(s)
Model	—	YSI 556
Serial #:	—	05C1520 AK

Purging Information

Casing Material: PVC

Casing Diameter: 2"

Total Depth: 105'

Depth to Water: 20.70

Water Column: 84.3

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 waterra

Screen Interval: From: _____ To: _____

Pump Intake Setting: _____

Volumes to be Purged: 3 casing

Total Volume Purged: 40.5

Pump on: 1351 Off: 1431

Well Casing Volumes (gal/ft): (2" = 0.16) 3" = 0.37 $3^1/_2$" = 0.50 4" = 0.65 6" = 1.46

Cr+6 (1560) .008 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
1351	0	2	0		3	-91.1	6.63	11901	24.84	1.17	
1354	3	2	7		3	-90.2	7.02	12474	23.14	1.06	
1358	7	2	14		3	-102.6	7.09	12182	22.95	0.78	
1401	10	2	21		3	-106.7	7.17	12065	22.81	0.87	
1405	14	2	28		3	-111.3	7.22	12010	22.82	0.91	
1408	17	2	35		2	-112.7	7.19	11956	22.86	0.93	
1412	21	2	42		2	-113.4	7.20	11932	22.83	0.92	

Observations During Sampling

Well Condition: GOOD

Color: NONE/CLEAR

Odor: NO

Purge Water Disposal: TANK

Turbidity(qualitative): CLEAR

Other (OVA, HNU,etc.): _____

Sample ID: PT-1D-0910 **Sample Date & Time:** 10/26/09 @ 1413

Samples Analyzed For: See the COC

ARCADIS

Groundwater Sampling Form

Project Number: RC000689.0007. Task: 00002 Well ID: PT-2D

Date: 10- 26 -09 Sampled By: GC

Weather: WARM Recorded By: CI

Coded Duplicate No.: —

Instrument Identification

	PID	Water Quality Meter(s)
Model	—	YSI 556
Serial #:	—	05C1520 AK

Purging Information

Casing Material: PVC

Casing Diameter: 2"

Total Depth: 105'

Depth to Water: 20.88

Water Column: 84.12

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 WATERRA

Screen Interval: From: 95' To: 105'

Pump Intake Setting:

Volumes to be Purged: 3 CASING

Total Volume Purged: 40.4

Pump on: 1459 Off: 1528

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

Cr+6 (1560) .011 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
1459	0	2	0	/	2	-91.6	7.15	11042	25.62	0.96	
1502	3	2	6	/	2	-101.1	7.30	12107	23.50	0.83	
1506	7	2	14	/	2	-103.1	7.34	11492	23.42	0.95	
1509	10	2	20	/	2	-105.8	7.39	11291	23.25	0.75	
1513	14	2	28	/	2	-108.2	7.39	11190	23.22	0.79	
1516	17	2	34	/	2	-110.3	7.39	11172	23.15	0.70	
1520	21	2	42	/	2	-112.4	7.41	11117	23.01	0.73	

Observations During Sampling

Well Condition: GOOD

Color: NONE/CLEAR

Odor: NONE

Purge Water Disposal: TANK

Turbidity(qualitative): —

Other (OVA, HNU,etc.): —

Sample ID: PT-2D-0910 **Sample Date & Time:** 10/26/09 @1521

Samples Analyzed For: See the COC

* TRANSDUCER REMOVED @ 1450 *

ARCADIS

Groundwater Sampling Form

Project Number: RC000689.0007. Task: 00002 Well ID: PT-3D

Date: 10- 27 -09 Sampled By: GC

Weather: WARM Recorded By: CI

Coded Duplicate No.: —

Instrument Identification

	PID	Water Quality Meter(s)
Model	—	YSI-556
Serial #:	—	05C1520AK

Purging Information

Casing Material: PVC

Casing Diameter: 2"

Total Depth: 105'

Depth to Water: 19.79

Water Column: 85.21

Gallons/Foot: .16

Gallons in Well: 13.7

Purge Technique (circle one): Low-Flow (Remove 3 Well Volumes) Bail Dry

Purge Equipment (circle one): Submersible Centrifugal Bladder Peristaltic Bailer WATERRA

Screen Interval: From: _____ To: _____

Pump Intake Setting: _____

Volumes to be Purged: 3 CASING

Total Volume Purged: 41.0

Pump on: 0827 Off: 0857

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

Cr+6 (1560) .615 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
										0.78	
0827	0	2	0		4	-247.4	6.77	13379	21.87	~~-244.5~~	(1)
0830	3	2	6		3	-164.2	7.62	15289	22.07	0.81	
0834	7	2	14		3	-134.0	7.66	14574	22.05	0.82	
0837	10	2	20		3	-118.5	7.66	14240	22.15	0.80	
0841	14	2	28		3	-110.1	7.66	14056	22.02	0.94	
0844	17	2	34		2	-101.5	7.66	13905	21.94	0.79	
0848	21	2	42		2	-100.2	7.66	13890	21.87	0.74	

Observations During Sampling

Well Condition: HINGE BROKEN

Color: NONE/CLEAR

Odor: SULFUR

Purge Water Disposal: TANK

Turbidity(qualitative): —

Other (OVA, HNU,etc.): —

Sample ID: PT-3D-0910 **Sample Date & Time:** 10/27/09 @ 0849

Samples Analyzed For: See the COC

ARCADIS

Groundwater Sampling Form

Project Number: RC000689.0007. Task: 00002 Well ID: PT-4D

Date: 10- 27 -09 Sampled By: GC

Weather: WARM Recorded By: GT

Coded Duplicate No.: —

Instrument Identification

	PID	Water Quality Meter(s)
Model	—	YSI 556
Serial #:	—	05C1520 AK

Purging Information

Casing Material: PVC

Casing Diameter: 2"

Total Depth: 105'

Depth to Water: 20.56

Water Column: 84.44

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 WATERRA

Screen Interval: From: _____ To: _____

Pump Intake Setting: _____

Volumes to be Purged: 3 CASING

Total Volume Purged: 40.6

Pump on: 0913 Off: 0945

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

CrVI (1560) 1.54 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
0913	0	2	0		3	1.4	7.35	17127	22.55	0.86	
0916	3	2	6		2	4.3	7.27	17998	22.02	0.72	
0920	7	2	14		2	4.6	7.26	17989	22.00	0.70	
0923	10	2	20		2	7.3	7.26	17749	22.20	0.68	
0927	14	2	28		2	10.1	7.24	17545	22.45	0.61	
0930	17	2	34		2	11.2	7.25	17395	22.44	0.58	
0934	21	2	42		2	12.4	7.25	17204	22.42	0.55	

Observations During Sampling

Well Condition: GOOD

Color: NONE

Odor: NONE

Purge Water Disposal: TANK

Turbidity(qualitative): _____

Other (OVA, HNU,etc.): _____

Sample ID: PT-4D-0910 **Sample Date & Time:** 10/27/09 @ 0935

Samples Analyzed For: See the COC

ARCADIS

Groundwater Sampling Form

Project Number:	RC000689.0007.	Task:	00002	Well ID:	PTI-1D
Date:	01- 13 -10	Sampled By:	Blainetech		
Weather:	WARM	Recorded By:	DM		
		Coded Duplicate No.:	None		

Instrument Identification

	PID	Water Quality Meter(s)
Model	—	YSI-556-MPS
Serial #:	—	09D101246

Purging Information

Casing Material: PVC
Casing Diameter: 4"
Total Depth: 105'
Depth to Water: 22.34'
Water Column: 82.66'
Gallons/Foot: .65
Gallons in Well: 53.7

Cr+6 (1560) .006 mg/L

Purge Technique (circle one): Low-Flow, **Remove 3 Well Volumes** (circled), Bail Dry
Purge Equipment (circle one): Submersible Centrifugal Bladder Peristaltic Bailer Whaterra
Screen Interval: From: ______ To: ______
Pump Intake Setting: ______
Volumes to be Purged: 3 casing volumes
Total Volume Purged: 161.2
Pump on: 1310 Off: 1438

Well Casing Volumes (gal/ft): 2" = 0.16; 3" = 0.37; $3^1/_2$" = 0.50; 4" = 0.65 (circled); 6" = 1.46

Field Parameter Measurements Taken During Purging

Time	Minutes Elapsed	Flow Rate ( )	Volume Purged (gal)	DTW (ft btoc)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Spec Cond (µmhos/cm)	Temp (°C)	DO (mg/L)	Comments
1310	0		0		3	-68.4	7.58	11002	22.20	1.80	
1328	18		54		5	-94.9	7.68	11566	22.31	1.61	
1349	39		108		4	-101.5	7.65	11513	22.60	1.14	
1350	~~stop to off load~~ Bry	—		—	stop	purge to	off load	water			
1413	—	—		—	restart	purge					
1433	83	—	162	—	2	-98.6	7.57	11256	22.48	1.03	

Observations During Sampling

Well Condition: Broken Hinge
Color: none
Odor: none

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

Sample ID: PTI-1D100113 **Sample Date & Time:** 1-13-10 1435

Samples Analyzed For: See the COC

I:\Active\Lompoc\QAPP\Field FormsWTR forms.xlsx
1/5/2010

ARCADIS

Groundwater Sampling Form

Project Number: RC000689.0007. Task: 00002 Well ID: PT-1D

Date: 01- 14 -10 Sampled By: Blainetech

Weather: WARM Recorded By: DM

Coded Duplicate No.: None

Instrument Identification

	PID	Water Quality Meter(s)
Model	—	YSI 556 MPS
Serial #:	—	09D101246

Purging Information

Casing Material: PVC

Casing Diameter: 2"

Total Depth: 105'

Depth to Water: 21.94'

Water Column: 83.06'

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 Waterra

Screen Interval: From: _____ To: _____

Pump Intake Setting: _____

Volumes to be Purged: 3 Casing

Total Volume Purged: 39.9

Pump on: 0835 Off: 0912

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

Cr+6 (1560) .005 mg/L

Field Parameter Measurements Taken During Purging

Time	Minutes Elapsed	Flow Rate ( )	Volume Purged (gal)	DTW (ft btoc)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Spec Cond (µmhos/cm)	Temp (°C)	DO (mg/L)	Comments
0835	0	/	0	/	17	-74.6	6.94	11951	21.43	0.93	
0845	10		14		4	-97.3	7.45	12231	21.25	1.08	
0855	20		27		3	-94.5	7.40	12171	21.15	1.19	
0905	30		40		3	-94.8	7.43	12024	21.39	1.23	

Observations During Sampling

Well Condition: Good

Color: none

Odor: none

Purge Water Disposal: TANK

Turbidity(qualitative): clear

Other (OVA, HNU,etc.): —

Sample ID: PT-1D100114 **Sample Date & Time:** 1-14-10 0910

Samples Analyzed For: See the COC

ARCADIS

Groundwater Sampling Form

Project Number: RC000689.0007. Task: 00002 Well ID: PT-2D

Date: 01- 14 -10 Sampled By: Blainetech

Weather: WARM Recorded By: DM

Coded Duplicate No.: —

Instrument Identification

	PID	Water Quality Meter(s)
Model	—	YSI 556 MPS
Serial #:	—	09D101246

Purging Information

Casing Material: PVC

Casing Diameter: 2"

Total Depth: 105'

Depth to Water: 21.20'

Water Column: 83.8'

Gallons/Foot: .16

Gallons in Well: 13.4

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: 40.2

Pump on: 0945 Off: 1022

Well Casing Volumes (gal/ft): (2" = 0.16) 3" = 0.37; 3½" = 0.50; 4" = 0.65; 6" = 1.46

CR+6 (1560) .007 mg/L

Field Parameter Measurements Taken During Purging

Time	Minutes Elapsed	Flow Rate ( )	Volume Purged (gal)	DTW (ft btoc)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Spec Cond (µmhos/cm)	Temp (°C)	DO (mg/L)	Comments
0945	0	/	0	/	7	-121.6	7.25	11313	22.74	0.89	
0955	10		14		5	-129.6	7.48	11567	22.67	1.10	
1005	20		27		3	-125.0	7.52	11531	22.65	1.21	
1015	30		41		3	-127.7	7.54	11588	22.40	1.28	

Observations During Sampling

Well Condition: GOOD

Color: none

Odor: none

Purge Water Disposal: TANK

Turbidity(qualitative): clear

Other (OVA, HNU,etc.):

Sample ID: PT-2D-100114 **Sample Date & Time:** 1-14-10 1020

Samples Analyzed For: See the COC

ARCADIS

Groundwater Sampling Form

Project Number: RC000689.0007. Task: 00002 Well ID: PT-3D

Date: 01- 14 -10 Sampled By: Blainetech

Weather: WARM Recorded By: DM

Coded Duplicate No.: DUP1-100114 (1145)

Instrument Identification

	PID	Water Quality Meter(s)
Model	—	YSI 556 MPS
Serial #:	—	09D101246

Purging Information

Purge Technique (circle one): Low-Flow (Remove 3 Well Volumes) Bail Dry

Purge Equipment (circle one): Submersible Centrifugal Bladder Peristaltic Bailer Waterra

Casing Material: PVC

Casing Diameter: 2"

Total Depth: 105'

Depth to Water: 20.88'

Water Column: 84.12

Gallons/Foot: .16

Gallons in Well: 13.5

Screen Interval: From: _____ To: _____

Pump Intake Setting: _____

Volumes to be Purged: 3 casing

Total Volume Purged: 40.4

Pump on: 1105 Off: 1137

Cr+6 (1560) .539 mg/L

Well Casing Volumes (gal/ft): (2" = 0.16) 3" = 0.37 3½" = 0.50 4" = 0.65 6" = 1.46

Field Parameter Measurements Taken During Purging

Time	Minutes Elapsed	Flow Rate ( )	Volume Purged (gal.)	DTW (ft btoc)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Spec Cond (µmhos/cm)	Temp (°C)	DO (mg/L)	Comments
1105	0	/	0	/	6	-206.8	6.96	13674	22.59	1.04	
1113	8		14		2	-203.6	7.71	13886	22.45	1.01	
1120	15		27		3	-188.7	7.72	13507	22.49	0.97	
1127	22		41		2	-185.4	7.72	13480	22.53	0.92	

Observations During Sampling

Well Condition: Broken Hinge

Color: none

Odor: none

Purge Water Disposal: tank

Turbidity(qualitative): clear

Other (OVA, HNU,etc.): —

Sample ID: PT-3D100114 **Sample Date & Time:** 1-14-10 1130

Samples Analyzed For: See the COC

ARCADIS

Groundwater Sampling Form

Project Number: RC000689.0007. Task: 00002 Well ID: PT-4D

Date: 01- 14 -10 Sampled By: Blainetech

Weather: warm Recorded By: DM

Coded Duplicate No.: —

Instrument Identification

	PID	Water Quality Meter(s)
Model	—	YSI 556 MPS
Serial #:	—	09D101246

Purging Information

Casing Material: PVC

Casing Diameter: 2"

Total Depth: 105'

Depth to Water: 21.83'

Water Column: 83.17'

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 (Waterra

Screen Interval: From: ____ To: ____

Pump Intake Setting: ____

Volumes to be Purged: 3 Casing

Total Volume Purged: 39.9

Pump on: 1159 Off: 1227

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

CrVI 6 (1560) 1.14 mg/L

Field Parameter Measurements Taken During Purging

Time	Minutes Elapsed	Flow Rate ( )	Volume Purged (gal)	DTW (ft btoc)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Spec Cond (µmhos/cm)	Temp (°C)	DO (mg/L)	Comments
1159	0	/	0	/	22	-149.4	7.36	16772	23.24	1.21	
1207	8		14		11	-142.0	7.34	17614	22.60	1.30	
1215	16		27		6	-136.0	7.33	17540	22.82	1.22	
1223	24		40		5	-134.5	7.33	17375	22.71	1.15	

Observations During Sampling

Well Condition: GOOD

Color: none

Odor: none

Purge Water Disposal: TANK

Turbidity(qualitative): clear

Other (OVA, HNU,etc.): —

Sample ID: PT-4D100114 **Sample Date & Time:** 1-14-10 1225

Samples Analyzed For: See the COC

ARCADIS

Groundwater Sampling Form

Project Number: RC000689.0007. Task: 00002 Well ID: PTI-1D

Date: 4/5/10 Sampled By: Blainetech

Weather: WARM Recorded By: CE

Coded Duplicate No.: None

Instrument Identification

	PID	Water Quality Meter(s)
Model	—	YSI 556 MPS
Serial #:	—	07H00894

Purging Information

Casing Material: PVC

Casing Diameter: 4"

Total Depth: 107.83

Depth to Water: 20.70

Water Column: 87.13

Gallons/Foot: .65

Gallons in Well: 56.7

Purge Technique (circle one): Low-Flow (Remove 3 Well Volumes) Bail Dry (MPERA)

Purge Equipment (circle one): Submersible Centrifugal Bladder Peristaltic Bailer

Screen Interval: From: ____ To: ____

Pump Intake Setting: ____

Volumes to be Purged: 3

Total Volume Purged: 167

Pump on: 1117 Off: 1225

Well Casing Volumes (gal/ft): 2" = 0.16 3" = 0.37 3½" = 0.50 (4" = 0.65) 6" = 1.46

CrT+6 (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
(1) 1107	0	3	0		26	129.4	7.96	15129	23.40	0.93	
1120	10	3	30		18	14.2	7.78	13052	13.80	1.01	
1130	20	3	60		4	-32.1	7.70	11998	23.80	0.90	
1140	30	3	90		3	-58.0	7.67	11619	23.83	1.21	
1150	40	3	120		2	-83.7	7.64	11477	23.41	1.03	
1200	50	3	150		2	-91.0	7.62	11364	23.64	0.96	
1210	60	3	180		2	-93.4	7.60	11288	23.53	0.98	

Observations During Sampling

Well Condition: HINGE BROKEN

Color: NONE / CLEAR

Odor: NONE

Purge Water Disposal: TANK

Turbidity(qualitative): CLEAR

Other (OVA, HNU,etc.): —

Sample ID: PTI-1D **Sample Date & Time:** 4/5/10 @ 1220

Samples Analyzed For: See the COC

ARCADIS

Groundwater Sampling Form

Project Number: RC000689.0007. Task: 00002 Well ID: PT-3D
Date: 4/5/10 Sampled By: Blainetech
Weather: SUNNY, WARM Recorded By: CE
Coded Duplicate No.: DUP-1

Instrument Identification

	PID	Water Quality Meter(s)
Model	—	YSI 556 MPS
Serial #:		07L100894

Purging Information

Casing Material: PVC
Casing Diameter: 2"
Total Depth: 96.69
Depth to Water: 19.72
Water Column: 76.97
Gallons/Foot: 0.16
Gallons in Well: 12.4

Purge Technique (circle one): Low-Flow Remove 3 Well Volumes Bail Dry (ARCADIS)
Purge Equipment (circle one): Submersible Centrifugal Bladder Peristaltic Bailer
Screen Interval: From: To:
Pump Intake Setting:
Volumes to be Purged: 3
Total Volume Purged: 37.0
Pump on: 14/6 Off: 1500

CR46 (4560) .622 mg/L

Well Casing Volumes (gal/ft): (2" = 0.16) 3" = 0.37 3½" = 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
14/6	0	1	0		5	-196.5	6.87	13712	23.92	1.59	ODOR-SULFUR
1422	6	1	6		4	-92.8	7.46	15234	23.18	0.71	ODOR GONE
1428	12	1	12		2	-72.2	7.49	14342	23.05	0.97	
1434	18	1	24		1	-50.1	7.54	14156	23.27	1.46	
1440	24	1	30		1	-48.6	7.51	14068	23.01	1.51	
1446	30	1	37		1	-46.4	7.54	13858	22.90	1.66	

Observations During Sampling

Well Condition: HINGE BROKEN
Color: CLEAR/NONE
Odor: NONE
Purge Water Disposal: TANK
Turbidity(qualitative): CLEAR
Other (OVA, HNU,etc.): —

Sample ID: PT-3D **Sample Date & Time:** 4/5/10 @ 1450
Samples Analyzed For: See the COC

ARCADIS

Groundwater Sampling Form

Project Number: RC000689.0007. Task: 00002 Well ID: PT- 1D
Date: 4/6/2010 Sampled By: Blainetech
Weather: SUNNY WARM Recorded By: CE
Coded Duplicate No.: —

Instrument Identification

	PID	Water Quality Meter(s)
Model	—	YSI 556 MPS
Serial #:	—	07L00894

Purging Information

Casing Material: PVC
Casing Diameter: 2"
Total Depth: 97.62
Depth to Water: 19.60
Water Column: 77.42
Gallons/Foot: .16
Gallons in Well: 12.4

Purge Technique (circle one): Low-Flow Remove 3 Well Volumes Bail Dry WATERRA
Purge Equipment (circle one): Submersible Centrifugal Bladder Peristaltic Bailer
Screen Interval: From: ____ To: ____
Pump Intake Setting: ____
Volumes to be Purged: 3
Total Volume Purged: 37.2
Pump on: 0809 Off: 0855

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

CrT6 (1560) .016 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
0809	0	1	0		10	-154.8	7.11	12760	21.98	1.54	
0815	6	1	6		7	-80.6	7.54	12540	20.74	1.96	
0821	12	1	12		2	-97.5	7.55	12488	21.34	0.89	
0827	18	1	18		2	-110.4	7.55	12490	21.50	0.79	
0833	24	1	24		1	-96.9	7.57	12450	21.45	2.09	
0839	30	1	30		1	-103.5	7.57	12423	21.66	1.99	
0849	40	1	40		1	-106.2	7.57	12420	21.10	1.99	

Observations During Sampling

Well Condition: GOOD
Color: NONE/CLEAR
Odor: NONE

Purge Water Disposal: ~~TANK~~ IM 3
Turbidity(qualitative): CLEAR
Other (OVA, HNU, etc.): ____

Sample ID: PT-1D **Sample Date & Time:** 4/6/10 @ 0850
Samples Analyzed For: See the COC

ARCADIS

Groundwater Sampling Form

Project Number: RC000689.0007. Task: 00002 Well ID: PT-2D
Date: 4/6/10 Sampled By: Blainetech
Weather: SUNNY WARM Recorded By: CE
Coded Duplicate No.: —

Instrument Identification

	PID	Water Quality Meter(s)
Model	—	YSI 556 MPS
Serial #:	—	07L100894

Purging Information

Casing Material: PVC
Casing Diameter: 2"
Total Depth: 107.64
Depth to Water: 18.84
Water Column: 88.8
Gallons/Foot: 0.16
Gallons in Well: 14.3

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:
Volumes to be Purged: 3
Total Volume Purged: 42.7
Pump on: 0920 Off: 0950

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

CT+6 (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
0920	0	2	0		4	-67.6	7.11	12217	22.62	1.12	
0924	3	2	7		2	-70.5	7.36	12743	22.13	0.76	
0927	7	2	14		2	-91.9	7.43	12467	22.22	0.87	
0931	10	2	21		3	-105.1	7.45	12251	22.11	0.70	
0934	13	2	28		2	-110.8	7.46	12115	22.18	0.77	
0938	17	2	35		2	-111.4	7.45	12008	22.53	0.65	
0943	22	2	45		2	-112.9	7.46	12045	22.35	0.61	

Observations During Sampling

Well Condition: GOOD
Color: CLEAR
Odor: NONE

Purge Water Disposal: IM3
Turbidity(qualitative): CLEAR
Other (OVA, HNU,etc.):

Sample ID: PT-2D **Sample Date & Time:** 4/6/10 @0945
Samples Analyzed For: See the COC

* TRANSDUCER

ARCADIS

Groundwater Sampling Form

Project Number: RC000689.0007. Task: 00002 Well ID: PT- 4 D
Date: 4/6/10 Sampled By: Blainetech
Weather: SUNNY WARM Recorded By: CE
Coded Duplicate No.: —

Instrument Identification

	PID	Water Quality Meter(s)
Model	—	YSI 556 MPS
Serial #:	—	07L100984

Purging Information

Casing Material: PVC
Casing Diameter: 2"
Total Depth: 99.11
Depth to Water: 19.55
Water Column: 79.56
Gallons/Foot: 0.16
Gallons in Well: 12.8

Purge Technique (circle one): Low-Flow Remove 3 Well Volumes Bail Dry (W.GRAB)
Purge Equipment (circle one): Submersible Centrifugal Bladder Peristaltic Bailer
Screen Interval: From: ____ To: ____
Pump Intake Setting: ____
Volumes to be Purged: 3
Total Volume Purged: 38.2
Pump on: 1023 Off: 1110

CR+6 (1560) 1.14 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

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
1023	0	1	0		8	-30.5	7.68	12561	23.90	5.37	
1030	7	1	7		3	22.3	7.14	18683	23.87	1.90	
1037	14	1	14		2	30.1	7.18	18775	23.27	1.49	
1043	20	1	20		1	35.5	7.16	18237	24.05	0.75	
1049	26	1	26		1	39.6	7.21	18088	23.85	1.58	
1055	32	1	32		1	41.6	7.22	18080	23.72	1.74	
1103	40	1	40		1	44.1	7.23	18025	23.96	1.67	

Observations During Sampling

Well Condition: HINGE BROKEN
Color: NONE
Odor: ND

Purge Water Disposal: TM3
Turbidity(qualitative): CLEAR
Other (OVA, HNU,etc.): ____

Sample ID: PT-4D **Sample Date & Time:** 4/6/10 @ 1105
Samples Analyzed For: See the COC

ARCADIS

Groundwater Sampling Form

Project Number: RC000753.0001. Task: 00002 Well ID: PT-~~MW~~1D

Date: 07- 15 -10 Sampled By: Gary Clift

Weather: Hot Recorded By: CI

Coded Duplicate No.:

Instrument Identification

	PID	Water Quality Meter(s)
Model	—	YSI-556 MPS
Serial #:	—	10B100316

Purging Information

Casing Material: PVC

Casing Diameter: 2"

Total Depth: 105'

Depth to Water: 18.65

Water Column: 86.35

Gallons/Foot: .16

Gallons in Well: 13.9

Purge Technique (circle one): Low-Flow (Remove 3 Well Volumes) Bail Dry

Purge Equipment (circle one): Submersible Centrifugal Bladder Peristaltic Bailer (WATERRA)

Screen Interval: From: To:

Pump Intake Setting: 100'

Volumes to be Purged: 3 Casing

Total Volume Purged: 41.5

Pump on: 0944 Off: 1015

Well Casing Volumes (gal/ft): (2" = 0.16) 3" = 0.37 3½" = 0.50 4" = 0.65 6" = 1.46

Cr+6 (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
0944	0	2	0		4	-136.5	7.13	12164	25.8	4.15	
0948	4	2	7		2	-140.8	7.55	11962	24.0	2.23	
0951	7	2	14		2	-131.2	7.57	11728	23.5	1.59	
0955	11	2	21		2	-128.1	7.57	11594	23.4	1.15	
0958	14	2	28		1	-132.1	7.56	11608	23.6	0.56	
1002	18	2	35		1	-129.2	7.56	11641	23.5	0.49	
1005	21	2	42		1	-128.7	7.56	11684	23.5	0.47	

Observations During Sampling

Well Condition: GOOD

Color: CLEAR

Odor: NONE

Purge Water Disposal: Im-3

Turbidity(qualitative): CLEAR

Other (OVA, HNU,etc.):

Sample ID: PT-1D-100715 Sample Date & Time: 7-15-10 @1006

Samples Analyzed For: See the COC

ARCADIS

Groundwater Sampling Form

Project Number: RC000753.0001. Task: 00002 Well ID: PT-2D
Date: 7-15-10 Sampled By: Blainetech
Weather: HOT Recorded By: CI
Coded Duplicate No.: DUP1-100715

Instrument Identification

	PID	Water Quality Meter(s)
Model	—	YSI-556 MPS
Serial #:	—	10B100316

Purging Information

Casing Material: PVC
Casing Diameter: 2"
Total Depth: 105'
Depth to Water: 17.58
Water Column: 87.42
Gallons/Foot: .16
Gallons in Well: 14.0

Purge Technique (circle one): Low-Flow (Remove 3 Well Volumes) Bail Dry
Purge Equipment (circle one): Submersible Centrifugal Bladder Peristaltic Bailer (WATERRA)
Screen Interval: From: 95' To: 105'
Pump Intake Setting: 100'
Volumes to be Purged: 3 CASING
Total Volume Purged: 42
Pump on: 0845 Off: 0915

Well Casing Volumes (gal/ft): (2" = 0.16) 3" = 0.37 3½" = 0.50 4" = 0.65 6" = 1.46

CR+6 (1560) .009 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
0845	0	2	0		7	240.0	7.26	12128	27.7	5.20	
0849	4	2	7		5	226.6	7.38	11696	24.1	3.00	
0852	7	2	14		4	203.1	7.45	11060	23.9	1.93	
0856	11	2	21		2	160.7	7.47	10840	23.8	1.34	
0859	14	2	28		2	-91.6	7.49	10728	23.6	1.12	
0903	18	2	35		2	-98.5	7.50	10599	23.5	0.73	
0906	21	2	42		2	-101.7	7.52	10516	23.3	0.80	
0908	23	2	46		1	-105.3	7.53	10487	23.4	0.83	

Observations During Sampling

Well Condition: GOOD
Color: NONE
Odor: NONE

Purge Water Disposal: IM3
Turbidity(qualitative): CLEAR
Other (OVA, HNU,etc.): —

Sample ID: PT-2D-100715 **Sample Date & Time:** 7-15-10 @ 0909
Samples Analyzed For: See the COC

ARCADIS

Groundwater Sampling Form

Project Number: RC000753.0001. Task: 00002 Well ID: PT-3D

Date: 07- 15 -10 Sampled By: Gary Clift

Weather: Hot Recorded By: CI

Coded Duplicate No.: NONE

Instrument Identification

	PID	Water Quality Meter(s)
Model	—	YSI-556 mps
Serial #:	—	10B100316

Purging Information

Casing Material: PVC

Casing Diameter: 2"

Total Depth: 105'

Depth to Water: 18.72

Water Column: 86.28

Gallons/Foot: .16

Gallons in Well: 13.81

Purge Technique (circle one): Low-Flow (Remove 3 Well Volumes) Bail Dry

Purge Equipment (circle one): Submersible Centrifugal Bladder Peristaltic Bailer (WATER)

Screen Interval: From: To:

Pump Intake Setting: 100'

Volumes to be Purged: 3 CASing

Total Volume Purged: 41.5

Pump on: 1032 Off: 1102

Well Casing Volumes (gal/ft): (2" = 0.16) 3" = 0.37 3½" = 0.50 4" = 0.65 6" = 1.46

CrT6 (1560) .610 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
1032	0	2	0		8	-151.8	7.03	13830	26.6	2.17	
1036	4	2	7		7	-62.7	7.44	14510	23.9	1.48	
1039	7	2	14		5	-46.5	7.51	13861	23.8	1.08	
1043	11	2	21		5	-40.4	7.53	13446	23.4	0.90	
1046	14	2	28		4	-37.3	7.53	13304	23.3	0.90	
1050	18	2	35		4	-34.4	7.54	13313	23.4	0.96	
1053	21	2	42		3	-32.4	7.54	13172	23.3	0.98	

Observations During Sampling

Well Condition: HINGE BROKEN

Color: NONE

Odor: NONE

Purge Water Disposal: Im-3

Turbidity(qualitative): CLEAR

Other (OVA, HNU,etc.): —

Sample ID: PT-3D-100715 Sample Date & Time: 7-15-10 @1054

Samples Analyzed For: See the COC

ARCADIS

Groundwater Sampling Form

4D

Project Number: RC000753.0001. Task: 00002 Well ID: PT-~~15~~

Date: 07- 15 -10 Sampled By: Gary Clift

Weather: Hot Recorded By: CI

Coded Duplicate No.: None

Instrument Identification

	PID	Water Quality Meter(s)
Model	—	YSI-556 MPS
Serial #:	—	10B100316

Purging Information

Casing Material: PVC

Casing Diameter: 2"

Total Depth: 105'

Depth to Water: 19.85

Water Column: 85.15

Gallons/Foot: .16

Gallons in Well: 13.63

Purge Technique (circle one): Low-Flow (Remove 3 Well Volumes) Bail Dry

Purge Equipment (circle one): Submersible Centrifugal Bladder Peristaltic Bailer (ULTERA)

Screen Interval: From: To:

Pump Intake Setting: 100'

Volumes to be Purged: 3 CASING

Total Volume Purged: 40.9

Pump on: 1351 Off: 1420

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

Cr+6 (1560) 1.22 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
1351	0	2	0		12	60.0	7.37	17960	27.3	4.84	
1355	4	2	7		8	49.8	7.22	17924	24.5	2.62	
1358	7	2	14		7	47.1	7.21	17321	24.0	1.81	
1402	11	2	21		5	46.8	7.24	16943	23.8	1.75	
1405	14	2	28		4	45.6	7.23	16974	24.0	1.53	
1409	18	2	35		4	44.6	7.23	16674	23.6	1.30	
1412	21	2	42		3	43.8	7.23	16622	23.7	1.25	

Observations During Sampling

Well Condition: LOCK BROKEN

Color: NONE | CLEAR

Odor: NONE

Purge Water Disposal: IM-3

Turbidity(qualitative): CLEAR

Other (OVA, HNU,etc.):

Sample ID: PT-4D-100715 Sample Date & Time: 7-15-10 @1413

Samples Analyzed For: See the COC

ARCADIS

Groundwater Sampling Form

Project Number: RC000753.0001. Task: 00002 Well ID: PTI-1D

Date: 07- 15 -10 Sampled By: Gary Clift

Weather: Hot Recorded By: CI

Coded Duplicate No.: None

Instrument Identification

	PID	Water Quality Meter(s)
Model	—	YSI - 556 MPS
Serial #:	—	10B1003316

Purging Information

Casing Material: PVC

Casing Diameter: 4"

Total Depth: 105'

Depth to Water: 20.26

Water Column: 84.74

Gallons/Foot: .65

Gallons in Well: 55.1

Purge Technique (circle one): Low-Flow (Remove 3 Well Volumes) Bail Dry

Purge Equipment (circle one): Submersible Centrifugal Bladder Peristaltic Bailer (WATERRA)

Screen Interval: From: To:

Pump Intake Setting: 100'

Volumes to be Purged: 3 CASING

Total Volume Purged: 165.3

Pump on: 1223 Off: 13:15

Cr+6 (1560) .012 mg/L

Well Casing Volumes (gal/ft): 2" = 0.16 3" = 0.37 4" = 0.65 $3\frac{1}{2}$" = 0.50 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
1223	0	3.5	0		25	16.4	7.51	11976	28.1	4.28	
1231	46	3.5	28		18	-8.8	7.75	13184	24.8	2.43	
1239	24	3.5	55		12	-24.9	7.75	12148	23.8	1.50	
1247	32	3.5	83		8	-48.3	7.71	11290	24.2	0.89	
1255	40	3.5	110		5	-55.1	7.69	10929	23.5	0.81	
1303	48	3.5	139		4	-61.7	7.68	10812	23.2	0.80	
1311	56	3.5	166		4	-63.9	7.68	10842	23.5	0.87	

Observations During Sampling

Well Condition: HINGE BROKEN

Color: NONE / CLEAR

Odor: NONE

Purge Water Disposal: IM-3

Turbidity(qualitative): CLEAR

Other (OVA, HNU,etc.):

Sample ID: PTI-1D-100715 Sample Date & Time: 7-15-10 @1312

Samples Analyzed For: See the COC

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Appendix C

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