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October 4, 2011

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

Upland In-Situ Pilot Test

2011 Annual Monitoring Report

(Rescinded Board Order R7-2007-0015)

Dear Mr. Perdue:

Enclosed is the 2011 Annual Monitoring Report for the Pacific Gas and Electric Company (PG&E) Topock Compressor Station, Upland reductive zone in situ pilot test. Although the Waste Discharge Requirement (WDR) issued by the Colorado River Basin Regional Water Quality Control Board (Water Board) under Board Order R7-2007-0015 was rescinded in May 2009, PG&E is continuing to monitor the test area and is providing this report for your information.

If you have any questions regarding this report, please call me at (805) 234-2257.

Sincerely, Monne Meche

Yvonne Meeks

Topock Project Manager

Enclosures:

2011 Annual Monitoring Report for the Upland Reductive Zone In Situ Pilot Test.

cc: Jose Cortez, Water Board

Robert Perdue, CA RWQCB Aaron Yue, DTSC (2 copies)

Pacific Gas and Electric Company

2011 Annual Monitoring Report for the Upland Reductive Zone In-Situ Pilot Test

PG&E Topock Compressor Station San Bernardino County, California

October 4, 2011

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

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PG&E Topock Compressor Station San Bernardino County, California

Document ID: PGE20111004B

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Pacific Gas and Electric Company

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RC000753.0007.00004

Date

October 4, 2011

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ARCADIS Acronyms and Abbreviations

Calscience Environmental Laboratories, Inc.

gpm Gallons per minute

ISPT In-Situ Pilot Test

μg/L Micrograms per liter

mg/L Milligrams per liter

MRP Monitoring and Reporting Program

OZARK Ozark Underground Laboratories, Inc.

PG&E Pacific Gas and Electric Company

SAFPM Sampling, Analysis, and Field Procedures Manual, PG&E

Topock Program, Revision 1

S/M/D Shallow/Middle/Deep

TOC Total Organic Carbon

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 Pilot Test Plan –

Upland Plume Treatment (September 2006)

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1.0 Introduction

Pacific Gas and Electric Company (PG&E) implemented an Upland reductive zone insitu pilot test (ISPT) to address chromium concentrations in groundwater at the Topock Compressor Station (the Site) near Needles, California. The purpose of the Upland ISPT was to evaluate the efficacy of using a reagent mixture to remove hexavalent chromium from groundwater using chemical reduction to form stable, insoluble trivalent chromium. The Upland ISPT consisted of the recirculation of the reagent mixture between the two recirculation wells (PTR-1 and PTR-2) from March 6, 2008 through November 1, 2008; results were monitored in surrounding groundwater monitoring wells (PT-7 Shallow/Middle/Deep [S/M/D] through PT-9S/M/D, MW-11, MW-24A/B, and MW-38S/D). Figure 1 provides a map of the PG&E Topock Compressor Station and ISPT area (all figures are provided at the end of the report).

California Regional Water Quality Control Board, Colorado River Basin Region (Water Board), Order No. R7-2007-0015 authorized PG&E to inject a total of approximately 38,000 gallons of reagent through the duration of the test. An automated reagent dosing system metered the reagent injections at regular intervals during each day of the pilot test. The pilot test concluded activities on December 3, 2008, at the end of the nine month period allowed in Order No. R7-2007-0015.

The Monitoring and Reporting Program (MRP) under Order No. R7-2008-0015 required a final report to be submitted within 90 days of the completion of the ISPT. The *Upland Reductive Zone In-Situ Pilot Test, Final Completion Report* (ARCADIS 2009a) was submitted on March 3, 2009 and summarizes the activities and results related to the Upland ISPT from March 2008 through December 3, 2008.

The Monitoring and Reporting Program (MRP) under Order No. R7-2007-0015 required monthly monitoring reports to be submitted by the 15th day of the following month. A letter requesting the Order be rescinded was submitted to the Water Board on March 20, 2009 (Appendix A). The rescission was approved on May 21, 2009. While active injection and operation of the in situ pilot test has ceased, ARCADIS has continued to take monitoring samples from the Upland ISPT area in order to document ongoing conditions at the site. This report describes monitoring activities and results related to the Upland ISPT for the last year, spanning from the fourth quarter of 2010 through the third quarter 2011; reports will continue to be submitted annually.

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2.0 In-Situ Pilot Test Sampling Locations

Table 1 summarizes the well construction details for the recirculation wells (PTR-1 and PTR-2) and monitoring wells (PT-7S/M/D through PT-9S/M/D, MW-11, MW-24A/B, and MW-38S/D). Figure 2 provides a map of the sampling locations. Figure 3 presents the well construction and cross section information for the monitoring wells sampled in the Upland ISPT. The sampling list includes the following wells: PT-7S/M/D through PT-9S/M/D, MW-11, and MW-24A/B.

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3.0 Description of Activities

During the past year, ARCADIS completed four sampling rounds associated with the Upland ISPT. Associated field activities were performed in accordance with the applicable procedures contained within the *Sampling, Analysis, and Field Procedures Manual, PG&E Topock Program, Revision 1 ("SAFPM")* (CH2M Hill, 2005).

The four sampling events were conducted in October 2010, January 2011, April 2011, and July 2011. Data from these four events are included in this report.

Samples were collected, labeled, and packaged according to the SAFPM, as summarized in Section 4.0. Table 2 presents the field parameter results. Tables 3 and 4 present the groundwater analytical results, including historical data from July 2007 to present. Calibration logs for field-monitoring instruments are included in Appendix B. Groundwater sampling logs are included in Appendix C.

With the rescission of the Waste Discharge Requirements for the pilot test, the groundwater analytical suite was reduced to the following parameters: total dissolved chromium, hexavalent chromium, fluorescein, rhodamine, nitrate, sulfate, dissolved iron, dissolved manganese, dissolved arsenic, dissolved molybdenum, dissolved selenium, total organic carbon, and bicarbonate alkalinity. Barium analysis was added to the sampling program in the first quarter of 2010 after baseline samples collected in the third quarter of 2009 indicated barium concentrations had increased.

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4.0 Sampling and Analytical Procedures

4.1 Groundwater Sampling

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

Monitoring wells were purged and sampled. 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 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, and temperature were recorded (Table 2). After completion of purging, the groundwater samples were collected in the appropriate containers.

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

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

Sample results are summarized in Tables 3, 4, and 5. Calibration logs for field-monitoring instruments are presented in Appendix B. Sampling logs are presented in Appendix C. Copies of laboratory analytical results are presented on compact disc in Appendix D.

Table 6 identifies the laboratory that performed each analysis and lists the following required monitoring information:

- Sample Location
- Sample identification
- Sampler name

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

Higher doses of carbon in the vicinity of PT-7M and PT-7D resulted in the temporary generation of carbon dioxide gas beyond the ability of the aquifer to diffuse the gas naturally. Elevated levels of gas were present in PT-7M and PT-7D during the monitoring period discussed in this report; however, levels appear to be declining. Over the past year, samples were collected from well PT-7D with a hand-bailer because the down-well pump could not be primed due to the amount of gas present in the purge water from the well. However, during the July 2011 event the down-well pump was able to collect the sample at PT-7D, signifying a reduction in gas production from the well.

Groundwater samples from the sampling events were analyzed for hexavalent chromium (United States Environmental Protection Agency [USEPA] Method 218.6 SM 2500-Cr) and total dissolved chromium (USEPA Method SW 6020) by Truesdail Laboratories (Truesdail); dissolved arsenic, dissolved barium, dissolved manganese, dissolved molybdenum, dissolved selenium, and dissolved iron (USEPA 200.8), sulfate and nitrate (USEPA 300), alkalinity bicarbonate (USEPA Method 2320B), and total organic carbon (TOC) (USEPA Method 5310B), by Calscience Environmental Laboratories, Inc. (Calscience); and for fluorescein and Rhodamine WT by Ozark Underground Laboratories, Inc. (fluorescence spectroscopy according to Ozark standard operating procedures). Hexavalent chromium was also analyzed in the field at the Interim Measures 3 facility using HACH Method 8023 - program 1560.

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5.0 Analytical Results

5.1 Groundwater Analytical Results

Summaries of the field test parameters, primary and secondary parameters, and supplementary metals are presented in Tables 2, 3, 4, and 5, respectively.

Approximately two and a half years after completing the pilot study, Cr(VI) continues to be treated in areas where TOC distribution was greatest and strong reducing conditions were established during the pilot study operation. In addition, by-product concentrations have either returned to baseline levels or are following generally declining trends.

Cr(VI) concentrations have been stable over the last two years. Cr(VI) continues to be treated as indicated by concentrations below baseline, although the extent of reduction varies across the pilot study area and is correlated with the extent of organic carbon distribution achieved during the pilot study. During operation, the distribution of organic carbon varied with distance from the injection locations, as shown in Figure 3. Significant concentrations of organic carbon were distributed and maintained at MW-24A and PT-8S from injection at PTR-2 and at PT-7M and PT-7D from injection at PTR-1 (areas shown in dark blue on Figure 3). At these locations, Cr(VI) concentrations have remained at, or below, the reporting limit of 1 microgram per liter (μg/L) since the end of the pilot test; suggesting complete reduction has been maintained. In locations where organic carbon concentrations were distributed at lower concentrations and less consistently over time (areas shown in light blue on Figure 3), Cr(VI) concentrations are stable below baseline levels, indicating incomplete reduction has been maintained (e.g. in third quarter 2011, PT-7S yielded a Cr(VI) concentration of 551 µg/L compared to a baseline concentration of 1,200 µg/L and PT-8D yielded a Cr(VI) concentration of 1,560 µg/L compared to baseline concentration of 6,540 µg/L). At PT-8M, where organic carbon was not distributed during operation, Cr(VI) concentrations continue to decline and reached a minimum during the third quarter 2011 event (114 µg/L) compared to a baseline concentration of 3,960 µg/L, indicating the arrival of treated groundwater that was distributed upgradient of this location during operation.

Arsenic and manganese concentrations have also been relatively stable or changing gradually over the last year. At locations where organic carbon was distributed during operation (PT-7S, PT-7M, PT-7D, PT-8S, PT-8D, and MW-24A), as shown in dark blue on Figure 3, manganese and arsenic concentrations temporarily increased as a result

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of the anaerobic dissolution of manganese and arsenic-bearing minerals. Arsenic concentrations have returned to baseline levels across the pilot test monitoring well network.

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Manganese concentrations decreased by an order of magnitude in the first year and a half following the end of active operations and have been relatively stable over the past year, with the following exceptions:

- Occasional elevated manganese concentrations were detected in samples from PT-7M and PT-7D. Manganese concentrations varied over time in post-pilot test samples collected from PT-7M and PT-7D, likely due to the locally heterogeneous generation and distribution of manganese during the pilot. The detection of several milligrams per liter of manganese in some samples is likely a result of delivering higher ethanol concentrations to the aquifer during the pilot.
- Manganese concentrations at PT-8M began increasing after the pilot study concluded. Organic carbon was not distributed at this location during recirculation. The arrival of manganese after recirculation ended indicates that organic carbon was distributed upgradient of this location and manganese dissolved into water is now traveling through PT-8M. The July 2011 result at PT-8M presents the current maximum manganese concentration at the site. The increase in manganese concentration at PT-8M coincides with an increase in fluorescein tracer concentration, which was injected at PTR-1 during the ISPT injections in 2007. The tracer response observed over two years after injections ceased indicates that reduced groundwater influenced the pilot test injections continues to flux through the vicinity of the pilot test monitoring well network. In the coming quarters, the manganese concentration at PT-8M is expected to decline as the persistence of reduced water lessens over time.

In addition, total organic carbon concentrations declined to less than 5 milligrams per liter (mg/L) throughout the pilot study area by early 2010, with the exception of PT-7M where the highest concentrations had been distributed during the pilot study. TOC concentrations at PT-7M fell below 5 mg/L during the third quarter sampling event; bringing TOC concentrations below 5 mg/L for the entire pilot study area.

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6.0 References

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- Cooper, D.C., Morse, J.W. 1998. Extractability of metal sulfide minerals in acidic solutions: application to environmental studies of trace metal contamination within anoxic sediments. Environmental Science and Technology. 32: 1076-1078.
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- Pacific Gas & Electric Company, 2008. Letter to Robert Perdue. Executive Officer. California Regional Water Quality Control Board, Colorado River Basin Region, May 29, 2008.

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7.0 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.

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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.

Monne Meeke

Signature:

Name: Yvonne Meeks

Company: PG&E

Title: Project Manager Date: October 3, 2011

Table 1 Boring and Well Construction Detail Summary

PG&E Topock Needles, California

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Well or Boring Designation	Date Completed	Aquifer Zone	Ground Elevation*	TOC Elevation**	Total Depth of Boring (feet bgs)	Casing Diameter	Boring Diameter (inches)	Well Completion Depth (feet bgs)	Well Completion Elevation (feet msl)	Screen Depth Interval	Screen Elevation Interval (feet msl)	Depth Interval	Sand Pack Elevation Interval	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	М	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	34° 43′ 10.3″	114° 29' 25.8"
PT-2S	8-Feb-06	S	471.627	473.487	127	2	10	45	428	35-45	438-428	32-47	441-426	28-32	445-441	2006010012	45	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	34° 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	34° 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		-	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	466.549	105	6	10	110	357	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 injection 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

PG&E Topock Needles, California

Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	рН	Specific Conductance (µS/cm)	Temperature (°C)	DO (mg/L)	Depth to Water (feet below TOC)	Hexavalent Chromium Field (μg/L)
PT-7S	18-Jul-07	N	130-150	-62.7	7.67	5,697	31.25	4.13	103.58	920
	22-Jan-08	N		132	7.60	4,369	23.5	4.12	105.75	1,760
	06-Mar-08	N		-70.4	7.26	5,514	29.47	0.54	105.11	1,800
	13-Mar-08	N		-112.4	7.32	4,860	29.6	0.15	104.98	1,400
	18-Mar-08	N		-114.1	7.42	5,328	29.6	0.075	104.89	1,280
	25-Mar-08	Ν		-55.9	7.43	5,235	29.69	0.87	104.66	1,680
	02-Apr-08	N		-179.1	7.50	5,577	29.68	0.41	104.78	1,700
	17-Apr-08	N		-161.8	7.37	5,682	27.01	0.66	104.26	1,340
	29-Apr-08	N		-210.6	7.37	4,804	29.75	0.35	103.33	220
	15-May-08	Ν		-155.6	7.35	5,090	30.1	0.38	103.72	1,040
	29-May-08	N		-143	7.33	5,781	29.88	0.33	103.77	1,440
	11-Jun-08	N		41.6	7.27	5,694	29.95	0.72	103.64	1,800
	24-Jun-08	N		0.2	6.83	5,044	30.11	0.16	103.55	1,060
	23-Jul-08	N		22.8	7.47	5,503	30.13	0.18	103.59	201
	21-Aug-08	N		-92.0	7.39	6,500	30.15	0.67	103.53	820
	18-Sep-08	N		-165.8	7.54	5,479	28.63	0.79	104.22	489
	15-Oct-08	Ν		5363.0	7.20	5,362	29.97	0.32	104.48	<10
	12-Nov-08	N		-109.4	7.60	5,897	29.93	0.17	104.78	280
	05-Feb-09	Ν		-18.2	7.54	5,791	30.50	0.39	105.39	166
	15-May-09	Ν		78.6	7.01	6,004	30.61	0.06	103.60	<10
	04-Aug-09	Ν		49.8	7.02	5,759	30.87	0.44	103.97	1,120
	29-Oct-09	Ν		52.1	7.08	5,682	30.19	0.14	105.68	774
	13-Jan-10	Ν		172.2	7.26	5,646	30.06	0.42	105.25	1,000
	08-Apr-10	Ν		56.3	7.14	5,868	30.68	0.18	104.40	586
	14-Jul-10	Ν		155.7	7.23	6,417	31.00	0.05	103.62	662
	14-Oct-10	N		132.9	7.36	5,407	30.30	0.08	104.26	678
	18-Jan-11	N		-44.4	7.27	5,554	30.14	1.09	105.14	<10
	13-Apr-11	N		-13.9	7.34	5,327	30.90	0.03	104.10	591
	12-Jul-11	N		-95.8	7.32	5,470	30.38	0.28	103.58	600

PG&E Topock Needles, California

Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	рН	Specific Conductance (µS/cm)	Temperature (°C)	DO (mg/L)	Depth to Water (feet below TOC)	Hexavalent Chromium Field (µg/L)
PT-7M	19-Jul-07	N	165-185	-40.2	7.76	7,224	33.99	3.75	103.90	1,480
	24-Jan-08	N		10.6	7.17	9,257	30.06	0.85	105.79	2,840
	06-Mar-08	N		-487	7.34	6,818	29.91	0.07	105.48	22
	13-Mar-08	N		-280.12	6.99	6,650	29.99	0.08	105.06	240
	18-Mar-08	N		-324.9	6.85	6,870	30.21	0.057	105.07	86
	25-Mar-08	N		-320.6	6.75	6,806	30.25	0.46	104.67	37
	02-Apr-08	N		-338.3	7.01	7,208	30.20	0.13	104.83	220
	17-Apr-08	N		-231.4	6.85	6,980	28.00	0.55	104.31	80
	29-Apr-08	N		-278.6	6.89	6,610	30.55	0.36	101.26	1,020
	14-May-08	N		-254.3	6.72	7,802	30.82	0.13	103.80	80
	29-May-08	N		-213.9	6.76	7,526	30.81	0.22	103.72	60
	11-Jun-08	N		-199.3	6.77	6,879	31.07	0.27	83.83	27
	19-Jun-08	N		-239.1	6.74	8,241	31.02	0.08	102.84	
	25-Jun-08	N		-161.8	6.66	7,973	31.11	0.13	79.51	35
	01-Jul-08	Ν		-217.2	6.61	7,604	31.41	0.04	97.30	
	23-Jul-08	N		-187.9	6.68	7,417	31.48	0.13	88.72	14
	21-Aug-08	N		-189.2	6.72	8,498	31.49	0.32	103.48	160
	18-Sep-08	N		-231.0	6.78	7,506	31.57	0.57	104.51	37
	15-Oct-08	N		-199.3	7.29	7,931	25.91	1.05	103.89	419
	12-Nov-08	N		-35.9	6.82	5,974	22.76	0.94	104.77	<10
	15-May-09	N		-171.3	7.07	6,355	29.25	1.06	104.70	<10
	04-Aug-09	N		-144.7	7.25	6,511	32.94	0.56	104.90	<10
	29-Oct-09	N		-168.2	7.17	7,689	23.05	1.02	105.77	51
	13-Jan-10	N		-171.1	7.19	7,615	24.80	0.70	105.49	<10
	14-Jul-10	N		-73.2	7.07	9,839	44.00	0.27	103.50	20
	14-Oct-10	N		-152.7	6.97	6,111	29.84	1.10	104.28	<10
	18-Jan-11	N		-127.4	7.00	6,288	24.08	2.15	104.88	<10
	14-Apr-11	N		-127.8	6.98	6,194	25.10	0.53	104.16	14
	13-Jul-11	N		-101.6	6.85	6,673	33.62	1.67	103.64	34

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Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	рН	Specific Conductance (µS/cm)	Temperature (°C)	DO (mg/L)	Depth to Water (feet below TOC)	Hexavalent Chromium Field (μg/L)
PT-7D	18-Jul-07	N	197-217	-76.7	7.91	16,327	31.46	1.9	103.65	6,240
	24-Jan-08	Ν		10.9	7.86	19,260	30.35	0.58	105.90	9,280
	06-Mar-08	N		-322.8	7.97	12,840	30.3	0.05	105.53	568
	13-Mar-08	N		-189.4	7.76	1,138	30.43	0.07	105.04	360
	18-Mar-08	Ν		-379.8	7.28	12,933	30.46	0.58	105.00	58
	25-Mar-08	N		-320.4	7.19	13,090	30.53	0.74	104.75	35
	02-Apr-08	Ν		-313	7.50	13,818	30.53	0.05	104.83	140
	17-Apr-08	Ν		-310.1	7.01	10,406	28.2	0.42	104.11	360
	29-Apr-08	Ν		-311.3	7.05	9,035	30.79	0.63	94.86	260
	15-May-08	Ν		-424.7	6.68	10,224	31.02	0.36	103.76	100
	29-May-08	N		-330.7	6.68	10,985	31.03	0.32	101.80	100
	11-Jun-08	N		-274.9	6.78	8,920	31.38	0.29	84.54	23
	19-Jun-08	N		-372.1	6.70	10,173	31.44	0.09	102.18	
	24-Jun-08	Ν		-248.9	6.51	8,952	31.2	0.1	86.30	54
	01-Jul-08	Ν		-290.4	6.65	9,071	31.44	0.05	102.94	
	23-Jul-08	N		-189.2	6.67	8,509	31.72	0.12	80.54	18
	21-Aug-08	N		-256.3	7.00	8,647	32.01	0.15	103.69	180
	18-Sep-08	Ν		-258.8	6.65	9,188	30.00	0.28	103.66	<10
	14-Oct-08	Ν		-205.6	6.14	8,508	28.54	0.45	103.64	78
	12-Nov-08	Ν		-195.0	7.71	8,290	21.15	0.33	104.58	18
	15-May-09	Ν		-128.3	7.13	15,418	29.43	1.21	104.80	<10
	04-Aug-09	Ν		-185.4	7.54	10,897	32.62	1.14	104.70	<10
	29-Oct-09	Ν		-53.5	7.36	15,207	24.50	1.07	105.62	17
	13-Jan-10	Ν		-67.9	7.33	15,378	23.43	1.09	105.53	<10
	08-Apr-10	N		-108.3	7.21	15,522	27.45	0.77	105.43	<10Q
	14-Jul-10	N		-44.8	7.03	17,816	33.20	1.36	103.54	<10
	14-Oct-10	N		-133.5	7.37	11,368	28.59	0.51	104.30	<10
	18-Jan-11	N		-100.9	7.25	12,138	25.30	1.74	87.62	<10
	14-Apr-11	N		-133.4	7.40	9,988	25.80	0.52	97.72	38
	13-Jul-11	N		-115.2	6.84	12,602	32.87	0.80	96.71	36

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Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	рН	Specific Conductance (µS/cm)	Temperature (°C)	DO (mg/L)	Depth to Water (feet below TOC)	Hexavalent Chromium Field (µg/L)
PT-8S	16-Jul-07	N	127-147	-66.4	7.90	5,389	31.07	7.02	105.29	1,670
	23-Jan-08	N		109.1	7.49	5,890	29.44	5.68	107.38	1,980
	05-Mar-08	N		-68.6	7.71	5,440	29.61	2.77	107.00	1,040
	13-Mar-08	N		131	7.34	4,969	29.72	0.26	106.61	390
	18-Mar-08	N		-145.9	7.64	5,024	29.61	0.48	106.47	162
	25-Mar-08	N		-43	7.51	4,795	29.54	0.49	106.39	306
	02-Apr-08	N		-176.3	7.53	5,101	29.57	0.08	106.31	1,080
	16-Apr-08	N		44.8	7.48	5,251	27.89	0.56	105.91	667
	29-Apr-08	N		-132.9	7.19	6,017	29.58	0.26	106.87	180
	14-May-08	N		-204.5	7.11	6,480	29.78	0.21	105.41	60
	28-May-08	N		-276.3	7.72	6,949	29.58	0.46	105.45	32
	11-Jun-08	N		-252.7	6.61	9,212	29.63	0.36	105.41	18
	19-Jun-08	N		-296.4	6.90	9,079	29.68	0.11	105.41	
	25-Jun-08	Ν		-217.8	6.66	10,733	30.10	0.14	105.29	46
	01-Jul-08	Ν		-178.9	6.85	9,835	29.97	0.09	105.33	
	23-Jul-08	Ν		-204.0	6.99	10,853	30.23	0.13	105.16	500
	20-Aug-08	Ν		-188.9	6.94	9,860	29.74	1.89	105.41	12
	17-Sep-08	Ν		-165.6	6.79	9,114	29.59	6.79	103.60	<10
	15-Oct-08	Ν		-145.7	6.92	9,055	28.35	0.49	106.10	28
	12-Nov-08	Ν		-82.3	7.08	9,443	25.20	0.99	106.44	11
	04-Feb-09	Ν		-146.0	7.02	8,421	28.42	2.91	106.93	<10
	13-May-09	Ν		-184.0	6.65	7,224	30.26	0.08	105.90	11
	04-Aug-09	Ν		-164.4	7.01	6,526	30.34	1.03	105.81	<10
	28-Oct-09	N		-194.4	7.12	6,069	29.59	0.16	106.50	<10
	12-Jan-10	Ν		-128.2	6.99	6,029	29.31	1.07	107.12	<10
	07-Apr-10	Ν		-167.1	7.10	5,841	30.36	0.22	106.38	<10
	13-Jul-10	Ν		-139.5	7.18	4,641	30.90	0.06	105.30	<10
	13-Oct-10	N		-279.5	7.21	5,292	30.39	0.09	106.20	46
	17-Jan-11	N		-205.6	7.05	5,359	30.52	0.24	106.83	35
	13-Apr-11	N		-165.4	7.21	5,192	30.50	0.02	105.80	13
	12-Jul-11	N		-154.4	7.19	5,290	30.30	0.33	105.34	<10

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Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	рН	Specific Conductance (µS/cm)	Temperature (°C)	DO (mg/L)	Depth to Water (feet below TOC)	Hexavalent Chromium Field (μg/L)
PT-8M	18-Jul-07	N	162-182	54.9	7.18	6,698	29.67	2.9	105.18	3,740
	23-Jan-08	Ν		36.1	7.17	8,047	29.95	1.72	107.30	4,660
	05-Mar-08	Ν		-96.4	7.40	7,930	29.89	1.68	107.10	3,680
	13-Mar-08	Ν		145.3	7.14	6,886	29.84	2.52	106.72	4,060
	19-Mar-08	Ν		164.5	7.34	7,238	29.87	3.64	106.65	3,340
	25-Mar-08	Ν		-6.1	7.19	6,955	29.99	2.77	106.30	4,100
	02-Apr-08	Ν		-129.7	7.23	7,308	29.81	1.47	106.24	4,100
	16-Apr-08	Ν		8.7	7.14	7,230	28.4	1.55	105.98	4,080
	29-Apr-08	Ν		-49.6	7.04	6,453	29.81	3.02	103.26	4,120
	14-May-08	Ν		-35.1	6.98	6,939	30.00	2.90	105.59	3,820
	28-May-08	N		-69.4	7.13	7,094	29.93	3.95	105.37	4,220
	11-Jun-08	N		-38.0	7.06	6,769	29.95	2.23	105.35	3,860
	19-Jun-08	N		-75.5	7.02	7,437	29.99	0.15	105.73	
	25-Jun-08	Ν		23	6.89	6,634	30.19	0.85	76.50	4,140
	01-Jul-08	N		-22.2	6.98	6,438	30.03	0.07	105.30	
	23-Jul-08	N		-0.6	7.13	6,511	29.93	0.31	105.47	4,000
	20-Aug-08	N		-37.0	7.22	6,769	29.97	0.32	105.71	3,140
	17-Sep-08	N		-80.1	7.01	6,884	29.87	1.11	105.93	2,460
	15-Oct-08	N		-101.0	6.99	6,277	29.99	0.24	106.19	2,940
	12-Nov-08	N		15.6	6.93	6,507	29.77	0.16	106.46	2,200
	04-Feb-09	N		3.9	6.77	7,084	29.94	1.22	106.90	1,660
	13-May-09	N		-12.3	6.42	7,316	30.40	0.08	99.50	639
	04-Aug-09	Ν		-100.2	6.64	7,426	30.29	2.18	105.56	579
	28-Oct-09	N		21.4	6.79	7,272	30.48	0.14	106.42	782
	12-Jan-10	Ν		-28.1	6.62	7,600	29.75	0.78	106.98	527
	07-Apr-10	Ν		13.5	6.58	8,036	30.42	0.21	106.30	438
	13-Jul-10	Ν		22.7	6.57	8,981	30.50	0.02	105.25	327
	13-Oct-10	N		-198.6	6.56	7,846	30.55	0.07	106.13	262
	17-Jan-11	N		-59.8	6.43	8,160	30.49	0.36	106.62	247
	13-Apr-11	N		27.0	6.54	8,031	30.30	0.04	105.77	159
	12-Jul-11	N		7.8	6.50	5,346	30.56	0.55	105.25	56

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Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	рН	Specific Conductance (µS/cm)	Temperature (°C)	DO (mg/L)	Depth to Water (feet below TOC)	Hexavalent Chromium Field (µg/L)
PT-8D	16-Jul-07	N	190-210	-54.6	7.99	16,042	33.76	6.39	105.09	6,120
	23-Jan-08	N		24.1	7.86	17,790	30.23	0.97	107.34	6,980
	05-Mar-08	N		-128.4	8.13	18,118	30.18	0.78	107.09	6,220
	13-Mar-08	N		195	7.85	1,589	30.3	1.21	106.80	5,740
	18-Mar-08	N		-57.3	7.93	17,392	30.28	1.34	106.77	5,460
	25-Mar-08	N		-34	7.87	16,250	30.32	0.77	106.45	5,700
	02-Apr-08	N		-169.2	7.90	16,964	30.15	0.29	107.17	4,800
	16-Apr-08	N		-39.1	7.85	17,458	28.44	0.90	106.13	6,480
	29-Apr-08	N		-108.1	7.74	15,000	30.39	0.71	105.91	4,940
	14-May-08	N		-99.5	7.57	14,622	30.37	0.32	105.89	3,800
	28-May-08	N		-52.9	7.79	16,139	30.24	0.39	105.50	1,220
	11-Jun-08	N		-89.7	7.75	15,420	30.36	0.43	106.56	3,960
	19-Jun-08	N		-129.8	7.76	16,400	30.4	0.26	105.63	
	25-Jun-08	N		-163.9	7.49	14,750	30.38	0.23	104.57	2,920
	01-Jul-08	N		-155.5	7.71	15,337	30.47	0.18	105.20	
	23-Jul-08	N		-110.3	7.93	15,325	30.41	0.20	104.97	3,660
	20-Aug-08	N		-156.0	8.04	16,099	30.35	0.38	105.69	4,100
	17-Sep-08	Ν		-192.7	7.86	15,196	30.24	0.42	106.06	3,820
	15-Oct-08	Ν		-244.3	7.25	13,194	30.10	0.73	106.76	512
	12-Nov-08	Ν		-109.4	7.44	15,128	30.13	0.16	106.34	596
	04-Feb-09	Ν		-236.0	8.02	15,755	29.38	1.32	107.11	1,340
	13-May-09	N		-189.4	7.68	17,782	30.70	0.05	106.50	1,700
	04-Aug-09	N		-192.4	7.99	16,270	30.38	0.38	105.60	1,780
	28-Oct-09	N		-154.5	7.99	15,852	30.47	0.30	118.96	2,000
	12-Jan-10	N		-119.4	8.01	16,721	30.01	0.27	107.05	1,800
	07-Apr-10	N		-145.1	7.88	17,706	30.75	0.26	106.57	1,560
	13-Jul-10	N		-82.5	7.85	18,992	30.80	0.07	105.45	2,040
	13-Oct-10	N		-244.1	7.82	15,972	30.78	0.04	106.00	2,060
	17-Jan-11	N		-182.7	7.66	16,468	30.75	0.27	106.83	2,040
	13-Apr-11	N		-71.1	7.78	18,000	30.60	0.03	105.91	1,460
	12-Jul-11	N		-65.8	7.78	17,211	30.78	0.24	105.25	2,000

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Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	рН	Specific Conductance (µS/cm)	Temperature (°C)	DO (mg/L)	Depth to Water (feet below TOC)	Hexavalent Chromium Field (μg/L)
PT-9S	17-Jul-07	N	128-148	-61.5	7.86	4,919	33.28	4.97	102.33	2,620
	22-Jan-08	N		157.1	7.53	4,784	27.16	3.97	104.50	1,580
	05-Mar-08	N		41.8	7.71	4,942	25.95	4.21	104.08	1,360
	12-Mar-08	N		144.6	7.62	4,280	27.81	3.12	103.80	1,480
	19-Mar-08	N		125.6	7.73	4,819	27.07	2.68	103.71	1,200
	26-Mar-08	N		25.1	7.54	4,106	27.92	3.1	103.47	1,580
	02-Apr-08	N		-34.4	7.60	4,822	27.91	3.2	103.38	1,540
	16-Apr-08	N		149.3	7.50	4,800	27.79	2.79	103.09	1,640
	29-Apr-08	Ν		180.4	7.44	4,350	28.55	5.99	107.00	1,360
	14-May-08	N		-57.5	7.44	4,369	28.23	2.91	102.56	1,240
	28-May-08	N		2.0	7.52	4,840	28.61	2.78	102.48	1,540
	11-Jun-08	N		146.1	7.50	4,511	26.51	4.74	102.50	1,540
	25-Jun-08	N		21.4	7.30	4,778	28.86	3.91	102.27	1,420
	24-Jul-08	N		123.4	7.63	4,490	29.7	4.79	102.54	1,740
	20-Aug-08	Ν		-9.6	7.74	4,499	29.97	4.54	102.87	1,760
	17-Sep-08	N		154.4	7.43	4,908	27.72	2.86	103.00	1,880
	15-Oct-08	N		114.0	7.47	4,660	28.37	4.94	103.32	1,100
	12-Nov-08	N		-2.3	7.37	5,912	25.66	3.15	103.53	760
	05-Feb-09	N		-53.6	7.51	5,907	26.4	2.49	104.08	1,060
	14-May-09	N		-40.6	7.20	5,615	29.17	3.22	102.30	1,080
	05-Aug-09	Ν		-10.0	7.28	5,352	30.2	2.98	102.81	1,320
	29-Oct-09			8.6	7.49	5,446	27.23	4.3	103.58	620
	12-Jan-10	Ν		13.9	7.42	5,340	27.08	3.92	104.19	1,340
	08-Apr-10	Ν		-56.2	7.22	5,514	28.5	1.15	103.28	1,240
	13-Jul-10	Ν		-40.7	7.31	5,814	29.5	0.40	102.37	1,500
	13-Oct-10	N		-201.2	7.23	4,924	28.92	0.65	103.37	1,620
	18-Jan-11	N		-58.5	7.24	4,927	30.1	1.05	104.05	1,360
	13-Apr-11	N		35.9	7.49	4,644	28.1	2.13	102.83	1,120
	12-Jul-11	N		-63.2	7.42	4,722	2940	1.90	102.32	900

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Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	рН	Specific Conductance (µS/cm)	Temperature (°C)	DO (mg/L)	Depth to Water (feet below TOC)	Hexavalent Chromium Field (μg/L)
PT-9M	17-Jul-07	N	162-182	-57.0	7.34	6,605	31.74	4.09	102.34	3,460
	22-Jan-08	N		58.8	7.03	7,963	30.05	3.34	104.49	3,000
	05-Mar-08	N		-41.7	7.37	7,982	29.99	3.06	104.10	2,100
	12-Mar-08	Ν		120.5	7.14	7,080	29.87	3.46	103.86	2,740
	19-Mar-08	Ν		48.9	7.28	7,710	30.08	3.03	103.69	2,420
	26-Mar-08	Ν		110.2	7.10	6,572	29.88	3.56	103.48	2,480
	02-Apr-08	Ν		55.7	7.08	7,798	29.81	2.34	77.22	2,800
	16-Apr-08	Ν		40.3	7.09	7,653	29.28	2.07	78.96	2,940
	29-Apr-08	Ν		-1.2	7.04	6,791	29.96	3.95	98.07	2,760
	14-May-08	Ν		-17.0	6.94	7,633	30.13	3.59	102.80	2,760
	28-May-08	Ν		-6.8	7.09	7,593	29.99	3.65	102.40	2,640
	11-Jun-08	Ν		70.1	7.00	7,238	30.13	4	90.56	2,980
	25-Jun-08	Ν		23.1	6.91	6,977	30.08	4.1	102.75	2,800
	24-Jul-08	Ν		198.7	7.27	6,706	30.01	4.57	102.47	2,800
	20-Aug-08	N		6.3	7.20	7,282	30.02	3.83	102.82	2,800
	17-Sep-08	Ν		111.3	7.07	7,304	29.85	4.04	103.06	2,860
	15-Oct-08	Ν		66.9	7.11	6,726	29.73	3.73	103.27	3,280
	12-Nov-08	Ν		71.3	7.14	7,152	29.85	2.95	103.36	3,180
	05-Feb-09	Ν		55.3	7.17	7,950	29.79	1.88	104.20	3,260
	14-May-09	Ν		25.7	6.88	8,183	30.17	2.36	102.80	2,870
	05-Aug-09	Ν		112.7	7.01	8,078	30.2	3.08	102.83	2,960
	29-Oct-09	Ν		68.6	7.15	8,225	29.95	2.91	103.66	2,940
	12-Jan-10	N		23.0	7.13	8,420	29.65	1.94	104.11	2,440
	08-Apr-10	Ν		102.8	7.02	9,187	30.34	0.93	103.38	2,580
	13-Jul-10	Ν		-1.1	7.08	9,961	30.50	0.84	102.34	2,460
	13-Oct-10	N		-191.5	6.96	8,585	30.39	0.39	103.45	2,600
	18-Jan-11	N		33.5	7.03	9,082	30.15	1.62	105.99	2,460
	13-Apr-11	N		65.4	7.05	8,751	30.40	0.07	102.89	2,040
	12-Jul-11	N		-32.9	7.06	9,276	30.53	0.29	102.54	2,160

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Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	рН	Specific Conductance (µS/cm)	Temperature (°C)	DO (mg/L)	Depth to Water (feet below TOC)	Hexavalent Chromium Field (μg/L)
PT-9D	17-Jul-07	N	190-210	-74.8	7.87	14,027	31.46	1.14	102.18	10,050
	22-Jan-07	N		47.9	7.76	17,070	30.4	1.23	104.38	17,080
	05-Mar-08	N		-85.7	8.05	17,396	30.44	0.98	104.12	15,820
	12-Mar-08	N		198.4	7.78	1,541	30.16	1.52	103.89	14,060
	19-Mar-08	N		71.3	7.94	16,747	30.35	0.97	103.80	13,580
	26-Mar-08	Ν		35.2	7.81	13,975	30.39	0.98	103.50	12,220
	02-Apr-08	N		-93	7.83	16,109	30.41	0.51	105.17	13,980
	16-Apr-08	N		44.1	7.76	12,223	29.4	1.25	103.31	14,130
	29-Apr-08	N		-53.9	7.60	14,014	30.31	0.96	102.82	10,790
	14-May-08	N		-89.2	7.56	15,231	30.44	0.7	102.92	10,850
	28-May-08	N		101.2	7.68	15,667	30.34	0.8	102.51	14,450
	11-Jun-08	N		107.6	7.62	15,590	30.11	1.15	85.69	13,660
	25-Jun-08	N		14.2	7.45	14,474	30.46	0.68	102.49	10,400
	24-Jul-08	N		162.4	7.65	14,681	30.34	0.77	102.05	10,780
	20-Aug-08	N		17.7	7.84	16,555	30.46	1.15	102.87	14,400
	17-Sep-08	N		136.6	7.73	15,588	30.32	1.2	103.11	15,180
	15-Oct-08	Ν		80.0	7.52	13,691	30.06	2.56	103.36	9,300
	12-Nov-08	N		80.7	7.64	16,534	30.19	0.69	103.42	13,900
	05-Feb-09	N		37.1	7.73	16,997	30.48	0.99	104.10	15,860
	15-May-09	N		112.3	7.60	16,823	30.42	0.80	102.60	14,220
	05-Aug-09	N		74.7	7.66	15,340	30.37	0.98	102.78	11,180
	28-Oct-09	Ν		31.1	7.90	16,692	30.26	1.13	103.50	15,760
	12-Jan-10	Ν		22.4	7.91	17,133	30.02	1.32	104.07	15,010
	08-Apr-10	N		88.4	7.73	17,445	30.61	1.12	103.37	14,840
	13-Jul-10	N		31.6	7.76	18,767	30.80	1.03	102.36	13,180
	13-Oct-10	N		-198.1	7.68	16,320	30.48	1.00	103.40	15,320
	18-Jan-11	N		87.5	7.78	17,262	30.53	2.23	104.00	15,600
	13-Apr-11	N		75.2	7.79	16,583	30.50	0.99	102.91	14,360
	12-Jul-11	N		8.1	7.80	17,132	30.78	1.52	102.43	15,400

PG&E Topock Needles, California

Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	рН	Specific Conductance (µS/cm)	Temperature (°C)	DO (mg/L)	Depth to Water (feet below TOC)	Hexavalent Chromium Field (μg/L)
MW-11	17-Jul-07	N	63-88	-23.7	7.56	2,176	30.15	8.81	65.60	260
	24-Jan-08	N		137.3	7.40	2,312	28710	7.61	67.67	342
	04-Mar-08	N		51.6	7.47	2,262	28.79	0.93	67.09	350
	11-Mar-08	N		149.2	7.44	2,169	29.81	7.1	66.97	319
	19-Mar-08	N		29.5	7.61	2,279	29.27	5.59	66.85	340
	26-Mar-08	N		110.2	7.37	2,205	29.52	7.91	66.62	360
	01-Apr-08	N		-48.8	7.47	4,194	29.17	6.44	66.60	334
	15-Apr-08	Ν		66.5	7.24	2,097	30.06	5.66	66.06	326
	28-Apr-08	N		-23.2	7.41	20	29.86	9.03	65.82	322
	13-May-08	Ν		-35.9	7.24	2,351	30.04	6.76	65.83	420
	27-May-08	Ν		32.1	7.24	2,208	29.87	9.66	65.64	380
	10-Jun-08	Ν		-11.3	7.20	2,196	30.73	8.14	65.49	302
	24-Jun-08	Ν		54.6	7.01	2,287	29.17	8.96	65.54	252
	22-Jul-08	Ν		125.8	7.40	2,370	29.35	6.71	65.63	299
	21-Aug-08	Ν		151.7	7.43	2,210	29.49	8.68	65.84	285
	16-Sep-08	N		-43.3	7.32	2,203	29.37	7.51	66.10	269
	14-Oct-08	N		43.0	7.42	2,120	29.37	6.43	66.36	337
	11-Nov-08	Ν		144.3	7.69	2,161	29.21	5.87	66.78	343
	03-Feb-09	Ν		39.2	7.00	2,229	29.22	6.48	67.30	330
	14-May-09	Ν		14.0	7.18	2,252	29.46	7.22	65.63	246
	06-Apr-10	Ν		120.9	7.48	2,262	29.56	7.21	66.67	286
	12-Jul-10	Ν		69.3	7.38	2,539	29.60	9.43	65.62	257
	12-Oct-10	N		42.2	7.46	2,134	29.60	8.42	66.47	199
	17-Jan-11	N		20.7	7.38	2,112	29.65	6.25	67.16	233
	12-Apr-11	N		121.8	7.49	2,036	29.40	8.55	66.17	192
	11-Jul-11	N		75.1	7.38	2,205	29.64	9.39	65.55	235

PG&E Topock Needles, California

Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	рН	Specific Conductance (µS/cm)	Temperature (°C)	DO (mg/L)	Depth to Water (feet below TOC)	Hexavalent Chromium Field (μg/L)
MW-24A	18-Jul-07	N	104-124	-43.9	7.67	2,707	32.20	2.89	110.05	1,100
	24-Jan-08	Ν		79.8	7.51	3,090	28.51	1.95	112.20	2,980
	06-Mar-08	Ν		-119.7	7.45	10,486	29.02	0.61	111.33	325
	12-Mar-08	Ν		-201.4	7.44	9,758	31.2	0.2	111.50	14,060
	19-Mar-08	Ν		-250.7	7.04	9,950	30.13	0.16	111.48	111
	26-Mar-08	Ν		-299.6	6.54	8,402	30.7	0.39	111.25	173
	01-Apr-08	Ν		-299.1	7.06	1,638	30.6	0.04		440
	17-Apr-08	Ν		-285.9	6.62	10,291	30.9	1.39	110.85	160
	30-Apr-08	Ν		-315.7	6.45	10,294	32.03	1.46	110.15	220
	30-Apr-08	FD		-315.7	6.45	10,294	32.03	1.46	110.15	220
	15-May-08	Ν		-350.1	6.54	10,940	33.47	0.44	109.82	120
	27-May-08	Ν		-278.1	6.33	10,759	32.8	1.29	110.20	<10
	12-Jun-08	Ν		-259.9	6.70	10,910	32.6	0.8	111.66	<10
	19-Jun-08	Ν		-222.4	6.49	11,469	32.81	1.28	110.28	
	26-Jun-08	Ν		-228.5	7.20	107	30.84	0.17	110.13	18
	01-Jul-08	Ν		-320.4	6.82	10,282	31.3	0.07	109.73	
	24-Jul-08	Ν		-224.9	7.57	10,670	32.38	0.32	110.26	180
	19-Aug-08	Ν		-302.5	7.20	10,311	33.74	2.06	110.53	17
	16-Sep-08	Ν		-343.8	6.54	9,799	30.03	0.31	110.78	50
	16-Oct-08	Ν		-259.4	7.01	10,626	30.91	0.70	111.11	123
	13-Nov-08	Ν		-284.9	7.57	10,952	27.05	0.44	111.33	<10
	03-Feb-09	Ν		-360.6	6.66	10,894	28.14	1.13	111.92	<10
	14-May-09	Ν		-212.3	7.13	10,531	31.64	0.11	110.23	<10
	03-Aug-09	N		-276.8	6.92	9,113	31.2	0.96	110.58	<10
	27-Oct-09	N		-206.0	7.41	6,001	30.91	0.17	111.10	<10
	11-Jan-10	N		-174.0	7.53	4,677	30.12	0.64	111.90	<10
	07-Apr-10	Ν		-194.7	7.71	3,757	31.15	0.17	111.15	<10
	12-Jul-10	Ν		-171.7	7.80	3,659	31.10	0.03	110.18	22
	12-Oct-10	N		-262.4	7.86	3,021	30.46	0.10	111.03	<10
	17-Jan-11	N		-135.9	7.45	3,421	30.00	0.60	111.76	23
	12-Apr-11	N		-206.8	7.93	2,711	30.80	0.04	110.75	22
	11-Jul-11	N		-369.5	8.05	2,613	30.48	0.33	110.10	<10

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Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	рН	Specific Conductance (µS/cm)	Temperature (°C)	DO (mg/L)	Depth to Water (feet below TOC)	Hexavalent Chromium Field (μg/L)
MW-24B	18-Jul-07	N	193-213	-57.9	7.86	15,371	31.40	3.02	107.92	2,340
	24-Jan-08	N		-9.7	7.74	17,450	29.91	0.85	109.75	5,400
	06-Mar-08	N		28.1	7.73	17,751	28.05	1.49	110.20	4,400
	12-Mar-08	Ν		-19.4	7.78	1,669	30.62	1.11	109.47	4,800
	19-Mar-08	Ν		-32.7	7.90	17,369	30.16	0.78	109.22	4,460
	26-Mar-08	N		-28	7.77	14,547	30.91	88	109.23	4,700
	02-Apr-08	N		-292.2	7.77	17,340	30.13	0.54	109.00	4,420
	17-Apr-08	N		-141.4	7.77	16,429	30.42	1.09	108.60	4,640
	30-Apr-08	N		-222.7	7.79	15,539	30.45	0.85	105.82	3,800
	15-May-08	Ν		-82.0	7.65	17,017	30.36	0.80	108.57	3,860
	28-May-08	Ν		-105.4	7.76	16,854	30.25	2.54	108.14	3,940
	12-Jun-08	N		-66.6	7.72	16,160	30.23		111.23	3,980
	26-Jun-08	N		24.7	7.68	10,275	30.09	0.49	108.06	3,400
	24-Jul-08	N		-22.0	7.82	16,374	30.19	0.39	108.29	3,240
	19-Aug-08	N		-25.7	7.61	16,302	30.51	0.48	108.31	3,400
	17-Sep-08	Ν		-64.4	7.76	15,433	29.49	0.79	108.56	3,360
	16-Oct-08	Ν		88.6	7.60	15,816	31.18	1.18	109.03	3,380
	13-Nov-08	N		9.3	7.66	16,049	31.12	0.47	109.14	3,000
	04-Feb-09	N		-18.6	7.69	16,432	31.64	1.29	109.90	3,000
	14-May-09	N		-35.2	7.61	16,708	30.21	0.09	108.50	2,700
	07-Apr-10	N		-104.2	7.79	18,131	30.19	0.20	108.94	2,040
	12-Jul-10	N		144.0	7.72	20,363	30.60	0.04	108.29	2,340
	12-Oct-10	N		-239.8	7.80	16,937	30.21	0.07	108.90	2,280
	17-Jan-11	N		-102.5	7.63	17,665	30.29	0.30	109.47	2,180
	12-Apr-11	N		-72.0	7.93	17,812	30.30	0.03	108.53	2,220
	11-Jul-11	N		-134.8	7.78	18,793	30.79	0.23	108.10	2,200

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Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	рН	Specific Conductance (µS/cm)	Temperature (°C)	DO (mg/L)	Depth to Water (feet below TOC)	Hexavalent Chromium Field (μg/L)
MW-38S	17-Jul-07	N	75-95	27.2	7.52	3,306	29.00	6.02	69.04	720
	23-Jan-08	N		36.6	7.56	3,175	27.08	5.33	71.05	1,140
	04-Mar-08	N		150	7.59	3,194	27.72	0.57	70.71	1,200
	11-Mar-08	N		56	7.70	3,094	28.37	2.95	70.40	1,300
	20-Mar-08	N		117.6	7.71	3,218	27.3	5.31	70.43	1,140
	26-Mar-08	N		24.1	7.39	2,687	28.36	4.2	70.18	1,260
	01-Apr-08	N		-16.4	7.57	5,892	28.48	4.6	70.10	1,280
	15-Apr-08	N		116.4	7.41	2,958	28.64	3.89	69.66	1,180
	28-Apr-08	N		-88.8	7.70	2,875	29.05	5.22	69.45	1,340
	13-May-08	N		-41.3	7.38	3,213	28.62	4.18	69.27	1,120
	27-May-08	N		-20.0	7.43	3,035	28.39	4.82	69.17	1,180
	10-Jun-08	N		-14.1	7.50	2,569	28.8	1.59	66.62	1,320
	24-Jun-08	N		10.7	7.20	3,041	28.65	4.82	69.12	1,140
	22-Jul-08	N		185.1	7.54	3,045	29.33	2.85	69.10	1,280
	20-Aug-08	N		7.2	7.71	2,832	28.88	1.49	65.66	1,340
	16-Sep-08	N		80.9	7.46	2,811	29.00	1.54	69.50	1,360
	14-Oct-08	N		141.6	7.43	2,684	28.63	0.67	69.94	1,540
	11-Nov-08	N		136.7	7.77	2,701	27.87	3.71	70.18	1,440
	03-Feb-09	N		40.1	7.28	2,816	28.41	3.33	70.83	1,600
	12-May-09	N		94.4	7.42	2,595	29.29	2.92	69.10	762
	03-Aug-09	N		93.0	7.36	2,390	29.20	1.41	69.33	977
	27-Oct-09	N		88.9	7.74	2,307	27.78	8.0	69.95	980
	11-Jan-10	N		11.0	7.66	2,248	28.25	1.89	70.70	1,220
MW-38D	17-Jul-07	N	166-188	-62.9	7.81	20,894	30.63	1.2	69.37	1,410
	23-Jan-08	N		-32.8	7.78	23,020	30.28	0.14	71.29	69
	04-Mar-08	N		-39	7.86	23,367	30.09	0.11	71.01	77
	11-Mar-08	N		-54.0	7.80	2,260	30.28	0.3	70.86	72
	20-Mar-08	N		174.8	7.95	234	30.18	0.14	70.79	54
	26-Mar-08	N		-47.9	7.77	19,673	30.4	0.18	70.53	54
	01-Apr-08	N		-79.7	8.10	42,680	30.22	0.10	67.43	53
	15-Apr-08	N		-56.2	7.65	21,852	30.06	0.50	70.83	62
	15-Apr-08	FD		-56.2	7.65	21,852	30.06	0.50	70.83	62
	28-Apr-08	N		-2.1	7.79	21,005	30.26	0.45	69.96	62
	13-May-08	N		-106.5	7.62	23,691	30.27	0.18	188.30	<10
	27-May-08	N		10.2	7.68	2,246	30.27	0.57	69.63	189
	10-Jun-08	N		36.9	7.74	21,879	30.49	0.5	69.22	64
	24-Jun-08	N		-80.4	7.80	22,824	30.32	0.17	69.58	53
	22-Jul-08	N		110.6	7.81	23,605	30.41	0.15	69.50	69
	20-Aug-08	N		89.0	7.93	22,069	30.33	0.20	69.81	66
	16-Sep-08	N		-118.3	7.73	21,191	29.29	0.39	70.07	70
	14-Oct-08	N		86.3	7.72	21,347	30.19	2.56	70.38	87
	11-Nov-08	N		159.3	7.82	21,866	30.24	0.33	68.70	71
	03-Feb-09	N		58.4	7.64	23,061	30.12	0.55	71.15	59
	12-May-09	N		-21.0	7.70	23,376	30.45	0.04	69.50	52
	03-Aug-09	N		8.7	7.74	22,012	30.49	0.48	69.80	49
	27-Oct-09	N		10.1	7.87	22,123	30.17	0.28	69.79	61
	11-Jan-10	N		106.4	7.43	27,027	29.9	0.36	71.13	34

PG&E Topock Needles, California

Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	рН	Specific Conductance (µS/cm)	Temperature (°C)	DO (mg/L)	Depth to Water (feet below TOC)	Hexavalent Chromium Field (μg/L)
PTR-1	19-Jul-07	N	*	-50.9	7.91	8,927	31.2	1.6	102.65	201
	25-Jan-08	N		228.7	7.48	7,093	22.52	2.09		920
	06-Mar-08	N		23.2	7.77	4,750	26.9	1.2		641
	11-Mar-08	N		114.3	6.74	4,453	32.84	1.99		380
	20-Mar-08	N		-139.7	7.97	3,105	37.50	1.54		62
	27-Mar-08	N		185.1	7.46	1,489	31.28	3.7		654
	01-Apr-08	N		-215.3	7.97	10,980	33.58	1.39		240
	16-Apr-08	Ν		-42.4	7.63	4,019	33.01	0.92		52
	29-Apr-08	Ν		-232.9	7.23	4,479	28.91	0.54		22
	15-May-08	Ν		-221.6	6.98	5,158	32.1	0.60		120
	29-May-08	Ν		-107.5	7.34	4,640	36.35	0.80		25
	12-Jun-08	Ν		-159.4	7.69	5,661	33.60	1.34		1
	19-Jun-08	Ν		-119.7	7.79	6,231	38.28	0.78		
	26-Jun-08	Ν		-113.6	7.58	5,640	38.43	1.10		<10
	01-Jul-08	Ν		-1115	7.62	5,868	39.84	1.24		
	24-Jul-08	N		90.5	7.46	5,365	37.00	1.24		480
	19-Aug-08	N		40.8	7.44	5,752	36.86	1.60		<10
	18-Sep-08	N		-33.3	7.57	5,804	31.94	0.96		<10
	16-Oct-08	N		-74.8	7.28	6,139	38.5	1.35		11
	13-Nov-08	N		-23.3	7.33	4,410	33.2	1.09		<10
	04-Feb-09	N		-227.9	7.25	5,702	32.15	0.50	102.73	<10
	14-May-09	N		-223.7	6.79	6,123	31.17	0.04	101.00	<10
PTR-2	18-Jul-07	N	*	-56.7	7.40	9,367	30.52	1.01	110.34	2,020
	25-Jan-08	N		167.8	7.31	9,122	28.41	2.37		4,920
	06-Mar-08	Ν		33.8	7.31	1,007	28.7	1.27		4,800
	11-Mar-08	Ν		125	6.92	9,837	28.21	1.59		5,660
	20-Mar-08	N		-27.2	7.70	4,116	37.18	3.66		19,500
	27-Mar-08	N		52.8	7.76	2,146	32.21	4.4		8,700
	01-Apr-08	N		-46.9	7.45	1,953	36.75	1.56		4,240
	15-Apr-08	N		-79.1	7.42	50	33.21	2.24		552
	29-Apr-08	Ν		-82.4	7.20	10,168	26.61	2.07		5,320
	15-May-08	Ν		45.0	7.30	11,203	29.69	1.43		5,060
	28-May-08	Ν		-60.0	7.73	8,988	32.73	1.95		4,280
	10-Jun-08	N		69.0	7.54	10,684	37.77	1.46		196
	19-Jun-08	N		170.6	7.55	9,106	38.22	1.4		
	26-Jun-08	N		20.9	7.32	10,484	31.34	0.79		4,280
	01-Jul-08	N		-54.3	7.20	10,163	37.45	0.81		
	24-Jul-08	N		281.5	7.26	10,747	33.07	1.18		4,900
		IN								
	19-Aug-08	K I		-19.6	7.30	5,956 5,783	37.04	4.40		2,000
	18-Sep-08	N		128.9	7.37	5,782	30.6	1.49		2,160
	16-Oct-08	N		-154.8	7.14	10,131	28.5	0.85		4,440
	13-Nov-08	N		16.5	7.09	11,109	33.11	0.88		4,360
	05-Feb-09	N		-40.7	7.29	12,167	29.83	0.29	107.7	2,060
	13-May-09	N		-74.3	7.09	12,175	30.59	0.07	105.88	2,380

PG&E Topock Needles, California

2011 Annual Monitoring Report for the Upland Reductive Zone In-Situ Pilot Test

Location Name	Sample Date	Sample Type	Screen Interval (ft bgs)	ORP (mV)	рН	Specific Conductance (µS/cm)	Temperature (°C)	DO (mg/L)	Depth to Water (feet below TOC)	Hexavalent Chromium Field (μg/L)
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Notes:

Current quarter data indicated in BOLD

Depth to water recorded prior to any sampling activities. Recirculation wells PTR-1 and PTR-2 cannot be gauged post-construction due to necessary piping and well caps

ft bgs Feet below ground surface

mV Millivolts

μS/cm Microsiemens per centimeter

°C Degrees Celsius μg/L Micrograms per liter mg/L Milligrams per liter

ORP Oxidation Reduction Potential

N Normal

DO Dissolved oxygen TOC Top of Casing

--- Not analyzed/Not available

* PTR-1 Screen: 125-160 and 175-220 ft bgs. PTR-2 Screen: 118-158 and 173-218 ft bgs.

Oct result for PT-7M & PT-7D are grab samples. Unable to effectively purge well because of gas buildup in the well.

Oct ORP value for PT-7S is under review; likely a mis-reading was recorded.

PG&E Topock Needles, California

2011 Annual Monitoring Report for the Upland Reductive Zone In-Situ Pilot Test

Location Name	Sample Date	Not es	Sampl e Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Total Chromium (µg/L)	Fluorescein (ppb)	Fluorescein (ppb dye)	Rhodamine (ppb)	Rhodamine (ppb dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved Manganese (µg/L)	Total Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)	Dissolved Molybdenum (µg/L)	Dissolved Selenium (µg/L)
PT-7S	18-Jul-07	а	N	1,200	1,260	1,080					22	<0.1	6,160	<500	56	1,050	674	1.2	23 ¹	42 ¹
	23-Jan-08	а	N	1,400	1,390						19	<0.1	558	<2,500	<2,500	462	608	3.0	<25	33
	06-Mar-08	а	N	1,420	1,270				ND	ND	19	<0.1	<500	<500	<500	34	637	<1	25	22
	13-Mar-08	а	N	1,100	1,070		0.024	0.02	ND	ND	15	<0.1	<500	<2,500	<2,500	<10	588	1.3		
	18-Mar-08	а	N	1,300	1,280		0.847	0.64	ND	ND	18	<0.1	<500	<2,500		11	606	1.2		
	25-Mar-08	а	N	1,420	1,410		1.28	0.96	ND	ND	19	<0.2	<500	<2,500	<2,500	23	630	1.9		
	02-Apr-08	а	N	1,490	1,510		0.325	0.24	ND	ND			<500	<2,500			665	<1		
	17-Apr-08	а	N	1,320	1,280		3.22	2.42	ND	ND			<500	<2,500			737	<1	34	33
	29-Apr-08	a **	N	812	855		7.61	5.71	ND	ND	14	0.95	<500	<500	<500	189	567	1.8		
	15-May-08	а	N	876	868		3.85	2.89	ND	ND			<500	<500			563	<1		
	29-May-08	а	N	1,230	1,190		0.0942	0.07	ND	ND	19	<0.5	<500	<500	<500	47.9	675	<1	30	26
	11-Jun-08	а	N	1,580	1,350		0.23	0.17	ND	ND			<500	<500			764		26	35
	24-Jun-08	а	N	927	801		1.38	1.04	ND	ND	13	<0.5	<500	<500	<500	134	599	1.9		
	23-Jul-08	а	N	182	190		33.7	25.3	15	3.00	4.4	<1	<500	<500	1,450	1,650	547	14	369	7.1
	21-Aug-08	а	N	401 J	398		451	338	1.83	0.37	9.0	<1	<500	<500	2,230	2,620	486	896	59	15
	18-Sep-08		N	429	502		2.9	2.18	0.598	0.12	15	<0.5	<500	<500	690	855	629	3.2	44	26
	15-Oct-08		N	<0.2	39		42.3	31.7	14.0	2.80	2.9	<0.5	604	<500	1,470	1,710	381	48	43	<5
	12-Nov-08		N	152	316		20.4	15.3	8.6	1.71	11	<0.5	<500	<500	945	1,380	543	16	32	22
	05-Feb-09	а	N	794	729		10.9	8.18	ND	ND	10 UB	<0.1	<100	102	366	369	770	1.5	29	25
	15-May-09		N	818	876		ND	ND	ND	ND	16	<0.2	1,820	<100	259	286	610	1 J	26	15
	04-Aug-09	а	N	836	805		ND	ND	ND	ND	17			278	189		620	0.85 UB	22	12 J
	29-Oct-09		N	770	646		ND	ND	ND	ND	16			393 J	158		680	3.1 J	20	9.6
	13-Jan-10		N	797	733		ND	ND	ND	ND	15			<100	97		670	0.72	20	13
	08-Apr-10		N	697	676		ND	ND	ND	ND	14			<100	86		680	0.81	20	9.5
	14-Jul-10		N	694	703		ND	ND	ND	ND	14			131	77		670	18 J ²	17	11
	14-Oct-10		N	682	592		ND	ND	ND	ND	13			<100	69		660	<0.5	18	7.1
	18-Jan-11		N	638	541		ND	ND	ND	ND	13			<100	53		650	<0.5	18	7.1
	13-Apr-11		N	586	576		ND	ND	ND	ND	13 J			78 J	53		640	<0.5	18	5.6

551

537

ND

ND

ND

ND

12.0

<50

49

670

<0.5

12-Jul-11

19

5.3

Table 3
Summary of Primary Analytical Parameters

PG&E Topock Needles, California

Location Name	Sample Date	Not es		Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Total Chromium (µg/L)	Fluorescein (ppb)	Fluorescein (ppb dye)	Rhodamine (ppb)	Rhodamine (ppb dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved Manganese (µg/L)	Total Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)	Dissolved Molybdenum (µg/L)	Dissolved Selenium (μg/L)
PT-7M	19-Jul-07	а	N	2,320	2,240	2,110					25	<0.1	6,260	<500	32	1,150	1,250	1.0	15 ¹	101 ¹
	24-Jan-08	а	N	2,440	2,340						30	<0.5	<500	<1,000	<1,000	<10	1,280	<1	17	85
	06-Mar-08	а	N	30	16.5		ND	ND	ND	ND	<0.5	<0.1	<500	<500	702	711	846	216	67	<5
	06-Mar-08	а	FD	33.3	18		0.044	0.03	ND	ND	<0.5	<0.1	<500	<500	703	714	832	213		
	13-Mar-08	а	N	<0.2	<5		1,590	1,193	ND	ND	<0.5	<0.1	<500	<2,500	3,320	3,540	656	446		
	18-Mar-08	а	N	<0.2	<5		4,520	3,390	ND	ND	<5	<1	1,040	<2,500		6,290	205	1,550		
	25-Mar-08	а	N	6.9	<5		4,040	3,030	ND	ND	<2.5	<0.5	1,740	<2,500	8,690	9,500	144	1,500		
	02-Apr-08	а	N	2	<5		3,760	2,820	ND	ND			2,660	<2,500			105	1,270		
	17-Apr-08	а	N	<1	<5		10,200	7,650	ND	ND			6,320	3,700			<10	4,640	<25	<25
	29-Apr-08	a **	N	<1	1.08		10,900	8,175	ND	ND	<10	<2	1,680	1,300	11,300	14,100	<10	8,050		
	14-May-08	а	N	<1.1	1.52		10,300	7,725	ND	ND			9,070	6,900			<20	8,040		
	29-May-08	а	N	<1	1.34		5,550	4,163	ND	ND	<10	<10	12,400	11,000	18,600	18,400	<10	10,700	<5	<5
	11-Jun-08	а	N	1.4	1.98		4,000	3,000	ND	ND			15,100	10,900			11.2	8,530	<5	<5
	19-Jun-08	а	N															9,340		
	25-Jun-08	а	N	<1	1.02		2,530	1,898	ND	ND	<2.5	<2.5	18,500	13,200	21,900	26,300	<2.5	8,630		
	01-Jul-08	а	N															8,180		
	08-Jul-08	а	N															6,980		
	15-Jul-08	а	N															1,810		
	23-Jul-08	а	N	<0.2	<1		16.5	12.4	ND	ND	<2.5	<2.5	27,100	19,100	24,400	26,500	3.11	5,180	<5	<5
	28-Jul-08	а	N															4,930		
	21-Aug-08	а	N	<0.2 UJ	<1		1450	1,088	ND	ND	<2.5	<2.5	38,600	34,400	31,400	31,300	11.8	5,530	<50	<5
	03-Sep-08	а	N															2,870		
	18-Sep-08		N	<0.2	<1		1,450	1,088	ND	ND	<1	<1	13,600	25,100	22,900	29,200	6.65	2,930	<5	<5
	15-Oct-08		N	<0.2	<1		1,320	990	ND	ND	<2.5	<2.5	33,600	27,800	16,100	16,300	57.8	2,210	<5	<5
	12-Nov-08		N	<0.2	<1		539	404	ND	ND	<1	<1	4,090	2,690	1,100	1,190	17.5	395	<5	<5
	15-May-09		N	<0.2	<1		315	236	ND	ND	<0.2	<0.2	8,930	6,930 J	1,950	1,930	<2 UB	110	<1	<1
	04-Aug-09	а	N	<0.2	<1		404	303	ND	ND	<0.2			4,350	977		3.3	79	<1	<1 UJ
	29-Oct-09		N	<0.2	<1		671	503	ND	ND	<0.2			16,100 J	3,050		34.0	950	1.4	<1
	13-Jan-10		N	<0.2	<1		261	196	ND	ND	<0.2			21,800	2,620		<3.5	160	1.1	<1
	14-Jul-10		N	<0.2	<1		436	327	ND	ND	< 0.2			19,200	2,580		<2	320 J ²	3.0	2.9
	14-Oct-10		N	<0.2	1.1		1,300	975	ND	ND	<0.2			5,620 J	398		<2	4.6	<1	<1
	18-Jan-11		N	<0.2	2.2		411	308	ND	ND	<0.2			8,980 J	505		<2	7.2	<1	<1
	14-Apr-11		N	<1	<1		532	399	ND	ND	<0.2			8,650	358		3.9	5.7	<5	<5
	13-Jul-11		N	<0.2	<1		353	265	ND	ND	<0.2			6,340	578		2.0	4.7	1.50	<1

PG&E Topock Needles, California

Location Name	Sample Date	Not es	-	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Total Chromium (µg/L)	Fluorescein (ppb)	Fluorescein (ppb dye)	Rhodamine (ppb)	Rhodamine (ppb dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved Manganese (µg/L)	Total Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)	Dissolved Molybdenum (µg/L)	Dissolved Selenium (µg/L)
PT-7D	18-Jul-07	а	N	7,260	7,890	7,750					7.4	<0.1	<500	<500	48	54	1,140	<1	129 ¹	8.1 ¹
	24-Jan-08	а	N	8,010	7,920						9.9	<0.5	<500	<1,000	<1,000	14	1,150	<1	87	<10
	06-Mar-08	а	N	506	499		ND	ND	ND	ND	<0.5	<0.1	<500	<500	<500	193	903	234	203	<5
	13-Mar-08	а	N	80.6	160		1,580	1,185	ND	ND	<0.5	<0.2	<500	<2,500	<2,500	1,050	903	313		
	18-Mar-08	а	N	<2.1	69.3		1,040	780	ND	ND	<1	<0.2	<500	<2,500		2,220	621	309		
	25-Mar-08	а	N	4	17.8 UB		860	645	ND	ND	<1	<0.5	<500	<2,500	4,080	4,320	612	313		
	02-Apr-08	а	N	<0.2	<5		771	578	ND	ND			<500	<2,500			633	256		
	17-Apr-08	а	N	22.6	7.64		5,550	4,163	ND	ND			<500	<2,500			179	1,410	65	<25
	29-Apr-08	а	N	<0.2	17.2		6,680	5,010	ND	ND	<10	<2	<500	<500	2,960	3,380	98	2,920		
	15-May-08	а	N	<1.1	1.48		5,450	4,088	ND	ND			2,280	1,730			96	2,780		
	29-May-08	а	N	<1	1.14		5,260	3,945	ND	ND	<10	<10	2,660	2,000	8,860	8,850	100	1,690	51	<5
	11-Jun-08	а	N	1.5	1.48		8,390	6,293	ND	ND			4,920	2,740			50.5	4,620	35	<5
	19-Jun-08	а	N															4,520		
	24-Jun-08	а	N	<1	49.2		7,000	5,250	ND	ND	<10	<10	10,600	1,280	9,700	11,400	12.7	4,450		
	01-Jul-08	а	N															5,850		
	08-Jul-08	а	N															4,580		
	15-Jul-08	а	N															5,430		
	23-Jul-08	а	N	<0.2	2.18		2,730	2,048	ND	ND	<5	<5	7,870	5,380	18,100	19,900	<5	5,140	<5	<5
	28-Jul-08	а	N															5,140		
	21-Aug-08	а	N	<0.2 UJ	1.13		2,210	1,658	ND	ND	<2.5	<2.5	7,130	6,140	19,100	20,300	30.1	4,500	10	<5
	03-Sep-08	а	N															5,110		
	18-Sep-08		N	<0.2	3.07		1,010	758	ND	ND	<1	<1	25,900	10,000	27,000	20,100	11.3	2,890	<5	<5
	15-Oct-08		N	<0.2	7.37		704	528	ND	ND	<1	<1	14,300	6,150	23,700	25,400	17	1,640	<50	<50
	12-Nov-08		N	<0.2	2.8		424	318	ND	ND	<2.5	<2.5	4,460	<500	18,200	22,100	7.8	791	<25	<5
	15-May-09		N	<0.2	<1		437	328	ND	ND	<0.5	<0.5	836	315 J	246	579	290	3.7 J	<1	<1
	04-Aug-09	а	N	<0.2	<1		1,080	810	ND	ND	<0.5			5,150	6,170		82	770	11	<1 UJ
	28-Oct-09		N	<0.2	1.46		460	345	ND	ND	<0.5 UJ			746 J	354		510	4.9	<1	<1
	13-Jan-10		N	<0.2	<1		456	342	ND	ND	<0.5			1,010 J	389		680	9.2	4.6	<1
	08-Apr-10		N	<0.2	1.47		636	477	ND	ND	<0.5			463	200		650	4.9	16	<1
	14-Jul-10		N	<0.2	<1		484	363	ND	ND	< 0.5			4,930 J	2,070		670	96 J ²	22	<5
	14-Oct-10		N	<0.2	1.9		1,090	818	ND	ND	<0.5			893 J	422		370	2.2	19	<1
	18-Jan-11		N	<0.2	2.6		1,140	855	ND	ND	<0.5			1,150 J	420		380	6.2	27	<1
	14-Apr-11		N	<0.2	1.4		1,330	998	ND	ND	<0.5			1,110	336		170	26	18	<5
	13-Jul-11		N	<1	<1		718	539	ND	ND	<0.5			5,920	2,340		280	1	29	<1

PG&E Topock Needles, California

2011 Annual Monitoring Report for the Upland Reductive Zone In-Situ Pilot Test

Location Name	Sample Date	Not es	Sampl e Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Total Chromium (µg/L)	Fluorescein (ppb)	Fluorescein (ppb dye)	Rhodamine (ppb)	Rhodamine (ppb dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved Manganese (µg/L)	Total Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)	Dissolved Molybdenum (µg/L)	Dissolved Selenium (µg/L)
PT-8S	16-Jul-07	а	N	1,750	1,660	1,620					25	<0.5	2,670	<500	25	269	869	1.4	45 ¹	84 ¹
	23-Jan-08	а	N	1,620	1,680						25	<0.5	<500	<2,500	<2,500	<10	734	1.0		
	05-Mar-08	а	N	1,430	1,340		ND	ND	ND	ND	23	<0.5	<500	<500	<500	<10	727	1.1		
	13-Mar-08	а	N	657	657		ND	ND	ND	ND	8.4	1.61	<500	<2,500	<2,500	333	618	13		
	18-Mar-08	а	N	160	164		ND	ND	ND	ND	1.7	0.82	<500	<2,500		1,050	561	7.2		
	25-Mar-08	а	N	455	438		0.097	0.07	ND	ND	6.2	2.42	<500	<2,500	<2,500	973	591	4.2		
	02-Apr-08	а	N	877	884		ND	ND	ND	ND			<500	<2,500			634	1.4		
	16-Apr-08	а	N	775	747		0.203	0.15	ND	ND			<500	<2,500			408	<1		
	29-Apr-08	а	N	76.7	95.7		24.8	18.6	ND	ND	1.4	<0.2	<500	<500	2,300	2,910	560	74		
	14-May-08	а	N	<0.2	18.1		12.8	9.60	1.77	0.35			<500	<500			481	36		
	28-May-08	а	N	<0.2	2.68		80.0	60.0	34.6	6.92	<0.5	<2.5	532	<500	3,560	3,930	161	50		
	28-May-08	а	FD	<0.2	3.05			62.1		6.72	< 0.5	<2.5	544	<500	3,520	3,950	162	92		
	11-Jun-08	а	N	1.8	4.97		430	323	213	42.6			5,530	4,210			12.7	1,100		
	19-Jun-08	а	N															842		
	25-Jun-08	а	N	<1	1.8		164	123	487	97.4	<1	<1	6,600	5,540	15,600	17,600	2.6	1,710		
	01-Jul-08	а	N															1,740		
	08-Jul-08	а	N															1,090		
	15-Jul-08	а	N															1,230		
	23-Jul-08	а	N	<0.2	<1		111	83.3	486	97.2	<5	<5	6,380	5,050	17,200	18,100	<5	1,210		
	28-Jul-08	а	N															1,020		
	20-Aug-08	а	N	<0.2 J	16.0		119	89.3	346	69.2	<1	<2.5	13,600	11,200	9,560	10,700	3.9	439		
	17-Sep-08		N	<0.2	3.7		97.1	72.8	257	51.4	<1	<1	12,800	10,300	4,700	5,380	4.1	189		
	15-Oct-08		N	<0.2	1.0		181	136	345	69.0	<1	<2.5	9,240	8,200	2,720	3,040	5.5	164		
	12-Nov-08		N	<0.2	<1		111	83.3	248	49.6	<1	<1	19,700	8,090	1,640	3,030	5.2	5.41		
	04-Feb-09	а	N	<0.2	<1		213	160	178	35.6	1.4	<0.5	7,100	6,150	2,600	2,880	100	3.90	8.2	2.4 J
	13-May-09	а	N	<0.2	3.8		139	104	194	38.8	<0.2	<0.2	8,920	5,000	2,600	2,770	150	2.4 J	13	<1
	04-Aug-09	а	N	<0.2	<1		111	83.3	165	33.0	< 0.2			3,790	2,320		240	2.30	14	4.6 J
	28-Oct-09		N	<0.2	<1		86.9	65.2	118	23.6	9.9			763	1,460		740	1.7	4.5	24 J
	12-Jan-10		N	<0.2	<1		70.9	53.2	79.2	15.84	<0.2			3,020	2,100		360	1.8	27	2.1
	07-Apr-10		N	<0.2	<1		32.8	24.6	62.4	12.48	<0.1			2,680	2,290		500	1.3	28	4.6
	13-Jul-10		N	<0.2	3.6		17.4	13.1	29.2	5.84	<0.2			2,140	1,990		560	17 J	31	4.1
	13-Oct-10		N	<0.2	2.9		11.9	8.9	19.9	3.98	<0.2			1,530 J	1,890		580	<0.5	35	<1
	17-Jan-11		N	<0.2	1.5		7.56	5.7	13.9	2.78	<0.2			1,780 J	2,280		590	<0.5	41	<1
	13-Apr-11		N	<0.2	<1		2.87	2.2	8.1	1.62	<0.1			1,500 J	1,910		600	<0.5	50	<1

4.51

0.902

<0.1

1,110

1,930

600

<0.5

61

<1

1.5

<0.2

<1

2.05

12-Jul-11

PG&E Topock Needles, California

Location Name	Sample Date	Not es	Sampl e Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Total Chromium (µg/L)	Fluorescein (ppb)	Fluorescein (ppb dye)	Rhodamine (ppb)	Rhodamine (ppb dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved Manganese (µg/L)	Total Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)	Dissolved Molybdenum (µg/L)	Dissolved Selenium (µg/L)
PT-8M	18-Jul-07	а	N	3,960	4,120	4,140					32		<500	<500	16	22.7	1,330	1.4	12 ¹	151 ¹
	23-Jan-08	а	N	4,050	4,030						35	<5	<500	<2,500	<2,500	<10	1,210	1.3		
	05-Mar-08	а	N	3,820	3,910		ND	ND	ND	ND	34	<0.5	<500	<500	<500	<10	1,290	1.4		
	13-Mar-08	а	N	3,870	3,870		ND	ND	ND	ND	32	<0.5	<500	<2,500	<2,500	<10	1,250	1.3		
	19-Mar-08	а	N	4,030	3,850		ND	ND	ND	ND	33	<1	<500	<2,500		<10	1,230	1.2		
	25-Mar-08	а	N	3,890	3,820		ND	ND	ND	ND	33	<1	<500	<2,500	<2,500	<10	1,230	1.0		
	02-Apr-08	а	N	3,880	3,810		ND	ND	ND	ND			<500	<2,500			1,290	1.1		
	16-Apr-08	а	N	3,670	3,730		ND	ND	ND	ND			<500	<2,500			1,280	<1		
	29-Apr-08	а	N	3,570	3,760		ND	ND	ND	ND	32	<1	<500	<500	<500	<10	1,250	<1		
	14-May-08	а	N	3,880	3,760		ND	ND	ND	ND			<500	<500			1,220	1.4		
	28-May-08	а	N	3,830	3,660		ND	ND	ND	ND	13	<2.5	<500	<500	<500	12.8	1,010	<1		
	11-Jun-08	а	N	2,720	3,500		0.43	0.32	ND	ND			<500	<500			1,220	1.4		
	19-Jun-08	а	N															<2		
	25-Jun-08	а	N	3,710	3,540		0.02	0.02	ND	ND	30	<1	<500	<500	<500	<10	1,190	1.5		
	25-Jun-08	а	FD	3,550	3,470			0.02		ND	31	<1	<500	<500	<500	<10	1,190	1.5		
	01-Jul-08		N															1.6		
	23-Jul-08	а	N	3,620	3,480		0.04	0.03	ND	ND	29	<1	<500	<500	<500	<10	1,130	1.6		
	20-Aug-08	а	N	2,770 J	2,740		2.56	1.92	ND	ND	22	<1	<500	<500	<500	80	1,090	2.2		
	17-Sep-08		N	1,950	2,310		0.66	0.49	0.373	0.07	19	<1	<500	<500	<500	231	1,040	2.4		
	15-Oct-08		N	2,900	2,780		0.67	0.50	4.94	0.99	26 J	<1	<500	<500	<500	16	1,110	1.6		
	12-Nov-08		N	1,660	1,650		2.73	2.05	14.1	2.82	12	1.21	<500	<500	<500	314	878	2.3		
	04-Feb-09	а	N	1,170	1,350		91.50	68.6	14.6	2.92	11	<0.5	300	179	554	532	890	3.8	6.5	61 J
	13-May-09		N	702	698		134.00	101	7.58	1.52	6.1	<0.2	644	<100	882	985	590	1.9 J	6.2	23
	04-Aug-09	а	N	571	512		200.00	150	ND	ND	6.0			582	1,590		630	2.40	4.8	24 J
	28-Oct-09		N	884	843		27.60	20.7	ND	ND	<0.2			3,400	2,070		320	1.7	20	<1 UJ
	12-Jan-10		N	580	590		73.50	55.1	ND	ND	8.1			1,030	1,850		710	1.8	5.8	21
	07-Apr-10		N	383	452		58.40	43.8	ND	ND	7.2			125	2,380		770	2.1	4.8	17
	13-Jul-10		N	400	396		102.00	76.5	ND	ND	7.5			286 J	2,640		820	38 J	4.6	17
	13-Oct-10		N	233	284		75.30	56.5	ND	ND	7.6			158 J	2,990		900	0.62	4.0	12
	17-Jan-11		N	340	334		31.30	23.5	ND	ND	8.9			213 J	3,480		1,000	<0.5	4.4	11
	13-Apr-11		N	178	227		106.00	79.5	ND	ND	6.2			215 J	2,960		840	0.62	4.6	7.5
	13-Apr-11		FD	185	230		74.60	56.0	ND	ND	6.2			193 J	2,920		850	<0.5	4.4	7.2
	12-Jul-11		N	114	149		101.00	75.8	ND	ND	6.2			279	4,040		1,000	<0.5	5.4	7.7

PG&E Topock Needles, California

2011 Annual Monitoring Report for the Upland Reductive Zone In-Situ Pilot Test

Location Name	Sample Date	Not es	Sampl e Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Total Chromium (µg/L)	Fluorescein (ppb)	Fluorescein (ppb dye)	Rhodamine (ppb)	Rhodamine (ppb dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (μg/L)	Dissolved Iron (µg/L)	Dissolved Manganese (µg/L)	Total Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)	Dissolved Molybdenum (µg/L)	Dissolved Selenium (µg/L)
PT-8D	16-Jul-07	а	N	6,540	7,260	7,290					9.7	<1	2,620	<500	24	186	1,110	<1	92 ¹	9.1 ¹
	23-Jan-08	а	N	6,210	6,340						11	<2.5	<500	<5,000	<5,000	<10	1,080	<1		
	05-Mar-08	а	N	6,510	6,600		ND	ND	ND	ND	11	<1	<500	<2,500	<2,500	<10	1,110	<1		
	13-Mar-08	а	N	6,560	5,030		ND	ND	ND	ND	13	<2.5	<500	<2,500	<2,500	<10	1,270	<1		
	18-Mar-08	а	N	5,750	5,280		ND	ND	ND	ND	12	<2.5	<500	<2,500		<10	1,130	<1		
	25-Mar-08	а	N	5,380	5,310		ND	ND	ND	ND	12	<2.5	<500	<2,500	<2,500	<10	1,160	<1		
	02-Apr-08	а	N	2,640	5,180		ND	ND	ND	ND			<500	<2,500			1,180	<1		
	16-Apr-08	а	N	6,340	6,270		ND	ND	ND	ND			<500	<2,500			1,100	<1		
	29-Apr-08	а	N	4,570	4,380		2.93	2.20	ND	ND	13	<2.5	<500	<500	<500	<10	1,240	<1		
	14-May-08	а	N	2,300	3,470		14.1	10.6	ND	ND			<500	<500			1,210	8.2		
	28-May-08	а	N	3,940	3,790		6.03	4.52	ND	ND	11	<2.5	<500	<500	<500	82.1	1,170	<1		
	11-Jun-08	а	N	3,310	3,530		9.22	6.92	ND	ND			<500	<500			1,190	1.5		
	19-Jun-08	а	N															2.3		
	25-Jun-08	а	N	2,120	2,550		64.9	48.7	ND	ND	7.2	<2.5	<500	<500	929	975	1,140	91		
	01-Jul-08		N															4.2		
	08-Jul-08		N															51		
	15-Jul-08		N															1.7		
	23-Jul-08	а	N	3,000	2,700		11.7	8.78	ND	ND	9.6	<2.5	<500	<500	<500	72.4	1,170	2.4		
	28-Jul-08		N															25		
	20-Aug-08	а	N	3,710 J	3,550		6.23	4.67	ND	ND	9.3	<2.5	<500	<500	<500	107.0	1,130	1.4		
	17-Sep-08	а	N	3,130	3,430		ND	ND	ND	ND	10.1	<2.5	<500	<2,500	<2,500	45.0	1,180	<1		
	15-Oct-08		N	18	1,420		87.3	65.5	ND	ND	7.0	<2.5	<500	<2,500	<2,500	1,410	1,120	58		
	12-Nov-08		N	714	802		44.3	33.2	ND	ND	5.5	<1	<500	<2,500	<2,500	952	1,120	1.6		
	04-Feb-09	а	N	982	1,180		24.4	18.3	ND	ND	<9.3	<1	<100	152	406	532	1,400	0.60		
	04-Feb-09	а	FD	966	1,170		26.7	20.0	ND	ND	<8.9	<1	<100	198	424	490	1,300	<0.5	65	5.2 J
	13-May-09		N	1,440	1,630		12.7	9.53	ND	ND	5.4	<0.5	108	<100	268	362	960	<0.5	82	<1
	04-Aug-09	а	N	1,450	1,390		2.42	1.82	ND	ND	9.1			591	220		1,100	<0.5	68	<1 UJ
	28-Oct-09		N	1,760	1,710		2.88	2.16	ND	ND	10			891	265		1,200	<0.5	72	<1 UJ
	28-Oct-09		FD	1,780	1,590		3.14	2.36	ND	ND	10			885	254		1,200	<0.5	66	<1 UJ
	12-Jan-10		N	1,820	1,780		2.08	1.56	ND	ND	9.2			<500	271		1,100	<0.5	75	7.7
	07-Apr-10		N	1,630	1,660		1.99	1.49	ND	ND	7.4			<100	294		1,100	<0.5	74	<1
	07-Apr-10		FD	1,630	1,680						7.5			105	299		1,100	<0.5	75	<1
	13-Jul-10		N	1,900	1,650		1.14	0.86	ND	ND	9.5			144	223		1,100	$4.5 J^2$	76	6.7
	13-Oct-10		N	1,760	1,940		1.18	0.89	ND	ND	8.6			<100	236		1,100	<0.5	73	10
	17-Jan-11		N	1,810	1,650		0.49	0.37	ND	ND	9.3			151 J	237		1,100	<0.5	59	8.4

129 J

<50

213

910

1,000

<0.5

<0.5

63

78

5.2

5.7

1,430

1,560

1,410

1,520

0.66

0.70

0.49

0.53

ND

ND

ND

ND

5.8

8.3

13-Apr-11

12-Jul-11

PG&E Topock Needles, California

Location Name	Sample Date	Not es	-	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Total Chromium (µg/L)	Fluorescein (ppb)	Fluorescein (ppb dye)	Rhodamine (ppb)	Rhodamine (ppb dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (μg/L)	Dissolved Iron (μg/L)	Dissolved Manganese (µg/L)	Total Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)	Dissolved Molybdenum (µg/L)	Dissolved Selenium (µg/L)
PT-9S	17-Jul-07	а	N	1,180	1,150	1,170					16	<0.5	1,080	<500	29	125	689	1.2	48 ¹	57 ¹
	22-Jan-08	а	N	1,380	1,250						17	<2.5	917	1,000	<500	37	644	<1		
	05-Mar-08	а	N	1,380	1,340		0.02	0.01	ND	ND	18	<0.5	1,060	<500	<500	145	718	<1		
	12-Mar-08	а	N	1,140	1,010		ND	ND	ND	ND	16	<0.5	<500	<500	<500	13	525	<1		
	19-Mar-08	а	N	1,390	1,380		ND	ND	ND	ND	18	<0.5	<500	<2,500		22	633	<1		
	26-Mar-08	а	N	1,350	1,310		ND	ND	ND	ND	18	<0.5	<500	<2,500	<2,500	17	668	<1		
	02-Apr-08	а	N	1,340	1,300		ND	ND	ND	ND			<500	<2,500			670	<1		
	16-Apr-08	а	N	1,410	1,350		0.05	0.04	ND	ND			<500	<2,500			424	<1		
	29-Apr-08	а	N	1,050	1,080		ND	ND	ND	ND	17	<0.5	<500	<500	<500	17	559	<1		
	14-May-08	а	N	1,060	1,030		ND	ND	ND	ND			<500	<500			563	<1		
	28-May-08	а	N	1,280	1,210		ND	ND	ND	ND	18	<0.5	635	<500	<500	52	643	<1		
	11-Jun-08	а	N	1,270	1,180		ND	ND	ND	ND			719	<500			678			
	25-Jun-08	а	N	1,030	1,060		0.03	0.02	ND	ND	16	<0.5	<500	<500	<500	33	595	<1		
	24-Jul-08	а	N	1,450	1,240		ND	ND	ND	ND	17	<1	1,310	<500	<500	194.0	627	1.3		
	20-Aug-08	а	N	1,460 J	1,390		2.07	1.55	11	2.2	17	<1	1,240	<500	<500	164.0	667	1.3		
	17-Sep-08		N	1,290	1,400		5.81	4.36	ND	ND	16	<0.5	<500	<500	<500	22	689	1.2		
	15-Oct-08		N	929	889		3.91	2.93	4.03	0.81	11 J	<0.5	<500	<500	<500	28	558	1.2		
	12-Nov-08		N	530	484		75.1	56.3	9.22	1.84	8.9	<0.5	1,480	<500	1,280	1,820	377	146		
	05-Feb-09	а	N	633	458		33.6	25.2	17.7	3.54	14 UB	<0.1	5,850 J	<100	893	973	720	7.0	28	54 J
	14-May-09		N	826	936		161	121	8.01	1.60	13	<0.2	9,180 J	<100	800	1,110	510	44	31	42
	05-Aug-09		N	1,060	1,180		212	159	6.13	1.23	14			300	683		520	2.2	29	41
	29-Oct-09		N	1,010	956		ND	ND	ND	ND	10			329 J	559		440	2.6	33	33
	12-Jan-10		N	1,320	1,350		199	149	1.89	0.38	16			466	513		660	1.9	42.4 J	44
	08-Apr-10		N	1,080	1,080		96.9	73	3.31	0.66	14			<100	472		690	1.6	29	32
	13-Jul-10		N	1,250	1,120		27.9	21	0.525	0.11	14			141 J	662		690	17 J ²	29	34
	13-Oct-10		N	1,080	1,080		26.1	20	ND	ND	13			<100	608		660	0.6	30	27
	18-Jan-11		N	1,090	950		33.5	25	ND	ND	12			122 J	612		610	<0.5	47	24
	13-Apr-11		N	944	896		10.8	8	0.064	0.01	8.1 J			75 J	477		600	<0.5	39	17
	12-Jul-11		N	752	777		3.19	2	ND	ND	9.6			<50	639		580	<0.5	39	13

PG&E Topock Needles, California

Location Name	Sample Date	Not es	Sampl e Type	Hexavalent Chromium (μg/L)	Total Dissolved Chromium (µg/L)	Total Chromium (µg/L)	Fluorescein (ppb)	Fluorescein (ppb dye)	Rhodamine (ppb)	Rhodamine (ppb dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved Manganese (µg/L)	Total Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)	Dissolved Molybdenum (µg/L)	Dissolved Selenium (µg/L)
PT-9M	17-Jul-07	а	N	2,340	2,270	2,250					24	<0.5	<500	<500	18.7	27	1,410	1.2	7.1 ¹	165 ¹
	17-Jul-07	а	FD	2,240	2,270	2,220					25	<0.5	<500	<500	18.2	32	1,410	1.2	7.5 ¹	173 ¹
	22-Jan-08	а	N	2,940	2,400						24	<2.5	<500	<500	<500	<10	1,390	1.0		
	05-Mar-08	а	N	2,310	2,400		ND	ND	ND	ND	25	<0.5	<500	<500	<500	<10	1,460	<1		
	12-Mar-08	а	N	2,590	2,360		ND	ND	ND	ND	22	<0.5	<500	<500	<500	<10	1,370	<1		
	19-Mar-08	а	Ν	2,660	2,570		0.074	0.06	ND	ND	23	<1	<500	<2,500		<10	1,430	<1		
	26-Mar-08	а	N	2,610	2,490		0.174	0.13	ND	ND	24	<1	<500	<2,500	<2,500	<10	1,340	<1		
	26-Mar-08	а	FD	2,500	2,500		ND	ND	ND	ND	24	<1	<500	<2,500	<2,500	<10	1,340	<1		
	02-Apr-08	а	N	2,520	2,510		ND	ND	ND	ND			1,260	<2,500			1,510	<1		
	16-Apr-08	а	Ν	2,550	2,570		ND	ND	ND	ND			<500	<2,500			908	<1		
	29-Apr-08	а	N	2,370	2,360		ND	ND	ND	ND	22	<0.2	<500	<500	<500	<10	1,460	<1		
	14-May-08	а	N	2,550	2,430		ND	ND	ND	ND			<500	<500			1,450	<1		
	28-May-08	а	Ν	2,500	2,300		0.065	0.05	ND	ND	24	<1	<500	<500	<500	<10	1,410	<1		
	11-Jun-08	а	Ν	2,500	2,330		ND	ND	ND	ND			<500	<500			1,460			
	25-Jun-08	а	N	2,460	2,260		ND	ND	ND	ND	21	<1	<500	<500	<500	<10	1,450	1.3		
	24-Jul-08	а	N	2,620	2,230		ND	ND	ND	ND	21	<1	<500	<500	<500	<10	1,400	1.5		
	20-Aug-08	а	Ν	2,500 J	2,400		0.086	0.06	ND	ND	22	<1	<500	<500	<500	<10	1,420	1.4		
	17-Sep-08		N	2,260	2,590		ND	ND	0.207	0.04	22	<1	<500	<2,500	<2,500	<10	1,480	<1		
	15-Oct-08		N	2,660	2,630		ND	ND	ND	ND	26 J	<1	<500	<500	<500	<10	1,490	1.1		
	12-Nov-08		N	2,590	2,800		ND	ND	ND	ND	24	< 0.5	<500	<2,500	<2,500	<10	1,450	1.0		
	05-Feb-09	а	N	2,680	2,590		0.05	0.03	ND	ND	23 J	< 0.2	1,480 J	134	1.1	25	1,800	0.63	7.6	163 J
	14-May-09		N	2,580	2,750		ND	ND	ND	ND	22 J	< 0.2	1,560 J	117 J	1.1	28	1,400	0.79 J	7.2	101
	05-Aug-09	а	N	2,490	2,580		ND	ND	ND	ND	20			1,030	<1		1,400	0.64 UB	7.1	121
	29-Oct-09		N	2,560	2,600		ND	ND	ND	ND	20 J			1,370 J	<1		1,500	0.66	7.8	114
	12-Jan-10		N	2,540	2,470		ND	ND	ND	ND	20			<500	<5		1,300	0.54	7.64 J	108
	08-Apr-10		N	2,230	2,160		ND	ND	ND	ND	19			110	<1		1,400	0.56	8.1	67
	13-Jul-10		N	2,390	2,240		ND	ND	ND	ND	20			163	<1		1,400	5.0 J ²	7.9	89
	13-Oct-10		N	2,200	2,010		ND	ND	ND	ND	19			<100	<1		1,400	<0.5	6.6	72
	18-Jan-11		N	2,150	1,900		ND	ND	ND	ND	16			<100 J	<1		1,400	<0.5	7.2	66
	13-Apr-11		N	1,860	1,810		ND	ND	ND	ND	16			149 J	1.7		1,300	<0.5	6.6	36
	12-Jul-11		N	1,770	1,850		ND	ND	ND	ND	15			<50	<1		1,300	<0.5	7.7	40

PG&E Topock Needles, California

2011 Annual Monitoring Report for the Upland Reductive Zone In-Situ Pilot Test

Name	Sample Date	Not es	Sampl e Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Total Chromium (µg/L)	Fluorescein (ppb)	Fluorescein (ppb dye)	Rhodamine (ppb)	Rhodamine (ppb dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (μg/L)	Dissolved Iron (μg/L)	Dissolved Manganese (µg/L)	Total Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)	Dissolved Molybdenum (µg/L)	Dissolved Selenium (µg/L)
PT-9D	17-Jul-07	а	N	15,700	15,600	<1					9.3	<1	<500	<500	29	34	1,260	1.1	92 ¹	9.1 ¹
	22-Jan-08	а	N	17,400	15,300						12	<2.5	<500	<5,000	<5,000	<10	1,390	<1		
	22-Jan-08	а	FD	16,400	15,500						11	<2.5	<500	<5,000	<5,000	<10	1,310	<1		
	05-Mar-08	а	N	16,000	15,600		ND	ND	ND	ND	9.9	<1	<500	<2,500	<2,500	15.8	1,470	<1		
	12-Mar-08	а	N	13,500	12,500		ND	ND	ND	ND	13	<2.5	<500	<2,500	<2,500	<10	1,390	<1		
	19-Mar-08	а	N	14,800	14,300		ND	ND	ND	ND	12	<2.5	<500	<2,500		<10	1,370	<1		
	26-Mar-08	а	N	14,600	14,100		ND	ND	ND	ND	12	<2.5	<500	<2,500	<2,500	<10	1,320	<1		
	02-Apr-08	а	N	13,900	14,400		ND	ND	ND	ND			<500	<2,500			1,430	<1		
	16-Apr-08	а	N	14,900	15,400		ND	ND	ND	ND			<500	<2,500			1,350	<1		
	29-Apr-08	а	N	11,000	10,600		ND	ND	ND	ND	13	<5	<500	<500	<500	<10	1,400	<1		
	14-May-08	а	N	10,600	10,700		ND	ND	ND	ND			<500	<500			1,340	<1		
	28-May-08	а	N	12,000	11,700		ND	ND	ND	ND	13	<2.5	<500	<500	<500	<10	1,330	<10		
	11-Jun-08	а	N	13,600	12,300		ND	ND	ND	ND			<500	<500			1,400	<2		
	11-Jun-08	а	FD	14,500	12,200			0.29		ND			<500	<500			1,380	<2		
	25-Jun-08	а	N	10,500	9,680		ND	ND	ND	ND	14	<2.5	<500	<500	<500	<10	1,330	<5		
	24-Jul-08	а	N	10,900	9,920		ND	ND	ND	ND	13	<2.5	<500	<500	<500	<10	1,320	12		
	20-Aug-08	а	N	13,000 J	14,900		0.02	0.02	ND	ND	11	<2.5	<500	<500	<500	<10	1,320	1.2		
	20-Aug-08	а	FD	7,090 J	14,800		ND.	ND.	ND.	ND.	11	<2.5	<500	<500	<500	<10	1,310	1.2		
	17-Sep-08 15-Oct-08		N	12,100 9,920	14,000 9,650		ND ND	ND ND	ND ND	ND ND	11	<2.5	<500 <500	<2,500 <2,500	<2,500 <2,500	<10 <10	1,440 1,440	<1		
	12-Nov-08		N N	•	13,400			ND	ND	ND	15	<1 <2.5				<10 <10		<2		
	05-Feb-09	а	N	13,500 15,300	13,400		ND ND	ND ND	ND ND	ND ND	13 14 UB	<2.5 <0.5	<500 335 J	<2,500 527	<2,500 <5	<10 8.1	1,380 1,800	1.8 <2.5	 74	 14 J
	15-May-09	а	N	13,800	13,400		ND	ND	ND	ND	12	<0.5	400	459 J	1.1	10	1,400	<0.5	85	<1
	05-Aug-09		N	12,300	11,600		ND	ND	ND	ND	11			974	<1		1,400	<2.5	64	<1
	28-Oct-09		N	14,000	14,200		ND	ND	ND	ND	11			1,640	<1		1,400	<2.5	84	<1 UJ
	12-Jan-10		N	15,000	15,600		ND	ND	ND	ND	11			<500	<5		1,400	<2.5	92	9.4
	08-Apr-10		N	14,000	11,800		ND	ND	ND	ND	10			591	<1		1,400	<0.5	87	<1
	13-Jul-10		N	15,600	15,500		ND	ND	ND	ND	12			390	<1		1,400	11 J ²	92.1 J	7.0
	13-Oct-10		N	16,400	14,100		ND	ND	ND	ND	11			<500	<1		1,400	<0.5	93	9.68 J
	13-Oct-10		FD	16,200	13,900						11			<500	<1		1,400	<0.5	93	12.5 J
	18-Jan-11		N	15,700	13,700		ND	ND	ND	ND	10			868 J	<1		1,600	<2.5	99	10
	13-Apr-11		N	15,400	15,100		ND	ND	ND	ND	11			842 J	<1		1,500	<0.5	87	8.0

1,500

<1

102

7.3

14,700

13,600

ND

ND

ND

ND

12-Jul-11

PG&E Topock Needles, California

Location Name	Sample Date	Not es	Sampl e Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Total Chromium (µg/L)	Fluorescein (ppb)	Fluorescein (ppb dye)	Rhodamine (ppb)	Rhodamine (ppb dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (μg/L)	Dissolved Iron (µg/L)	Dissolved Manganese (µg/L)	Total Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)	Dissolved Molybdenum (µg/L)	Dissolved Selenium (µg/L)
MW-11	17-Jul-07	а	N	321	314	339					8.4	<0.5	<500	<500	<5	<10	251	1.1	11 ¹	6.1 ¹
	24-Jan-08	а	N	321	310						8.7	<0.5	<500	<500	<500	<10	241	<1		
	04-Mar-08	а	N	299	290		ND	ND	ND		9.7	<0.5	<500	<500	<500	<10	236	<1		
	11-Mar-08	а	N	289	288		ND	ND	ND	ND	8.9	<0.5	<500	<500	<500	<10	240	<1		
	11-Mar-08	а	FD	286	285		ND	ND	ND	ND	9.0	<0.5	<500	<500	<500	<10	248	<1		
	19-Mar-08	а	N	340	332		ND	ND	ND	ND	9.3	<0.5	<500	<2,500		<10	231	<1		
	27-Mar-08	а	N	331	308		0.056	0.04	ND	ND	8.9	<0.5	<500	<500	<500	<10	238	<1		
	01-Apr-08	а	N	316	306		0.038	0.03	ND	ND			<500	<500			237	<1		
	15-Apr-08	а	N	311	319		ND	ND	ND	ND			<500	<500			222	<1		
	28-Apr-08	а	N	284	266		ND	ND	ND	ND	8.6	<0.5	<500	<500	<500	<10	226	<1		
	13-May-08	а	N	280	281		ND	ND	ND	ND			<500	<500			229	<1		
	27-May-08	а	N	286	238		ND	ND	ND	ND	8.6	<0.5	<500	<500	<500	<10	220	<1		
	10-Jun-08	а	N	275	265		ND	ND	ND	ND				<500			227	<1		
	24-Jun-08	а	N	286	244		0.03	0.02	ND	ND	8.7	<0.5	<500	<500	<500	<10	226	<1		
	22-Jul-08	а	N	296	256		ND	ND	ND	ND	8.6	<0.5	<500	<500	<500	<10	220	<1		
	21-Aug-08	а	N	281	240		ND	ND	ND	ND	8.3	<0.5	<500	<500	<500	<10	223	<1		
	16-Sep-08		N	262	256		ND	ND	ND	ND	8.5	<0.5	<500	<500	<500	<10	227	<1		
	14-Oct-08		N	264	312		ND	ND	ND	ND	8.4	<0.5	<500	<500	<500	<10	217	<1		
	11-Nov-08		N	305	303		ND	ND	ND	ND	8.6	<0.5	<500	<500	<500	<10	266	<1		
	03-Feb-09	а	N	299	336		0.03	0.02	ND	ND	9.8	<0.1	<100	<100	<1	<1	290	0.58	9.3	8.99 J
	14-May-09		N	234	268		4.57	3.43	ND	ND	8.7	<0.1	714 J	<100	2.8	19	200	5.5 J	10	8.6
	06-Apr-10		N	231	243		ND	ND	ND	ND	8.7			<100	<1		200	0.58	9.4	7.2
	12-Jul-10		N	256	222		ND	ND	ND	ND	8.7			<100 J	<1		200	$4.4 J^2$	9.5	9.0
	12-Oct-10		N	256	216		ND	ND	ND	ND	8.6			<100	<1		190	<0.5	8.6	6.0
	17-Jan-11		N	244	208		ND	ND	ND	ND	8.4			111 J	1.3		190	<0.5	9.1	4.8
	17-Jan-11		FD	242	220						8.4			<100 J	1.2		190	<0.5	8.5	5.4
	12-Apr-11		N	223	229		ND	ND	ND	ND	8.7			101	<1		190	<0.5	9.6	4.1 J
	11-Jul-11		N	206	179		ND	ND	ND	ND	8.3			<50	<1		190	<0.5	8.7	4.8

Table 3
Summary of Primary Analytical Parameters

24-Jan-08 a N 2,620 2,570	ocation Name	Sample Date	Not es	Sampl e Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Total Chromium (µg/L)	Fluorescein (ppb)	Fluorescein (ppb dye)	Rhodamine (ppb)	Rhodamine (ppb dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved Manganese (µg/L)	Total Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)	Dissolved Molybdenum (µg/L)	Dissolved Selenium (µg/L)
06-Mar-08 a N 3.890 4,190 ND ND ND ND 14	W-24A	18-Jul-07	а	N	2,480	2,550	2,600					18	<0.5	<500	<500	<5	<10	372	3.8	48 ¹	3.4 ¹
12-Mar-08		24-Jan-08	а	N	2,620	2,570						19	<0.5	<500	<500	<500	<10	380	3.8	40	<5
19-Mar-08 a N 1.6 5.76 1,760 1,320 1,480 296 <2.5 <2.5 <5.00 <2.500 1,280 854 2.4 2.4 26-Mar-08 a N 1.6 12.90 12,800 9,450 3,880 776 <5 <5 <5 1,030 <2.500 <2.500 2.380 347 4,8		06-Mar-08	а	N	3,890	4,190		ND	ND	ND	ND	14	<5	<500	<500	<500	401	1,210	367	29	58
26-Mar-08 a N 10.6 12.90 12.600 9.450 3.880 776 <5 5 1.030 <2.500 <2.500 2.380 347 4.8 01-Apr-08 a N <1 5.46 14.200 10.650 9.970 1.994 2.080 <2.500 129 12: 17-Apr-08 a N 15.7 9.79 254 191 2.480 496 2.080 <2.500 46.1 3.6 30-Apr-08 a N <1 7.18 28.7 21.5 194 38.8 <5 5 6 670 <500 1.320 1.320 1.360 624 1.1 30-Apr-08 a FD <1 8.19 28.6 21.5 265 53 <5 680 <500 1.320 1.330 1.350 624 1.1 15-May-08 a FD <1 8.19 28.6 21.5 265 53 1.520 853 831 1.6 15-May-08 a FD <1 8.19 28.6 21.5 265 53 1.520 853 831 1.6 27-May-08 a N <2.1 5.42 19.2 14.4 353 70.6 <1 <2.5 2.160 1.560 3.550 3.740 21 1.1 12-Jun-08 a N <2.1 5.42 19.2 14.4 353 70.6 <1 <2.5 2.160 1.560 3.550 3.740 21 1.1 19-Jun-08 a N		12-Mar-08	а	N	1,650	2,510		11.4	8.55	2,290	458	<10	<10	<500	<2,500	<2,500	417	1,170	1,160		
01-Apr-08 a N <1 5.46 14,200 10,650 9,970 1,994 2.080 <2,500 129 12, 17-Apr-08 a N 15.7 9.79 254 191 2,480 496 1,820 <2,500 46.1 3,6 30-Apr-08 a N <1 7.718 28.7 21.5 194 38.8 <5 <5 65 670 <500 1,320 1,360 624 11, 30-Apr-08 a FD <1 8.19 28.6 21.5 265 53 <5 680 <500 1,330 1,350 624 11, 15-May-08 a N <0.2 5.04 54.7 41.0 214 42.8 1,520 853 831 1,6 27-May-08 a FD <0.2 4.88 56.0 42.0 195 39 1,540 861 821 1,6 27-May-08 a N <2.1 5.42 19.2 14.4 353 70.6 <1 <2.5 2,160 1,560 3,550 3,740 21 1,3 1,9 1,9 1,9 1,9 1,9 1,9 1,9 1,9 1,9 1,9		19-Mar-08	а	N	1.6	5.76		1,760	1,320	1,480	296	<2.5	<2.5	<500	<2,500		1,280	854	2,460		
17-Apr-08 a N 15.7 9.79 254 191 2,480 496 1,820 <2,500 46.1 3.6 36,47-08 a N 15.7 7.18 28.7 21.5 194 38.8 5		26-Mar-08	а	N	10.6	12.90		12,600	9,450	3,880	776	<5	<5	1,030	<2,500	<2,500	2,380	347	4,890		
30-Apr-08 a N <1 7.18 28.7 21.5 194 38.8 <5 <5 670 <500 1,320 1,360 624 1,1 30-Apr-08 a FD <1 8.19 28.6 21.5 265 53 <5 <5 680 <500 1,330 1,350 624 1,1 1,1 1,1 1,1 1,1 1,1 1,1 1,1 1,1 1,		01-Apr-08	а	N	<1	5.46		14,200	10,650	9,970	1,994			2,080	<2,500			129	12,900		
30-Apr-08 a FD <1 8.19 28.6 21.5 265 53 <5 <5 680 <500 1,330 1,350 624 1,1 15-May-08 a N <0.2 5.04 54.7 41.0 214 42.8 1,520 853 831 1,6 15-May-08 a FD <0.2 4.88 56.0 42.0 195 39 1,540 861 821 1,6 27-May-08 a N <2.1 5.42 19.2 14.4 353 70.6 <1 <2.5 2,160 1,560 3,550 3,740 21 1,6 1,6 1,6 1,6 1,6 1,6 1,6 1,6 1,6 1,		17-Apr-08	а	N	15.7	9.79		254	191	2,480	496			1,820	<2,500			46.1	3,690	<25	<25
15-May-08 a N <0.2 5.04 54.7 41.0 214 42.8 1,520 853 831 1,6 15-May-08 a FD <0.2 4.88 56.0 42.0 195 39 1,540 861 821 1,6 27-May-08 a N <2.1 5.42 19.2 14.4 353 70.6 <1 <2.5 2,160 1,560 3,550 3,740 21 1,3 12-Jun-08 a N <2.3 4.56 28.3 21.2 326 65.2 2,440 671 267 1,1 19-Jun-08 a N <0.2 26.00 321 2,41 14.9 2,98 5.4 <2.5 1,890 758 1,550 1,630 1,110 4 01-Jul-08 a N		30-Apr-08	а	N	<1	7.18		28.7	21.5	194	38.8	<5	<5	670	<500	1,320	1,360	624	1,160		
15-May-08 a FD		30-Apr-08	а	FD	<1	8.19		28.6	21.5	265	53	<5	<5	680	<500	1,330	1,350	624	1,160		
27-May-08 a N <2.1 5.42 19.2 14.4 353 70.6 <1 <2.5 2.160 1,560 3,550 3,740 21 1.3 1.2 1.2 1.3 1.3 1.2 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3		15-May-08	а	N	<0.2	5.04		54.7	41.0	214	42.8			1,520	853			831	1,650	12	34
12-Jun-08 a N 2.3 4.56 28.3 21.2 326 65.2 2,440 671 267 1,1 19-Jun-08 a N			а	FD		4.88			42.0									821	1,660		
19-Jun-08 a N			а	N	<2.1			19.2				<1	<2.5	2,160	1,560	3,550	3,740	21	1,350		
26-Jun-08 a N <0.2 26.00 3.21 2.41 14.9 2.98 5.4 <2.5 1,890 758 1,550 1,630 1,110 4 01-Jul-08 a N			а	N	2.3	4.56		28.3	21.2	326	65.2			2,440	671			267	1,130		
01-Jul-08 a N			а																1,500		
24-Jul-08 a N <1.0 39.10 3.65 2.74 20.4 4.08 4.2 <2.5 2,370 527 647 653 1,230 24-Jul-08 a FD <1.0 43.40 2.55 4.66 3.2 <2.5 2,350 560 672 768 1,190 1 19-Aug-08 a N 1.5 J 1.46 7.17 5.38 365 73.0 <1 <1 548 <500 1,430 1,670 982 9 16-Sep-08 N <0.2 4.38 3.49 2.62 208 41.6 <1 <1 <500 <500 1,510 1,720 16 80 16-Oct-08 N 5.8 6.72 2.14 1.61 3.43 0.7 <0.5 <1 2,380 519 1,100 1,330 868 9 13-Nov-08 FD <0.2 7.19 2.09 1.57 19.0 3.8 <0.5 <1 2,010			а	N	<0.2	26.00		3.21	2.41	14.9	2.98	5.4	<2.5	1,890	758	1,550	1,630	1,110	43		
24-Jul-08 a FD < 1.0		01-Jul-08	а	N															<400		
19-Aug-08 a N 1.5 J 1.46 7.17 5.38 365 73.0 <1 <1 548 <500 1,430 1,670 982 9 16-Sep-08 N <0.2 4.38 3.49 2.62 208 41.6 <1 <1 <500 <500 1,510 1,720 16 80 16-Oct-08 N 5.8 6.72 2.14 1.61 3.43 0.7 <0.5 <1 2,380 519 1,100 1,330 868 9 13-Nov-08 N <0.2 9.10 2.09 1.57 19.0 3.8 <0.5 <1 2,010 J <2,500 <2,500 1,140 J 644 5 13-Nov-08 FD <0.2 7.19 1.97 1.48 14.0 2.8 <2.5 <2.5 3,490 J <2,500 <2,500 1,020 J 690 8 13-Nov-09 a N <0.2 4.30 5.97 4.48 163.0 32.6 <0.5 <0.5 <1.54			а					3.65		20.4				•	527				<1	21	32
16-Sep-08 N <0.2 4.38 3.49 2.62 208 41.6 <1 <1 <500 <500 1,510 1,720 16 80 16-Oct-08 N 5.8 6.72 2.14 1.61 3.43 0.7 <0.5 <1 2,380 519 1,100 1,330 868 9 13-Nov-08 N <0.2 9.10 2.09 1.57 19.0 3.8 <0.5 <1 2,010 J <2,500 <2,500 1,140 J 644 5 13-Nov-08 FD <0.2 7.19 1.97 1.48 14.0 2.8 <2.5 <2.5 3,490 J <2,500 <2,500 1,020 J 690 8 03-Feb-09 a N <0.2 4.30 5.97 4.48 163.0 32.6 <0.5 <0.5 2,410 156 964 863 1,200 4 14-May-09 N <1.0 1.30 16.9 12.7 333.0 66.6 <0.5 <0.			а		<1.0	43.40						3.2	<2.5	2,350	560	672	768	,	12		
16-Oct-08 N 5.8 6.72 2.14 1.61 3.43 0.7 <0.5 <1 2,380 519 1,100 1,330 868 9 13-Nov-08 N <0.2 9.10 2.09 1.57 19.0 3.8 <0.5 <1 2,010 J <2,500 <2,500 1,140 J 644 5 13-Nov-08 FD <0.2 7.19 1.97 1.48 14.0 2.8 <2.5 <2.5 3,490 J <2,500 <2,500 1,020 J 690 8 03-Feb-09 a N <0.2 4.30 5.97 4.48 163.0 32.6 <0.5 <0.5 <0.5 2,410 156 964 863 1,200 4 14-May-09 N <1.0 1.30 16.9 12.7 333.0 66.6 <0.5 <0.5 1,120 J 363 J 750 750 680 5 03-Aug-09 a N <0.2 <1 20.6 15.5 282.0 56.4 <0.2 2,130 3,266 520 6 27-Oct-09 N <0.2 1.18 30.2 22.7 333.0 66.6 <0.5 <0.5 649 1,010 200 3 11-Jan-10 N <0.2 1.28 15.9 11.9 356.0 71.2 <0.2 485 J 479 190 3 07-Apr-10 N <0.2 1.39 10.9 8.2 547.0 109.4 <0.5 252 261 280 3.			а	N								<1	<1		<500	1,430		982	9.4	<5	<5
13-Nov-08 N <0.2 9.10 2.09 1.57 19.0 3.8 <0.5 <1 2,010 J <2,500 <2,500 1,140 J 644 5 13-Nov-08 FD <0.2 7.19 1.97 1.48 14.0 2.8 <2.5 <2.5 3,490 J <2,500 <2,500 1,020 J 690 8 103-Feb-09 a N <0.2 4.30 5.97 4.48 163.0 32.6 <0.5 <0.5 <0.5 2,410 156 964 863 1,200 4 14-May-09 N <1.0 1.30 16.9 12.7 333.0 66.6 <0.5 <0.5 <0.5 1,120 J 363 J 750 750 680 5 103-Aug-09 a N <0.2 <1 20.6 15.5 282.0 56.4 <0.2 2,130 3,260 520 6 11-Jan-10 N <0.2 1.18 30.2 22.7 333.0 66.6 <0.2 649 1,010 200 3 11-Jan-10 N <0.2 1.28 15.9 11.9 356.0 71.2 <0.2 485 J 479 190 3 107-Apr-10 N <0.2 1.39 10.9 8.2 547.0 109.4 <0.5 252 261 280 3.		16-Sep-08		N	<0.2	4.38		3.49	2.62	208	41.6	<1	<1	<500	<500	1,510	1,720	16	800	<5	<5
13-Nov-08 FD <0.2 7.19 1.97 1.48 14.0 2.8 <2.5 <2.5 3,490 J <2,500 <2,500 1,020 J 690 8 03-Feb-09 a N <0.2 4.30 5.97 4.48 163.0 32.6 <0.5 <0.5 <0.5 2,410 156 964 863 1,200 4 14-May-09 N <1.0 1.30 16.9 12.7 333.0 66.6 <0.5 <0.5 1,120 J 363 J 750 750 680 5 03-Aug-09 a N <0.2 <1 20.6 15.5 282.0 56.4 <0.2 2,130 3,260 520 6 11-Jan-10 N <0.2 1.18 30.2 22.7 333.0 66.6 <0.2 649 1,010 200 3 11-Jan-10 N <0.2 1.28 15.9 11.9 356.0 71.2 <0.2 485 J 479 190 3 07-Apr-10 N <0.2 1.39 10.9 8.2 547.0 109.4 <0.5 252 261 280 3.					5.8	6.72				3.43	0.7	<0.5	<1	2,380	519	1,100	1,330	868	90	5.2	13.3
03-Feb-09 a N <0.2 4.30 5.97 4.48 163.0 32.6 <0.5 <0.5 2,410 156 964 863 1,200 4 14-May-09 N <1.0 1.30 16.9 12.7 333.0 66.6 <0.5 <0.5 1,120 363 J 750 750 680 5 03-Aug-09 a N <0.2 <1 20.6 15.5 282.0 56.4 <0.2 2,130 3,260 520 6 27-Oct-09 N <0.2 1.18 30.2 22.7 333.0 66.6 <0.2 649 1,010 200 3 11-Jan-10 N <0.2 1.28 15.9 11.9 356.0 71.2 <0.2 485 J 479 190 3 07-Apr-10 N <0.2 1.39 10.9 8.2 547.0 109.4 <0.5 252 261 280 3.		13-Nov-08			<0.2	9.10			1.57	19.0	3.8	<0.5	<1	2,010 J	<2,500	<2,500	1,140 J	644	52	<25	<25
14-May-09 N <1.0 1.30 16.9 12.7 333.0 66.6 <0.5 <0.5 1,120 J 363 J 750 750 680 5 03-Aug-09 a N <0.2 <1 20.6 15.5 282.0 56.4 <0.2 2,130 3,260 520 6 27-Oct-09 N <0.2 1.18 30.2 22.7 333.0 66.6 <0.2 649 1,010 200 3 11-Jan-10 N <0.2 1.28 15.9 11.9 356.0 71.2 <0.2 485 J 479 190 3 07-Apr-10 N <0.2 1.39 10.9 8.2 547.0 109.4 <0.5 252 261 280 3.		13-Nov-08		FD	<0.2	7.19			1.48	14.0		<2.5	<2.5	3,490 J	<2,500	<2,500	1,020 J	690	80		
03-Aug-09 a N <0.2 <1 20.6 15.5 282.0 56.4 <0.2 2,130 3,260 520 6 27-Oct-09 N <0.2 1.18 30.2 22.7 333.0 66.6 <0.2 649 1,010 200 3 11-Jan-10 N <0.2 1.28 15.9 11.9 356.0 71.2 <0.2 485 J 479 190 3 07-Apr-10 N <0.2 1.39 10.9 8.2 547.0 109.4 <0.5 252 261 280 3.			а	N	<0.2				4.48			<0.5	< 0.5	2,410	156				4.0	1.2	4.3 J
27-Oct-09 N <0.2 1.18 30.2 22.7 333.0 66.6 <0.2 649 1,010 200 3 11-Jan-10 N <0.2 1.28 15.9 11.9 356.0 71.2 <0.2 485 J 479 190 3 07-Apr-10 N <0.2 1.39 10.9 8.2 547.0 109.4 <0.5 252 261 280 3.				N		1.30					66.6		< 0.5	1,120 J		750	750		5.3	3.4	2.8
11-Jan-10 N <0.2 1.28 15.9 11.9 356.0 71.2 <0.2 485 J 479 190 3 07-Apr-10 N <0.2 1.39 10.9 8.2 547.0 109.4 <0.5 252 261 280 3.		-	а	N	<0.2	<1		20.6				<0.2			2,130	3,260		520	6.3	<5	<5
07-Apr-10 N <0.2 1.39 10.9 8.2 547.0 109.4 <0.5 252 261 280 3.		27-Oct-09		N	<0.2	1.18		30.2	22.7	333.0	66.6	<0.2			649	1,010		200	3.7	<1	<1 UJ
·		11-Jan-10		N	<0.2	1.28		15.9	11.9	356.0	71.2	<0.2			485 J	479		190	3.6	1.1	1.3
12 Jul-10 N 0.26 -1 7.29 5.5 405.0 00 -0.1 199 147 320 23		07-Apr-10		N	<0.2	1.39		10.9	8.2	547.0	109.4	<0.5			252	261		280	3.6	1.4	3.3
		12-Jul-10		N	0.26	<1		7.38	5.5	495.0	99	<0.1			188	147		320	23 J ²	2.1	3.2
		12-Jul-10		FD		<1						<0.1			185	153		310	18 J ²	2.1	3.1
		12-Oct-10		N	0.23	5.30			2.8	371.0		<0.1			142	154		310	1.6	2.7	<1
17-Jan-11 N <0.2 1.20 6.37 4.8 242.0 48.4 <0.2 402 J 343 250 1.		17-Jan-11		N	<0.2	1.20		6.37	4.8	242.0	48.4	<0.2			402 J	343		250	1.5	2.6	<1
12-Apr-11 N 0.98 2.00 2.11 1.6 333.0 66.6 <0.1 197 121 360 1.		12-Apr-11		N	0.98	2.00		2.11	1.6	333.0	66.6	<0.1			197	121		360	1.4	6.1	<1 J
11-Jul-11 N <0.2 <1 1.52 1.1 239.0 47.8 <0.2 95.2 68 340 1.		11-Jul-11		N	<0.2	<1		1.52	1.1	239.0	47.8	<0.2			95.2	68		340	1.3	10.7	<1

PG&E Topock Needles, California

Location Name	Sample Date	Not es	Sampl e Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Total Chromium (µg/L)	Fluorescein (ppb)	Fluorescein (ppb dye)	Rhodamine (ppb)	Rhodamine (ppb dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (μg/L)	Dissolved Iron (μg/L)	Dissolved Manganese (µg/L)	Total Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)	Dissolved Molybdenum (µg/L)	Dissolved Selenium (μg/L)
MW-24B	18-Jul-07	а	N	5,540	6,020	5,680					12	<0.5	<500	<500	23	25	1,060	<1	60.0	11 ¹
	24-Jan-08	а	N	4,870	4,760						11	<2.5	<500	<1,000	<1,000	20	1,050	<1		
	06-Mar-08	а	N	4,510	4,110		ND	ND	ND	ND	11	<1	<500	<500	<500	15	1,030	<1		
	12-Mar-08	а	N	4,530	4,310		ND	ND	ND	ND	12	<1	<500	<2,500	<2,500	13	996	<1		
	19-Mar-08	а	N	4,690	4,470		ND	ND	ND	ND	13	<2.5	<500	<2,500		16	1,010	<1		
	26-Mar-08	а	N	4,160	4,220		ND	ND	ND	ND	12	<2.5	<500	<2,500	<2,500	14	1,020	<1		
	03-Apr-08	а	N	4,310	4,240		0.200	0.15	ND	ND			<500	<2,500		15	1,040	<1		
	17-Apr-08	а	N	4,180	4,260		0.031	0.02	ND	ND			<500	<2,500			1,120	<1		
	30-Apr-08	а	N	3,400	3,790		ND	ND	ND	ND	10.0	<0.2	<500	<500	<500	14	1,050	4.4		
	15-May-08	а	N	3,580	3,780		ND	ND	ND	ND			<500	<500			1,050	<1		
	28-May-08	а	N	3,620	3,530		0.098	0.07	ND	ND	31	<1	<500	<500	<500	<10	1,180	1.0		
	12-Jun-08	а	N	3,690	3,730		ND	ND	ND	ND			<500	<500			1,080	<1		
	26-Jun-08	а	N	3,720	3,280		0.03	0.03	ND	ND	13	<2.5	<500	<500	<500	15	995	<1		
	24-Jul-08	а	N	3,180	2,690		ND	ND	ND	ND	12	<5	<500	<500	<500	14	1,010	1.0		
	19-Aug-08	а	N	3,200	2,730		ND	ND	ND	ND	12	<1	<500	<500	<500	11	1,020	1.2		
	17-Sep-08	а	N	2,680	2,820		ND	ND	ND	ND	12	<2.5	<500	<2,500	<2,500	20	1,070	1.1		
	16-Oct-08		N	2,700	2,640		ND	ND	ND	ND	13	<2.5	<500	<2,500	<2,500	13	1,060	<1		
	16-Oct-08		FD	2,560	2,610		ND	ND	ND	ND	13	<2.5	<500	<2,500	<2,500	14	1,060	<1		
	13-Nov-08		N	2,470	2,540		ND	ND	ND	ND	13	<2.5	<500 J	<2,500	<2,500	17	1,120	2.6		
	04-Feb-09	а	N	2,480	2,210		ND	ND	ND	ND	<13 UB	<0.2	<100	246	17	18	1,300	3.1	55	<1 UJ
	14-May-09		N	2,300	2,800		ND	ND	ND	ND	10	<0.5	<100	<100	17	18	990	<0.5	63	<1
	07-Apr-10		N	2,070	2,060		ND	ND	ND	ND	8.4			112	19		1,100	<0.5	65	<1
	12-Jul-10		N	2,000	1,970		ND	ND	ND	ND	7.9			144 J	20		990	2.2 J ²	63	<5
	12-Oct-10		N	2,130	1,850		ND	ND	ND	ND	7.4			<500	19		990	<0.5	55	7.4
	17-Jan-11		N	1,940	1,690		ND	ND	ND	ND	6.8			119 J	21		960	<0.5	56	6.6
	12-Apr-11		N	1,680	1,920		ND	ND	ND	ND	7.4			<250	24		930	<0.5	53	5.28 J
	11-Jul-11		N	1,720	1,700		ND	ND	ND	ND	6.2			<50	18		930	<0.5	73	3.0
	11-Jul-11		FD	1,790	1,620						6.2			<50	19		950	<0.5	73	2.8

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Location Name	Sample Date	Not es	Sampl e Type	Hexavalent Chromium (μg/L)	Total Dissolved Chromium (µg/L)	Total Chromium (µg/L)	Fluorescein (ppb)	Fluorescein (ppb dye)	Rhodamine (ppb)	Rhodamine (ppb dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (μg/L)	Dissolved Manganese (µg/L)	Total Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)	Dissolved Molybdenum (µg/L)	Dissolved Selenium (μg/L)
MW-38S	17-Jul-07	а	N	911	920	948					11	<0.5	1,910	<500	<5	234	465	1.1	65 ¹	7.2 ¹
	23-Jan-08	а	N	899	885						11	<0.5	<500	<500	<500	<10	366	<1	71	5.5
	04-Mar-08	а	N	900	912		ND	ND	ND	ND	12	<0.5	<500	<500	<500	15	399	<1		
	11-Mar-08	а	N	948	942		ND	ND	ND	ND	11	<0.5	<500	<500	<500	13	429	<1		
	20-Mar-08	а	N	993	1,040		0.065	0.05	0.232	0.05	11	<0.5	<500	<2,500		<10	404	<1		
	26-Mar-08	а	N	958	984		ND	ND	ND	ND	11	<0.5	<500	<2,500	<2,500	<10	404	<1		
	01-Apr-08	а	N	999	852		0.109	0.08	ND	ND			<500	<500			419	<1		
	15-Apr-08	а	N	995	987		ND	ND	ND	ND			<500	<500			396	<1		
	28-Apr-08	а	N	1,020	956		0.221	0.17	ND	ND	11	<0.5	<500	<500	<500	<10	414	<1		
	13-May-08	а	N	1,000	977		ND	ND	ND	ND			<500	<500			404	<1		
	27-May-08	а	N	984	895		ND	ND	ND	ND	11	<0.5	<500	<500	<500	<10	399	<1		
	10-Jun-08	а	N	992	959		ND	ND	ND	ND			1,140	<500			410	<1		
	24-Jun-08	а	N	1,040	942		0.02	0.02	ND	ND	10	< 0.5	<500	<500	<500	<10	396	<1	66	5.3
	22-Jul-08	а	N	1,020	945		ND	ND	ND	ND	10	<0.5	<500	<500	<500	<10	390	<1	71	5.5
	20-Aug-08	а	N	1,020 J	1,020		0.02	0.02	ND	ND	9.9	< 0.5	<500	<500	<500	<10	371	<1	71	5.4
	16-Sep-08		N	987	999		ND	ND	ND	ND	9.9	< 0.5	<500	<500	<500	<10	391	<1	70	5.4
	14-Oct-08		N	1,100	1,090		ND	ND	ND	ND	9.6	0.60	<500	<500	<500	<10	383	<1	70	5.2
	11-Nov-08		N	1,050	1,000		0.17	0.13	ND	ND	10	< 0.5	566	<500	<500	46	381	<1	72	5.4
	03-Feb-09	а	N	1,140	1,080		ND	ND	ND	ND	11	<0.1	425	269	10	16	490	0.97	68	8.0 J
	12-May-09		N	1,040	912			ND		ND	9.7 J	<0.1	36,500	106	6.6	582	320	0.80	75	6.4
	03-Aug-09	а	N	949	855		ND	ND	ND	ND	9.6			<100	6.0		340	0.89 UB	65	5.9 UB
	-														<5.84 UB					6.6 J
																				6.9
	27-Oct-09 11-Jan-10	u	N N	1,040 1,030	927 974		ND ND	ND ND	ND ND	ND ND	9.3 9.3			108 121 J	<5.84 UB 5.0		310 330	0.67 0.96	67 72	

PG&E Topock Needles, California

Location Name	Sample Date	Not es	-	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Total Chromium (µg/L)	Fluorescein (ppb)	Fluorescein (ppb dye)	Rhodamine (ppb)	Rhodamine (ppb dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved Manganese (µg/L)	Total Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)	Dissolved Molybdenum (µg/L)	Dissolved Selenium (µg/L)
MW-38D	17-Jul-07	а	N	104	72.1	66.2					0.70	<2.5	<500	<500	10	20	724	<1	78 ¹	<1 ¹
	23-Jan-08	а	N	58.8	67.7						<2.5	<2.5	<500	<10,000	<10,000	<10	723	<1	76	<5
	04-Mar-08	а	N	49.8	47		ND	ND	ND	ND	0.56	<2.5	<500	<500	<500	<10	735	<1		
	11-Mar-08	а	N	50.4	53.8		ND	ND	ND	ND	0.58	<2.5	<500	<2,500	<2,500	<10	734	<1		
	20-Mar-08	а	N	49.6	50.7		ND	ND	ND	ND	<2.5	<2.5	<500	<2,500		13	724	<1		
	20-Mar-08	а	FD	51	50.9		ND	ND	ND	ND	<2.5	<2.5	<500	<2,500		12	711	<1		
	26-Mar-08	а	N	48.7	50.1		ND	ND	ND	ND	<1	<2.5	<500	<2,500	<2,500	13	723	<1		
	01-Apr-08	а	N	45.6	42.4		ND	ND	ND	ND			<500	<500			746	<1		
	01-Apr-08	а	FD	47.6	41.8		0.027	0.02	ND	ND			<500	<500			746	<1		
	15-Apr-08	а	N	43.8	45.8		ND	ND	ND	ND			<500	<500			738	<1		
	15-Apr-08	а	FD	46.1	45.8		0.047	0.04	ND	ND			<500	<500			748	<1		
	28-Apr-08	а	N	48	46.2		ND	ND	ND	ND	0.54	<0.5	<500	<2,500	<2,500	17	734	<1		
	13-May-08	а	N	53	50.1		ND	ND	ND	ND			<500	<500			743	<1		
	27-May-08	а	N	53	48.3		ND	ND	ND	ND	0.59	<5	<500	<500	<500	13	748	<1		
	10-Jun-08	а	N	50.9	47.7		0.073	0.05	ND	ND			<500	<500			741	<1		
	24-Jun-08	а	N	55.5	48.3		ND	ND	ND	ND	0.57	<0.5	<500	<500	<500	13	737	<1	78	<5
	22-Jul-08	а	N	56.3	52.3		ND	ND	ND	ND	<0.5	<5	<500	<500	<500	<10	734	<1	80	<5
	20-Aug-08	а	N	54.1	47.2		ND	ND	ND	ND	<2.5	<2.5	<500	<500	6,950	<10	721	<1		
	16-Sep-08		N	48.8	52.5		ND	ND	ND	ND	<0.5	<2.5	<500	<500	<500	<10	763	<1	76	<5
	16-Sep-08		FD	50.5	57.0		ND	ND	ND	ND	0.54	<2.5	<500	<2,500	<2,500	<10	760	<1	76	<25
	14-Oct-08		N	71.7	70.2		ND	ND	ND	ND	0.68	<2.5	<500	<2,500	<2,500	<10	672	<1	81	<25
	11-Nov-08		N	55.8	53.4		ND	ND	ND	ND	0.77	<2.5	<500	<500	<500	<10	655	<1	72	<5
	03-Feb-09	а	N	45.4	52.4		0.03	0.02	ND	ND	<0.5	<0.5	<100	<100	4.2	6.0	940	<0.5	70	<1 UJ
	12-May-09		N	44.7	44.7		ND	ND	ND	ND	<1.0	<1.0	<100	<100	4.3	5.2	780	<0.5	86	<1
	12-May-09		FD	43.0	40.6		ND	ND	ND	ND	<1.0	<1.0	<100	<100	4.1	5.0	780	<0.5	85	<1
	03-Aug-09	а	N	51.5	44.5		ND	ND	ND	ND	0.75			713 J	<5		720	<0.5	77	9.0 UB
	03-Aug-09	а	FD	52.8	56.2						<0.5			737 J	<5		710	<0.5	78	12
	27-Oct-09		N	54.9	46.1		ND	ND	ND	ND	<1			888	<3.1 UB		760	<0.5	79	<1 UJ
	11-Jan-10		N	47.5	46.6		ND	ND	ND	ND	<0.5			<500 J	<5		730	<0.5	83	<5
	11-Jan-10		FD	53.1	44.6						< 0.5			<500 J	<5		710	< 0.5	86	<5

PG&E Topock Needles, California

2011 Annual Monitoring Report for the Upland Reductive Zone In-Situ Pilot Test

Location Name	Sample Date	Not es	Sampl e Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Total Chromium (µg/L)	Fluorescein (ppb)	Fluorescein (ppb dye)	Rhodamine (ppb)	Rhodamine (ppb dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (μg/L)	Dissolved Iron (µg/L)	Dissolved Manganese (µg/L)	Total Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)	Dissolved Molybdenum (µg/L)	Dissolved Selenium (µg/L)
PTR-1	19-Jul-07	а	N	538	713	1,240					18	<0.5	6,010	<500	92	119	983	<1	52 ¹	54 ¹
	25-Jan-08	а	N	904	991						20	<0.5	2,920	<500	<500	26	742	3.8		
	06-Mar-08	а	N	356	334		445,000	333,750	ND	ND	<500	<500	<500	<2,500	<2,500	1,070	1,460	11,200		
	11-Mar-08	а	N	945	846		2,760	2,070	ND	ND	11	<5	<500	<2,500	<2,500	633	671	29,700		
	20-Mar-08	а	N	76.8	125		40,500	30,375	ND	ND	<50	<50	540	<2,500		437	440	63,400		
	27-Mar-08	а	N	<1	<5		11,600	8,700	ND	ND	<20	<20	1,660	<2,500	<2,500	867	122	122,000		
	01-Apr-08	а	N	<1	<5		16,700	12,525	ND	ND			2,160	<2,500			356	2,890		
	16-Apr-08	а	N	20.2	99.2		112	84	ND	ND			750	<2,500			386	37,200		
	28-Apr-08	а	N															208,000		
	29-Apr-08	а	N	<0.2	93.9		1,760	1,320	ND	ND	5.9	<5	<500	<500	5,350	5,890	359	205,000		
	15-May-08	а	N	<2.1	170		485	364	ND	ND			524	<500			428	2,360		
	29-May-08	а	N	<2	3.1		31.5	24	ND	ND	1.5	< 0.5	2,670	<500	708	919	520	27,900		
	12-Jun-08	а	N	<2	1.8			31.8					2,310	1,040			644	80		
	19-Jun-08	а	N															107		
	26-Jun-08	а	N	<0.2	5.2		34.6	26.0	ND	ND	5.3	6.04	718	<500	1,050	1,200	658	28.20		
	01-Jul-08		N															12		
	24-Jul-08	а	N	<1.0	49.3		39.4	29.6	ND	ND	3.5	7.44	998	<500	1,770	2,200	586	19		
	19-Aug-08	а	N	<0.2 UJ	30.9		11.1	8.33	ND	ND	2.0	0.72	5,210	<500	507	623	659	968		
	18-Sep-08		N	1.2	96.0		6.21	4.66	ND	ND	9.3	0.71	8,970	<500	<500	519	731	6.5		
	16-Oct-08		N	0.3	16.5		6.33	4.75	ND	ND	11	<1	15,400	<500	<500	322	713	3.5		
	13-Nov-08		N	0.4	16.0		16.1	12.1	ND	ND	<0.5	<0.5	7,530 J	<500	528	764 J	161	12,400		
	04-Feb-09	а	N	<0.2	<1		10.7	8.03	ND	ND	0.7	< 0.5	6,550	4,250	12,800	14,000	280	740	3.0	3.8 J

ND

<1.5 UB <0.2 18,300 J 18,100 J

4,330

4,180

210

310

1.7

<1

14-May-09

<0.2

1.1

17.9

13.4

ND

PG&E Topock Needles, California

Location Name	Sample Date	Not es	Sampl e Type	Hexavalent Chromium (μg/L)	Total Dissolved Chromium (µg/L)	Total Chromium (µg/L)	Fluorescein (ppb)	Fluorescein (ppb dye)	Rhodamine (ppb)	Rhodamine (ppb dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (μg/L)	Dissolved Iron (µg/L)	Dissolved Manganese (µg/L)	Total Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)	Dissolved Molybdenum (µg/L)	Dissolved Selenium (μg/L)
PTR-2	18-Jul-07	а	N	3,190	3,380	4,020					26	<0.5	3,720	<500	69	74	1,200	1.6	26 ¹	83 ¹
	25-Jan-08	а	N	4,240	4,310						33	<0.5	6,920	<1,000	<1,000	29	1,280	6.4		
	06-Mar-08	а	N	4,960	5,120		5,490	4,118	ND	ND	29	<1	<500	<2,500	<2,500	<10	1,220	675		
	11-Mar-08	а	N	5,120	5,150		0.290	0	0.811	0.16	30	<1	<500	<500	<500	<10	1,280	1,060		
	20-Mar-08	а	N	3,170	3,160		2,970	2,228	482,000	96,400	<250	<250	<500	<2,500		55	514	83,000		
	27-Mar-08	а	N	1,800	1,720		1,870	1,403	195,000	39,000	<500	<500	<500	<2,500	<2,500	131	<500	117,000		
	01-Apr-08	а	N	4,190	4,370		1,130	848	409	81.80			<500	<2,500			1,190	3,090		
	15-Apr-08	а	N	2,030	2,080		26.9	20	195	39.00			<500	<2,500			762	31,900		
	28-Apr-08	а	N															220,000		
	29-Apr-08	а	N	4,900	4,870		4.65	3.49	107	21.4	27	<1	<500	<500	<500	95	1,250	206,000		
	15-May-08	а	N	4,790	4,840		1.14	0.86	44.4	8.88			<500	<500			1,240	8.4		
	28-May-08	а	N	3,870	3,920		0.446	0.33	84.9	17.0	11	<1	<500	<500	<500	183	1,010	25,200		
	10-Jun-08	а	N	4,350	4,970		0.475	0.36	42.9	8.58			<500	<500			1,200	201		
	19-Jun-08		N															39		
	26-Jun-08	а	N	4,570	4,240		1.41	1.06	7.71	1.54	26	<2.5	<500	<500	<500	31	1,160	<20		
	01-Jul-08	а	N															<10		
	24-Jul-08	а	N	4,620	4,420		2.69	2.02	7.07	1.41	24	<2.5	<500	<500	<500	19	1,160	54		
	19-Aug-08	а	N	1,620 J	1,900		ND	ND	24.5	4.90	< 0.5	<1	2,370	<5,000	<5,000	80	782	29,100		
	18-Sep-08		N	719	2,070		1.16	0.87	17.2	3.44	8.9	0.83	1,110	<500	<500	145	654	47,400		
	16-Oct-08		N	3,900	3,780		1.58	1.19	1.92	0.38	20	<2.5	<500	<2,500	<2,500	49	1,180	2,690		
	13-Nov-08		N	3,900	4,220		0.14	0.11	3.02	0.60	15	5.25	<500 J	<2,500	<2,500	43 J	1,080	3.7		
	05-Feb-09	а	N	1,670	1,600		1.89	1.42	2.33	0.47	14	<0.2	594 J	167	557	534	1,300	0.56	40	23 J
	13-May-09		N	2,330	2,320		0.20	0.15	1.11	0.22	9.5	<0.5	1,200	125	379	448	1,000	0.69 J	35	5.2

PG&E Topock Needles, California

Location Name	Sample Date	Not es	Sampl e Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Total Chromium (µg/L)	Fluorescein (ppb)	Fluorescein (ppb dye)	Rhodamine (ppb)	Rhodamine (ppb dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (μg/L)	Dissolved Manganese (μg/L)	Total Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)	Dissolved Molybdenum (µg/L)	Dissolved Selenium (µg/L)
Equipment	17-Jul-07	а	EB	<0.2	<1	<1					<0.5	<0.5	<500	<500	<5	<10	<0.5	<1		
Balnks	22-Jan-08	а	EB	<0.2	<1						<0.5	<0.5	<500	<500	<500	<10	<0.5	<1		
	05-Mar-08	а	EB	<0.2	1.7		ND	ND	ND	ND	<0.5	<0.5	<500	<500	<500	<10	0.63	<1		
	11-Mar-08	а	EB	<0.2	<1		ND	ND	ND	ND	<0.5	<0.5	<500	<500	<500	<10	0.69	<1		
	18-Mar-08	а	EB	<1	<1		ND	ND	ND	ND	<0.5	<0.5	<500	<500		<10	<0.5	<1		
	25-Mar-08	а	EB	<42	3.31		0.029	0.02	ND	ND	<0.5	<0.5	<500	<500	<500	<10	<0.5	<1		
	03-Apr-08	а	EB	<0.2	<1		ND	ND	ND	ND			<500	<500		<10	<0.5	<1		
	15-Apr-08	а	EB	<0.2	<1		ND	ND	ND	ND			<500	<500			< 0.5	1.4		
	28-Apr-08	а	EB	<0.2	<1		ND	ND	ND	ND	<0.5	<0.5	<500	<500	<500	<10	<0.5	<1		
	13-May-08	а	EB	<0.2	<1		ND	ND	ND	ND			<500	<500			<0.5	<1		
	28-May-08	а	EB	<0.2	<1		ND	ND	ND	ND	<0.5	<0.5	<500	<500	<500	<10	<0.5	<1		
	10-Jun-08	а	EB	<0.2	<1								<500	<500			< 0.5	<1		
	19-Jun-08		EB															<1		
	24-Jun-08	а	EB	<0.2	<1		ND	ND	ND	ND	<0.5	<0.5	<500	<500	<500	<10	<0.5	<1		
	01-Jul-08		EB															<1		
	22-Jul-08	а	EB	<0.2	<1		ND	ND	ND	ND	< 0.5	< 0.5	<500	<500	<500	<10	< 0.5	<1		
	19-Aug-08	а	EB	<0.2																
	20-Aug-08	а	EB		<1			ND		ND	1.1	< 0.5	<500	<500	<500	<10	< 0.5	<1		
	16-Sep-08		EB	<0.2	<1			ND		ND	< 0.5	< 0.5	<500	<500	<500	<10	< 0.5	<1		
	14-Oct-08		EB	<0.2	<1			ND		ND	<0.5	< 0.5	<500	<500	<500	<10	< 0.5	<1		
	11-Nov-08		EB	<0.2	<1		ND	ND	ND	ND	< 0.5	<0.5	<500	<500	<500	<10	<0.5	<1		
	03-Feb-09		EB	<0.2	<1		ND	ND	ND	ND	<0.1	<0.1	<100	<100	<1	<1	1.1	<0.5		
	14-May-09		EB	<0.2	<1			ND		ND	0.6	<0.1	<100	<100	<1	<5	2.2	2.8	<1	<1
	03-Aug-09		EB	0.24	<1						<0.1			<100	<1		1.6	0.68	<1	<1
	29-Oct-09		EB	<0.2	<1		ND	ND	ND	ND	<0.1			<100	<1		1.2	<0.5	<1	<1
	12-Jan-10		EB	<0.2	<1		ND	ND	ND	ND	<0.1			<100	<1		1.2	<0.5	<1	<1
	08-Apr-10		EB	<0.2	<1		ND	ND	ND	ND	<0.1			<100	<1		3.4	<0.5	<1	<1
	13-Jul-10		EB	0.32	<1		ND	ND	ND	ND	<0.1			<100	<1		<1	0.62	<1	<1
	13-Oct-10		EB	<0.2	<1		ND	ND	ND	ND	<0.1			<100	<1		<1	<0.5	<1	<1
	18-Jan-11		EB	<0.2	<1		ND	ND	ND	ND	<0.1			<100	<1		<1	<0.5	<1	<1
	12-Apr-11		EB	<0.2	<1		ND	ND	ND	ND	<0.1			<50	<1		<1	<0.5	<1	<1
	11-Jul-11		EB	<0.2	<1		ND	ND	ND	ND	<0.1			<50	<1		<1	<0.5	<1	<1

PG&E Topock Needles, California

2011 Annual Monitoring Report for the Upland Reductive Zone In-Situ Pilot Test

Location Name	Sample Date	Not es	Sampl e Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Total Chromium (µg/L)	Fluorescein (ppb)	Fluorescein (ppb dye)	Rhodamine (ppb)	Rhodamine (ppb dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (µg/L)	Dissolved Iron (µg/L)	Dissolved Manganese (µg/L)	Total Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)	Dissolved Molybdenum (µg/L)	Dissolved Selenium (µg/L)
Field Blanks	17-Jul-07	а	FB	<0.2	<1	<1					<0.5	<0.5	<500	<500	<5	<10	<0.5	<1		
i leiu bialiks	22-Jan-08	а	FB	<0.2	<1						<0.5	<0.5	<500	<500	<500	<10	36.4	<1		
	05-Mar-08	а	FB	<0.2	<1		ND	ND	ND	ND	<0.5	<0.5	<500	<500	<500	<10	0.63	<1		
	11-Mar-08	а	FB	<0.2	1.15		ND	ND	ND	ND	<0.5	<0.5	<500	<500	<500	<10	< 0.5	<1		
	18-Mar-08	а	FB	<0.2	<1		ND	ND	ND	ND	<0.5	<0.5	<500	<500		<10	< 0.5	<1		
	25-Mar-08	а	FB	<0.2	<1		0.03	0.02	ND	ND	<0.5	<0.5	<500	<500	<500	<10	<0.5	<1		
	03-Apr-08	а	FB	<0.2	<1		0.043	0.03	ND	ND			<500	<500		<10	< 0.5	<1		
	15-Apr-08	а	FB	<0.2	<1		ND	ND	ND	ND			<500	<500			<0.5	<1		
	28-Apr-08	а	FB	<0.2	<1		ND	ND	ND	ND	<0.5	<0.5	<500	<500	<500	<10	<0.5	<1		
	13-May-08	а	FB	<0.2	<1		ND	ND	ND	ND			<500	<500			<0.5	<1		
	28-May-08	а	FB	<0.2			ND	ND	ND	ND	<0.5	< 0.5	<500	<500	<500	<10	<0.5	<1		
	10-Jun-08	а	FB		<1								<500	<500			< 0.5	<1		
	19-Jun-08		FB															<1		
	24-Jun-08	а	FB	<0.2	<1	1	ND	ND	ND	ND	<0.5	<0.5	<500	<500	<500	<10	<0.5	<1		
	01-Jul-08		FB															<1		
	22-Jul-08	а	FB	<0.2	<1		0.456	0.34	ND	ND	<0.5	<0.5	<500	<500	<500	<10	<0.5	<1		
	19-Aug-08	а	FB	<0.2 J	<1			0.024		ND	<0.5	< 0.5	<500	<500	<500	<10	<0.5	1.03		
	16-Sep-08		FB	<0.2	<1			ND		ND	<0.5	< 0.5	<500	<500	<500	<10	< 0.5	<1		
	14-Oct-08		FB	<0.2	<1			ND		ND	<0.5	< 0.5	<500	<500	<500	<10	< 0.5	<1		
	11-Nov-08		FB	<0.2	<1		ND	ND	ND	ND	0.52	<0.5	<500	<500	<500	<10	<0.5	<1		
	04-Feb-09		FB	<0.2	<1		0.03	0.02	ND	ND	3.3	< 0.5	<100	<100	<1	<5	<5	<0.5		
	12-May-09		FB	<0.2	<1			ND		ND	<0.1	<0.1	<100	<100	<1	<5	2.0	<0.5	<1	<1
	03-Aug-09		FB	0.24	<1						<0.1			<100	<1		1.6	<0.5	<1	1
	29-Oct-09		FB	<0.2	<1		0.04	0.03	ND	ND	<0.1			<100	<1		3.1	<0.5	<1	<1
	11-Jan-10		FB	<0.2	<1		ND	ND	ND	ND	<0.1			<100	<1		1.2	<0.5	<1	<1
	07-Apr-10		FB	<0.2	<1		ND	ND	ND	ND	<0.1			<100	<1		3.3	<0.5	<1	<1
	12-Jul-10		FB	0.27	<1		ND	ND	ND	ND	<0.1			<100	<1		<1	0.54	<1	<1
	13-Oct-10		FB	<0.2	<1		ND	ND	ND	ND	<0.1			<100	<1		<1	<0.5	<1	<1
	18-Jan-11		FB	<0.2	<1		ND	ND	ND	ND	<0.1			<100	<1		<1	<0.5	<1	<1
	12-Apr-11		FB	<0.2	<1		ND	ND	ND	ND										

11-Jul-11

FB

<0.2

<1

ND

ND

ND

ND

<0.1

<50

< 0.5

<1

<1

Table 3

Summary of Primary Analytical Parameters

PG&E Topock

Needles, California

2011 Annual Monitoring Report for the Upland Reductive Zone In-Situ Pilot Test

Location Name	Sample Date	Not es	Sampl e Type	Hexavalent Chromium (µg/L)	Total Dissolved Chromium (µg/L)	Total Chromium (µg/L)	Fluorescein (ppb)	Fluorescein (ppb dye)	Rhodamine (ppb)	Rhodamine (ppb dye)	Nitrate-N (mg/L)	Nitrite-N (mg/L)	Total Iron (μg/L)	Dissolved Iron (μg/L)		Total Manganese (µg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)		Dissolved Selenium (µg/L)	
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Notes:

Current quarter data indicated in BOLD

a Samples were diluted in the laboratory

Dissolved Samples were field filtered with a 0.45 micron filter.

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

J Reported value is estimated

N Normal

ND Non-detect

EB Equipment blank

FB Field blank

FD Field duplicate

Nitrate-N Nitrate as Nitrogen

Nitrite-N Nitrite as Nitrogen

UB The analyte was not detected, but the analyte was found in the associated blank.

UJ The analyte was not detected above reporting limit. However, the reporting limit is approximate and may be inaccurate or imprecise.

--- Not analyzed/Not available

* PTR-1 Screen: 125-160 and 175-220 ft bgs. PTR-2 Screen: 118-158 and 173-218 ft bgs.

** Sample IDs were transcribed in the field. Data here are presented with the appropriate ID.

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

Molybdenum and selenium results are Total, not Dissolved

TOC data from 3rd quarter 2010 is not used for trend evaluation due to calibration concerns in regards to the calculation method of TOC.

Table 4
Summary of Secondary Analytical Parameters

PG&E Topock

Needles, California

Location Name:	Sample Date:	Notes	Sample Type:	Dissolved Calcium µg/L	Dissolved Magnesium µg/L	Dissolved Arsenic µg/L	Total Arsenic µg/L	Dissolved Potassium µg/L	Dissolved Sodium µg/L	Alkalinity bicarbonate mg/L	Alkalinity carbonate mg/L	Chloride mg/L	Orthophosphat e mg/L	Sulfide mg/L	Fluoride mg/L
PT-7S	18-Jul-07	а	N	159,000		<5	9.7	14,500	999,000	125	<5	1,250	<0.5	<2	
	23-Jan-08	а	N	259,000	42,400	<25		13,600	942,000	135		1,060	<0.5	<2	
	06-Mar-08	а	N	147,000	30,000	<5		12,300	931,000	153		1,170	<0.5	<2	
	13-Mar-08	а	N	141,000	28,100	<25		11,900	844,000	153		1,110	<0.5	<2	
	18-Mar-08	а	N	179,000	30,100			12,900	885,000	160	<5	1,230	<0.5	<2	
	25-Mar-08	а	N	160,000	30,600	<25		12,900	903,000	153		1,240	<0.5	<2	
	02-Apr-08	а	N	163,000	34,900			13,400	982,000	135	<5			<2	
	17-Apr-08	а	N	172,000	35,400			13,900	1,010,000	140	<5			<2	
	29-Apr-08	a **	N	141,000	30,300	<5		12,800	897,000	170	<5		<0.5	<2	
	15-May-08		N	140,000	28,900			12,300	873,000	175	<5			<2	
	29-May-08	а	N	166,000	34,000	<5		13,600	1,010,000	145		1,270	<0.5	<2	
	11-Jun-08	а	N	170,000	37,000			13,600	1,110,000	128	<5			<2	
	24-Jun-08	а	N	139,000	27,100	<5		12,100	872,000	158		1,150	<0.5	<2	
	23-Jul-08	а	N	154,000	36,200	<5		13,200	96,700	173		1,310	<0.5	<2	
	21-Aug-08	а	N	221,000	42,800	5.6		15,400	1,330,000	580		1,310	<1	4.00	
	18-Sep-08		N	149,000	31,400	<5		12,900	983,000	130		1,260	<0.5	<2	
	15-Oct-08		N	151,000	33,100	12		11,900	918,000	352		1,420	<0.5	<2	
	12-Nov-08		N	158,000	33,600	8.0		13,100	1,020,000	211		1,340	<0.5	<2	
	05-Feb-09		N	153,000	40,400	5.3		14,000	1,220,000	162		1,500	<0.1	< 0.05	
	15-May-09	а	N	161,000	32,700 J	3.2		12,300	975,000	144		1,400	<0.20	< 0.05	
	04-Aug-09		N			2.1				156					1.4
	29-Oct-09		N			1.9				157					1.2
	13-Jan-10		N			3.2				158					
	08-Apr-10		N			2.9				150					
	14-Jul-10		N			2.7				144					
	14-Oct-10		N			3.0				156					
	18-Jan-11		N			2.8				145					
	14-Apr-11		N			<1				140					
	12-Jul-11		N			2.4				141					

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Location Name:	Sample		Sample	Dissolved Calcium	Dissolved Magnesium	Dissolved Arsenic	Total Arsenic	Dissolved Potassium	Dissolved Sodium	Alkalinity bicarbonate	Alkalinity carbonate	Chloride mg/L	Orthophosphat e	Sulfide mg/L	Fluoride mg/L
	Date:	Notes	Type:	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	mg/L	mg/L		mg/L		mg/L
PT-7M	19-Jul-07	а	N	419,000		<5	7.0	23,900	1,350,000	97.5	<5	1,920	<0.5	<2	
	24-Jan-08	а	N	434,000	58,100	<10		24,600	1,460,000	80.0		2,180	<0.5	<2	
	06-Mar-08	а	N	236,000	32,200	10		19,200	1,170,000	138		1,520	<0.5	<2	
	06-Mar-08	а	FD	236,000	32,500	11		19,200	1,170,000	145	<5	1,490	<0.5	<2	
	13-Mar-08	а	N	275,000	37,500	53		18,600	1,150,000	360		1,530	<0.5	<2	
	18-Mar-08	а	N	273,000	37,900			17,300	1,140,000	650	<5	1,570	<5	8.00	
	25-Mar-08	а	N	333,000	42,400	<25		18,000	1,170,000	920		1,560	<2.5	<2	
	02-Apr-08	а	N	340,000	47,500			17,200	1,210,000	1,010	<5			8.00	
	17-Apr-08	а	N	457,000	59,500			19,500	1,310,000	1,380	<5			<2	
	29-Apr-08	a**	N	503,000	62,400	16		19,400	1,220,000	1,460	<5		<10	<2	
	14-May-08		N	614,000	75,200			20,300	1,230,000	1,930	<5			<2	
	29-May-08	а	N	697,000	71,200	29		19,900	1,180,000	1,720		1,090	<10	<2	
	11-Jun-08	а	N	769,000	87,900			20,800	1,220,000	1,400	<5			<2	
	25-Jun-08	а	N	874,000	81,100	35		20,800	1,110,000	1,800		1,110	<2.5	<2	
	23-Jul-08	а	N	1,030,000	97,700	30		20,200	984,000	1,980		863	<2.5	<2	
	21-Aug-08	а	N	1,380,000	133,000	31		22,900	1,290,000	2,780		1,020	<2.5	8.00	
	18-Sep-08		N	994,000	82,600	47		20,600	1,100,000	2,160		1,080	<1	<2	
	15-Oct-08		N	849,000	80,200	47		21,200	1,090,000	2,040		1,280	<2.5	<2	
	12-Nov-08		N	225,000	52,800	55		16,800	1,020,000	1,010		1,230	<1	<2	
	15-May-09	а	N	181,000	28,000 J	19		14,000	1,050,000	1,170		1,100	<0.20	0.25	
	04-Aug-09		N			12				1,460					1.1
	29-Oct-09		N			8.6				2,180					0.78
	13-Jan-10		N			12				1,890					
	14-Jul-10		N			9.0				1,460					
	14-Oct-10		N			7.5				1,540					
	18-Jan-11		N			5.2				1,330					
	12-Apr-11		N			6.1				1,200					
	13-Jul-11		N			1.6				1,130					

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Location Name:	Sample Date:	Notes	Sample Type:	Dissolved Calcium µg/L	Dissolved Magnesium µg/L	Dissolved Arsenic µg/L	Total Arsenic µg/L	Dissolved Potassium µg/L	Dissolved Sodium µg/L	Alkalinity bicarbonate mg/L	Alkalinity carbonate mg/L	Chloride mg/L	Orthophosphat e mg/L	Sulfide mg/L	Fluoride mg/L
PT-7D	18-Jul-07	а	N	321,000		8	8.1	38,600	3,630,000	52.5	<5	5,490	<0.5	<2	
	24-Jan-08	а	N	339,000	9,350	<10		39,100	3,890,000	47.5		5,540	<1	<2	
	06-Mar-08	а	N	153,000	4,530	19		25,200	2,660,000	85.0		3,480	<0.5	<2	
	13-Mar-08	а	N	141,000	<5000	<25		23,400	2,460,000	150		3,540	<0.5	<2	
	18-Mar-08	а	N	174,000	5,650			24,100	2,620,000	280	<5	3,690	<1	10.4	
	25-Mar-08	а	N	217,000	6,970	97		25,400	2,940,000	360		3,980	<1	17.6	
	02-Apr-08	а	N	210,000	7,980			25,500	3,030,000	340	<5			6.80	
	17-Apr-08	а	N	178,000	5,700			19,800	2,340,000	840	<5			20.8	
	29-Apr-08	а	N	155,000	4,780	42		18,100	2,130,000	805	<5		<10	4.40	
	15-May-08		N	188,000	6,370			19,300	2,110,000	920	<5			5.60	
	29-May-08	а	N	215,000	6,640	28		20,400	2,280,000	1,040		2,670	<10	7.20	
	11-Jun-08	а	N	286,000	7,090			19,300	2,170,000	1,330	<5			<2	
	24-Jun-08	а	N	257,000	6,700	18		21,400	2,110,000	1,370		2,030	<10	5.60	
	23-Jul-08	а	N	400,000	11,000	23		19,800	1,940,000	1,640		1,480	<5	<2	
	21-Aug-08	а	N	472,000	14,300	33		21,200	2,270,000	2,080		1,480	<2.5	40.0	
	18-Sep-08		N	433,000	11,400	23		21,600	198,000	1,960		1,460	<1	<2	
	15-Oct-08		N	320,000	11,000	32		20,300	1,780,000	1,490		1,650	<1	6.40	
	12-Nov-08		N	236,000	10,700	47		20,000	1,700,000	1,380		1,560	<2.5	26.0	
	15-May-09	а	N	96,900	8,630 J	<0.5		18,300	3,150,000	922		4,400	<0.50	1.6	
	04-Aug-09		N			24				2,190					2.1
	28-Oct-09		N			<0.5				1,000					1.7
	13-Jan-10		N			<0.5				896					
	08-Apr-10		N			<0.5				870					
	14-Jul-10		N			<0.5				966					
	14-Oct-10		N			2.5				1,060					
	18-Jan-11		N			<0.5				890					
	12-Apr-11		N			5.5				940					
	13-Jul-11		N			4.8				830					

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Location Name:	Sample Date:	Notes	Sample Type:	Dissolved Calcium µg/L	Dissolved Magnesium µg/L	Dissolved Arsenic µg/L	Total Arsenic µg/L	Dissolved Potassium µg/L	Dissolved Sodium µg/L	Alkalinity bicarbonate mg/L	Alkalinity carbonate mg/L	Chloride mg/L	Orthophosphat e mg/L	Sulfide mg/L	Fluoride mg/L
PT-8S	16-Jul-07	а	N	132,000		<5	5.1	12,500	955,000	125	<5	1,190	<0.5	<2	
	23-Jan-08	а	N	141,000	30,000	<25		12,600	1,040,000	128		1,220	<0.5	2.00	
	05-Mar-08	а	N	120,000	26,000	<5		11,400	1,060,000	158		1,100	<0.5	<2	
	13-Mar-08	а	N	114,000	23,900	<25		11,100	934,000	215		1,110	<0.5	<2	
	18-Mar-08	а	N	97,500	21,500			10,600	894,000	225	<5	1,010	<0.5	<2	
	25-Mar-08	а	N	101,000	21,300	<25		10,600	876,000	230		1,070	<0.5	<2	
	02-Apr-08	а	N	110,000	25,200			11,400	965,000	200	<5			<2	
	16-Apr-08	а	N	125,000	26,700			11,700	1,010,000	205	<5			<2	
	29-Apr-08	а	N	160,000	35,500	10		13,000	1,130,000	283	<5		<0.5	<2	
	14-May-08		N	148,000	34,100			12,300	1,140,000	323	<5			<2	
	28-May-08	а	N	155,000	33,300	26		11,200	1,220,000	550		1,760	<0.5	2.00	
	28-May-08	а	FD	155,000	33,500	26		11,300	1,210,000	520		1,770	<0.5	<2	
	11-Jun-08	а	N	402,000	72,100			15,600	1,840,000	950	<5			<2	
	25-Jun-08	а	N	502,000	77,100	19		17,400	1,940,000	1,370		2,440	<1	<2	
	23-Jul-08	а	N	459,000	84,800	21		16,200	1,910,000	1,150		2,660	<5	<2	
	20-Aug-08	а	N	358,000	62,500	28		14,500	1,780,000	1,000		2,640	<1	40.0	
	17-Sep-08		N	264,000	58,600	31		14,500	1,750,000	830		2,580	<1	<2	
	15-Oct-08		N	251,000	57,500	27		13,900	1,700,000	1,180		2,550	<1	<2	
	12-Nov-08		N	212,000	49,200	44		14,200	1,740,000	914		2,510	<1	2.00	
	04-Feb-09	а	N	178,000	48,700 J	18		11,700	1,300,000	754		2,400	<0.50	< 0.050	
	13-May-09	а	N	321,000	67,000	14		10,800	1,150,000	624		1,800	<0.20	0.30	
	04-Aug-09		N			8.7				502					2.8
	28-Oct-09		N			1.8				359					0.5
	12-Jan-10		N			9.2				418					
	07-Apr-10		N			8.6				318					
	13-Jul-10		N			7.5				244					
	13-Oct-10		N			8.0				250					
	17-Jan-11		N			11				206					
	14-Apr-11		N			10				187					
	12-Jul-11		N			9.3				182					

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Location Name:	Sample Date:	Notes	Sample Type:	Dissolved Calcium µg/L	Dissolved Magnesium µg/L	Dissolved Arsenic µg/L	Total Arsenic µg/L	Dissolved Potassium µg/L	Dissolved Sodium µg/L	Alkalinity bicarbonate mg/L	Alkalinity carbonate mg/L	Chloride mg/L	Orthophosphat e mg/L	Sulfide mg/L	Fluoride mg/L
PT-8M	18-Jul-07	а	N	353,000		<5	1.5	22,200	1,130,000	103	<5	1,510	<2.5	<2	
	23-Jan-08	а	N	403,000	41,800	<25		24,100	1,230,000	100		1,700	<0.5	4.00	
	05-Mar-08	а	N	422,000	42,200	<5		24,000	1,350,000	108		1,650	<0.5	<2	
	13-Mar-08	а	N	364,000	44,100	<25		22,300	1,130,000	120		1,400	<0.5	<2	
	19-Mar-08	а	N	362,000	43,000			22,400	1,120,000	123	<5	1,400	<0.5	<2	
	25-Mar-08	а	N	376,000	41,500	<25		22,200	1,110,000	130		1,570	<0.5	4.00	
	02-Apr-08	а	N	367,000	45,400			22,900	1,160,000	130	<5			<2	
	16-Apr-08	а	N	392,000	45,100			23,200	1,190,000	125	<5			<2	
	29-Apr-08	а	N	356,000	43,900	<5		22,000	1,070,000	145	<5		<1	<2	
	14-May-08		N	350,000	42,900			21,800	1,040,000	135	<5			<2	
	28-May-08	а	N	321,000	6,750	7.0		34,000	3,200,000	50		4,820	<1	<2	
	11-Jun-08	а	N	381,000	48,900			21,400	1,160,000	110	<5			<2	
	25-Jun-08	а	N	362,000	42,600	<5		21,200	1,040,000	113		1,360	<0.5	<2	
	25-Jun-08	а	FD	366,000	42,600	<5		20,900	1,050,000	108		1,390	<1	<2	
	23-Jul-08	а	N	356,000	49,300	<5		20,100	1,020,000	115		1,300	<1	<2	
	20-Aug-08	а	N	364,000	43,900	<5		20,000	1,050,000	155		1,510	<0.5	80.0	
	17-Sep-08		N	371,000	47,400	<5		21,800	1,120,000	180		1,650	<0.5	<2	
	15-Oct-08		N	357,000	45,000	<5		20,400	978,000	168		1,480	<1	<2	
	12-Nov-08		N	338,000	44,500	<5		20,400	990,000	258		1,400	<0.5	<2	
	04-Feb-09	а	N	366,000	51,700 J	6.3		21,100	1,180,000	314		2,000	<0.50	<0.050	
	13-May-09	а	N	599,000	71,000	2.1		19,600	1,040,000	360		1,700	<0.20	< 0.050	
	04-Aug-09		N			0.7				382					0.62
	28-Oct-09		N			8.3				447					2.7
	12-Jan-10		N			1.9				414					
	07-Apr-10		N			1.7				434					
	13-Jul-10		N			1.2				430					
	13-Oct-10		N			0.9				420					
	17-Jan-11		N			1.4				316					
	14-Apr-11		N			1.2				378					
	14-Apr-11		FD			1.7				376					
	12-Jul-11		N			1.5				343					

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Location				Dissolved	Dissolved	Dissolved	Total	Dissolved	Dissolved	Alkalinity	Alkalinity	Chloride	Orthophosphat	Sulfide	Fluoride
Name:	Sample Date:	Notes	Sample Type:	Calcium	Magnesium	Arsenic	Arsenic	Potassium	Sodium	bicarbonate	carbonate	mg/L	e "	mg/L	mg/L
PT-8D				µg/L	μg/L 	μ g/L 7.1	μ g/L 9.0	µg/L	µg/L	mg/L	mg/L <5	5 200	mg/L <0.5		
P1-8D	16-Jul-07	а	N	281,000	11,800	<50		35,100 35,200	3,300,000 3,420,000	45.0 50.0		5,360 5,190	<0.5 <1	<2 <2	
	23-Jan-08	а	N	325,000	•										
	05-Mar-08	а	N	322,000	10,000	<25		37,700	3,850,000	50.0		5,240	<0.5	<2	
	13-Mar-08	а	N	284,000	9,560	<25		32,900	3,340,000	55.0		5,090	<2.5	<2	
	18-Mar-08	а	N	292,000	9,470			33,900	3,480,000	48.0	<5	5,480	<2.5	<2	
	25-Mar-08	а	N	306,000	10,200	<25		34,300	3,550,000	50.0		5,010	<0.5	<2	
	02-Apr-08	а	N	298,000	10,700			33,800	3,550,000	52.5	<5 -			<2	
	16-Apr-08	а	N	312,000	9,020			36,000	3,840,000	50.0	<5 -			<2	
	29-Apr-08	а	N	292,000	9,830	7.7		33,500	3,290,000	60.0	<5		<1	<2	
	14-May-08		N	281,000	13,300			32,000	2,820,000	87.5	<5			<2	
	28-May-08	а	N	267,000	9,020	6.8		32,100	3,050,000	57.5		4,530	<1	<2	
	11-Jun-08	а	N	288,000	11,100			32,200	3,390,000	55.0	<5			<2	
	25-Jun-08	а	N	280,000	12,100	12		30,600	2,960,000	143		4,200	<0.5	<2	
	23-Jul-08	а	N	264,000	11,000	8.9		30,700	3,080,000	60.0		4,390	<1	<2	
	20-Aug-08	а	N	284,000	10,500	7.2		31,400	3,220,000	46.3		4,870	<1	40.0	
	17-Sep-08		N	286,000	10,000	<25		34,000	3,250,000	47.5		4,730	<1	<2	
	15-Oct-08		N	333,000	24,200	<25		31,300	2,530,000	197		4,140	<0.5	<2	
	12-Nov-08		N	312,000	17,400	<25		33,600	3,020,000	85.9		4,250	<0.5	<2	
	04-Feb-09	а	N	332,000	14,400 J	<3.39 UB		32,900	2,780,000	56.0		5,200	<1.0	0.50	
	04-Feb-09	а	FD	327,000	13,400 J	<0.5		32,400	2,890,000	55.0		5,400	1.4	0.50	
	13-May-09	а	N	656,000	17,700	<0.5		34,100	3,090,000	50.0		5,400	<0.50	0.10	
	04-Aug-09		N			<0.5				60.0					3.6
	28-Oct-09		N			<0.5				50.0					3.2
	28-Oct-09		FD			<0.5				48.0					3.3
	12-Jan-10		N			7.0				48.0					
	07-Apr-10		N			<0.5				42.0					
	07-Apr-10		FD			<0.5				44.0					
	13-Jul-10		N			<0.5				46.0					
	13-Oct-10		N			6.5				48.0					
	17-Jan-11		N			<0.5				49.0					
	14-Apr-11		N			6.7				39.0					
	12-Jul-11		N			5.0				45.6					

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Location Name:	Sample Date:	Notes	Sample Type:	Dissolved Calcium µg/L	Dissolved Magnesium µg/L	Dissolved Arsenic µg/L	Total Arsenic µg/L	Dissolved Potassium µg/L	Dissolved Sodium µg/L	Alkalinity bicarbonate mg/L	Alkalinity carbonate mg/L	Chloride mg/L	Orthophosphat e mg/L	Sulfide mg/L	Fluoride mg/L
PT-9S	17-Jul-07	а	N	108,000		<5	5.4	11,800	820,000	155	<5	895	<0.5	<2	
	22-Jan-08	а	N	107,000	21,100	5.6		9,140	848,000	205		924	<0.5	<2	
	05-Mar-08	а	N	120,000	24,500	5.2		9,990	962,000	168		977	<0.5	<2	
	12-Mar-08	а	N	87,500	17,800	5.5		8,270	836,000	190		916	<0.5	<2	
	19-Mar-08	а	N	115,000	23,100			9,930	884,000	163	<5	889	<0.5	<2	
	26-Mar-08	а	N	116,000	23,000	<25		9,370	843,000	175		977	<0.5	<2	
	02-Apr-08	а	N	118,000	25,100			9,570	871,000	178	<5			<2	
	16-Apr-08	а	N	126,000	25,100			9,980	891,000	170	<5			<2	
	29-Apr-08	а	N	113,000	24,900	5.3		9,590	837,000	185	<5		<0.5	<2	
	14-May-08		N	101,000	21,000			8,940	821,000	168	<5			<2	
	28-May-08	а	N	111,000	22,000	<5		9,420	825,000	158		917	<0.5	<2	
	11-Jun-08	а	N	107,000	23,500			9,150	867,000	160	<5			<2	
	25-Jun-08	а	N	102,000	20,000	<5		8,910	820,000	163		908	<0.5	<2	
	24-Jul-08	а	N	105,000	22,600	5.1		9,070	855,000	165		890	<0.5	<2	
	20-Aug-08	а	N	99,200	21,100	5.1		9,050	844,000	160		922	<0.5	320	
	17-Sep-08		N	114,000	23,500	<5		9,930	920,000	155		989	<0.5	<2	
	15-Oct-08		N	103,000	21,400	5.2		9,180	849,000	188		1,090	<0.5	<2	
	12-Nov-08		N	127,000	27,100	13		9,840	993,000	427		1,290	<0.5	<2	
	05-Feb-09	а	N	141,000	33,500	15		10,100	1,070,000	316		1,400	<0.1	0.20	
	14-May-09	а	N	151,000	31,100 J	9.8		10,300	955,000	476		1,200	<0.20	< 0.050	
	05-Aug-09		N			9.8				490					3.0
	29-Oct-09		N			8.9				565					3.1
	12-Jan-10		N			8.9				420					
	08-Apr-10		N			7.9				352					
	13-Jul-10		N			11				237					
	13-Oct-10		N			8.3				252					
	18-Jan-11		N			12				254					
	14-Apr-11		N			6.8				208					
	12-Jul-11		N			11				185					

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Location Name:	Sample Date:	Notes	Sample Type:	Dissolved Calcium µg/L	Dissolved Magnesium µg/L	Dissolved Arsenic µg/L	Total Arsenic µg/L	Dissolved Potassium µg/L	Dissolved Sodium µg/L	Alkalinity bicarbonate mg/L	Alkalinity carbonate mg/L	Chloride mg/L	Orthophosphat e mg/L	Sulfide mg/L	Fluoride mg/L
PT-9M	17-Jul-07	а	N	485,000		<5	1.4	30,200	1,030,000	97.5	<5	1,400	<0.5	<2	
	17-Jul-07	а	FD	476,000		<5	1.4	29,800	1,020,000	100	<5	1,400	<0.5	<2	
	22-Jan-08	а	N	525,000	22,700	<5		29,800	1,140,000	97.5		1,640	<0.5	<2	
	05-Mar-08	а	N	553,000	25,100	<5		32,100	1,220,000	100		1,650	<0.5	<2	
	12-Mar-08	а	N	483,000	22,800	<5		30,700	1,140,000	113		1,520	<0.5	<2	
	19-Mar-08	а	N	517,000	26,400			32,100	1,190,000	97.5	<5	1,510	<0.5	<2	
	26-Mar-08	а	N	526,000	26,200	<25		31,900	1,160,000	100		1,610	<0.5	<2	
	26-Mar-08	а	FD	543,000	26,400	<25		33,200	1,190,000	103		1,600	<0.5	<2	
	02-Apr-08	а	N	513,000	27,700			31,800	1,150,000	105	<5			<2	
	16-Apr-08	а	N	556,000	28,000			32,900	1,220,000	105	<5			<2	
	29-Apr-08	а	N	475,000	23,900	<5		30,900	1,100,000	120	<5		<1	<2	
	14-May-08		N	496,000	26,100			33,500	1,130,000	120	<5			<2	
	28-May-08	а	N	479,000	22,800	<5		29,800	1,070,000	108		1,530	<0.5	<2	
	11-Jun-08	а	N	492,000	25,900			31,200	1,150,000	97.5	<5			<2	
	25-Jun-08	а	N	452,000	21,800	<5		29,900	1,090,000	103		1,380	<1	<2	
	24-Jul-08	а	N	426,000	22,700	<5		26,600	1,050,000	108		1,240	<0.5	<2	
	20-Aug-08	а	N	488,000	23,500	<5		28,900	1,100,000	97.5		1,530	<0.5	40.0	
	17-Sep-08		N	504,000	26,100	<25		32,300	1,110,000	92.5		1,660	<0.5	<2	
	15-Oct-08		N	431,000	22,300	<5		27,600	1,010,000	105		1,450	<1	<2	
	12-Nov-08		N	468,000	24,700	<25		30,700	1,090,000	100		1,420	<0.5	<2	
	05-Feb-09	а	N	507,000	32,300	11		30,400	1,310,000	114		2,000	<0.2	< 0.05	
	14-May-09	а	N	571,000	23,200 J	3.7		30,800	1,080,000	86.0		1,800	<0.20	< 0.050	
	05-Aug-09		N			0.93				92.0					0.92
	29-Oct-09		N			3.7				93.0					0.81
	12-Jan-10		N			<2.5				96.0					
	08-Apr-10		N			2.9				88.0					
	13-Jul-10		N			5.6				88.0					
	13-Oct-10		N			1.8				94.0					
	18-Jan-11		N			2.0				90.0					
	14-Apr-11		N			<1				92.0					
	12-Jul-11		N			<1				91.0					

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Location	Sample		Sample	Dissolved Calcium	Dissolved Magnesium	Dissolved Arsenic	Total Arsenic	Dissolved Potassium	Dissolved Sodium	Alkalinity bicarbonate	Alkalinity carbonate	Chloride	Orthophosphat e	Sulfide	Fluoride
Name:	Date:	Notes	Type:	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
PT-9D	17-Jul-07	а	N	368,000		6.3	6.1	34,200	2,840,000	52.5	<5	4,350	<1	<2	
	22-Jan-08	а	N	399,000	8,380	<50		35,500	3,230,000	50.0		4,790	<1	<2	
	22-Jan-08	а	FD	404,000	9,160	<50		35,400	3,260,000	55.0		4,940	<1	<2	
	05-Mar-08	а	N	438,000	9,240	<25		37,000	3,540,000	41.0		4,890	<0.5	<2	
	12-Mar-08	а	N	407,000	10,100	<25		35,000	3,210,000	52.5		4,920	<2.5	<2	
	19-Mar-08	а	N	432,000	10,400			36,800	3,320,000	42.0	<5	4,650	<1	<2	
	26-Mar-08	а	N	436,000	10,100	<25		36,700	3,300,000	52.5		4,810	<1	12.0	
	02-Apr-08	а	N	419,000	10,400			36,000	3,320,000	50.0	<5			<2	
	16-Apr-08	а	N	445,000	10,300			36,600	3,440,000	55.0	<5			<2	
	29-Apr-08	а	N	431,000	11,900	7.3		35,500	2,940,000	57.5	<5		<5	<2	
	14-May-08		N	408,000	12,400			35,800	2,750,000	65.0	<5			<2	
	28-May-08	а	N	421,000	11,200	6.8		35,100	2,800,000	55		4,320	<1	<2	
	11-Jun-08	а	N	460,000	12,800			37,300	3,270,000	47.5	<5			<2	
	11-Jun-08	а	FD	466,000	13,200			37,100	3,340,000	47.5	<5			<2	
	25-Jun-08	а	N	439,000	12,500	7.4		35,000	2,830,000	52.5		4,050	<1	<2	
	24-Jul-08	а	N	452,000	15,200	6.5		33,600	2,910,000	53.8		4,090	<2.5	8.00	
	20-Aug-08	а	N	451,000	11,900	7.3		36,700	3,250,000	47.5		4,810	<2.5	40.0	
	20-Aug-08	а	FD	451,000	12,000	7.2		36,200	3,280,000	47.5		4,820	<2.5	160	
	17-Sep-08		N	431,000	11,200	<25		36,900	3,250,000	47.5		4,880	<2.5	<2	
	15-Oct-08		N	458,000	18,400	<25		36,300	2,640,000	55.5		3,990	<1	<2	
	12-Nov-08		N	523,000	17,000	<25		40,300	3,110,000	47.9		4,680	<2.5	<2	
	05-Feb-09	а	N	441,000	13,700	12		36,700	3,560,000	44.0		5,700	<0.5	< 0.05	
	15-May-09	а	N	455,000	7,880 J	<0.5		24,800	3,160,000	52.0		5,200	<0.50	<0.050	
	05-Aug-09		N			<0.5				49.0					3.4
	28-Oct-09		N			<0.5				47.0					3.6
	12-Jan-10		N			10.2				48.0					
	08-Apr-10		N			<0.5				48.0					
	13-Jul-10		N			<0.5				48.0					
	13-Oct-10		N			7.9				52.0					
	13-Oct-10		FD			9.7				54.0					
	18-Jan-11		N			3.1				46.0					
	14-Apr-11		N			8.5				47.0					
	12-Jul-11		N			6.4				49.0					

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Location Name:	Sample Date:	Notes	Sample Type:	Dissolved Calcium µg/L	Dissolved Magnesium µg/L	Dissolved Arsenic µg/L	Total Arsenic µg/L	Dissolved Potassium µg/L	Dissolved Sodium µg/L	Alkalinity bicarbonate mg/L	Alkalinity carbonate mg/L	Chloride mg/L	Orthophosphat e mg/L	Sulfide mg/L	Fluoride mg/L
MW-11	17-Jul-07	а	N	125,000		<5	1.5	8,330	280,000	87.5	<5	470	<0.5	<2	
	24-Jan-08	а	N	122,000	16,100	<5		8,160	280,000	103		442	<0.5	<2	
	04-Mar-08	а	N	123,000	17,700	<5		8,300	302,000	92.5		434	<0.5	<2	
	11-Mar-08	а	N	116,000	16,100	<5		7,990	278,000	110		439	<0.5	<2	
	11-Mar-08	а	FD	120,000	16,700	<5		8,160	296,000	105		453	<0.5	<2	
	19-Mar-08	а	N	125,000	17,400			8,800	302,000	103	<5	427	<0.5	<2	
	27-Mar-08	а	N	124,000	15,900	<5		8,480	295,000	110		467	<0.5	<2	
	01-Apr-08		N	118,000	15,800			8,340	283,000	103	<5			<2	
	15-Apr-08		N	122,000	16,400			8,260	299,000	108	<5			4.00	
	28-Apr-08		N	116,000	16,100	<5		8,230	276,000	140	<5		<0.5	<2	
	13-May-08		N	120,000	16,800			8,290	289,000	113	<5			2.40	
	27-May-08	а	N	117,000	16,100	<5		8,220	272,000	100		466	<0.5	<2	
	10-Jun-08		N	119,000	17,600			8,230	282,000	90.0	<5			<2	
	24-Jun-08	а	N	120,000	16,700	<5		8,560	284,000	90.0		477	<0.5	<2	
	22-Jul-08	а	N	114,000	17,900	<5		8,120	275,000	92.5		473	<0.5	<2	
	21-Aug-08	а	N	116,000	19,000	<5		8,450	300,000	92.5		465	<0.5	<2	
	16-Sep-08		N	114,000	16,500	<5		8,360	268,000	87.5		474	<0.5	<2	
	14-Oct-08		N	120,000	16,300	<5		8,140	278,000	94.3		459	<0.5	<2	
	11-Nov-08		N	116,000	15,100	<5		8,210	280,000	91.5		551	<0.5	<2	
	03-Feb-09	а	N	113,000	16,600	<2.64 UB		7,790	277,000	96.0		510	<0.10	< 0.050	
	14-May-09	а	N	116,000	17,500 J	2.2		7,690	296,000	90.0		520	<0.10	< 0.050	
	06-Apr-10		N			1.8				90.0					
	12-Jul-10		N			2.3 J				98.0					
	12-Oct-10		N			1.9				90.0					
	17-Jan-11		N			2.4				93.0					
	17-Jan-11		FD			2.4				93.0					
	12-Apr-11		N			2.0				92.0					
	11-Jul-11		N			2.0				101.0					

Table 4
Summary of Secondary Analytical Parameters

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Location	Sample		Sample	Dissolved	Dissolved	Dissolved	Total	Dissolved	Dissolved	Alkalinity	Alkalinity	Chloride	Orthophosphat	Sulfide	Fluoride
Name:	Date:	Notes	Type:	Calcium µg/L	Magnesium µg/L	Arsenic µg/L	Arsenic µg/L	Potassium µg/L	Sodium µg/L	bicarbonate mg/L	carbonate mg/L	mg/L	e mg/L	mg/L	mg/L
MW-24A	18-Jul-07	а	N	42,000	μg/L 	<u>μ</u> αμην. 5.4	5.6	5,610	565,000	310		410	<0.5	<2	
	24-Jan-08	а	N	46,300	8,660	5.1		5,860	585,000	365		452	<0.5	<2	
	06-Mar-08	а	N	367,000	46,000	8.0		19,900	1,840,000	118		2,450	<5	<2	
	12-Mar-08	а	N	387,000	39,900	<25		22,700	1,680,000	198		2,680	<10	<2	
	19-Mar-08	а	N	407,000	46,200			21,200	1,710,000	423	<5	2,370	<2.5	<2	
	26-Mar-08	а	N	491,000	50,500	83		18,900	1,690,000	970		2,380	<5	4.80	
	01-Apr-08	а	N	423,000	47,700			18,100	1,620,000	1,020	<5			<2	
	17-Apr-08	а	N	517,000	43,400			23,100	2,030,000	1,110	<5			10.4	
	30-Apr-08	а	N	432,000	37,200	72		24,700	1,860,000	590	<5		<5	<2	
	30-Apr-08	а	FD	437,000	35,800	70		23,700	1,860,000	570	<5		<5	<2	
	15-May-08		N	494,000	59,900			24,000	1,750,000	450	<5			<2	
	15-May-08		FD	502,000	59,100			24,800	1,780,000	480	<5			<2	
	27-May-08	а	N	493,000	42,200	9.8		24,300	1,870,000	880		2,790	<1	11.2	
	12-Jun-08	а	N	521,000	45,900			25,300	1,960,000	970	<5			4.00	
	26-Jun-08	а	N	398,000	29,700	24		23,700	1,920,000	153		2,780	<0.5	<2	
	24-Jul-08	а	N	384,000	27,800	25		24,000	1,980,000	115		2,730	<1	6.40	
	24-Jul-08	а	FD	397,000	28,300	26		24,300	2,020,000	118		2,670	<1	<2	
	19-Aug-08	а	N	376,000	34,500	21		22,400	1,800,000	288		2,690	<1	2.00	
	16-Sep-08		N	355,000	29,100	8.1		23,100	1,930,000	670		2,720	<1	117	
	16-Oct-08		N	353,000	30,400	26		24,300	1,940,000	353		2,870	<0.5	22.0	
	13-Nov-08		N	348,000	26,500	<25.0		26,500	1,980,000	340		2,800	<0.5	102	
	13-Nov-08		FD	349,000	27,400	<25		26,000	2,010,000	310		2,800	<2.5	94.4	
	03-Feb-09	а	N	322,000	28,500	11		24,700	2,140,000	334		3,400	<0.50	8.1	
	14-May-09	а	N	302,000	23,200 J	12		19,800	1,880,000	330		2,600	<0.50	2.5	
	03-Aug-09		N			7.5				504					2.3
	27-Oct-09		N			3.2				576					3.1
	11-Jan-10		N			2.0				563					
	07-Apr-10		N			1.5				464					
	12-Jul-10		N			0.70 J				426					
	12-Jul-10		FD			1.0 J				422					
	12-Oct-10		N			0.81				400					
	17-Jan-11		N			0.96				469					
	12-Apr-11		N			<1				320					
	11-Jul-11		N			<1				518					

Table 4
Summary of Secondary Analytical Parameters

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	1		1	Dissolved	Dissolved	Dissolved	Total	Dissolved	Dissolved	Alkalinity	Alkalinity		Orthophosphat		
Location	Sample		Sample	Calcium	Magnesium	Arsenic	Arsenic	Potassium	Sodium	bicarbonate	carbonate	Chloride	e	Sulfide	Fluoride
Name:	Date:	Notes	Type:	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-24B	18-Jul-07	а	N	329,000		7.1	7.1	34,500	3,270,000	50.0	<5	4,820	<0.5	<2	
	24-Jan-08	а	N	341,000	8,050	<10		36,400	3,470,000	50.0		5,270	<1	2.00	
	06-Mar-08	а	N	338,000	7,970	8.8		37,200	3,430,000	42.0		5,160	<1	<2	
	12-Mar-08	а	N	332,000	7,610	<25		34,800	3,290,000	52.5		5,870	<1	<2	
	19-Mar-08	а	N	351,000	8,410			37,100	3,650,000	44.0	<5	5,120	<0.5	<2	
	26-Mar-08	а	N	358,000	8,240	<25		37,200	3,580,000	42.0		5,150	<0.5	<2	
	03-Apr-08	а	N	345,000	8,130			36,200	3,470,000	44.0	<5			3.20	
	17-Apr-08	а	N	345,000	8,280			36,700	3,530,000	50.0	<5			<2	
	30-Apr-08	а	N	304,000	7,020	6.8		68,200	3,420,000	57.5	<5		<1	<2	
	15-May-08		N	338,000	8,130			37,100	3,350,000	55.0	<5			<2	
	28-May-08	а	N	360,000	38,900	<5		20,800	1,050,000	118		1,420	<1	<2	
	12-Jun-08	а	N	336,000	7,570			34,800	3,340,000	45.0	<5			<2	
	26-Jun-08	а	N	326,000	6,960	8.3		35,400	3,300,000	46.3		4,950	<1	<2	
	24-Jul-08	а	N	323,400	7,730	7.4		33,000	3,420,000	46.3		4,860	<2.5	3.20	
	19-Aug-08	а	N	296,000	7,150	7.6		31,900	3,210,000	46.3		4,910	<1	2.00	
	17-Sep-08		N	308,000	7,770	<25		34,900	3,260,000	45.0		4,950	<0.5	<2	
	16-Oct-08		N	307,000	7,990	<25		34,700	3,130,000	47.6		4,870	<0.5	<2	
	16-Oct-08		FD	310,000	7,880	<25		34,700	3,190,000	47.8		4,880	<0.5	<2	
	13-Nov-08		N	302,000	7,600	<25		35,000	3,380,000	46		5,260	<0.5	<2	
	04-Feb-09	а	N	310,000	7,200 J	<3.59 UB		34,100	3,060,000	48.0		4,000	1	< 0.050	
	14-May-09	а	N	333,000	6,990 J	<0.5		23,900	3,190,000	42.0		5,100	<0.50	<0.050	
	07-Apr-10		N			<0.5				42.0					
	12-Jul-10		N			<0.5 UJ				40.0					
	12-Oct-10		N			5.5				41.0					
	17-Jan-11		N			<0.5				49.0					
	12-Apr-11		N			9.1				38.0					
	11-Jul-11		N			4.9				40.0					
	11-Jul-11		FD			6.5				39.6					

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Location Name:	Sample Date:	Notes	Sample Type:	Dissolved Calcium µg/L	Dissolved Magnesium µg/L	Dissolved Arsenic µg/L	Total Arsenic µg/L	Dissolved Potassium µg/L	Dissolved Sodium µg/L	Alkalinity bicarbonate mg/L	Alkalinity carbonate mg/L	Chloride mg/L	Orthophosphat e mg/L	Sulfide mg/L	Fluoride mg/L
MW-38S	17-Jul-07	а	N	84,200		<5	6.1	8,710	627,000	175	<5	680	<0.5	<2	
	23-Jan-08	а	N	63,900	12,200	<5		7,400	546,000	175		546	<0.5	<2	
	04-Mar-08	а	N	67,600	13,300	<5		7,910	607,000	185		534	<0.5	<2	
	11-Mar-08	а	N	66,100	13,300	<5		7,920	586,000	175		571	<0.5	<2	
	20-Mar-08	а	N	70,900	13,400			8,190	593,000	200	200		<0.5	<2	
	26-Mar-08	а	N	71,000	13,500	<25		8,160	583,000	183		583	<0.5	<2	
	01-Apr-08	а	N	60,500	11,600			7,010	57,500	290	<5			<2	
	15-Apr-08	а	N	67,100	13,000			7,710	590,000	190	<5			<2	
	28-Apr-08	а	N	67,000	13,000	<5		8,030	575,000	200	<5		<0.5	<2	
	13-May-08		N	63,400	12,700			7,780	571,000	185	<5			<2	
	27-May-08	а	N	62,600	12,200	<5		7,420	540,000	193		551	<0.5	<2	
	10-Jun-08	а	N	63,000	12,400			7,670	620,000	180	<5			<2	
	24-Jun-08	а	N	65,700	12,200	<5		7,690	570,000	185		533	<0.5	<2	
	22-Jul-08	а	N	59,700	12,600	<5		7,270	534,000	183		523	<0.5	<2	
	20-Aug-08	а	N	56,400	11,200	<5		7,160	540,000	175		487	<0.5	160	
	16-Sep-08		N	54,200	10,900	<5		7,150	560,000	160		496	<0.5	<2	
	14-Oct-08		N	53,700	10,400	<5		6,840	535,000	189		467	<0.5	<2	
	11-Nov-08		N	53,000	9,220	<5		6,930	516,000	182		471	<0.5	<2	
	03-Feb-09	а	N	58,400	9,600	<5.9 UB		8,570	488,000	187		530	<0.10	<0.050	
	12-May-09	а	N	66,700	7,510	5.8		10,700	412,000	208		390	<0.10	0.050	
	03-Aug-09		N			5.6				178					5.8
	27-Oct-09		N			5.1				228					6.0
	11-Jan-10		N			5.6				192					

Table 4
Summary of Secondary Analytical Parameters

PG&E Topock

Needles, California

Location Name:	Sample Date:	Notes	Sample Type:	Dissolved Calcium µg/L	Dissolved Magnesium	Dissolved Arsenic	Total Arsenic	Dissolved Potassium	Dissolved Sodium µg/L	Alkalinity bicarbonate	Alkalinity carbonate	Chloride mg/L	Orthophosphat e mg/L	Sulfide mg/L	Fluoride mg/L
MW-38D	17-Jul-07	a	N	352,000	μg/L 	μ g/L 7.9	μ g/L 7.5	μg/L 45,600	μg/L 4,710,000	mg/L 35.0	mg/L <5	7,240	mg/L <0.5	<2	
	23-Jan-08	а	N	353,000	<20000	<100		43,100	4,560,000	40.0		7,690	<2.5	<2	
	04-Mar-08	а	N	343,000	7,150	8.6		44,500	5,070,000	31.0		7,390	<0.5	<2	
	11-Mar-08	a	N	363,000	7,580	<25		47,000	4,970,000	32.0		7,710	<0.5	<2	
	20-Mar-08	а	N	361,000	7,720			44,900	5,020,000	32.0	32.0		<2.5	<2	
	20-Mar-08	а	FD	359,000	7,720			45,100	4,920,000	33.0	33.0		<2.5	<2	
	26-Mar-08	а	N	362,000	7,580	<25		44,700	4,940,000	31.0		7,830	<1	<2	
	01-Apr-08	а	N	353,000	7,040			46,100	4,870,000	31.0	<5			<2	
	01-Apr-08	а	FD	335,000	6,680			44,000	4,900,000	32.0	<5			<2	
	15-Apr-08	а	N	38,500	7,440			45,200	5,010,000	31.0	<5			<2	
	15-Apr-08	а	FD	405,000	7,500			46,300	5,330,000	32.0	<5			<2	
	28-Apr-08	а	N	346,000	7,700	<25		43,700	4,740,000	32.0	<5		<0.5	<2	
	13-May-08		N	360,000	7,020			46,400	4,690,000	36.0	<5			2.00	
	27-May-08	а	N	337,000	6,670	7.7		44,500	4,600,000	32.0		7,580	<0.5	<2	
	10-Jun-08	а	N	352,000	6,960			44,900	4,860,000	32.5	<5			<2	
	24-Jun-08	а	N	377,000	6,610	9.0		45,200	5,000,000	32.5		7,420	<0.5	<2	
	22-Jul-08	а	N	369,000	7,300	8.5		45,100	4,900,000	32.5		7,490	<0.5	<2	
	20-Aug-08	а	N	364,000	6,950	8.9		43,200	3,200,000	31.3		7,230	<2.5	80.0	
	16-Sep-08		N	367,000	7,240	8.6		44,700	4,870,000	32.0		7,390	<0.5	<2	
	16-Sep-08		FD	339,000	7,750	<25		44,400	4,910,000	33.0		7,430	<0.5	<2	
	14-Oct-08		N	361,000	8,180	<25		45,100	5,080,000	33.3		7,360	<0.5	<2	
	11-Nov-08		N	365,000	6,670	8.1		42,400	487,000	32.4		7,210	<0.5	<2	
	03-Feb-09	а	N	388,000	8,450	<0.5		48,300	5,320,000	33.0		8,500	<0.50	<0.050	
	12-May-09	а	N	355,000	3,380	<0.5		41,800	3,620,000	31.0		7,000	<1.0	<0.050	
	12-May-09	а	FD	348,000	3,600	<0.5		41,400	3,710,000	32.0		7,000	<1.0	< 0.050	
	03-Aug-09	а	N			7.8				28.0					3.9
	03-Aug-09	а	FD			7.4				30.0					3.9
	27-Oct-09		N			<0.5				36.0					3.7
	11-Jan-10		N			9.0				34.0					
	11-Jan-10		FD			9.3				32.0					

Table 4
Summary of Secondary Analytical Parameters

PG&E Topock

Needles, California

Location				Dissolved	Dissolved	Dissolved	Total	Dissolved	Dissolved	Alkalinity	Alkalinity	Chloride	Orthophosphat	Sulfide	Fluoride
Name:	Sample		Sample	Calcium	Magnesium	Arsenic	Arsenic	Potassium	Sodium	bicarbonate	carbonate	mg/L	е	mg/L	mg/L
	Date:	Notes	Type:	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	mg/L	mg/L		mg/L		
PTR-1	19-Jul-07	а	N	254,000		<5	1.9	21,500	1,500,000	97.5	<5	1,940	<0.5	<2	
	25-Jan-08	а	N	206,000	37,500	<5		16,400	1,190,000	123		1,610	<0.5	<2	
	06-Mar-08	а	N	171,000	36,500	<25		12,800	882,000	208		1,360	<500	<2	
	11-Mar-08	а	N	166,000	36,100	<25		13,000	872,000	158		1,190	<5	<2	
	20-Mar-08	а	N	155,000	32,800			11,500	758,000	203	203		<50	<2	
	27-Mar-08	а	N	112,000	21,600	<25		6,680	461,000	185		608	<20	3.20	
	01-Apr-08	а	N	254,000	47,500			15,600	1,050,000	600	<5			<2	
	16-Apr-08	а	N	175,000	40,900			12,500	833,000	138	<5			<2	
	29-Apr-08	а	N	170,000	35,100	13		11,300	767,000	298	<5		<5	4.80	
	15-May-08		N	188,000	37,800			11,800	818,000	300	<5			3.60	
	29-May-08	а	N	157,000	35,700	<5		13,800	856,000	183		1,190	<0.5	4.00	
	12-Jun-08	а	N	171,000	38,900			14,200	965,000	148	<5			<2	
	26-Jun-08	а	N	173,000	36,100	7.5		13,600	942,000	150		1,290	<0.5	<2	
	24-Jul-08	а	N	163,000	37,700	<5		12,300	916,000	160		1,180	<0.5	16.0	
	19-Aug-08	а	N	170,000	37,500	6.0		14,200	979,000	140		1,330	<0.5	320	
	18-Sep-08		N	182,000	40,200	8.5		15,000	1,040,000	115		1,450	<0.5	<2	
	16-Oct-08		N	176,000	40,600	<5		16,300	992,000	106		1,440	<0.5	2.00	
	13-Nov-08		N	209,000	32,300	<5.00		11,900	686,000	330		967	<0.5	<2	
	04-Feb-09	а	N	323,000	53,800 J	<2.9 UB		12,500	925,000	592		1,300	2	0.30	
	14-May-09	а	N	227,000	56,600 J	1.4		11,700	936,000	764		1,000	<0.20	<0.050	
PTR-2	18-Jul-07	а	N	335,000		<5	1.99	23,200	1,610,000	92.5	<5	2,200	<0.5	<2	
	25-Jan-08	а	N	427,000	34,400	<10		25,000	1,450,000	103		2,060	<0.5	2.00	
	06-Mar-08	а	N	407,000	29,200	<25		26,800	1,780,000	92.5		2,460	<1	<2	
	11-Mar-08	а	N	393,000	27,200	<5		26,300	1,770,000	92.5		2,470	<0.5	<2	
	20-Mar-08	а	N	151,000	18,000			17,300	1,220,000	148	148		<250	<2	
	27-Mar-08	а	N	88,500	13,000	<25		11,100	830,000	120		1,090	<500	<2	
	01-Apr-08	а	N	404,000	28,900			28,500	2,120,000	145	<5			<2	
	15-Apr-08	а	N	241,000	23,900			13,900	919,000	143	<5			<2	
	29-Apr-08	а	N	410,000	25,300	5.6		26,200	1,920,000	120	<5		<1	<2	
	15-May-08		N	396,000	26,900			28,800	1,970,000	105	<5			<2	
	28-May-08	а	N	302,000	19,700	7.7		22,800	1,730,000	82.5		2,620	<1	<2	
	10-Jun-08	а	N	397,000	25,200			26,200	203,000	95.0	<5			<2	
	26-Jun-08	а	N	397,000	24,000	<5		26,700	1,910,000	82.5		2,650	<1	<2	
	24-Jul-08	а	N	396,000	26,400	<5		25,900	1,960,000	95.0		2,660	<2.5	4.00	
	19-Aug-08	а	N	254,000	26,100	<25		17,800	1,050,000	125		1,580	<0.5	80.0	
	18-Sep-08		N	281,000	23,400	7.8		21,000	1,520,000	75.0		1,380	<0.5	<2	
	16-Oct-08		N	354,000	26,600	<25		26,100	1,740,000	86.9		2,630	<0.5	<2	
	13-Nov-08		N	364,000	22,700	<25		28,300	2,060,000	92.5		2,770	<1	<2	
	05-Feb-09	а	N	330,000	24,800	<2.5 UB		27,800	2,370,000	94.0		3,700	<0.2	< 0.05	
	13-May-09	а	N	684,000	37,000	<0.5		26,100	1,940,000	60.0		4,300	<0.50	< 0.050	
	-														

Table 4

Summary of Secondary Analytical Parameters

PG&E Topock

Needles, California

2011 Annual Monitoring Report for the Upland Reductive Zone In-Situ Pilot Test

Location				Dissolved	Dissolved	Dissolved	Total	Dissolved	Dissolved	Alkalinity	Alkalinity	Chloride	Orthophosphat	Sulfido	Fluoride
	Sample		Sample	Calcium	Magnesium	Arsenic	Arsenic	Potassium	Sodium	bicarbonate	carbonate		e	Suitide	
Name:	Date:	Notes	Type:	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L

Notes:

Current quarter data indicated in BOLD

- a Samples were diluted in the laboratory
- 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
- Reported value is estimated. J
- NA Not applicable

Dissolved Samples were field filtered with a 0.45 micron filter.

- --- Not analyzed/not sampled

 * PTR-1 Screen: 125-160 and 175-220 ft bgs. PTR-2 Screen: 118-158 and 173-218 ft bgs.

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

Table 5
Summary of Supplementary Metals

PG&E Topock

Needles, California

Location	Sample		Sample	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved		Dissolved	Total
Name:	Date:	Notes	Type:	Antimony	Antimony µg/L	Barium	Barium	Cadmium µg/L	Cadmium µg/L	Cobalt µg/L	Cobalt	Lead	Lead	Silver	Silver µg/L	Thallium µg/L			
PT-7S	18-Jul-07		N	μg/L 	μ y/L <1	μg/L 	μg/L 156	μg/∟ 	μ <u>y</u> /∟ <1	μ <u>g</u> /L	μ g/L 21.5	μg/L 	μ g/L 28.6	μg/L 	μ g/ L <1	μg/L 	μ g/L <1	μg/L 	μ g/L 51.5
	04-Aug-09		N	<1		45.1		<1		<1		<1		<1		<1		5.48	
	29-Oct-09		N			43.7													
	13-Jan-10		N			46.2													
	08-Apr-10		N			45.2													
	14-Jul-10		N			43.7													
	14-Oct-10		N			38.7													
	18-Jan-11		N			45.4													
	14-Apr-11		N			41.7													
	12-Jul-11		N			44.1													
PT-7M	19-Jul-07		N		<1		94.8		<1		12.4		18.6		<1		<1		30.1
	04-Aug-09		N	<1		869		<1		<1		<1		<1		<1		<1	
	29-Oct-09		N			1,140													
	13-Jan-10		N			1,490													
	14-Jul-10		N			1,090													
	14-Oct-10		N			946													
	18-Jan-11		N			1,150													
	14-Apr-11		N			1,160													
	13-Jul-11		N			1,090													
PT-7D	18-Jul-07		N		<1		96.5		<1		<1		<1		<1		<1		5.47
	04-Aug-09		N	<1		2,800		<1		<1		<1		<1		<1		1.07	
	28-Oct-09		N			512													
	13-Jan-10		N			273													
	08-Apr-10		N			227													
	14-Jul-10		N			297													
	14-Oct-10		N			245													
	18-Jan-11		N			264													
	14-Apr-11		N			450													
	13-Jul-11		N			1,060													

Table 5
Summary of Supplementary Metals

Location	Sample		Sample	Dissolved		Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
Name:	Date:	Notes	Type:		Antimony	Barium	Barium	Cadmium	Cadmium	Cobalt	Cobalt	Lead	Lead	Silver	Silver	Thallium		Vanadium	
PT-8S	16-Jul-07		N N	μg/L 	μ g/L <1	μg/L 	μg/L 86.9	μg/L 	μ g/L <1	μg/L 	μ g/L 5.18	μg/L 	μ g/L 7.75	μg/L 	μ g/L <1	μg/L 	μ g/L <1	μg/L 	μ g/L 22.3
F1-03			N N	 <1		393		 <1	< I 	 <1	5.16	<1		 <1		<1	< I	 <1	
	04-Aug-09 28-Oct-09		N N			82.4													
	12-Jan-10		N N			248													
	07-Apr-10		N N			176													
	13-Jul-10		N			121													
	13-0ct-10		N			97.6													
	17-Jan-11		N			85.3													
	14-Apr-11		N			71.0													
	12-Jul-11		N			68.1													
PT-8M	18-Jul-07		N		<1		33.7		<1		<1		<1		<1		<1		5.73
	04-Aug-09		N	<1		78.7		<1		<1		<1		<1		<1		<1	
	28-Oct-09		N			327													
	12-Jan-10		N			96.8													
	07-Apr-10		N			98.3													
	13-Jul-10		N			92.7													
	13-Oct-10		N			92.2													
	17-Jan-11		N			76.7													
	14-Apr-11		N			70.8													
	14-Apr-11		FD			69.0													
	12-Jul-11		N			79.2													
PT-8D	16-Jul-07		N		<1		105		<1		6.03		9.13		<1		<1		13.1
	04-Aug-09		N	<1		45.4		<1		<1		<1		<1		<1		<1	
	28-Oct-09		N			48.3													
	28-Oct-09		FD			44.3													
	12-Jan-10		N			53													
	07-Apr-10		N			58.9													
	07-Apr-10		FD			60.2													
	13-Jul-10		N			46.4													
	13-Oct-10		N			52.0													
	17-Jan-11		N			48.6													
	14-Apr-11		N			54.2													
	12-Jul-11		N			49.7													

Table 5
Summary of Supplementary Metals

Location	Sample		Sample	Dissolved		Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
Name:	Date:	Notes	Type:	Antimony		Barium	Barium	Cadmium	Cadmium	Cobalt	Cobalt	Lead	Lead	Silver	Silver	Thallium	Thallium	Vanadium	Vanadium
PT-9S	17-Jul-07		N N	μg/L	μ g/L <1	μg/L	μg/L 67.2	μg/L	μg/L	μg/L	μ g/L 2.86	μg/L	μ g/L 2.57	μg/L	μ g/L <1	μg/L	μ g/L <1	μg/L	μg/L
P1-95						420			<1										20.0
	05-Aug-09		N	<1		128		<1		<1		<1		<1		<1		<1	
	29-Oct-09		N			122 99.5													
	12-Jan-10		N																
	08-Apr-10		N			97.2													
	13-Jul-10 13-Oct-10		N			83.0													
			N			86.7 92.3													
	18-Jan-11		N N																
	14-Apr-11 12-Jul-11		N N			74.8 81.4													
PT-9M	17-Jul-07		N		<1		46.8		<1		1.09		<1		<1		<1		5.92
I I JIVI	17-Jul-07		FD		<1		48.1		<1		1.00		<1		<1		<1		6.28
	05-Aug-09		N	<1		34.2		<1		<1		<1		<1		<1		<1	
	29-Oct-09		N			32.1													
	12-Jan-10		N			34.8													
	08-Apr-10		N			38.0													
	13-Jul-10		N			35.4													
	13-Oct-10		N			37.3													
	18-Jan-11		N			38.6													
	14-Apr-11		N			37.7													
	12-Jul-11		N			38.1													
PT-9D	17-Jul-07		N		<1		79.5		<1		<1		<1		<1		<1		3.95
	05-Aug-09		N	<1		34.8		<1		<1		<1		<1		<1		<1	
	28-Oct-09		N			34.4													
	12-Jan-10		N			40.9													
	08-Apr-10		N			38.7													
	13-Jul-10		N			38.4													
	13-Oct-10		N			41.7													
	13-Oct-10		FD			40.5													
	18-Jan-11		N			35.6													
	14-Apr-11		N			37.5													
	12-Jul-11		N			37.8													

Table 5
Summary of Supplementary Metals

Location	Sample		Sample	Dissolved		Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
Name:	Date:	Notes	Type:	Antimony µg/L	Antimony µg/L	Barium µg/L	Barium µg/L	Cadmium µg/L	Cadmium µg/L	Cobalt µg/L	Cobalt µg/L	Lead µg/L	Lead µg/L	Silver µg/L	Silver µg/L	Thallium µg/L	Thallium µg/L	Vanadium µg/L	Vanadium µg/L
MW-11	17-Jul-07		N	μg/L 	μg/L <1	µg/∟ 	μ g/L 43.1	μ <u>g</u> /L	μ g/L <1	μ <u>g</u> /L	<u>μ</u> g/∟ <1	μg/L 	μ y/L 2.48	μg/L 	μ <u>g</u> /∟ <1	μg/∟ 	μ y /∟ <1	μg/L 	9.16
	06-Apr-10		N			43.5													
	12-Jul-10		N			43.6													
	12-Oct-10		N			43													
	17-Jan-11		N			40.4													
	17-Jan-11		N			41.5													
	14-Apr-11		N			38.2													
	11-Jul-11		N			43.3													
MW-24A	18-Jul-07		N		<1		26.1		<1		<1		1.10		<1		<1		30.6
	03-Aug-09	а	N	<5		183 D		<5		<5		<5		<5		<5		<5	
	27-Oct-09		N			229													
	11-Jan-09		N			190													
	07-Apr-10		N			132													
	12-Jul-10		N			89.9													
	12-Jul-10		FD			99.0													
	12-Oct-10		N			105.0													
	17-Jan-11		N			150.0													
	14-Apr-11		N			78.1													
	11-Jul-11		N			60.4													
MW-24B	18-Jul-07		N		<1		38.9		<1		<1		<1		<1		<1		7.20
	07-Apr-10		N			49.4													
	12-Jul-10		N			37.2													
	12-Oct-10		N			44.4													
	17-Jan-11		N			44.7													
	14-Apr-11		N			42.6													
	11-Jul-11		N			46.3													
	11-Jul-11		FD			47.0													

Table 5
Summary of Supplementary Metals

Location	Sample		Sample	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
Name:	Date:	Notes	Type:	Antimony µg/L	Antimony µg/L	Barium µg/L	Barium µg/L	Cadmium µg/L	Cadmium µg/L	Cobalt µg/L	Cobalt µg/L	Lead µg/L	Lead µg/L	Silver µg/L	Silver µg/L	Thallium µg/L	Thallium µg/L	Vanadium µg/L	Vanadium µg/L
MW-38S	17-Jul-07		N	μg/L 	<u>μg/L</u> 1.74	μg/L 	μ <u>σ/</u> Ε 40.7	μg/L 	<u>μg/L</u> 1.20	μg/L 	3.19	μ <u>y</u> /L	2.39	μ <u>γ</u> /L	1.38	μg/L 	<u>μg/L</u> 1.47	μg/∟ 	26.2
	03-Aug-09		N	<1		27.1		<1		<1		<1		<1		<1		17.5	
	27-Oct-09		N			24.4													
	11-Jan-09		N			24.1													
MW-38D	17-Jul-07		N		<1		45.7		<1		<1		<1		<1		1.46		6.92
	03-Aug-09	а	N	<5		47.6		<5		<5		<5		<5		<5		<5	
	03-Aug-09	а	FD	<5		47.7		<5		<5		<5		<5		<5		<5	
	27-Oct-09		N			39.5													
	11-Jan-10		N			46.0													
	11-Jan-10		FD			47.0													
PTR-01	19-Jul-07		N		<1		72.7		<1		1.10		<1		<1		<1		4.67
PTR-02	18-Jul-07		N		<1		39.7		<1		<1		<1		<1		<1		4.24
EB	17-Jul-07		EB		<1		<1		<1		<1		<1		<1		<1		<1
	03-Aug-09		EB	<1		<1		<1		<1		<1		<1		<1		<1	
	12-Jan-10		EB			<1													
	08-Apr-10		EB			<1													
	13-Jul-10		EB			<1													
	13-Oct-10		EB			<1													
	18-Jan-11		EB			<1													
	14-Apr-11		EB			<1	<1												
	11-Jul-01		EB			<1													
FB	17-Jul-07		FB		<1		<1		<1		<1		<1		<1		<1		<1
	03-Aug-09		FB	<1		<1		<1		<1		<1		<1		<1		<1	
	11-Jan-09		FB			<1													
	07-Apr-10		FB			<1													
	12-Jul-10		FB			<1													
	13-Oct-10		FB			<1													
	18-Jan-11		FB			<1													
	14-Apr-11		FB			<1													
	11-Jul-11		FB			<1													

Table 5

Summary of Supplementary Metals

PG&E Topock

Needles, California

2011 Annual Monitoring Report for the Upland Reductive Zone In-Situ Pilot Test

Location	Comple		Comple	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
Location Name:	Sample Date:	Notes	Sample Type:	Antimony	Antimony	Barium	Barium	Cadmium	Cadmium	Cobalt	Cobalt	Lead	Lead	Silver	Silver	Thallium	Thallium	Vanadium	Vanadium
Name.	Date.		Type.	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L

Notes:

Current quarter data indicated in BOLD

- a Samples were diluted in the laboratory
- 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

Table 6 **Summary of Monitoring Information**

PG&E Topock

Needles, California
2011 Annual Monitoring Report for the Uplands Reductive Zone In-Situ Pilot Test

	1		Sample	Sample				 	Analyst Name/
Location	Sample ID	Sampler	Date	Time	Laboratory	Test Method	Analyte	Analysis Date	Analyst ID #
PT-07S	PT-7S-101014	ARCADIS	10/14/2010	9:16	CEL	E200.8	Arsenic	10/20/2010	43
					CEL	E200.8	Barium	10/20/2010	43
					CEL	E200.8	Iron-Dissolved	10/20/2010	43
					CEL	E200.8	Manganese	10/20/2010	43
					CEL	E200.8	Molybdenum	10/20/2010	43
					CEL	E200.8	Selenium	10/20/2010	43
					Truesdail	E218.6	Chromium, hexavalent	10/20/2010	Sonya Bersudsky
					CEL	E300	Nitrate-n	10/15/2010	305
					CEL	E300	Sulfate	10/16/2010	305
					Ozark	OHM In-house Method	Fluorescein-clc	10/22/2010	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	10/22/2010	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	10/20/2010	735
					CEL	SM5310C	Total Organic Carbon	10/21/2010	92
					Truesdail	SW6020	Chromium	10/25/2010	Katia Kiarashpoor
	PT-07S-110118	ARCADIS	1/18/2011	11:24	CEL	E200.8	Arsenic	1/20/2011	43
					CEL	E200.8	Barium	1/20/2011	43
					CEL	E200.8	Iron-Dissolved	1/20/2011	43
					CEL	E200.8	Manganese	1/20/2011	43
					CEL	E200.8	Molybdenum	1/20/2011	43
					CEL	E200.8	Selenium	1/20/2011	43
					Truesdail	E218.6	Chromium, hexavalent	1/22/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	1/19/2011	305
					CEL	E300	Sulfate	1/19/2011	305
					Ozark	OHM In-house Method	Fluorescein-clc	1/24/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	1/24/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	1/26/2011	144
					CEL	SM5310C	Total Organic Carbon	1/20/2011	92
					Truesdail	SW6020	Chromium	1/28/2011	Katia Kiarashpoor
	PT-7S-110413	ARCADIS	4/13/2011	11:51	CEL	E200.8	Arsenic	4/18/2011	43
		7111071515	., 13, 2011	11.01	CEL	E200.8	Barium	4/18/2011	43
					CEL	E200.8	Iron-Dissolved	4/18/2011	43
					CEL	E200.8	Manganese	4/18/2011	43
					CEL	E200.8	Molybdenum	4/18/2011	43
					CEL	E200.8	Selenium	4/18/2011	43
					Truesdail	E218.6	Chromium, hexavalent	4/19/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	4/15/2011	110
					CEL	E300	Sulfate	4/15/2011	110
					Ozark	OHM In-house Method	Fluorescein-clc	4/22/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	4/22/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	4/18/2011	650
					CEL	SM5310C	Total Organic Carbon	4/14/2011	305
					Truesdail	SW6020	Chromium	5/5/2011	Maksim Gorbunov
	PT-7S-110712	ARCADIS	7/12/2011	14:35	CEL	E200.8	Arsenic	7/15/2011	43
	11 /3 110/12	/ III C/IDIS	7/12/2011	14.55	CEL	E200.8	Barium	7/15/2011	43
					CEL	E200.8	Iron-Dissolved	7/15/2011	43
					CEL	E200.8	Manganese	7/15/2011	43
					CEL	E200.8	Molybdenum	7/15/2011	43
					CEL	E200.8	Selenium	7/15/2011	43
					Truesdail	E218.6	Chromium, hexavalent	7/15/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	7/13/2011	92
					CEL	E300	Sulfate	7/13/2011	92
					Ozark	OHM In-house Method	Fluorescein-clc	7/13/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	7/19/2011	Margaret Ridinger
					CEL				
					CEL	SM2320B SM5310C	Alkalinity bicarbonate Total Organic Carbon	7/16/2011 7/15/2011	688 305
							· ·		
					Truesdail	SW6020	Chromium	7/18/2011	Katia Kiarashpoor

PG&E Topock

PT-07M	Leastion	Sample ID	Complex	Sample	Sample	l aborate:::	Toot Mothod	Analysta	Analysis Data	Analyst Name/
	Location	Sample ID	Sampler		Time	Laboratory	Test Method	Analyte	Analysis Date	Analyst ID #
PT-07M-110118	PT-07M	PT-7M-101014	ARCADIS	10/14/2010	13:00					
FF-07M-110118										
CEL E200.8 CEL E200.8 CEL E200.8 CEL E200.8 CEL E300 CEL E300 Sulfate 10/28/2010 Sonya Bersudsky Nitrate 10/28/2010 Margaret Bidinger Margaret								Iron-Dissolved	10/20/2010	
Feb.								•		
PT-07M-110118								•		
CEL F300 Nitrate										
CEL SM230B Sufface 10/15/2010 Margaret Ridinger Margar										
PT-07M-110118										
PT-07M-110118										
PT-07M-110118								Rhodamine-clc		
PT-07M-110118								Alkalinity bicarbonate	10/20/2010	
PT-07M-110118								-		
CEL E200.8 Barlum 1,70/2011 43										•
CEL E200.8 Manganese 1/20/2011 43		PT-07M-110118	ARCADIS	1/18/2011	13:15					
CEL E200.8										
CEL E200.8 Molybdenum 1/20/2011 43 CEL E200.8 Selenium 1/20/2011 43 Truesdail E218.6 Chromium, hexavalent 1/22/2011 305 CEL E300 Nitrate-n 1/39/2011 305 CEL E300 Nitrate-n 1/39/2011 305 CEL SM2300B Alkalinity bicarbonate 1/24/2011 Margaret Ridinger CEL E200.8 Arsenic 4/19/2011 43 CEL E200.8 Barium 4/19/2011 43 CEL E200.8 Molybdenum 4/19/2011 43 CEL E300 Sulfate 4/15/2011 110 CEL E300 Sulfate 4/15/2011 110 CEL SM3300B Alkalinity bicarbonate 4/15/2011 110 Margaret Ridinger Marga										
CEL E200.8 Selenium 1/20/2011 43								-		
PT-7M-110414								•		
CEL										
CEL CAPA COUNTY COUNTY CAPA CAPA										
Part										
PT-7M-110414 ARCADIS AFF AFF										
CEL SM5310C Total Organic Carbon 1/26/2011 144 1/26 1/26/2011 144 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26 1/26										
PT-7M-110414										
PT-7M-110414								•		
PT-7M-110414								-		
CEL E200.8 Barium 4/19/2011 43										
CEL E200.8 Manganese 4/19/2011 43		PT-7M-110414	ARCADIS	4/14/2011	9:50					
CEL E200.8 Manganese A/19/2011 43										
CEL E200.8 Molybdenum 4/19/2011 43										
CEL E200.8 Selenium A/19/2011 A3 Truesdail E218.6 Chromium, hexavalent A/19/2011 Sonya Bersudsky CEL E300 Nitrate-n A/15/2011 110 CEL E300 Sulfate A/15/2011 110 CEL E300 Sulfate A/15/2011 110 CEL SM2320B Alkalinity bicarbonate A/12/2011 Margaret Ridinger CEL SM3230B Alkalinity bicarbonate A/18/2011 Margaret Ridinger CEL SM3310C Total Organic Carbon A/15/2011 305 CEL SM5310C Total Organic Carbon A/15/2011 Maskim Gorbunov PT-7M-110713 ARCADIS 7/13/2011 12:45 CEL E200.8 Barium 7/15/2011 43 CEL E200.8 Barium 7/15/2011 43 CEL E200.8 Manganese 7/15/2011 43 CEL E200.8 Selenium 7/15/2011 50 CEL E300 Sulfate 7/14/2011 92 CEL E300 Sulfate 7/14/2011 688 CEL E300 Sulfate 7/								-		
Truesdail E218.6 Chromium, hexavalent A/19/2011 Sonya Bersudsky CEL E300 Nitrate-n A/15/2011 110								•		
CEL E300 Nitrate-n 4/15/2011 110										
CEL E300 Sulfate 4/15/2011 Margaret Ridinger Ozark OHM In-house Method Fluorescein-clc 4/22/2011 Margaret Ridinger Ozark OHM In-house Method Rhodamine-clc 4/22/2011 Margaret Ridinger Ozark OHM In-house Method Rhodamine-clc 4/18/2011 Margaret Ridinger Ozark OHM In-house Method Rhodamine-clc 4/18/2011 Ozark OHM In-house Method Rhodamine-clc 4/18/2011 Ozark OHM In-house Method Ozark OHM In-house Method OHM In-house Method OHM In-house Method Rhodamine-clc 7/15/2011 Ozark OHM In-house Method Rhodamine-clc 7/20/2011 Margaret Ridinger Ozark OHM In-house Method OHM In-house Method Rhodamine-clc 7/20/2011 Margaret Ridinger Ozark OHM In-house Method Rhodamine-clc 7/20/2011 Margaret Ridinger OHM In-house Method Rhodamine-clc 7/20/2011 Margaret Ridinger OHM In-house Method Rhodamine-clc 7/20/2011 Margaret Ridinger OHM In-house Method OHM In-house Method Rhodamine-clc 7/20/2011 Margaret Ridinger OHM In-house Method OHM In-house Method Rhodamine-clc 7/20/2011 Margaret Ridinger OHM In-house Method OHM In-house Method Rhodamine-clc 7/20/2011 Margaret Ridinger OHM In-house Method OHM In-house OHM In-ho										
Ozark										
Ozark										
CEL SM2320B Alkalinity bicarbonate 4/18/2011 650 CEL SM5310C Total Organic Carbon 4/15/2011 305 Truesdail SW6020 Chromium 4/23/2011 Maksim Gorbunov PT-7M-110713 ARCADIS 7/13/2011 12:45 CEL E200.8 Arsenic 7/15/2011 43 CEL E200.8 Barium 7/15/2011 43 CEL E200.8 Iron-Dissolved 7/15/2011 43 CEL E200.8 Manganese 7/15/2011 43 CEL E200.8 Molybdenum 7/15/2011 43 CEL E200.8 Molybdenum 7/15/2011 43 CEL E200.8 Selenium 7/15/2011 50nya Bersudsky CEL E300 Nitrate-n 7/14/2011 92 CEL E300 Sulfate 7/12/2011 Margaret Ridinger CEL SM2320B Alkalinity bicarbonate 7/18/2011 688 CEL SM2320B Alkalinity bicarbonate 7/15/2011 688 CEL SM2320B Alkalinity bicarbonate 7/15/2011 305 CEL SM2320B Alk										
CEL SM5310C Total Organic Carbon 4/15/2011 305 Truesdail SW6020 Chromium 4/23/2011 Maksim Gorbunov PT-7M-110713 ARCADIS 7/13/2011 12:45 CEL E200.8 Arsenic 7/15/2011 43 CEL E200.8 Barium 7/15/2011 43 CEL E200.8 Iron-Dissolved 7/15/2011 43 CEL E200.8 Manganese 7/15/2011 43 CEL E200.8 Manganese 7/15/2011 43 CEL E200.8 Molybdenum 7/15/2011 43 CEL E200.8 Molybdenum 7/15/2011 43 CEL E200.8 Selenium 7/15/2011 43 CEL E200.8 Selenium 7/15/2011 43 CEL E200.8 Selenium 7/15/2011 50nya Bersudsky CEL E300 Nitrate-n 7/14/2011 92 CEL E300 Sulfate 7/14/2011 92 CEL E300 Sulfate 7/14/2011 92 CEL E300 Sulfate 7/10/2011 Margaret Ridinger CEL SM2320B Alkalinity bicarbonate 7/18/2011 688 CEL SM2320B Alkalinity bicarbonate 7/15/2011 688 CEL SM5310C Total Organic Carbon 7/15/2011 305 CEL SM5310C Total Organic Carbon 7/15/2011 305 CEL C										
Truesdail SW6020 Chromium A/23/2011 Maksim Gorbunov								•		
PT-7M-110713 ARCADIS 7/13/2011 12:45 CEL E200.8 Arsenic 7/15/2011 43 CEL E200.8 Barium 7/15/2011 43 CEL E200.8 Iron-Dissolved 7/15/2011 43 CEL E200.8 Manganese 7/15/2011 43 CEL E200.8 Molybdenum 7/15/2011 43 CEL E200.8 Selenium 7/15/2011 43 CEL E200.8 Selenium 7/15/2011 43 CEL E200.8 Selenium 7/15/2011 43 Truesdail E218.6 Chromium, hexavalent 7/15/2011 5onya Bersudsky CEL E300 Nitrate-n 7/14/2011 92 CEL E300 Sulfate 7/14/2011 92 Ozark OHM In-house Method Fluorescein-clc 7/20/2011 Margaret Ridinger Ozark OHM In-house Method Rhodamine-clc 7/20/2011 Margaret Ridinger CEL SM2320B Alkalinity bicarbonate 7/18/2011 688 CEL SM2320B Alkalinity bicarbonate 7/18/2011 688								· ·		
CEL E200.8 Barium 7/15/2011 43 CEL E200.8 Iron-Dissolved 7/15/2011 43 CEL E200.8 Manganese 7/15/2011 43 CEL E200.8 Molybdenum 7/15/2011 43 CEL E200.8 Selenium 7/15/2011 43 Truesdail E218.6 Chromium, hexavalent 7/15/2011 Sonya Bersudsky CEL E300 Nitrate-n 7/14/2011 92 CEL E300 Sulfate 7/14/2011 92 Ozark OHM In-house Method Fluorescein-clc 7/20/2011 Margaret Ridinger Ozark OHM In-house Method Rhodamine-clc 7/20/2011 Margaret Ridinger CEL SM2320B Alkalinity bicarbonate 7/18/2011 688 CEL SM5310C Total Organic Carbon 7/15/2011 305										
CEL E200.8 Iron-Dissolved 7/15/2011 43 CEL E200.8 Manganese 7/15/2011 43 CEL E200.8 Molybdenum 7/15/2011 43 CEL E200.8 Selenium 7/15/2011 43 Truesdail E218.6 Chromium, hexavalent 7/15/2011 Sonya Bersudsky CEL E300 Nitrate-n 7/14/2011 92 CEL E300 Sulfate 7/14/2011 92 Ozark OHM In-house Method Fluorescein-clc 7/20/2011 Margaret Ridinger Ozark OHM In-house Method Rhodamine-clc 7/20/2011 Margaret Ridinger CEL SM2320B Alkalinity bicarbonate 7/18/2011 688 CEL SM5310C Total Organic Carbon 7/15/2011 305		PT-7M-110713	ARCADIS	7/13/2011	12:45					
CEL E200.8 Manganese 7/15/2011 43 CEL E200.8 Molybdenum 7/15/2011 43 CEL E200.8 Selenium 7/15/2011 43 Truesdail E218.6 Chromium, hexavalent 7/15/2011 Sonya Bersudsky CEL E300 Nitrate-n 7/14/2011 92 CEL E300 Sulfate 7/14/2011 92 Ozark OHM In-house Method Fluorescein-clc 7/20/2011 Margaret Ridinger Ozark OHM In-house Method Rhodamine-clc 7/20/2011 Margaret Ridinger CEL SM2320B Alkalinity bicarbonate 7/18/2011 688 CEL SM5310C Total Organic Carbon 7/15/2011 305										
CEL E200.8 Molybdenum 7/15/2011 43 CEL E200.8 Selenium 7/15/2011 43 Truesdail E218.6 Chromium, hexavalent 7/15/2011 Sonya Bersudsky CEL E300 Nitrate-n 7/14/2011 92 CEL E300 Sulfate 7/14/2011 92 Ozark OHM In-house Method Fluorescein-clc 7/20/2011 Margaret Ridinger Ozark OHM In-house Method Rhodamine-clc 7/20/2011 Margaret Ridinger CEL SM2320B Alkalinity bicarbonate 7/18/2011 688 CEL SM5310C Total Organic Carbon 7/15/2011 305										
CEL E200.8 Selenium 7/15/2011 43 Truesdail E218.6 Chromium, hexavalent 7/15/2011 Sonya Bersudsky CEL E300 Nitrate-n 7/14/2011 92 CEL E300 Sulfate 7/14/2011 92 Ozark OHM In-house Method Fluorescein-clc 7/20/2011 Margaret Ridinger Ozark OHM In-house Method Rhodamine-clc 7/20/2011 Margaret Ridinger CEL SM2320B Alkalinity bicarbonate 7/18/2011 688 CEL SM5310C Total Organic Carbon 7/15/2011 305								-		
Truesdail E218.6 Chromium, hexavalent 7/15/2011 Sonya Bersudsky CEL E300 Nitrate-n 7/14/2011 92 CEL E300 Sulfate 7/14/2011 92 Ozark OHM In-house Method Fluorescein-clc 7/20/2011 Margaret Ridinger Ozark OHM In-house Method Rhodamine-clc 7/20/2011 Margaret Ridinger CEL SM2320B Alkalinity bicarbonate 7/18/2011 688 CEL SM5310C Total Organic Carbon 7/15/2011 305								•		
CEL E300 Nitrate-n 7/14/2011 92 CEL E300 Sulfate 7/14/2011 92 Ozark OHM In-house Method Fluorescein-clc 7/20/2011 Margaret Ridinger Ozark OHM In-house Method Rhodamine-clc 7/20/2011 Margaret Ridinger CEL SM2320B Alkalinity bicarbonate 7/18/2011 688 CEL SM5310C Total Organic Carbon 7/15/2011 305										
CEL E300 Sulfate 7/14/2011 92 Ozark OHM In-house Method Fluorescein-clc 7/20/2011 Margaret Ridinger Ozark OHM In-house Method Rhodamine-clc 7/20/2011 Margaret Ridinger CEL SM2320B Alkalinity bicarbonate 7/18/2011 688 CEL SM5310C Total Organic Carbon 7/15/2011 305										
OzarkOHM In-house MethodFluorescein-clc7/20/2011Margaret RidingerOzarkOHM In-house MethodRhodamine-clc7/20/2011Margaret RidingerCELSM2320BAlkalinity bicarbonate7/18/2011688CELSM5310CTotal Organic Carbon7/15/2011305										
OzarkOHM In-house MethodRhodamine-clc7/20/2011Margaret RidingerCELSM2320BAlkalinity bicarbonate7/18/2011688CELSM5310CTotal Organic Carbon7/15/2011305										
CEL SM2320B Alkalinity bicarbonate 7/18/2011 688 CEL SM5310C Total Organic Carbon 7/15/2011 305										
CEL SM5310C Total Organic Carbon 7/15/2011 305										
								•		
Truesdail SW6020 Chromium 7/18/2011 Katia Kiarashpoor								-		
						Truesdail	SW6020	Chromium	7/18/2011	Katia Kiarashpoor

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Location	Sample ID	Sampler	Sample	Sample	Laboratory	Test Method	Analyte	Analysis Date	Analyst Name/
	-		Date	Time	•		,	-	Analyst ID #
PT-07D	PT-7D-101014	ARCADIS	10/14/2010	10:40	CEL	E200.8	Arsenic	10/20/2010	43
					CEL	E200.8	Barium	10/20/2010	43
					CEL	E200.8	Iron-Dissolved	10/20/2010	43
					CEL	E200.8	Manganese	10/20/2010	43
					CEL	E200.8	Molybdenum	10/20/2010	43
					CEL	E200.8	Selenium	10/20/2010	43
					Truesdail	E218.6	Chromium, hexavalent	10/20/2010	Sonya Bersudsky
					CEL	E300	Nitrate-n	10/15/2010	305
					CEL	E300	Sulfate	10/15/2010	305
					Ozark	OHM In-house Method	Fluorescein-clc	10/22/2010	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	10/22/2010	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	10/20/2010	735
					CEL	SM5310C	Total Organic Carbon	10/21/2010	92
					Truesdail	SW6020	Chromium	10/25/2010	Katia Kiarashpoor
	PT-07D-110118	ARCADIS	1/18/2011	12:00	CEL	E200.8	Arsenic	1/20/2011	43
					CEL	E200.8	Barium	1/20/2011	43
					CEL	E200.8	Iron-Dissolved	1/20/2011	43
					CEL	E200.8	Manganese	1/20/2011	43
					CEL	E200.8	Molybdenum	1/20/2011	43
					CEL	E200.8	Selenium	1/20/2011	43
					Truesdail	E218.6	Chromium, hexavalent	1/22/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	1/19/2011	305
					CEL	E300	Sulfate	1/19/2011	305
					Ozark	OHM In-house Method	Fluorescein-clc	1/24/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	1/24/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	1/26/2011	144
					CEL	SM5310C	Total Organic Carbon	1/21/2011	92
					Truesdail	SW6020	Chromium	1/28/2011	Katia Kiarashpoor
	PT-7D-110414	ARCADIS	4/14/2011	9:20	CEL	E200.8	Arsenic	4/19/2011	43
					CEL	E200.8	Barium	4/19/2011	43
					CEL	E200.8	Iron-Dissolved	4/19/2011	43
					CEL	E200.8	Manganese	4/19/2011	43
					CEL	E200.8	Molybdenum	4/19/2011	43
					CEL	E200.8	Selenium	4/19/2011	43
					Truesdail	E218.6	Chromium, hexavalent	4/19/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	4/15/2011	110
					CEL	E300	Sulfate	4/15/2011	110
					Ozark	OHM In-house Method	Fluorescein-clc	4/22/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	4/22/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	4/18/2011	650
					CEL	SM5310C	Total Organic Carbon	4/15/2011	305
					Truesdail	SW6020	Chromium	4/23/2011	Maksim Gorbunov
	PT-7D-110713	ARCADIS	7/13/2011	12:00	CEL	E200.8	Arsenic	7/15/2011	43
			.,,		CEL	E200.8	Barium	7/15/2011	43
					CEL	E200.8	Iron-Dissolved	7/15/2011	43
					CEL	E200.8	Manganese	7/15/2011	43
					CEL	E200.8	Molybdenum	7/15/2011	43
					CEL	E200.8	Selenium	7/15/2011	43
					Truesdail	E218.6	Chromium, hexavalent	7/15/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	7/14/2011	92
					CEL	E300	Sulfate	7/14/2011	92
					Ozark	OHM In-house Method	Fluorescein-clc	7/14/2011 7/21/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	7/21/2011	Margaret Ridinger
					CEL				688
					CEL	SM2320B	Alkalinity bicarbonate	7/18/2011	305
						SM5310C	Total Organic Carbon	7/15/2011	
					Truesdail	SW6020	Chromium	7/18/2011	Katia Kiarashpoor

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Location	Sample ID	Sampler	Sample	Sample	Laboratory	Test Method	Analyte	Analysis Date	Analyst Name/
PT-08S	PT-8S-101013	ARCADIS	Date 10/13/2010	Time 13:09	CEL	E200.8	Arsenic	10/19/2010	Analyst ID #
11 003	11 03 101013	riteribis	10/13/2010	13.03	CEL	E200.8	Barium	10/19/2010	43
					CEL	E200.8	Iron-Dissolved	10/19/2010	43
					CEL	E200.8	Manganese	10/19/2010	43
					CEL	E200.8	Molybdenum	10/19/2010	43
					CEL	E200.8	Selenium	10/19/2010	43
					Truesdail	E218.6	Chromium, hexavalent	10/15/2010	Sonya Bersudsky
					CEL	E300	Nitrate-n	10/15/2010	92
					CEL	E300	Sulfate	10/15/2010	92
					Ozark	OHM In-house Method	Fluorescein-clc	10/22/2010	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	10/22/2010	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	10/20/2010	144
					CEL	SM5310C	Total Organic Carbon	10/21/2010	92
					Truesdail	SW6020	Chromium	10/19/2010	Hope Trinidad
	PT-08S-110117	ΔRCΔDIS	1/17/2011	15:15	CEL	E200.8	Arsenic	1/18/2011	43
	000 110117	7111071515	1,1,,2011	13.13	CEL	E200.8	Barium	1/18/2011	43
					CEL	E200.8	Iron-Dissolved	1/18/2011	43
					CEL	E200.8	Manganese	1/18/2011	43
					CEL	E200.8	Molybdenum	1/18/2011	43
					CEL	E200.8	Selenium	1/18/2011	43
					Truesdail	E218.6	Chromium, hexavalent	1/22/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	1/18/2011	305
					CEL	E300	Sulfate	1/18/2011	305
					Ozark	OHM In-house Method	Fluorescein-clc	1/24/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	1/24/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	1/20/2011	144
					CEL	SM5310C	Total Organic Carbon	1/20/2011	662
					Truesdail	SW6020	Chromium	1/28/2011	Katia Kiarashpoor
	PT-8S-110413	ADCADIS	4/13/2011	10:59	CEL	E200.8	Arsenic	4/18/2011	43
	F1-03-110413	ANCADIS	4/13/2011	10.33	CEL	E200.8	Barium	4/18/2011	43
					CEL	E200.8	Iron-Dissolved	4/18/2011	43
					CEL	E200.8	Manganese	4/18/2011	43
					CEL	E200.8	Molybdenum	4/18/2011	43
					CEL	E200.8	Selenium	4/18/2011	43
					Truesdail	E218.6	Chromium, hexavalent	4/19/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	4/14/2011	110
					CEL	E300	Sulfate	4/15/2011	110
					Ozark	OHM In-house Method	Fluorescein-clc	4/22/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	4/22/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	4/18/2011	650
					CEL	SM5310C	Total Organic Carbon	4/14/2011	305
					Truesdail	SW6020	Chromium	4/22/2011	Maksim Gorbunov
	PT-8S-110712	ADCADIS	7/12/2011	10:05	CEL	E200.8	Arsenic	7/15/2011	43
	F1-03-110/12	ANCADIS	//12/2011	10.03	CEL	E200.8	Barium	7/15/2011	43
					CEL	E200.8	Iron-Dissolved	7/15/2011	43
					CEL	E200.8	Manganese	7/15/2011	43
					CEL	E200.8	Molybdenum	7/15/2011	43
					CEL	E200.8	Selenium		43
					Truesdail	E200.8 E218.6	Chromium, hexavalent	7/15/2011 7/15/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	7/13/2011	92
					CEL	E300	Nitrate-n Sulfate	7/13/2011 7/13/2011	92 92
					Ozark Ozark	OHM In-house Method OHM In-house Method	Fluorescein-clc Rhodamine-clc	7/22/2011 7/22/2011	Margaret Ridinger
									Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	7/16/2011	688
					CEL	SM5310C	Total Organic Carbon	7/15/2011	305
					Truesdail	SW6020	Chromium	7/18/2011	Katia Kiarashpoor

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Location	Sample ID	Sampler	Sample Date	Sample Time	Laboratory	Test Method	Analyte	Analysis Date	Analyst Name/ Analyst ID #
PT-08M	PT-8M-101013	ARCADIS	10/13/2010	14:10	CEL	E200.8	Arsenic	10/19/2010	43
					CEL	E200.8	Barium	10/19/2010	43
					CEL	E200.8	Iron-Dissolved	10/19/2010	43
					CEL	E200.8	Manganese	10/19/2010	43
					CEL	E200.8	Molybdenum	10/19/2010	43
					CEL	E200.8	Selenium	10/19/2010	43
					Truesdail CEL	E218.6	Chromium, hexavalent	10/15/2010	Sonya Bersudsky
					CEL	E300 E300	Nitrate-n Sulfate	10/14/2010 10/15/2010	92 92
					Ozark	OHM In-house Method	Fluorescein-clc	10/22/2010	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	10/22/2010	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	10/20/2010	144
					CEL	SM5310C	Total Organic Carbon	10/21/2010	92
					Truesdail	SW6020	Chromium	10/19/2010	Hope Trinidad
	PT-08M-110117	ARCADIS	1/17/2011	13:59	CEL	E200.8	Arsenic	1/18/2011	43
					CEL	E200.8	Barium	1/18/2011	43
					CEL	E200.8	Iron-Dissolved	1/18/2011	43
					CEL	E200.8	Manganese	1/18/2011	43
					CEL CEL	E200.8 E200.8	Molybdenum	1/18/2011	43 43
					Truesdail	E200.8 E218.6	Selenium Chromium, hexavalent	1/18/2011 1/22/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	1/18/2011	305
					CEL	E300	Sulfate	1/18/2011	305
					Ozark	OHM In-house Method	Fluorescein-clc	1/24/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	1/24/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	1/20/2011	144
					CEL	SM5310C	Total Organic Carbon	1/20/2011	662
					Truesdail	SW6020	Chromium	1/28/2011	Katia Kiarashpoor
	PT-8M-110413	ARCADIS	4/13/2011	9:25	CEL	E200.8	Arsenic	4/18/2011	43
					CEL	E200.8	Barium	4/18/2011	43
					CEL	E200.8	Iron-Dissolved	4/18/2011	43
					CEL	E200.8	Manganese	4/18/2011	43
					CEL CEL	E200.8 E200.8	Molybdenum Selenium	4/18/2011	43 43
					Truesdail	E218.6	Chromium, hexavalent	4/18/2011 4/19/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	4/14/2011	110
					CEL	E300	Sulfate	4/15/2011	110
					Ozark	OHM In-house Method	Fluorescein-clc	4/22/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	4/22/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	4/18/2011	650
					CEL	SM5310C	Total Organic Carbon	4/14/2011	305
					Truesdail	SW6020	Chromium	4/22/2011	Maksim Gorbunov
	PT-8M-110712	ARCADIS	7/12/2011	8:25	CEL	E200.8	Arsenic	7/15/2011	43
					CEL	E200.8	Barium	7/15/2011	43
					CEL CEL	E200.8 E200.8	Iron-Dissolved	7/15/2011 7/15/2011	43 43
					CEL	E200.8	Manganese Molybdenum	7/15/2011	43
					CEL	E200.8	Selenium	7/15/2011	43
					Truesdail	E218.6	Chromium, hexavalent	7/15/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	7/13/2011	92
					CEL	E300	Sulfate	7/13/2011	92
					Ozark	OHM In-house Method	Fluorescein-clc	7/23/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	7/23/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	7/16/2011	688
					CEL	SM5310C	Total Organic Carbon	7/15/2011	305
	DT 014 440440D	********	. / /		Truesdail	SW6020	Chromium	7/18/2011	Katia Kiarashpoor
	PT-8M-110413D	ARCADIS	4/13/2011		CEL	E200.8	Arsenic	4/18/2011	43
					CEL CEL	E200.8 E200.8	Barium Iron-Dissolved	4/18/2011 4/18/2011	43 43
					CEL	E200.8	Manganese	4/18/2011	43
					CEL	E200.8	Molybdenum	4/18/2011	43
					CEL	E200.8	Selenium	4/18/2011	43
					Truesdail	E218.6	Chromium, hexavalent	4/19/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	4/14/2011	110
					CEL	E300	Sulfate	4/15/2011	110
					Ozark	OHM In-house Method	Fluorescein-clc	4/22/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	4/22/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	4/18/2011	650
					CEL	SM5310C	Total Organic Carbon	4/14/2011	305
					Truesdail	SW6020	Chromium	4/22/2011	Maksim Gorbunov

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T	T	Ī	Sample	Sample				1	Analyst Name/
Location	Sample ID	Sampler	Date	Time	Laboratory	Test Method	Analyte	Analysis Date	Analyst ID #
PT-08D	PT-8D-101013	ARCADIS	10/13/2010	12:29	CEL	E200.8	Arsenic	10/19/2010	43
					CEL	E200.8	Barium	10/19/2010	43
					CEL	E200.8	Iron-Dissolved	10/19/2010	43
					CEL	E200.8	Manganese	10/19/2010	43
					CEL	E200.8	Molybdenum	10/19/2010	43
					CEL	E200.8	Selenium	10/19/2010	43
					Truesdail	E218.6	Chromium, hexavalent	10/15/2010	Sonya Bersudsky
					CEL	E300	Nitrate-n	10/14/2010	92
					CEL	E300	Sulfate	10/15/2010	92
					Ozark	OHM In-house Method	Fluorescein-clc	10/22/2010	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	10/22/2010	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	10/20/2010	144
					CEL	SM5310C	Total Organic Carbon	10/21/2010	92
					Truesdail	SW6020	Chromium	10/19/2010	Hope Trinidad
	PT-08D-110117	ARCADIS	1/17/2011	14:45	CEL	E200.8	Arsenic	1/18/2011	43
					CEL	E200.8	Barium	1/18/2011	43
					CEL	E200.8	Iron-Dissolved	1/18/2011	43
					CEL	E200.8	Manganese	1/18/2011	43
					CEL	E200.8	Molybdenum	1/18/2011	43
					CEL	E200.8	Selenium	1/18/2011	43
					Truesdail	E218.6	Chromium, hexavalent	1/22/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	1/18/2011	305
					CEL	E300	Sulfate	1/18/2011	305
					Ozark	OHM In-house Method	Fluorescein-clc	1/24/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	1/24/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	1/20/2011	144
					CEL	SM5310C	Total Organic Carbon	1/20/2011	662
					Truesdail	SW6020	Chromium	1/28/2011	Katia Kiarashpoor
	PT-8D-110413	ARCADIS	4/13/2011	10:23	CEL	E200.8	Arsenic	4/18/2011	43
	05 110 110	,	., 10, 2011	10.25	CEL	E200.8	Barium	4/18/2011	43
					CEL	E200.8	Iron-Dissolved	4/18/2011	43
					CEL	E200.8	Manganese	4/18/2011	43
					CEL	E200.8	Molybdenum	4/18/2011	43
					CEL	E200.8	Selenium	4/18/2011	43
					Truesdail	E218.6	Chromium, hexavalent	4/19/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	4/14/2011	110
					CEL	E300	Sulfate	4/15/2011	110
					Ozark	OHM In-house Method	Fluorescein-clc	4/22/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	4/22/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	4/18/2011	650
					CEL	SM5310C	Total Organic Carbon	4/14/2011	305
					Truesdail	SW6020	Chromium	4/22/2011	Maksim Gorbunov
	PT-8D-110712	ABCADIS	7/12/2011	9:35	CEL	E200.8	Arsenic	7/15/2011	43
	P1-0D-110/12	ANCADIS	//12/2011	9.55	CEL	E200.8	Barium	7/15/2011	43
					CEL	E200.8	Iron-Dissolved	7/15/2011	43
					CEL	E200.8			43
					CEL	E200.8	Manganese	7/15/2011	43
							Molybdenum	7/15/2011	
					CEL	E200.8	Selenium hovavalent	7/15/2011	43
					Truesdail	E218.6	Chromium, hexavalent	7/15/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	7/13/2011	92
					CEL	E300	Sulfate	7/13/2011	92
					Ozark	OHM In-house Method	Fluorescein-clc	7/24/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	7/24/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	7/16/2011	688
					CEL	SM5310C	Total Organic Carbon	7/15/2011	305
					Truesdail	SW6020	Chromium	7/18/2011	Katia Kiarashpoor

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Location	Sample ID	Sampler	Sample Date	Sample Time	Laboratory	Test Method	Analyte	Analysis Date	Analyst Name/ Analyst ID #
PT-09S	PT-9S-101013	ARCADIS	10/13/2010	8:21	CEL	E200.8	Arsenic	10/19/2010	43
					CEL	E200.8	Barium	10/19/2010	43
					CEL	E200.8	Iron-Dissolved	10/19/2010	43
					CEL	E200.8	Manganese	10/19/2010	43
					CEL	E200.8	Molybdenum	10/19/2010	43
					CEL	E200.8	Selenium	10/19/2010	43
					Truesdail	E218.6	Chromium, hexavalent	10/15/2010	Sonya Bersudsky
					CEL	E300	Nitrate-n	10/14/2010	92
					CEL	E300	Sulfate	10/15/2010	92
					Ozark	OHM In-house Method	Fluorescein-clc	10/22/2010	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	10/22/2010	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	10/20/2010	144
					CEL	SM5310C	Total Organic Carbon	10/21/2010	92
					Truesdail	SW6020	Chromium	10/19/2010	Hope Trinidad
	PT-09S-110118	ARCADIS	1/18/2011	14:22	CEL	E200.8	Arsenic	1/20/2011	43
					CEL	E200.8	Barium	1/20/2011	43
					CEL	E200.8	Iron-Dissolved	1/20/2011	43
					CEL	E200.8	Manganese	1/20/2011	43
					CEL	E200.8	Molybdenum	1/20/2011	43
					CEL	E200.8	Selenium	1/20/2011	43
					Truesdail	E218.6	Chromium, hexavalent	1/22/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	1/19/2011	305
					CEL	E300	Sulfate	1/19/2011	305
					Ozark	OHM In-house Method	Fluorescein-clc	1/24/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	1/24/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	1/26/2011	144
					CEL	SM5310C	Total Organic Carbon	1/20/2011	92
					Truesdail	SW6020	Chromium	1/28/2011	Katia Kiarashpoor
	PT-9S-110413	ARCADIS	4/13/2011	14:39	CEL	E200.8	Arsenic	4/18/2011	43
			.,,		CEL	E200.8	Barium	4/18/2011	43
					CEL	E200.8	Iron-Dissolved	4/18/2011	43
					CEL	E200.8	Manganese	4/18/2011	43
					CEL	E200.8	Molybdenum	4/18/2011	43
					CEL	E200.8	Selenium	4/18/2011	43
					Truesdail	E218.6	Chromium, hexavalent	4/19/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	4/15/2011	110
					CEL	E300	Sulfate	4/15/2011	110
					Ozark	OHM In-house Method	Fluorescein-clc	4/22/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	4/22/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	4/18/2011	650
					CEL	SM5310C	Total Organic Carbon	4/14/2011	305
					Truesdail	SW6020	Chromium	4/22/2011	Maksim Gorbunov
	PT-9S-110712	ARCADIS	7/12/2011	13:00	CEL	E200.8	Arsenic	7/15/2011	43
	55 110/12	,	,,12,2011	15.00	CEL	E200.8	Barium	7/15/2011	43
					CEL	E200.8	Iron-Dissolved	7/15/2011	43
					CEL	E200.8	Manganese	7/15/2011	43
					CEL	E200.8	Molybdenum	7/15/2011	43
					CEL	E200.8	Selenium	7/15/2011	43
					Truesdail	E218.6	Chromium, hexavalent	7/15/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	7/13/2011	92
					CEL	E300	Sulfate	7/13/2011	92
					Ozark	OHM In-house Method	Fluorescein-clc	7/13/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	7/25/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	7/16/2011	688
					CEL	SM5310C	Total Organic Carbon	7/15/2011	305
					Truesdail	SW6020	Chromium		Katia Kiarashpoor
					rruesuan	3440020	Cironnum	7/18/2011	ratia riai astipoof

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Location	Sample ID	Sampler	Sample	Sample	Laboratory	Test Method	Analyte	Analysis Date	Analyst Name/
	-	•	Date	Time	•		,	-	Analyst ID#
PT-09M	PT-9M-101013	ARCADIS	10/13/2010	10:51	CEL	E200.8	Arsenic	10/19/2010	43
					CEL	E200.8	Barium	10/19/2010	43
					CEL	E200.8	Iron-Dissolved	10/19/2010	43
					CEL	E200.8	Manganese	10/19/2010	43
					CEL	E200.8	Molybdenum	10/19/2010	43
					CEL	E200.8	Selenium	10/19/2010	43
					Truesdail	E218.6	Chromium, hexavalent	10/15/2010	Sonya Bersudsky
					CEL	E300	Nitrate-n	10/14/2010	92
					CEL	E300	Sulfate	10/15/2010	92
					Ozark	OHM In-house Method	Fluorescein-clc	10/22/2010	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	10/22/2010	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	10/20/2010	144
					CEL	SM5310C	Total Organic Carbon	10/21/2010	92
					Truesdail	SW6020	Chromium	10/19/2010	Hope Trinidad
	PT-09M-110118	ARCADIS	1/18/2011	10:33	CEL	E200.8	Arsenic	1/20/2011	43
					CEL	E200.8	Barium	1/20/2011	43
					CEL	E200.8	Iron-Dissolved	1/20/2011	43
					CEL	E200.8	Manganese	1/20/2011	43
					CEL	E200.8	Molybdenum	1/20/2011	43
					CEL	E200.8	Selenium	1/20/2011	43
					Truesdail	E218.6	Chromium, hexavalent	1/22/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	1/19/2011	305
					CEL	E300	Sulfate	1/19/2011	305
					Ozark	OHM In-house Method	Fluorescein-clc	1/24/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	1/24/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	1/26/2011	144
					CEL	SM5310C	Total Organic Carbon	1/20/2011	92
					Truesdail	SW6020	Chromium	1/28/2011	Katia Kiarashpoor
	PT-9M-110413	ARCADIS	4/13/2011	13:45	CEL	E200.8	Arsenic	4/18/2011	43
					CEL	E200.8	Barium	4/18/2011	43
					CEL	E200.8	Iron-Dissolved	4/18/2011	43
					CEL	E200.8	Manganese	4/18/2011	43
					CEL	E200.8	Molybdenum	4/18/2011	43
					CEL	E200.8	Selenium	4/18/2011	43
					Truesdail	E218.6	Chromium, hexavalent	4/19/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	4/14/2011	110
					CEL	E300	Sulfate	4/15/2011	110
					Ozark	OHM In-house Method	Fluorescein-clc	4/22/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	4/22/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	4/18/2011	650
					CEL	SM5310C	Total Organic Carbon	4/14/2011	305
			- / /		Truesdail	SW6020	Chromium	4/22/2011	Maksim Gorbunov
	PT-9M-110712	ARCADIS	7/12/2011	11:10	CEL	E200.8	Arsenic	7/15/2011	43
					CEL	E200.8	Barium	7/15/2011	43
					CEL	E200.8	Iron-Dissolved	7/15/2011	43
					CEL	E200.8	Manganese	7/15/2011	43
					CEL	E200.8	Molybdenum	7/15/2011	43
					CEL	E200.8	Selenium	7/15/2011	43
					Truesdail	E218.6	Chromium, hexavalent	7/15/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	7/13/2011	92
					CEL	E300	Sulfate	7/13/2011	92
					Ozark	OHM In-house Method	Fluorescein-clc	7/31/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	7/31/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	7/16/2011	688
					CEL	SM5310C	Total Organic Carbon	7/15/2011	305
					Truesdail	SW6020	Chromium	7/18/2011	Katia Kiarashpoor

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Location	Sample ID	Sampler	Sample	Sample	Laboratory	Test Method	Analyte	Analysis Date	Analyst Name/
1	-		Date	Time	•		-	•	Analyst ID #
PT-09D	PT-9D-101013	ARCADIS	10/13/2010	9:56	CEL	E200.8	Arsenic	10/19/2010	43
					CEL CEL	E200.8 E200.8	Barium Iron-Dissolved	10/19/2010 10/19/2010	43 43
					CEL	E200.8	Manganese	10/19/2010	43
					CEL	E200.8	Molybdenum	10/19/2010	43
					CEL	E200.8	Selenium	10/19/2010	43
					Truesdail	E218.6	Chromium, hexavalent	10/15/2010	Sonya Bersudsky
					CEL	E300	Nitrate-n	10/14/2010	92
					CEL	E300	Sulfate	10/15/2010	92
					Ozark	OHM In-house Method	Fluorescein-clc	10/22/2010	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	10/22/2010	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	10/20/2010	144
					CEL	SM5310C	Total Organic Carbon	10/21/2010	92
					Truesdail	SW6020	Chromium	10/19/2010	Hope Trinidad
	PT-09D-110118	ARCADIS	1/18/2011	9:43	CEL	E200.8	Arsenic	1/20/2011	43
					CEL	E200.8	Barium	1/20/2011	43
					CEL	E200.8	Iron-Dissolved	1/20/2011	43
					CEL	E200.8	Manganese	1/20/2011	43
					CEL	E200.8	Molybdenum	1/20/2011	43
					CEL	E200.8	Selenium	1/20/2011	43
					Truesdail	E218.6	Chromium, hexavalent	1/22/2011	Sonya Bersudsky
					CEL CEL	E300	Nitrate-n Sulfate	1/19/2011	305 305
					Ozark	E300 OHM In-house Method	Sulfate Fluorescein-clc	1/19/2011 1/24/2011	305 Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	1/24/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	1/26/2011	144
					CEL	SM5310C	Total Organic Carbon	1/20/2011	92
					Truesdail	SW6020	Chromium	1/28/2011	Katia Kiarashpoor
	PT-9D-110413	ARCADIS	4/13/2011	15:26	CEL	E200.8	Arsenic	4/18/2011	43
			, -, -		CEL	E200.8	Barium	4/18/2011	43
					CEL	E200.8	Iron-Dissolved	4/18/2011	43
					CEL	E200.8	Manganese	4/18/2011	43
					CEL	E200.8	Molybdenum	4/18/2011	43
					CEL	E200.8	Selenium	4/18/2011	43
					Truesdail	E218.6	Chromium, hexavalent	4/19/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	4/14/2011	110
					CEL	E300	Sulfate	4/15/2011	110
					Ozark	OHM In-house Method	Fluorescein-clc	4/22/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	4/22/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	4/18/2011	650
					CEL Truesdail	SM5310C SW6020	Total Organic Carbon Chromium	4/14/2011	305 Maksim Gorbunov
	PT-9D-110712	VBCVDIS	7/12/2011	11:51	CEL	E200.8	Arsenic	4/22/2011 7/15/2011	43
	F1-3D-110/12	ANCADIS	//12/2011	11.51	CEL	E200.8	Barium	7/15/2011	43
					CEL	E200.8	Iron-Dissolved	7/15/2011	43
					CEL	E200.8	Manganese	7/15/2011	43
					CEL	E200.8	Molybdenum	7/15/2011	43
					CEL	E200.8	Selenium	7/15/2011	43
					Truesdail	E218.6	Chromium, hexavalent	7/15/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	7/13/2011	92
					CEL	E300	Sulfate	7/13/2011	92
					Ozark	OHM In-house Method	Fluorescein-clc	8/2/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	8/2/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	7/16/2011	688
					CEL	SM5310C	Total Organic Carbon	7/15/2011	305
	DT 00		40/40/20:-		Truesdail	SW6020	Chromium	7/18/2011	Katia Kiarashpoor
	PT-9D-101013D	ARCADIS	10/13/2010		CEL	E200.8	Arsenic	10/19/2010	43
					CEL	E200.8	Barium	10/19/2010	43
					CEL	E200.8	Iron-Dissolved	10/19/2010 10/19/2010	43
					CEL CEL	E200.8 E200.8	Manganese Molybdenum	10/19/2010	43 43
					CEL	E200.8 E200.8	Selenium	10/19/2010	43
					Truesdail	E218.6	Chromium, hexavalent	10/15/2010	Sonya Bersudsky
					CEL	E300	Nitrate-n	10/14/2010	92
					CEL	E300	Sulfate	10/15/2010	92
					CEL	SM2320B	Alkalinity bicarbonate	10/20/2010	144
					CEL	SM5310C	Total Organic Carbon	10/21/2010	92
					Truesdail	SW6020	Chromium	10/19/2010	Hope Trinidad
								•	

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Location	Sample ID	Sampler	Sample	Sample	Laboratory	Test Method	Analyte	Analysis Date	Analyst Name/
MW-11	MW-11-101012	ARCADIS	Date 10/12/2010	Time 11:32	CEL	E200.8	Arsenic	10/14/2010	Analyst ID #
10100-11	WW-11-101012	AIICADIS	10/12/2010	11.52	CEL	E200.8	Barium	10/14/2010	43
					CEL	E200.8	Iron-Dissolved	10/14/2010	43
					CEL	E200.8	Manganese	10/14/2010	43
					CEL	E200.8	Molybdenum	10/14/2010	43
					CEL	E200.8	Selenium	10/14/2010	43
					Truesdail	E218.6	Chromium, hexavalent	10/15/2010	Sonya Bersudsky
					CEL	E300	Nitrate-n	10/13/2010	305
					CEL	E300	Sulfate	10/14/2010	305
					Ozark	OHM In-house Method	Fluorescein-clc	10/22/2010	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	10/22/2010	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	10/18/2010	650
					CEL	SM5310C	Total Organic Carbon	10/21/2010	92
		********	4 /4 7 /2044	44.00	Truesdail	SW6020	Chromium	10/30/2010	Hope Trinidad
	MW-11-110117	ARCADIS	1/17/2011	11:30	CEL	E200.8	Arsenic	1/18/2011	43
					CEL CEL	E200.8 E200.8	Barium Iron-Dissolved	1/18/2011	43 43
					CEL	E200.8	Manganese	1/18/2011 1/18/2011	43
					CEL	E200.8	Molybdenum	1/18/2011	43
					CEL	E200.8	Selenium	1/18/2011	43
					Truesdail	E218.6	Chromium, hexavalent	1/22/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	1/18/2011	305
					CEL	E300	Sulfate	1/18/2011	305
					Ozark	OHM In-house Method	Fluorescein-clc	1/24/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	1/24/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	1/20/2011	144
					CEL	SM5310C	Total Organic Carbon	1/20/2011	662
					Truesdail	SW6020	Chromium	1/28/2011	Katia Kiarashpoor
	MW-11-110412	ARCADIS	4/12/2011	10:47	CEL	E200.8	Arsenic	4/19/2011	43
					CEL	E200.8	Barium	4/19/2011	43
					CEL	E200.8	Iron-Dissolved	4/19/2011	43
					CEL	E200.8	Manganese	4/19/2011	43
					CEL	E200.8	Molybdenum	4/19/2011	43
					CEL	E200.8	Selenium	4/19/2011	43
					Truesdail	E218.6	Chromium, hexavalent	4/14/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	4/13/2011	110
					CEL	E300	Sulfate	4/13/2011	110
					Ozark Ozark	OHM In-house Method	Fluorescein-clc	4/22/2011	Margaret Ridinger
					CEL	OHM In-house Method SM2320B	Rhodamine-clc Alkalinity bicarbonate	4/22/2011 4/18/2011	Margaret Ridinger 650
					CEL	SM5310C	Total Organic Carbon	4/13/2011	305
					Truesdail	SW6020	Chromium	4/21/2011	Katia Kiarashpoor
	MW-11-110711	ARCADIS	7/11/2011	12:05	CEL	E200.8	Arsenic	7/15/2011	43
	11 110/11	,	,,11,2011	12.05	CEL	E200.8	Barium	7/15/2011	43
					CEL	E200.8	Iron-Dissolved	7/15/2011	43
					CEL	E200.8	Manganese	7/15/2011	43
					CEL	E200.8	Molybdenum	7/15/2011	43
					CEL	E200.8	Selenium	7/15/2011	43
					Truesdail	E218.6	Chromium, hexavalent	7/15/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	7/12/2011	305
					CEL	E300	Sulfate	7/12/2011	305
					Ozark	OHM In-house Method	Fluorescein-clc	7/26/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	7/26/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	7/16/2011	144
					CEL	SM5310C	Total Organic Carbon	7/14/2011	305
					Truesdail	SW6020	Chromium	7/18/2011	Katie Kiarashpoor
	MW-11-110117D	ARCADIS	1/17/2011		CEL	E200.8	Arsenic	1/18/2011	43
					CEL	E200.8	Barium	1/18/2011	43
					CEL	E200.8	Iron-Dissolved	1/18/2011	43
					CEL	E200.8	Manganese	1/18/2011	43
					CEL CEL	E200.8 E200.8	Molybdenum	1/18/2011 1/18/2011	43 43
						EZUU.ŏ	Selenium	1/10//011	41
							Chromium hovavalent		
					Truesdail	E218.6	Chromium, hexavalent	1/22/2011	Sonya Bersudsky
					Truesdail CEL	E218.6 E300	Nitrate-n	1/22/2011 1/18/2011	Sonya Bersudsky 305
					Truesdail CEL CEL	E218.6 E300 E300	Nitrate-n Sulfate	1/22/2011 1/18/2011 1/18/2011	Sonya Bersudsky 305 305
					Truesdail CEL	E218.6 E300	Nitrate-n	1/22/2011 1/18/2011	Sonya Bersudsky 305

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T			Sample	Sample					Analyst Name/
Location	Sample ID	Sampler	Date	Time	Laboratory	Test Method	Analyte	Analysis Date	Analyst ID #
MW-24A	MW-24A-101012	ARCADIS	10/12/2010	13:12	CEL	E200.8	Arsenic	10/14/2010	43
					CEL	E200.8	Barium	10/14/2010	43
					CEL	E200.8	Iron-Dissolved	10/14/2010	43
					CEL	E200.8	Manganese	10/14/2010	43
					CEL	E200.8	Molybdenum	10/14/2010	43
					CEL	E200.8	Selenium	10/14/2010	43
					Truesdail	E218.6	Chromium, hexavalent	10/15/2010	Sonya Bersudsky
					CEL	E300	Nitrate-n	10/13/2010	305
					CEL	E300	Sulfate	10/14/2010	305
					Ozark	OHM In-house Method	Fluorescein-clc	10/22/2010	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	10/22/2010	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	10/18/2010	650
					CEL	SM5310C	Total Organic Carbon	10/21/2010	92
					Truesdail	SW6020	Chromium	10/19/2010	Hope Trinidad
	MW-24A-110117	ARCADIS	1/17/2011	12:16	CEL	E200.8	Arsenic	1/18/2011	43
					CEL	E200.8	Barium	1/18/2011	43
					CEL	E200.8	Iron-Dissolved	1/18/2011	43
					CEL	E200.8	Manganese	1/18/2011	43
					CEL	E200.8	Molybdenum	1/18/2011	43
					CEL	E200.8	Selenium	1/18/2011	43
					Truesdail	E218.6	Chromium, hexavalent	1/22/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	1/18/2011	305
					CEL	E300	Sulfate	1/18/2011	305
					Ozark	OHM In-house Method	Fluorescein-clc	1/24/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	1/24/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	1/20/2011	144
					CEL	SM5310C	Total Organic Carbon	1/20/2011	662
					Truesdail	SW6020	Chromium	1/28/2011	Katia Kiarashpoor
	MW-24A-110412	ARCADIS	4/12/2011	11:45	CEL	E200.8	Arsenic	4/19/2011	43
					CEL	E200.8	Barium	4/19/2011	43
					CEL	E200.8	Iron-Dissolved	4/19/2011	43
					CEL	E200.8	Manganese	4/19/2011	43
					CEL	E200.8	Molybdenum	4/19/2011	43
					CEL	E200.8	Selenium	4/19/2011	43
					Truesdail	E218.6	Chromium, hexavalent	4/14/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	4/13/2011	110
					CEL	E300	Sulfate	4/13/2011	110
					Ozark	OHM In-house Method	Fluorescein-clc	4/22/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	4/22/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	4/18/2011	650
					CEL	SM5310C	Total Organic Carbon	4/13/2011	305
					Truesdail	SW6020	Chromium	4/19/2011	Katia Kiarashpoor
	MW-24A-110711	ARCADIS	7/11/2011	14:15	CEL	E200.8	Arsenic	7/15/2011	43
			, , -		CEL	E200.8	Barium	7/15/2011	43
					CEL	E200.8	Iron-Dissolved	7/15/2011	43
					CEL	E200.8	Manganese	7/15/2011	43
					CEL	E200.8	Molybdenum	7/15/2011	43
					CEL	E200.8	Selenium	7/15/2011	43
					Truesdail	E218.6	Chromium, hexavalent	7/15/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	7/13/2011	305
					CEL	E300	Sulfate	7/12/2011	305
					Ozark	OHM In-house Method	Fluorescein-clc	7/12/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	7/27/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	7/16/2011	688
					CEL	SM5310C	Total Organic Carbon	7/16/2011	305
						SW6020	J		
					Truesdail	300020	Chromium	7/18/2011	Katie Kiarashpoor

PG&E Topock

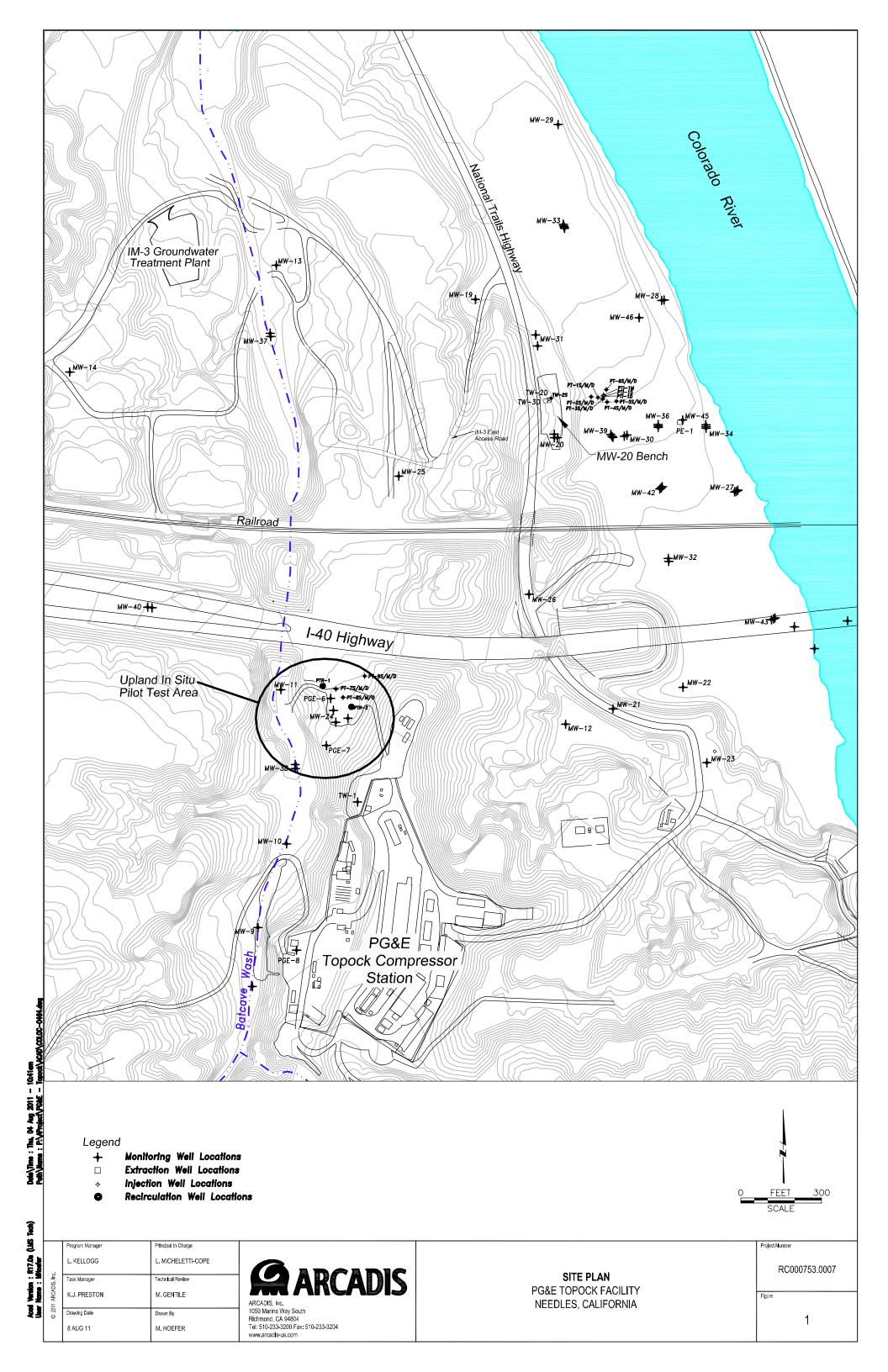
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NW-24B-110412	305									
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CEL SM5310C Total Organic Carbon 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/20/2011 1/2	Margaret Ridinger									
NW-24B-110412	144		•							
MW-24B-110412 ARCADIS 4/12/2011 13:56 CEL E200.8 Arsenic 4/19/2011 CEL E200.8 Iron-Dissolved 4/19/2011 CEL E200.8 Manganese 4/19/2011 CEL E200.8 Molybdenum 4/19/2011 CEL E200.8 Molybdenum 4/19/2011 CEL E200.8 Selenium 4/19/2011 CEL E300 Nitrate-n 4/13/2011 CEL E300 Nitrate-n 4/13/2011 CEL E300 Sulfate 4/13/2011 CEL E300 Sulfate 4/13/2011 CEL E300 Sulfate 4/13/2011 CEL E300 Nitrate-n 4/13/2011 CEL E300 Sulfate 4/13/2011 CEL SM3310C Total Organic Carbon 4/13/2011 CEL SM5310C Total Organic Carbon 4/13/2011 MW-24B-110711 ARCADIS 7/11/2011 13:25 CEL E200.8 Arsenic 7/15/2011 CEL E200.8 Barium 7/15/2011 CEL E200.8 Manganese 7/15/2011 CEL E200.8 Molybdenum 7/15/2011 CEL E200.8 Molybdenum 7/15/2011 CEL E200.8 Molybdenum 7/15/2011 CEL E200.8 Selenium 7/15/2011 CEL E200.8 Nitrate-n 7/15/2011 CEL E200.8 Selenium 7/15/2011 CEL E200.8 Nitrate-n 7/15/2011 CEL E200.8 Nitrate-n 7/15/2011 CEL E200.8 Nitrate-n 7/15/2011 CEL E200.8 Nitrate-n 7/15/2011	662		-							
CEL E200.8 Barium 4/19/2011	Katia Kiarashpoor									
CEL E200.8 Iron-Dissolved 4/19/2011 CEL E200.8 Manganese 4/19/2011 CEL E200.8 Manganese 4/19/2011 CEL E200.8 Molybdenum 4/19/2011 CEL E200.8 Molybdenum 4/19/2011 CEL E200.8 Selenium 4/19/2011 CEL E300 Nitrate-n 4/13/2011 CEL E300 Nitrate-n 4/13/2011 CEL E300 Sulfate 4/13/2011 CEL SM2320B Alkalinity bicarbonate 4/18/2011 CEL SM2320B Alkalinity bicarbonate 4/18/2011 CEL SM2320B Alkalinity bicarbonate 4/18/2011 Truesdail SW6020 Chromium 4/21/2011 Truesdail SW6020 Chromium 4/21/2011 CEL E200.8 Arsenic 7/15/2011 CEL E200.8 Barium 7/15/2011 CEL E200.8 Manganese 7/15/2011 CEL E200.8 Manganese 7/15/2011 CEL E200.8 Molybdenum 7/15/2011 CEL E200.8 Molybdenum 7/15/2011 CEL E200.8 Selenium 7/15/2011 Truesdail E218.6 Chromium, hexavalent 7/15/2011 Truesdail E218.6 Chromium, hexavalent 7/15/2011 Truesdail E218.6 Chromium, hexavalent 7/15/2011 CEL E200.8 Selenium 7/15/2011	43	4/19/2011				13:56	4/12/2011	ARCADIS	MW-24B-110412	
CEL E200.8 Manganese A/19/2011	43	4/19/2011	Barium	E200.8						
CEL E200.8 Molybdenum A/19/2011	43	4/19/2011	Iron-Dissolved		CEL					
CEL E200.8 Selenium A/19/2011	43	4/19/2011	Manganese		CEL					
Truesdail E218.6 Chromium, hexavalent 4/14/2011 CEL E300 Nitrate-n 4/13/2011 CEL E300 Sulfate 4/13/2011 Ozark OHM In-house Method Fluorescein-clc 4/22/2011 Ozark OHM In-house Method Rhodamine-clc 4/22/2011 CEL SM2320B Alkalinity bicarbonate 4/18/2011 CEL SM5310C Total Organic Carbon 4/13/2011 Truesdail SW6020 Chromium 4/21/2011 MW-24B-110711 ARCADIS 7/11/2011 13:25 CEL E200.8 Arsenic 7/15/2011 CEL E200.8 Barium 7/15/2011 CEL E200.8 Manganese 7/15/2011 CEL E200.8 Monganese 7/15/2011 CEL E200.8 Selenium 7/15/2011 CEL E200.8 Nitrate-n 7/15/2011	43	4/19/2011	Molybdenum							
CEL E300 Nitrate-n A/13/2011	43	4/19/2011	Selenium	E200.8	CEL					
CEL E300 Sulfate 4/13/2011	Sonya Bersudsky	4/14/2011	Chromium, hexavalent	E218.6	Truesdail					
Ozark	110	4/13/2011	Nitrate-n	E300	CEL					
Ozark	110	4/13/2011	Sulfate	E300	CEL					
CEL SM2320B Alkalinity bicarbonate A/18/2011 CEL SM2320B Alkalinity bicarbonate A/18/2011 CEL SM5310C Total Organic Carbon A/13/2011 Truesdail SW6020 Chromium A/21/2011 MW-24B-110711 ARCADIS 7/11/2011 13:25 CEL E200.8 Arsenic 7/15/2011 CEL E200.8 Barium 7/15/2011 CEL E200.8 Iron-Dissolved 7/15/2011 CEL E200.8 Manganese 7/15/2011 CEL E200.8 Molybdenum 7/15/2011 CEL E200.8 Molybdenum 7/15/2011 CEL E200.8 Selenium 7/15/2011 CEL E200.8 Selenium 7/15/2011 CEL E200.8 Chromium, hexavalent 7/15/2011 CEL E300 Nitrate-n 7/12/2011 CEL CEL E300 Nitrate-n 7/12/2011 CEL C	Margaret Ridinger	4/22/2011	Fluorescein-clc	OHM In-house Method	Ozark					
CEL SM5310C Total Organic Carbon 4/13/2011 Truesdail SW6020 Chromium 4/21/2011 MW-24B-110711 ARCADIS 7/11/2011 13:25 CEL E200.8 Arsenic 7/15/2011 CEL E200.8 Barium 7/15/2011 CEL E200.8 Iron-Dissolved 7/15/2011 CEL E200.8 Manganese 7/15/2011 CEL E200.8 Molybdenum 7/15/2011 CEL E200.8 Selenium 7/15/2011 CEL E200.8 Chromium, hexavalent 7/15/2011 CEL E300 Nitrate-n 7/12/2011 CEL E300 Nitrate-n 7/12/2011 CEL E300 Nitrate-n 7/12/2011 CEL	Margaret Ridinger	4/22/2011	Rhodamine-clc	OHM In-house Method	Ozark					
Truesdail SW6020 Chromium 4/21/2011 MW-24B-110711 ARCADIS 7/11/2011 13:25 CEL E200.8 Arsenic 7/15/2011 CEL E200.8 Barium 7/15/2011 CEL E200.8 Iron-Dissolved 7/15/2011 CEL E200.8 Manganese 7/15/2011 CEL E200.8 Molybdenum 7/15/2011 CEL E200.8 Selenium 7/15/2011 CEL E200.8 Selenium 7/15/2011 CEL E200.8 Selenium 7/15/2011 CEL E200.8 Selenium 7/15/2011 CEL E200.8 Nitrate-n 7/15/2011	650	4/18/2011	Alkalinity bicarbonate	SM2320B	CEL					
MW-24B-110711 ARCADIS 7/11/2011 13:25 CEL E200.8 Arsenic 7/15/2011 CEL E200.8 Barium 7/15/2011 CEL E200.8 Iron-Dissolved 7/15/2011 CEL E200.8 Manganese 7/15/2011 CEL E200.8 Molybdenum 7/15/2011 CEL E200.8 Selenium 7/15/2011 Truesdail E218.6 Chromium, hexavalent 7/15/2011 CEL E300 Nitrate-n 7/12/2011	305	4/13/2011	Total Organic Carbon	SM5310C	CEL					
CEL E200.8 Barium 7/15/2011 CEL E200.8 Iron-Dissolved 7/15/2011 CEL E200.8 Manganese 7/15/2011 CEL E200.8 Molybdenum 7/15/2011 CEL E200.8 Selenium 7/15/2011 Truesdail E218.6 Chromium, hexavalent 7/15/2011 CEL E300 Nitrate-n 7/12/2011	Katia Kiarashpoor	4/21/2011	Chromium	SW6020	Truesdail					
CEL E200.8 Iron-Dissolved 7/15/2011 CEL E200.8 Manganese 7/15/2011 CEL E200.8 Molybdenum 7/15/2011 CEL E200.8 Selenium 7/15/2011 Truesdail E218.6 Chromium, hexavalent 7/15/2011 CEL E300 Nitrate-n 7/12/2011	43	7/15/2011	Arsenic	E200.8	CEL	13:25	7/11/2011	ARCADIS	MW-24B-110711	
CEL E200.8 Manganese 7/15/2011 CEL E200.8 Molybdenum 7/15/2011 CEL E200.8 Selenium 7/15/2011 Truesdail E218.6 Chromium, hexavalent 7/15/2011 CEL E300 Nitrate-n 7/12/2011	43	7/15/2011	Barium	E200.8	CEL					
CEL E200.8 Molybdenum 7/15/2011 CEL E200.8 Selenium 7/15/2011 Truesdail E218.6 Chromium, hexavalent 7/15/2011 CEL E300 Nitrate-n 7/12/2011	43	7/15/2011	Iron-Dissolved	E200.8	CEL					
CEL E200.8 Selenium 7/15/2011 Truesdail E218.6 Chromium, hexavalent 7/15/2011 CEL E300 Nitrate-n 7/12/2011	43	7/15/2011	Manganese	E200.8	CEL					
Truesdail E218.6 Chromium, hexavalent 7/15/2011 CEL E300 Nitrate-n 7/12/2011	43	7/15/2011	Molybdenum	E200.8	CEL					
CEL E300 Nitrate-n 7/12/2011	43	7/15/2011	Selenium	E200.8	CEL					
	Sonya Bersudsky	7/15/2011	Chromium, hexavalent	E218.6	Truesdail					
CFI F300 Sulfate 7/12/2011	305	7/12/2011	Nitrate-n	E300	CEL					
CLL L500 Junate 1/12/2011	305	7/12/2011	Sulfate	E300	CEL					
Ozark OHM In-house Method Fluorescein-clc 7/28/2011	Margaret Ridinger	7/28/2011	Fluorescein-clc	OHM In-house Method	Ozark					
Ozark OHM In-house Method Rhodamine-clc 7/28/2011	Margaret Ridinger	7/28/2011	Rhodamine-clc	OHM In-house Method	Ozark					
CEL SM2320B Alkalinity bicarbonate 7/16/2011	688	7/16/2011	Alkalinity bicarbonate	SM2320B	CEL					
CEL SM5310C Total Organic Carbon 7/14/2011	305	7/14/2011	Total Organic Carbon	SM5310C	CEL					
Truesdail SW6020 Chromium 7/18/2011	Katie Kiarashpoor	7/18/2011	Chromium	SW6020	Truesdail					
MW-24B-110711D ARCADIS 7/11/2011 CEL E200.8 Arsenic 7/15/2011	43	7/15/2011	Arsenic	E200.8	CEL		7/11/2011	ARCADIS	MW-24B-110711D	
CEL E200.8 Barium 7/15/2011	43									
CEL E200.8 Iron-Dissolved 7/15/2011	43									
CEL E200.8 Manganese 7/15/2011	43									
CEL E200.8 Molybdenum 7/15/2011	43		-							
CEL E200.8 Selenium 7/15/2011			•							
Truesdail E218.6 Chromium, hexavalent 7/15/2011	43									
CEL E300 Nitrate-n 7/12/2011	43 Sonva Bersudsky									
CEL E300 Sulfate 7/12/2011	Sonya Bersudsky									
CEL SM2320B Alkalinity bicarbonate 7/16/2011	Sonya Bersudsky 305									
CEL SM5310C Total Organic Carbon 7/14/2011	Sonya Bersudsky 305 305									
Truesdail SW6020 Chromium 7/18/2011	Sonya Bersudsky 305		-							

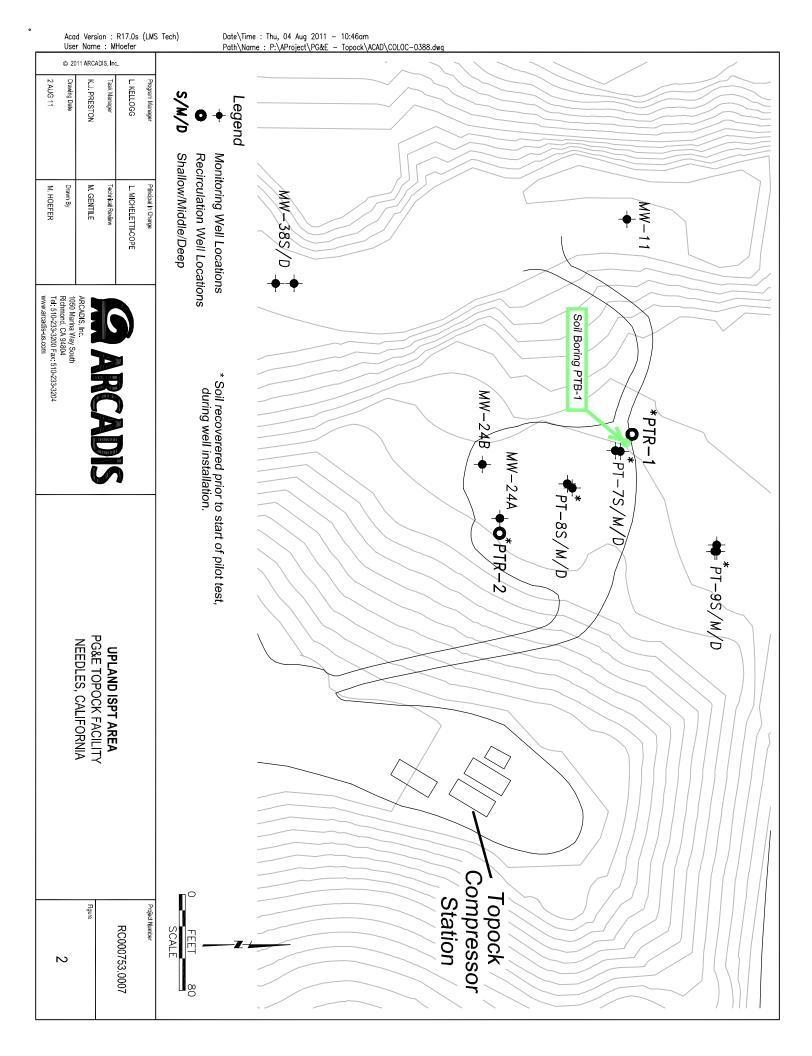
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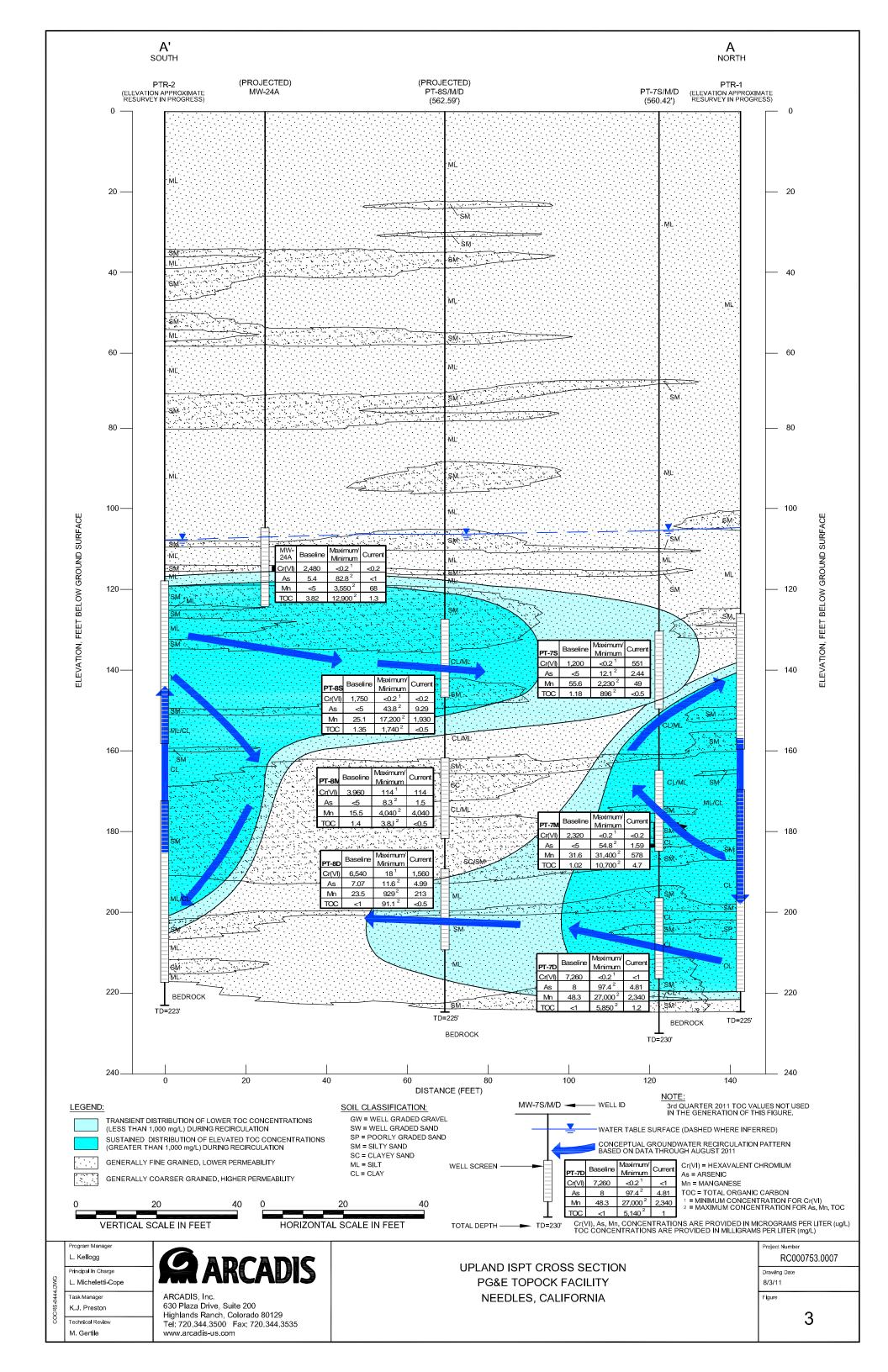
		1	Sample	Sample					Analyst Name/
Location	Sample ID	Sampler	Date	Time	Laboratory	Test Method	Analyte	Analysis Date	Analyst ID #
EB-Upland Wells	EB2-101013	ARCADIS	10/13/2010	11:10	CEL	E200.8	Arsenic	10/19/2010	43
					CEL	E200.8	Barium	10/19/2010	43
					CEL	E200.8	Iron-Dissolved	10/19/2010	43
					CEL	E200.8	Manganese	10/19/2010	43
					CEL	E200.8	Molybdenum	10/19/2010	43
					CEL	E200.8	Selenium	10/19/2010	43
					Truesdail	E218.6	Chromium, hexavalent	10/15/2010	Sonya Bersudsky
					CEL	E300	Nitrate-n	10/14/2010	92
					CEL	E300	Sulfate	10/14/2010	92
					Ozark	OHM In-house Method	Fluorescein-clc	10/22/2010	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	10/22/2010	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	10/20/2010	144
					CEL	SM5310C	Total Organic Carbon	10/21/2010	92
					Truesdail	SW6020	Chromium	10/19/2010	Hope Trinidad
	EB-1-110118	ARCADIS	1/18/2011	9:00	CEL	E200.8	Arsenic	1/20/2011	43
					CEL	E200.8	Barium	1/20/2011	43
					CEL	E200.8	Iron-Dissolved	1/20/2011	43
					CEL	E200.8	Manganese	1/20/2011	43
					CEL	E200.8	Molybdenum	1/20/2011	43
					CEL	E200.8	Selenium	1/20/2011	43
					Truesdail	E218.6	Chromium, hexavalent	1/22/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	1/19/2011	305
					CEL	E300	Sulfate	1/19/2011	305
					Ozark	OHM In-house Method	Fluorescein-clc	1/24/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	1/24/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	1/26/2011	144
					CEL	SM5310C	Total Organic Carbon	1/20/2011	92
					Truesdail	SW6020	Chromium	1/28/2011	Katia Kiarashpoor
	EB-1-110413	ARCADIS	4/13/2011	9:15	CEL	E200.8	Arsenic	4/18/2011	43
					CEL	E200.8	Barium	4/18/2011	43
					CEL	E200.8	Iron-Dissolved	4/18/2011	43
					CEL	E200.8	Manganese	4/18/2011	43
					CEL	E200.8	Molybdenum	4/18/2011	43
					CEL	E200.8	Selenium	4/18/2011	43
					Truesdail	E218.6	Chromium, hexavalent	4/19/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	4/14/2011	110
					CEL	E300	Sulfate	4/14/2011	110
					Ozark	OHM In-house Method	Fluorescein-clc	4/22/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	4/22/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	4/18/2011	144
					CEL	SM5310C	Total Organic Carbon	4/14/2011	305
					Truesdail	SW6020	Chromium	4/22/2011	Maksim Gorbunov
	EB-1-110711	ARCADIS	7/11/2011	12:15 PM	CEL	E200.8	Arsenic	7/15/2011	43
					CEL	E200.8	Barium	7/15/2011	43
					CEL	E200.8	Iron-Dissolved	7/15/2011	43
					CEL	E200.8	Manganese	7/15/2011	43
					CEL	E200.8	Molybdenum	7/15/2011	43
					CEL	E200.8	Selenium	7/15/2011	43
					Truesdail	E218.6	Chromium, hexavalent	7/15/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	7/12/2011	305
					CEL	E300	Sulfate	7/12/2011	305
					Ozark	OHM In-house Method	Fluorescein-clc	7/30/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	7/30/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	7/16/2011	688
					CEL	SM5310C	Total Organic Carbon	7/14/2011	305
					Truesdail	SW6020	Chromium	7/19/2011	Katie Kiarashpoor
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1			Sample	Sample				 	Analyst Name/
Location	Sample ID	Sampler	Date	Time	Laboratory	Test Method	Analyte	Analysis Date	Analyst Name/ Analyst ID #
FB-Upland Wells	FB2-101013	ARCADIS		11:40	CEL	E200.8	Arsenic	10/19/2010	43
					CEL	E200.8	Barium	10/19/2010	43
					CEL	E200.8	Iron-Dissolved	10/19/2010	43
					CEL	E200.8	Manganese	10/19/2010	43
					CEL	E200.8	Molybdenum	10/19/2010	43
					CEL	E200.8	Selenium	10/19/2010	43
					Truesdail	E218.6	Chromium, hexavalent	10/15/2010	Sonya Bersudsky
					CEL	E300	Nitrate-n	10/14/2010	92
					CEL	E300	Sulfate	10/14/2010	92
					Ozark	OHM In-house Method	Fluorescein-clc	10/22/2010	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	10/22/2010	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	10/20/2010	144
					CEL	SM5310C	Total Organic Carbon	10/21/2010	92
					Truesdail	SW6020	Chromium	10/19/2010	Hope Trinidad
	FB-1-110118	ARCADIS	1/18/2011	8:30	CEL	E200.8	Arsenic	1/20/2011	43
			, -, -		CEL	E200.8	Barium	1/20/2011	43
					CEL	E200.8	Iron-Dissolved	1/20/2011	43
					CEL	E200.8	Manganese	1/20/2011	43
					CEL	E200.8	Molybdenum	1/20/2011	43
					CEL	E200.8	Selenium	1/20/2011	43
					Truesdail	E218.6	Chromium, hexavalent	1/22/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	1/19/2011	305
					CEL	E300	Sulfate	1/19/2011	305
					Ozark	OHM In-house Method	Fluorescein-clc	1/24/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	1/24/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	1/26/2011	144
					CEL	SM5310C	Total Organic Carbon	1/20/2011	92
					Truesdail	SW6020	Chromium	1/28/2011	Katia Kiarashpoor
	FB-1-110412	APCADIS	4/12/2011	15:05	CEL	E200.8	Arsenic	4/20/2011	43
	10-1-110412	ARCADIS	4/12/2011	13.03	CEL	E200.8	Barium	4/20/2011	43
					CEL	E200.8	Iron-Dissolved	4/20/2011	43
					CEL	E200.8	Manganese	4/20/2011	43
					CEL	E200.8	Molybdenum	4/20/2011	43
					CEL	E200.8	Selenium		43
					Truesdail	E218.6		4/20/2011	
					CEL	E300	Chromium, hexavalent Nitrate-n	4/14/2011 4/13/2011	Sonya Bersudsky 110
					CEL	E300	Sulfate	4/13/2011	110
					Ozark Ozark	OHM In-house Method OHM In-house Method	Fluorescein-clc	4/22/2011	Margaret Ridinger
					CEL		Rhodamine-clc	4/22/2011	Margaret Ridinger
						SM2320B	Alkalinity bicarbonate	4/18/2011	650
					CEL	SM5310C	Total Organic Carbon	4/13/2011	305
	ED 4 440744	ADCADIC	7/44/2044	12.00	Truesdail	SW6020	Chromium	4/19/2011	Katia Kiarashpoor
	FB-1-110711	ARCADIS	7/11/2011	13:00	CEL	E200.8	Arsenic	7/15/2011	43
					CEL	E200.8	Barium	7/15/2011	43
					CEL	E200.8	Iron-Dissolved	7/15/2011	43
					CEL	E200.8	Manganese	7/15/2011	43
					CEL	E200.8	Molybdenum	7/15/2011	43
					CEL	E200.8	Selenium	7/15/2011	43
					Truesdail	E218.6	Chromium, hexavalent	7/15/2011	Sonya Bersudsky
					CEL	E300	Nitrate-n	7/12/2011	305
					CEL	E300	Sulfate	7/12/2011	305
					Ozark	OHM In-house Method	Fluorescein-clc	7/29/2011	Margaret Ridinger
					Ozark	OHM In-house Method	Rhodamine-clc	7/29/2011	Margaret Ridinger
					CEL	SM2320B	Alkalinity bicarbonate	7/16/2011	144
					CEL	SM5310C	Total Organic Carbon	7/14/2011	305
					Truesdail	SW6020	Chromium	7/19/2011	Katie Kiarashpoor







Appendix A

Communications



Yvonne Meeks Manager

Environmental Remediation Gas T&D Department

Mailing Address 4325 South Higuera Sreet San Luis Obispo, CA 93401 Location 6588 Ontario Road San Luis Obispo, CA 93405 Tel: (805) 234-2257

Email: yjm1@pge.com

May 29, 2008

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

Subject: Board Order R7-2007-0015

PG&E Topock Compressor Station, Needles, California

Upland In-Situ Pilot Test

Changes in Pilot Test Operations

Dear Mr. Purdue:

As we discussed yesterday, PG&E is submitting this letter is to notify the Regional Water Quality Control Board (RWQCB) that PG&E would like to temporarily discontinue injection of reagent for the Upland In-Situ Pilot Test (ISPT) operating under Board Order No. R7-2007-0015. Currently, the concentration of total dissolved carbon (TOC) within the aquifer is sufficient to sustain a viable in-situ reactive zone (IRZ). The plan is to withhold treatment discharge (reagent dosing via the recirculation wells) for approximately one month to monitor the recirculation systems ability to distribute the TOC sufficiently through the recirculation cell. There will be no change in the recirculation rate - the system will continue to circulate water during this time period.

To evaluate the TOC distribution, PG&E is recommending that weekly sampling of TOC be collected from eight wells: PT-7M, PT-7D, PT-8S, PT-8M, PT-8D, MW-24A, PTR-1, and PTR-2 during the one month evaluation period. After the evaluation period, PG&E will identify a path forward to continue the dosing of the Upland ISPT, potentially at a reduced rate, or will discuss other options with the RWQCB. All supplemental data collected and the plan for continued dosing the Upland ISPT will be communicated to the RWQCB.

From an engineering perspective, because of the continual evaluation inherent in any pilot test, the optimal approach to the Upland ISPT was anticipated to be conducted in a semi-continuous manner, with breaks as needed to assess progress or fine-tune approaches. PG&E discussed this type of phasing with the RWQCB during the preparation of the Waste Discharge Requirement (WDR), e.g. as described in Finding II.A.1, the pilot test "...is expected to take up to six months and will be conducted within a nine-month calendar period".

Based on our review of the Waste Discharge Requirements, it does not appear as though the proposed actions fall under the Effluent Limitations and Discharge Specifications IV.A.5 that states, "Any changes in the type of amount of treatment chemicals added to the process water, duration of the pilot test, or other specific design elements as described in this Board Order shall be made with prior written approval of the Regional Water Board's Executive Officer." or Provision V.A.1.e that states, "Prior to modifications in this facility, which would results in material change in the quality or quantity of wastewater treated or discharged, or any material change in the location of discharge, the Discharger shall report all pertinent information in writing to the RWQCB and obtain revised requirements before modifications are implemented."

We understand however that you will determine if the proposal to temporarily discontinue discharge, and subsequent restart requires a simple notification to the RWQCB or if the permit requires that Board or Executive Officer approval is necessary. If such approval is necessary, please consider this letter our request for approval.

We have a scheduled ethanol delivery on June 2nd that we may be able to reschedule if we are allowed to cease the dosing operation per the information provided above. We appreciate your timely consideration of this letter.

If you have any questions regarding this information, please call me at (805) 234-2257.

Sincerely,

Yvonne Meeks

Topock Project Manager

Monne Meeke

cc: Cliff Raley, Water Board

Tom Vandenberg, Water Board

Aaron Yue, DTSC



California Regional Water Quality Control Board

Colorado River Basin Region

Linda S. Adams
Secretary for
Environmental Protection

73-720 Fred Waring Drive, Suite 100, Palm Desert, California 92260 (760) 346-7491 • Fax (760) 341-6820 http://www.waterboards.ca.gov/coloradoriver



May 29, 2008

Yvonne J. Meeks, Project Manager Pacific Gas & Electric Company 4325 S. Higuera Street San Luis Obispo, CA 93401

SUBJECT: APPROVAL OF A CESSATION IN THE REAGENT INJECTION PROCESS, WASTE DISCHARGE REQUIREMENTS BOARD ORDER NO. R7-2007-0015 (WDRs). PG&E TOPOCK COMPRESSOR

STATION

We received your letter, dated May 29, 2008 (Letter), requesting approval to temporarily discontinue reagent injections while continuing to pump and monitor recirculation wells associated with the Upland In-situ Pilot Test (Upland ISPT) at the subject facility. You explain the reason for your request by stating: "Currently, the concentration of total dissolved carbon (TOC) within the aquifer is sufficient to sustain a viable in-situ reactive zone (IRZ)." You explain further that PG&E would like "to withhold treatment discharge for approximately one month to monitor the recirculation systems ability to distribute the TOC sufficiently through the recirculation cell." You add that no change in the recirculation rate will occur during this time period. Also, you indicate that to evaluate the TOC distribution, weekly sampling of TOC will be conducted from eight specified monitoring wells. Following this one-month evaluation period, you state that PG&E would continue the dosing of the Upland ISPT, potentially at a reduced rate, or would discuss other options with the Colorado River Basin Regional Water Quality Control Board (Board), and that the monitoring data and continued dosing plans would be communicated to the Board.

The latter part of your letter discusses your view that the proposed temporary cessation of reagent injection appears to be the type of testing approach to the Upland ISPT that was anticipated to be conducted in a semi-continuous manner, with breaks as needed to assess progress or fine-tune approaches. You point out that this type of phasing was discussed with Board staff during the drafting of the subject Board Order, as reflected in Finding II.A.1, which provides that the Upland ISPT "is expected to take up to six months and will be conducted within a nine-month calendar period." Based on this Finding, you conclude that the proposed temporary cessation and subsequent "fine-tuning" for determining the optimal dosing rate for the reagent injections do not appear to fall under Effluent Limitations and Discharge Specifications IV.A.5 to require

formal written approval by the Regional Board's Executive Officer. In the event that the Executive Officer does not share this conclusion, you requested that your letter be considered a request for the Executive Officer's approval.

I have concluded that the temporary cessation of reagent injection for one month in a testing protocol that envisions that the injection portion of the pilot test would take up to six months and be conducted within a nine-month calendar period (Finding II.A.1) is a significant enough delay to be considered a "change[] in the amount of treatment chemicals added to the process water" or, at a minimum, a "change[] in ... other specific design elements as described in [the Board Order]." (Specification IV.A.5.) Thus, the proposed temporary cessation of reagent injection is subject to Specification IV.A.5. As such, my written approval is required. Accordingly, I have treated your letter as requesting that approval, which is hereby granted.

As for the "fine-tuning" of the dosing rate, which is proposed to occur upon restart of the reagent injection process, I agree that the starts/stops and breaks involved for this fine-tuning work are of a short-term nature and thus, would not rise to the level of specific design element changes that would require my written approval. Therefore, with respect to the fine-tuning phase of the Upland ISPT, your notice regarding this phase of the work is sufficient.

Please keep in mind, however, that it is necessary that you keep the Regional Board and the Department of Toxic Substances Control staff apprised, at the earliest practicable time, of all design and operational parameters involved in the Upland ISPT.

The subject Board Order remains in full effect and is not modified by this letter. If you have any questions, or require additional information regarding this matter, please call Cliff Raley at (760) 776-8962.

ROBERT PERDUE

CR/tab

¹ Specification IV.A.5 states: "Any changes in the type or amount of treatment chemicals added to the process water, duration of the pilot test, or other specific design elements as described in this Board Order shall be made with prior written approval of the Regional Water Board's Executive Officer."

Reagent Injection Process - 3
Upland ISPT, Topock Compressor Station

cc: Curt Russell, Onsite Project Manager, PG&E Topock

Julie Eakins, PE, CH2M HILL, Lisa Kellogg, PE, ARCADIS, Inc., Aaron Yue, Project Manager, DTSC

File: WDID No. 7B 36 2186 001, PG&E Topock Compressor Station,

Board Order No. R7-2007-0015

----Original Message----

From: Meeks, Yvonne J [mailto:YJM1@pge.com]

Sent: Monday, August 04, 2008 4:12 PM

To: Robert Perdue; Cliff Raley; Tom Vandenberg

Cc: Gilbert, David; Doss, Robert; Jayo, Juan (Law); Kellogg, Lisa; Robert Lucas

Subject: PGE Uplands ISPT Reagent Dosing

Robert and all -- Per the attached letter from the RWQCB, we are providing this notice that PG&E intends to re-start ethanol dosing in uplands pilot study well PTR-2 at a rate of between 15 and 45 gallons per day (a reduction from the 100 gallons per day specified in the WDR).

As you recall, with your approval, we temporarily discontinued reagent injection in both injection wells in late May. At that time, we proposed to evaluate the data results and make a recommendation for the restarting reagent dosing. PG&E has evaluated the recent monitoring data and intends to begin recirculation with ethanol dosing in PTR-2 within the next week. PG&E will continue to review the data and plans to make a recommendation regarding dosing in PTR-1 at the end of August.

We will continue to keep the RWQCB informed. Let me know if you have any questions.

Yvonne Meeks

From: Meeks, Yvonne J [mailto:YJM1@pge.com] Sent: Thursday, October 23, 2008 4:07 PM
To: Robert Perdue; Tom Vandenberg; Cliff Raley

Cc: Gilbert, David; Doss, Robert; Robert Lucas; Ayue@dtsc.ca.gov; Christopher Guerre

Subject: Topock - Notification request to the RWQCB regarding Uplands dosing

Robert --

In accordance with the attached letter from the RWQCB, we are providing this notice that tomorrow, October 24, PG&E intends to increase the ethanol dosing in uplands pilot study wells, PTR-1 and PTR-2, to a rate of 100 gallons per day for each well. We are essentially going back to the injection rate as was originally specified in Board Order No. R7-2007-0015. You will recall that we had decreased the rate back in August to 15-45 gallons per day.

Looking ahead, weplan to complete the ethanol dosing on November 6, the final day per the WDR permit. After that we will just be recirculating groundwater until December 3rd, also consistent with the WDR. Since these timeframes are consistent with the timeframes in the WDR permit, these completion activities didn't require notification, but I thought you might like to know that we are finishing up another (successful) pilot test.

Let me know if you have any questions, Yvonne

Preston, Kelli Jo

From: Meeks, Yvonne J [YJM1@pge.com]
Sent: Monday, November 24, 2008 8:57 PM
To: Robert Perdue; Tom Vandenberg; Cliff Raley

Cc: Aaron Yue; Kellogg, Lisa; Sullivan, Kevin M; Doss, Robert; Gilbert, David

Subject: Notification regarding PG&E Topock Uplands pilot test

Attachments: Appendix A-Communications.pdf

Robert --

In accordance with the attached letter from the RWQCB, we are providing this notice that PG&E intends to modify the flow pattern in uplands pilot study well PTR-2 to perform a hydraulic extraction test. PTR-1 will be brought off-line and the recirculation pattern in PTR-2 will be reversed. This reversal will be allowed to run for 4-6 hours to evaluate the extraction capacity of the well. Once the 4-6 hour test is complete, the downhole equipment will be removed. As specified within Board Order No. R7-2007-0015, the pilot will be concluded on December 3rd, after 9 months of operation.

Let me me know if you have any questions regarding this email or any other aspect of the uplands test.

Yvonne Meeks



Yvonne Meeks Manager

Environmental Remediation Gas T&D Department

Mailing Address 4325 South Higuera Sreet San Luis Obispo, CA 93401 Location 6588 Ontario Road San Luis Obispo, CA 93405 Tel: (805) 234-2257

Email: yim1@pge.com

March 20, 2009

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

Subject: Request to Rescind the Waste Discharge Requirements under Board Order

R7-2007-0015

PG&E Topock Compressor Station, Needles, California

Dear Mr. Perdue:

Pacific Gas and Electric Company (PG&E) is requesting to rescind the Waste Discharge Requirements (WDRs) issued by the Colorado River Basin Regional Water Quality Control Board (Water Board) under Board Order R7-2007-0015 related to the PG&E Topock Compressor Station upland reductive zone in situ pilot test.

Reagent injections were completed in November 2008 followed by monitoring events as required in the Monitoring and Reporting Program (MRP) Attachment C. The in situ pilot test was deemed to be complete in December 2008 and the *Upland Reductive Zone In-Situ Pilot Test*, *Final Completion Report* was submitted on March 3, 2009. Since March 3, 2009, activity has consisted solely of quarterly sampling of sixteen upland pilot study wells. No additional injections are planned in this area. Therefore, it is PG&E's understanding that the WDR need not be renewed, and instead rescinded.

If you have any questions regarding this report, please call me at (805) 234-2257.

Sincerely,

Yvonne Meeks

Topock Project Manager

Spanne Meeke

cc: Cliff Raley, Water Board

Aaron Yue, DTSC

Appendix B

Calibration Logs for Field Monitoring Instruments

MULTIPARAMETER INSTRUMENT CALIBRATION RECORD

Project No.: RC 000753.0001-00002

Location: TOPOCK

Instrument: YSI 556

Serial Number: 090101246

Date	Calibrated by	Parameter	Standards Used	Calibrated Achieved (Y/N)	Remarks
10/12/10	CZ	pA 7.0,10,0,4.0		y	
		COND 3.9			
		ORP 221	215.5		
V		po 100% pH7.0,10.0,4.0	108.%		
11 13 10		PH7.0,10,0,4.0	7.44,1024,3.97		
		(OND 3.7)	3818		
		ORP 228			
V	1	DO 986%	104.8%		
1)14/10	1	pH 7.0, 10,0, 4.0 CONV 3.9 ORP 228	7.00,10.02,3.96		
		COND 3.9	3905		
		ORP 228	731.0		
		00 98,6%	88.6%	<u> </u>	
					*
	· ·				
		(2)			

MULTIPARAMETER INSTRUMENT CALIBRATION RECORD

Project No. RC 000 753.0001.00002

Location:

TOPOCK

Instrument: YST PRO PLUS

Serial Number: 10E102で好

Date	Calibrated by	Parameter	Standards Used	Calibrated Achieved (Y/N)	Remarks
10 11 10	OZ.	PH 7.0,10.0,40	7.02,10,03,4.02	Y	24.4°C
		Como 3.7	3885	7	27.7%
		ORP	273.9	Y	78.9 ℃
·olal	V	DO 100%	99.0%	Y	29.7 %
10/12/10	C2	pH7.0,10,0,4.0	7.03,10,04,4.01	4	27.2
		CHD 3.9	3942	4	27.6
		ORP	227.7	У	27.4
V	V	DO 1000%	116,5%	7	
112/10 CT		pt CR			
					100 000 00 00 00 00 00 00 00 00 00 00 00
					7
					I

MULTIPARAMETER INSTRUMENT CALIBRATION RECORD

Project No.: RC 000 753. 0001. 00002

Location: TOPOCK, CA

Instrument: YST 556 MPS

Serial Number: 375#1

Date	Calibrated by	Parameter	Standards Used	Calibrated Achieved (Y/N)	Remarks
11711	CĪ	7.12	PH 7.0	y	*
		10.03	10.0		
		3,90	4.0		
		3907	COND 3900		
		246.6	ORP 234		
V	<u> </u>	1041%	00 100%		
11/18/11	lt.	7.40	PH 7.0	Y	
		9.92	10.0		
		3.93	4.0		
	N.	3825	COND 3900		
		244.2	ORP 240		
VIII	1	104.1%	DU 100°60	4-	
\$1119/11	CF	7.00	PH 7.0	7	
		10.02	10.0		
		3865 261.0	4.0		3
		3865	cont 3rox		×
		261.0	op-6 321		
V	V	107.6%	Noon 00		
			-		

MULTIPARAMETER INSTRUMENT CALIBRATION RECORD

Project No.: RC000753.0007.00002

Location: ToPock, CA

Instrument: 104100830 ISI Peo Plus

Serial Number: 104100830

Date	Calibrated by	Parameter	Standards Used	Calibrated Achieved (Y/N)	EMP OC Remarks
ylilin	CI		PH 7.0,10.0, 4.0		16,7
			COND 3900		22.6
		ORP	234.5		23.5
		Do 100%	95.4%	\downarrow	21.8
4/12/11	A.	7.18,10,12,4,03	PH 7.0, 10.0, 4.0	Yes	14.3
		3839	00PE 01100		16,7
		99.0%	9900/00%		17.5
	\ \ \ \(\mathcal{G} \)	-02P242.2(DAY ORP	$\sqrt{}$	19,7
4 13 11	CT	7.14,10,08,4.05	PH 7.0,10.0,4.0	YES	181
	*	3872	COND 3900		18.4
		274.3	orp		18.5
		107 %	00 100%		34, 2
4 14 11	Œ	7.08, 10.02, 4.01	0-4-2010.0, 4-0	ES	16.9
		3838	WND S900		17.7
		243.9	ORP		
→	↓	112.3%	Noo1 00	\downarrow	21.8
		K1			
,,					

MULTIPARAMETER INSTRUMENT CALIBRATION RECORD

Project No.: RC000753.0007

Location: To Pock, CA

Instrument: Y51 550

Serial Number: 05C 1520 4K

Date	Calibrated by	Parameter	Standards Used	Calibrated Achieved (Y/N)	Remarks
71410	JN	PH	7,10,4	7	
		Cond.	3900 45	7	
		00	(007.	Y	
V		ORP	224.5	7	
		\$2 Ps			
	7				
12					<u> </u>
	Ш				2
(i)					
	#1				
					19
140					
					N _
				11	
		N			
					- 30

Appendix C

Groundwater Sampling Logs

Groundwater Sampling Form Project Number: RC000753.0001.											
	ımber:				Task:		00002	Well I	D	PT-7S	
Date:			与 -10)	Sample		Gary Clift				
Weather:		WAR	N		Recorde	-	CR				
					Coded L	Duplicate No.:			=		
Instrume	nt Identif	ication									
		PID					Water Qualit	y Meter(s)			
Model							YSE S	36			
Serial #				_				1746			
Purging I	nformatio	on					***				
						Purge Techniq	ue (circle one):	Low-Flow (Re	emove 3 Well	Volumes	Bail Dry
Casing Ma	eterial:	P	VC_			Purge Equipme	ent (circle one)		intrifugal Bl		italtic Bailer
Casing Dia	meter	2"				Screen Interva	l: From	130'	To:	15	i0'
Total Dept	th	150'				Pump Intake S	etting:		40'		
Depth to V	h to Water 104.76			4	Volumes to be	Purged	_3				
Water Col	umn	45.	74	12000		Total Volume I	-	22			
Gallons/Fo	oot	-16				Pump on	0904	Off 09	18		
Gallons in	Well	7.	1								
00	S. 1		1-			Well Casing \	/olumes (gal/			3" = 0.37	
C1	76		6 18		mylL	_		31/2" =		4" = 0.65	
(1560)				-1.910			6" = 1	:46		
Field Para	meter Me	easuremen	ts Taken	During Pu	rging		-		-	•	
Time	Minutes Elapsed	Flow Rate	Volume Purged	DTW (ft bloc)	Turbidity (NTUs)	ORP (m)V)	pH (SI Units)	Spec Cond (µmhos/cm)	Temp (°C)	DO	Comments
Time	Fighten	GPM	CAL	iii bioci	dyros	01121	151 (1015)	тринноз/сии	(()	(mg/L)	Comments
0904	0	2	0	1	71000	156.0	6.51	5513	29.22	0,15	
0906	2	2	4		122	144.3	7.10	5941	30.00	0.10	
0908	Ч	2	8		28	1424	7.79	5431	30,22	0,10	
0910	6	2	12		12	140.6	7.33	5412	30.26	0.08	
0912	8	2	1715	-/-	17	137.5	7.35	5409		0,08	-
0915	10	2	22	/	18	134,2	7.36	5407	30.30	0.08	
0 117				/	1-1	136.1	1.30	2107	.30.30	0.00	
							-	-			
		ng Samplin	g			D		IML			
Well Cond	ition	6000			_	Purge Water D		MS			
Color: Odor:		SHON			_	Turbidity(qualit		CLOAR			
					-	Other (OVA, H					
Sample ID	PT-	101-25	014		Sample D	ate & Time: _	0/14/10	@ 0911)]		

See the COC

Samples Analyzed For:

	ndwate			_									
Project N	lumber:	_		753.0	_		_ Task:		00002 Gary Clift	Well	ID.	PT-7M	
Date:		10						Sampled By:					
Weather		WARM						Recorded By:					
				Coded	Coded Duplicate No.:								
Instrum	ent Identi	fication	n _										
		PID							Water Qualit	ty Meter(s)			
Model					_				YSI.	556			
Serial #									09010				
					_				0 10 .0				
Purging	Informati	on											
				S				Purge Techniq	ue (circle one):	Low-Flow R	emove 3 Wel	l Volumes	Bail Dry
Casing M	laterial:		P	VC-				Purge Equipme					
Casing D	iameter	2	2" '				-	Screen Interval		165'	То		
Total Dep	oth:	185	5'					Pump Intake S	etting:	_			
Depth to	Water	10	4.2	8			======================================	Volumes to be	Purged	_			
Water Co	olumn:						_	Total Volume F	urged				
Gallons/F	oot:		16	>			_	Pump on		Off	-n		
Gallons in	n Well:	/											
\bigcirc \land	1.							Well Casing V	olumes (gal/			3'' = 0.37	
C V	+6 560) -	4	hh	4		/	ng/L			$3^{1}/_{2^{11}} =$	0.50	$4^{\circ} = 0.65$	
(1)	560) -		00	_/						6" = 1	46		
Field Par	ameter M	easure	men	ts Tal	cen l	During Pu	ırging						
	Minutes	Flow I		Volu	_	DTW	Turbidity	ORP	ρН	Spec Cond	Temp	DO	
Time	Elapsed	<u>C</u>)	Purg	ed	(fl btoc)	(NTUs)	(rnV)	(SEUnits)	(µmhos/cm) ₌	(°C)	(mg/L)	Comments
1300	DROPP	D K	BAIL	FD.	ſυ	Colli	FT CAA	PLE - WE	I Mass	IDEN DOE	C.m.		
1 200	DROPP		_	Ler	_	GAIN	FOR G	RAB SAN	PIE- IK	DIECO	SE N	ELEAG	\=D
	- G1	AB	5		PI		KEN		100	1100550			CP
1300					-		al	-157.7	005	0111	2001		
1300							76	-132.7	6.97	CHI	29.84	1.10	
	-		-	-	-								
			-										
Observat	ions Durir	na Sam	plin	a Th	ASI	ARE ST	RIPAED						
Vell Conc	dition	INAT	ED	MAILI	T) F	ROM CHE	REBIX	Purge Water Di	sposal:	MD			
Color:		GREE	N	-	/ "			Turbidity(qualita	ative):	MDCLOUDY			
)dor:	3	Suc	HIL	y S	w	Funic	_	Other (OVA, HN	iu,etc.				
	(91)							Un.	114/10 6	1300)		
	o: PT-7						Sample D	ate & Time: 🏌	11110	, , , , ,			
amples /	Analyzed	ror:		See the	$e \in C$)(_							

Project Number: Date:			k753.00	201.	Task:		00002	PT- '7	70		
			WARM			ed By:	Blainetech	Blainetech			
Weather	:	WAR	M		Record		CZ				
		3	Coded Duplicate No.:								
instrum	ent Identi	7									
Model		PID					Water Quali	y Meter(s)			
Serial #:							YSI 5	32			
Jenai #.			_				09016	01246			
Purging	Informatio	on									
Casino M	laterial·	PVC				Purge Techniq	ue (circle one):	Low-Flow R	emove 3 Wel	l Volumes	Bail Dry
	Casing Material: PVC Casing Diameter: 7.1		-	Purge Equipme Screen Interval	ent (circle one):	Submersible Ce			staltic Baile		
Total Dep		717			=	Pump Intake S			_ To		
Depth to	Water:	104.3	50		-	Volumes to be	-				
Water Co	lumn:	-tt			-	Total Volume P	-	- :		-	
Gallons/F					7 2	Pump on:		Off:	<u>Teper</u>		
Gallons in	Well:									-	
0	146					Well Casing V	olumes (gal/			3"=0.37	1
	(16)	• (207	Δ/	19/			31/2" =		4" = 0.65	-
					•			6"=1	.46		
ield Par		easureme			1		,				
Time	Minutes Elapsed	Flow Rate	Volume Purged	(ft btoc)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Spec Cond (µmhos/cm)	Temp	DO	
e ist e			()					(µnnos/cm)	(°C)	(mg/L)	Comment
040	TIME		D PUR		2" RED	I FLOW PU				MULTI	PLE
	USAD	DISPOS	BLE	TO GI	72 PU/	MP TO PU	RLE FOR	MORE SAMPLE	HAN	10-155	EC.
INLIA						COERCI	UNAL	SAMPLE.			
1040)	113	~133,5	7.37	11368	28.59	0,51	
										-	
			==								
						772					
					3-14-15						
haa		-									
bservati 'ell Condi	ons During	Sampling	exuala	out Til il	DO LONDO	Furge Water Dis	T.				
olor:	don. 1	GREEN)	101 1101			posal:	M 3 BLACK PAR	TALER		
dor:	_	SLIGH	T		_	Turbidity(qualita Other (OVA, HNI	uve):	DUICE PAR	IKKS		

Date				Task:		00002				
	10-	13 -1	0	Sample	d By:	Gary Clift	Well	ID,	PT-8S	
Weather		RM		Recorde	· ·	CM				
				-	Duplicate No.	-				
Instrument Identi	fication							_		
	PID					Water Quali	tv Meter(s)			
Model		_				VSI 5				
Serial #:							01246			
				-		Olpt	010-16			
Purging Informati	on									
					Purge Techniqu	ue (circle one)	: Low-Flow R	emove 3 Wel	l Volumes 💉	Bail Dry
Casing Material:		VC		:	Purge Equipme			entrifugal B		staltic Baile
Casing Diameter:	2"				Screen Interval	From	127'	To	14	17'
Total Depth:	147'			V. =1	Pump Intake S	etting		137'		
Depth to Water:	100,				Volumes to be		3 CAS			
Water Column:	40,5				Total Volume F	urged:	9.6			
Gallons/Foot:	-16				Pump on	1254	Off 13	13		
Gallons in Well:	_6.8	2								
0011		- /1/			Well Casing V	olumes (gal/			3" = 0.37	
Cr+6 (1560)	· . (046	-1	ngl			3 / 2" =		4" = 0.65	
(1560)				7/			6" = I	46		
Field Parameter M	easuremen	ıts Taken	During Pur	rging						
Time Elapsed	GPM	Volume Purged GAL	DTW (ft btoc)	Turbidity ATTUS	ORP (mV)	pH (SI Units)	Spec Cand (µmhos/cm)	Temo rº(°)	DO Timg/Li	Comment
1254 0	1-5	0	/	90	-2467	7.26	5933	79.24	0.09	
1259 2	1-5	3		12	-268,4	7.72	5447	30.06	0.06	1
	1.5	7	+/-	9	-277.9	7.72	54.5.5	30.30	0.04	
1303 9	12	13	1	10	-275.3	7.21	5385 5353	30.34		-
1306 12	1.5	17		9	-278.0	7.21	5320	30.39	0,06	
1308 14	1-5	20	/	9	-2795	7.21	5292	30.39	6.09	
						100				
Observations Durin	The state of the s	g					142			
Vell Condition Color:	POON				Purge Water Dis		1M3	0		
Odor:	NONE	7		===	Turbidity(qualita Other (OVA, HN		- CUVAV			
^	T- 85-101013 ed For: See the COC					0-13-10				

	dwater										
Project Nu	ımber:		753.0001	10	_ Task:		00002	Well	ID:	PT-8M	
Date:			3 -1	0	Sample	ed By:	Gary Clift				
Weather:		WAN	M		Record	ed By:	CR				
					Coded	Duplicate No			_		
Instrume	nt Identifi	cation									
		PID					Water Quali				
Model				_			YSE	556			
Serial #:							0901	01246			
Purging I	nformatio	n									
		0	^			Purge Techniq	ue (circle one)	Low-Flow R	emove 3 Well	Volumes	Bail Dry
Casing Ma	aterial:	N				Purge Equipm	ent (circle one)		entrifugal Bi		
Casing Dia	ameter	2"			2	Screen Interva	l: From:	162'	То	18	2'
Total Dept	:h:	182'			_	Pump Intake S	etting	13	+21		
Depth to V	Water	106,1	3			Volumes to be	Purged	3			
Water Col	umn:	16	7758	7-	-	Total Volume	Purged	36.5			
Gallons/Fo	ot		1			Pump on:	1358	Off 141	3		
Gallons in	Well:	1.5.	2		-					-	
00000	C) /				7.	Well Casing \	/olumes (gal/	ft): $(2" = 0)$	1.16	3" = 0.37	
C	176	100	. 7/07	7	24.0	J		31/2"	= 0.50	4'' = 0.65	
	(15/00) —	267		My			6" = I	.46		
Field Para		8			eatura.						
rieiu rara	Minutes	Flow Rate	Volume	DUTING PU	Turbidity	ORP	рН	Spec Cond	Ternp	DO	T
Time	Elapsed	GPM	Purged (GAL)	(ft bloc)	(NTUs)	Vm.	(SI Units)	rµmhos/cm)	remp r/Ct	(mg/L)	Comment
1350	0	2	0	/	522	-200.1	6.57	7969	30.05	0.13	
1353	3	2	6		318	-212.5	6.56	7953	30.35	0,95	
135+	47	2	20	-	152	-210.8	6.56	7916	30,45	0.49	
1403	710	1	26		77	-2075	6.56	7894	30.50	0.24	
1406	13/16	1		//	57	-200.7	6.56	7860	30,53	0,10	-
1409	1619	7	32	/	54	-198,6	6,56	7846	30,55	0,07	
	2211				- 2 1	110,0	0,50	7810	20,33	0,0	
									1		
		U.									
Observati			g					140			
Well Condi	ition:	6000			_	Purge Water D		JM3 SLIGHLY			
Color:	2	NONE			_	Turbidity(qualit		SLIGHLY	0		
Odor:	^-	NON			_	Other (OVA, H					
Sample ID	PT-8	M-101	1113		C 1 -	S. 1. 0. T. //	13/10 a	CIPIC			
Samples A Samples A			See the C	00	sample I	Date & Time: //	,,,	- // -			
Januales M	maivzeu f	UI.	שבע נוופ כי	UL							

		r Sampl	_		T 1		00003			P7 0 P	
Project Nu	umber:	-	753.0001		Task:	I D	00002	Well I	D	PT-8D	
Date:		10- WAR		U	Sample	-	Gary Clift				
Weather		w m/c	W (Recorde	-	CZ_				
					Coded	Duplicate No.	-		÷		
Instrume	nt Identif										
Model		PID					Water Quali				
			_	•			ASI 3	356			
Serial #			_				0901	01246			
Purging I	nformatio	on									
		Λ.				Purge Techniq	ue (circle one)	Low-Flow Re	emove We	Volumes E	Bail Dry
Casing M		TVC				Purge Equipme	ent (circle one)		ntrifugal Bl		
Casing Di		2"				Screen Interva		190'	To:	21	0,
Total Dep		210'				Pump Intake S	_		00′		
Depth to 'Water Co		106	_			Volumes to be	_	3			
Gallons/Fo		104				Total Volume I		50 off 12	'31		
Gallons in		16.64	4			rump on	1211	011 12	7	ŧ	
						Well Casing \	/olumes (gal/	ft): $(2'' = 0)$.16	3" = 0.37	
\mathcal{C}	176	7	2.06		MylL			31/2" =	0.50	4" = 0.65	
	(1560	$\overline{}$			_ // _			6" = I	46		
	_			During Pur	aina						
Time	Minutes Elapsed	Flow Rate	Volume Purged	DTW (ft btoc)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Spec Cond (µmhos/cm)	Temp (°C)	DO tmg/L)	Comments
101)	0	2	(GAL)		V-	2/25	7.00	15882	20 Cm	0.24	
1214	3	3	9		85	242.5	7.63	16935	30.61		
1217	6	3	18		3	-240,3	779	16366	30,74	0.04	
1270	9	3	34		2	744.7	7.80	16/85	30,78		
1225	14	3	42		2	-2445	7 82	16035	30.79	0.04	
1228	17	3	50	/	1	- 244.1	7.82	15972	30.78		
							-	19		-	
			1 - 2						-		
Observat Well Cond Color:	lition.	Samplin COOD	201-2701		_	Purge Water D Turbidity(quali		\M3			
Odor:		NO	NG			Other (OVA, H	NU,etc:):				
		80-10		06	Sample D	ate & Time:	0)13)10	@/229			
Samples /	unaiyzed i	ror:	See the C	UC							

Groundwat	ter Sampl	ing For	m							
Project Number:	1	753.0001.		Task:		00002	Well	ID:	PT-9S	
Date:		3 -10)	Sample	d By	Gary Clift	===== <u>=</u> ;		·	
Weather	SUNL	MW	unn	Recorde	ed By:	CI				
				Coded	Duplicate No.:					
Instrument Iden										
NA - I I	PID				4.5	Water Quali	· · · · · · · · · · · · · · · · · · ·			
Model		, a	_			ISI E	556			
Serial #		_	•			09010	1246			
Purging Informa	ation									
	DV	•			Purge Techniqi	ue (circle one)	Low-Flow R	emove (Wel	Volumes I	Bail Dry 🍃
Casing Material					Purge Equipme					· · · · · · · · · · · · · · · · · · ·
Casing Diameter	2"				Screen Interval	From:	128'	To	14	
Total Depth	147'	- 0			Pump Intake S	2,		137	No.	
Depth to Water	103.		1 2		Volumes to be		3			
Water Column		5 43	6)		Total Volume F	3	21			
Gallons/Foot	0.16	2			Pump on	0805	Off 08	27	-	
Gallons in Well:	7.0				M-U.C.: ::	·			5.00	
Cr	16	11-	7		Well Casing V	olumes (gal/			3'' = 0.37	
	†4 560) —	1000	- 1	ng/L			31/2" =		4" = 0.65	
_				~			6 = 1	46		
Field Parameter					,	,				
Time Elapse	(2) 6	Volume Purged	DTW (ft bloc)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Spec Cond ((µmlros/cm)	Temp (*C)	DO (mg/L)	Comments
0805 0	1.5	0		5	~55.3	6.70	5180	28.81	1.20	
0808 3	1,5	4		35	-93.1	6.97	5170	28.93	0.81	
0810 5	1.5	7		11	-177.8	7.11	5048	28.96	0.57	
0815 10	1.5	14		5	-162.6	7.18	5005 4954	28.93		
9818 13	1.5	18		5	- 195.9	7.22		28.94	0.64	
0820 15	1.5	21		4	-201.2	7.22	4940	78.92	0.65	
					7 771					
							9			
							- M			
							7			
Observations Du	ring Samplin	g					•	-		
Well Condition:	6000				Purge Water Di	sposal:	NOVE W3			
Color:	LIGHT G	REEN		4	Turbidity(qualita	ative):	NONE			
Odor:	NONE				Other (OVA, HI	NU,etc)				
Sample ID: PT-	95-10101	3		C	-A- 0 T	13/10@	0821			
iample ID: 11		See the CC)(sample D	ate & Time: 🎉	1,21,00				
ampies milary 20	u 1 01.	ACC THE CE	-							

Project Number:	RC000	753.000	1	Task:		00002	Well	ID:	PT-9M	
Date:	10-	(3 -1	0	- Sample	ed By:	Gary Clift			2	
Weather:	CVA	RM		Record	ed By	CZ				
				Coded	Duplicate No.	_				
Instrument Identi	fication									
	PID					Water Quali	ty Meter(s)			
Model			-			YSI	556			
Serial #:		_	1.			09010				
Purging Informat	ion									
	Ou				Purge Techniq	ue (circle one)	Low-Flow R	emove 3 (Ve	Oolumes	Bail Dry
Casing Material:	PVC				Purge Equipmi		Submersible Ce	entrifugal B	ladder Peri	staltic Baile
Casing Diameter	2"				Screen Interva		162'	То	18	32'
Total Depth	182'	~			Pump Intake S			1721		
Depth to Water Water Column	103.4				Volumes to be		330			
Gallons/Foot	785 . le	2			Total Volume I	1031	37.8	for the		
Gallons in Well	126				Pump on	1001	Off _10	54	-	
					Well Casing \	/olumes (gal/	ft): $0 = 0$	16	3" = 0.37	
Crt6	2	1/2			J	.5	33/," =		4" = 0,65	
Cr+6 (1560)	-	-60		my/L			6" = 1	46		
ield Parameter M	easuremen	its Taken	During Pu	ging						
Minutes Time Flapsed	Fiow Rate	Volume Purged GAL	DTW (ft btoc)	Turbidity (MTUs)	ORP 97/VI	pH (SI Units)	Spec Cand (µmhos/cm)	Temp (°C)	DO (mg/L)	Commen
1031 0	2	0		21000	-1619	7.13	8668	7975	0,57	-
1035 74	2	7		1.36	-191.1	7.04	8643	30.78	0.44	
538 7 1041 10	7	14	-/-	43	-197.]	7.02	8620	30.34		
1044 13	2	26		15	-198.4	6.98	8600	30,35	0.41	
1047 16	2	32		955	-192,7	6.97	8576	3039	0.39	
1050 19	1	38	1	5	-191,5	6.96	8282	30.39	0.39	
bservations Duri	n g Samplin	g								
Vell Condition:	Goon				Purge Water Di		CUEAR			
olor:		neen			Turbidity(quality		CUEAR			
dor:	MON			_	Other (OVA, HM	x Y				
					ate & Time: 🏌					

ANCAL											
Groun	dwate	r Sampl	ing Fo	rm							
Project Nu		-	753.0001		Task:		00002	Well	ID	PT-9D	
Date:		10-	3 -1	0	Sample	d By:	Gary Clift			-	
Weather		WAN	M		Recorde		CI				
					-	Duplicate No	DUP-2-1	01013 0	1000		
Instrume	nt Idontif	ication									2:
instrume	nt identii	PID					Water Quali	ty Mater(s)		-	
Model			<u> </u>				JSE 5				
Serial #								21246			-
Purging I	nformatio	on						-1018			
		0.1/				Purge Techniq	ue (circle one)	Low-Flow R	emove 3 WH	Volumes E	Bail Dry
Casing Ma	aterial:	PAC				Purge Equipm	ent (circle one)	Submer ble Ce	entrifugal Bl	adder Perisi	Laitic Bailer
Casing Dia		2"				Screen Interva	From:	190'	То	21	0'
Total Dept	th	210'			-	Pump Intake S	etting		200'		
Depth to \	Water:	103.4				Volumes to be	Purged	3			
Water Col	umn	Ato	106.6			Total Volume	Purged:	51.2			
Gallons/Fo	oot:	- 16			3	Pump on	0937	Off 💛 º	58		
Gallons in	Well:	17									
	- ~ /					Well Casing \	/olumes (gal/			3" = 0.37	
	-17+4 (156)	15	37	MUL			31/2"=	0.50	4" = 0.65	
	(156	0) —			119/			6" ===1	46		
Field Para	meter M	easuremer	ts Taken	During Pu	rging						
	Minutes	Flow Rate	Volume	DTW	Turbidity	ORP	Нс	Spec Cond	Temp	DO	
Time	Elapsed	(GPM)	Purged (C-A ()	(ft bloc)	(NHt/s)	WWW.	(SI Units)	(µmhos/cm)	(°C)	(mg/L)	Comments
0937	0	3	0	1	466	-209.9	7.60	15860	29.83	-211.0	2.01
0940	3	3	9		36	-707.3	7.73	16887	30.36	-207.1	
0943	6	The state of the s	18		17	-205.3	7.73	16728	30,43	1.12	
0946	9	3	27		10	-2028	7.72	16.500	30,47	1,06	
0347	12	3	36		6	.030	7.71	16432	30,47	1.04	
0955	17	3	45 52	/	-5-	-206.9	7.69	163.75	30.49	1.02	
0155	1 1	2	02	f	5	- 198,1	7,00	16320	30,78	1.00	
						-					
						-			-		
	-								L	L	
		ng Samplin	g					140			
Well Cond	ition:	GOGID				Purge Water D	isposal:	IM 3			
Color:		LIGHT G	REEN			Turbidity(qualit	tative):	CURAR			
Odor:		NOW	ઈ			Other (OVA, H	NU,etc.)	JM3 CUZAR			
Sample ID	PTLO	10-101	013		Sample D	ate & Time:	0 13 10	@ 0950	0		

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Samples Analyzed For:

Groundwate Project Number:	•	ing Fo 753.0001		Ťl		00008	107-11	ID:	BA18/ 44		
Date:		753.000 2 -1		Task:	d Dv	00008 Gary Clift	Well	ID	MW-11		
Weather:	WAR		U	Sample Records		CE.					
vvediller.		-,,,		-	eu ву. Duplicate No.:	-					
				Coded	Duplicate 140						
Instrument Identi						1.47 · O II					
Model	PID					Water Quali					
Serial #:	-						re pus				
3enai #.						IOEIO	12054				
Purging Informati	on										
		^			Purge Techniq	ue (circle one)): Low-Flow (R	emove 3 We	ll Volumes	Bail Dry	
Casing Material		PUC		-	Purge Equipm			entrifugal E	lladder Peris		
Casing Diameter	4"			2	Screen Interva		63'		8	8'	
Total Depth:	88'	17		-	Pump Intake S			75'			
Depth to Water	66,5	1		÷	Volumes to be		_3				
Water Column	,65 i40			-	Total Volume		42	-			
Gallons/Foot				+	Pump on.	1108	Off 113	2	=("		
Gallons in Well	_17	.0			will on the state of		/5:3 mil 0				
Cr+6	. 1	99			Well Casing \	/olumes (gal/	/ft): $2'' = 0$ $3^{1}/2'' = 0$		3'' = 0.37 $4'' = 0.65$	_	
Cr+6 (1560)		·)	M	914			6" = [4 = 0.03	/	
							0 - 1	40			
Field Parameter M					1	· · · · · · · · · · · · · · · · · · ·					
Time Elapsed	Flow Rate	Volume Purged (GAL)	(ft bloc)	furbidity (NTUs)	ORP (mV)	pH (SI Units)	Spec Cond (µmhos/cini	Temp ("Cı	·mg/Li	Comment	
1108 0	2	0	/	455	23.7	7.63	2297	29.5	8.73		
1115 3	2	7		-205	37.8	7.51	2202	295	8.58		
1115 7	2	21		20	35.7 39.0	7.48	2157	29.6	8.49		
1122 14	2	28		17	40.1	7.46	2131	79.6	8.75		
1125 17	2	34	/	10	41.7	7.46	2136	29.6	8,44		
11016	2	42	/	9	42.2	7.46	2130	29.6	8.43		
1131 23		46		_1_	766	7.76	2134	4,6	8,42		
-0.											
						-			-		
Observations Duri	ng Samelie	ı a		-							
Well Condition:	6-OUD	19			Purge Water D	isposal:	FM-3				
				-	Turbidity(qualit		CLOAR				
Color:	(VIIII)										
Color: Odor:	NONE	52		_	Other (OVA, H						

Project Number:	RC000	753.000	l	Task:		00002	Well	ID:	MW-24	Δ
Date:	10-	12 -1	0	Sample	ed By:	Gary Clift				
Weather	WA			Record	-	CI				
				•	Duplicate No.	_				
nstrument Ident	ification							==		
	PID					Water Qual	ity Meter(s)			
/lodel		-				YSI S				
erial #:		_					101246			
urging Informa	ion					<u></u>				
		0 1/ O			Purge Techniq	ue (circle one)	Low-Flow R	emove 3 Wel	Volumes	Bail Dry
asing Material:		pve			Purge Equipme		Sybreèrsible Ce	entrifugal B	ladder Peris	staltic Ba
asing Diameter	4"				Screen Interva		104'		12	24'
otal Depth:	124'	2			Pump Intake S			14'		
epth to Water Vater Column	111.0	वेन			Volumes to be	-	3		_	
vater Column. lallons/Foot:	16.				Total Volume I	Purged:	25.3	11-		
allons in Well:	8.	5			Pump on	1098	_Off:	15		
					Well Casing V	olumes (gal	'ft): 2" = ()	16	3" = 0.37	
C 1 +6 (1560)		NOW					31/2" =	0.50	(1" = 0.65	\geq
(1560)	, –			1914			6" = 1	.46		
eld Parameter N	1easuremer	nts Taken	During Pu	rging						
Minutes Time 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)	Comm
258 0	2	0	/	17	-2438	7.37	3305	30,05	3.60	-
300 2	2	4		39	-252.5	7.34	3303	30.78	1,50	
304 6	2	12		10	-260.1	7.52	3177	30.36	0.31	
307 9	2	18		5	-2659	7.79	3037	30,34		
301 11	2	22		5	-264.3	7.83	3026	30.43	0.11	
311 13	2	26	/		-262.4	7.86	3021	30.46	0.10	
			1 1 1							
	-									
servations Duri		g								
ell Condition:	6000				Purge Water Di		IM3			
lor: or:	NONE			-01	Turbidity(qualita		CLEAR			
	MIII A IV				Other (OVA, HI	III otc).				

See the COC

Samples Analyzed For:

Project Number:		753.0001.		Task:		00008	Well	ID,	MW-24	IB
Date: Weather:	10-	12 -10		Sample	-	Gary Clift				
vveatner.	WAR	M		Record	ed By: Duplicate No.:	CZ				
				Coded	Duplicate No					
Instrument Identif	PID					hu				
Model	FID					Water Quali				
Serial #:						YSI 5				
	-					01010	1246			
Purging Information	on				.5					
-7		0112			Purge Techniq				/	-
Casing Material: Casing Diameter:	4"	puc			Purge Equipme			entrifugal B		
otal Depth:	213'				Screen Interval		193'		21	13'
Depth to Water:	1089	()			Pump Intake S Volumes to be		2	CATED		
Vater Column	104.				Total Volume F		203			
Gallons/Foot:	.65				Pump on	1350	Off 14	26		
allons in Well	67.	7				1,750		20	-07	
1 11/2		- 0	-		Well Casing V	olumes (gal/			3" - 0.37	
(1560)	2.	28	M	9/			31/2" =	= 0.50	$4^{n} = 0.65$	\supset
(1360)				7, —			6" = 1	.46		
ield Parameter M	easuremen	ts Taken [During Pur	ging						
Time Elapsed	Flow Rate	Volume Purged GAL	DTW (ft btoc)	Turbidity (NTUs)	ORP (n)V	pH (SI Units)	Spec Cond (µmhos/cm)	Temp (°C)	DO (mg/L)	Commer
1350 0	6	0	/		-209.3	8,00	17055	30.15	3.80	-
1356 86	6	68		53	-251.7	7.50	16988	30.19	0.21	
1407 17	8	102		2	-236.3	7.42	16958	30.21	0.08 6 20	
412 22	6	137		2	-129.0	7.65	16962	30.19	0.08	
418 28	6	168			-236.1	7.77	16940	30.20	0.07	
423 34	6	198		1	-239,4	7.79	16936	15.05	0.07	
		AZVII			251,8	1.00	10134	30.00	0.0.4	
								-		
))							
bservations Durin	g Sampling	9					1 11 0			
	Goon				Purge Water Di		1/13			
olor: (dor:	YREEN !			-0.2	Turbidity(qualita		CLEAR			
JUI.	NONE				Other (OVA, HN	iu,etc.)	20. 92			

Groun	dwater	Sampli	ng For	m							
Project Nu	ımber:	RC0007	53.0001.		Task:		00002	Well II);	PT-7S	
Date:		01- /	B -11		Sample	d By:	Gary Clift				
Weather:		SUNNY			Recorde		Ct				
Wediner.		2010				Duplicate No.:					
					coded	apilicate (Total	\ 		•		
Instrume	nt Identifi										
		PID					Water Qualit				
Model							YSF 53	56 MPS			
Serial #:				_			1315#				
Purging I	nformatio	n									
						Purge Techniq	ue (circle one):	Low-Flow	move 3 Well	Volumes E	Bail Dry
Casing Ma	aterial:	f	VC			Purge Equipme	ent (circle one):	Sukmersible Ce	ntrıfugal Bla	odder Peris	taltic Bailer
Casing Dia		2"				Screen Interva	l: From:	130'	To:	15	0'
Total Dep		150'				Pump Intake S	etting:	140	7		
Depth to		105.1	4			Volumes to be	Purged:	3			
Water Co		44.8					al Volume Purged: 2).6				
Gallons/Fo		-16				Pump on:	1101	Off: 112	7		
Gallons in		7.2				ramp om		-		i)	
	VVCII.	1.0				Well Casing \	/olumes (gal/:	ft): $(2'' = 0)$	16	3" = 0.37	
C 1	H.	00	. 2	111	114	wen casing t	rolulles (gui	3 /2" =		4'' = 0.65	
	160) —	- 00						6" = 1		1 1100	
(1)	(0)							0 -1.	.40		
Field Para	ameter Me	easuremen	ts Taken	During Pu	rging						
	Minutes	Flow Rate	Volume	DTW	Turbidity	ORP	pH	Spec Cond	Temp	DO (====(1)	Campagata
Time	Elapsed	(GPM)	Purged (GAC)	(ft btoc)	(NTUs)	(mV)	(SI Units)	(µmhos/cm)	(°C)	(mg/L)	Comments
1101	0	1	O		339	-108,4	7.39	5699	27.79	120	
1104	3		3	/	142	-66,2	7.28	5602	29.98	1.17	
1108	7	1	7	/	17	-51.1	7.27	5578	3006	1.10	
ill	10	I	16		14	-478	7.27	5546	30,10	1.69	<u> </u>
1116	15	1	15		9	-459	7.27	5568	30.14	1,69	
1119	18	1	18	/	7	-45.1	7.27	5554	30.13	1.08	
1123	22		AO.	-	9	-44.4	7.27	3337	3011	1.01	
									-		
-								-			
-	-					1	-				
						1					
L											
Ohsarvat	ions Durii	ng Samplir	na								
Well Con		6000	19			Purge Water [Disposal:	Im-3			
Color:		CGAR				Turbidity(qual		CLEAR			
Odor:		MONE			_ :	Other (OVA, F					
	0-		7.000					2 1124			
Sample I	D: 17 -	PT-75-110118				Date & Time:	1-18-11	4 1/24			
Samples	Analyzed	For:	See the C	OC		_					

Groun Project Nu Date Weather		-	753.0001 8 -11		Task: Sample Record		00002 Gary Clift	Well	ID:	PT-7M	
					Coded	Duplicate No	_		_		
Instrume	nt Identif	ication									
		PID					Water Qual				
Model		_	-				4SI 53	3 MPS			
Serial #							3161				
Purging I	nformatio	on									
Casing Mac Casing Dia Total Depth Depth to V Water Col Gallons/Fo	nmeter h Vatec umn ot	2" 185' \$2.6, 97.3	PVC 2 104:	88	*) *(*	Purge Techniq Purge Equipme Screen Interval Pump Intake S Volumes to be Total Volume F Pump on	ent (circle one) From etting Purged:	-	entologal Bl To	adder Fens	taltic Bule
	ield Parameter Measurements Taken During P					Well Casing V	'olumes (gal/		- 0.50	3" = 0,37 -1" = 0,65	
Time	Monates	Figu Rate	Volume Purged	DTW Ift ploc!	Turbidity (NTUs)	ORP mV+	pH (SI Units)	Spec Cond rpmnos/cm!	lemp - ot :	h0 ang#i	Commen
	WELL	GEYS	-R (-7)	CRA	3 SA1	10/5 TA	KEN -		-		-
1315		-	-	_	26	-115.3	7.00	6356	24.28	225	
1319	~			- Changer	24	-129.3	7.04	6283	23.42	233	
1327		-	_		39	-127.4	7.00	6288	24.08	2.15	
						1					
						-					
								1			
						-					
								-			
Vell Condi Iolor Idor:	tion:	SULFUR	GREEN		=	Purge Water Di Turbidity(qualiti Other (OVA, HN	ative): VU,etc.):	IM-3 CLEAR			
ample ID: amples A		lm -110 for:	IIB See the CO		Sample D	ate & Time:	-18-11 (0/3/5	*****	145	Ų

Grour Project N		r Sampl	ling Foi		Taalo		00002	147 II	ID.	DT 70	
Date	minibet	01- ł			– Task: Sample	d Du	00002 Gary Clift	Well	ID:	PT-7D	
Weather		WAEN			Recorde		CI				
y v cottrer		_ W ME /			_	Duplicate No					
Instrume	ent Identi	fication							-		
	erre racine	PID					Water Quali	ity Meter(s)			
Model								6 MPS			
Serial #							DTS+	1 2			
Purging	Informati	on									
Casing M Casing D Total Dep Depth to Water Co Gallens/F Gallons in	iameter oth Water olumn oor	2" 217' 87.60 129.3	ρνc 2 38			Purge Techniq Purge Equipm Screen Interva Pump Intake S Volumes to be Total Volume Pump on:	ent (arcle one) 	tow-Flow (R) 197' 20 3 CASA Off	entrifugal B To 7	ladder Peris	
C N76 (156		. 0	υ7	ı	1g/L	Well Casing \	/olumes (gal/	(ft): $2^{n} = 0$ $3^{n} = 0$ $6^{n} = 1$	0.50	3" = 0.37 4" = 0.65	
Field Par	ameter M	easuremer	its Taken	During Pu	rging						
[dite	Minutes Umpseq	Flow Rate	Volume Pinged	DTW (ft bloc)	Turbidity (NTUs	URIP aut.VI	SELECTION OF THE SECOND	Spec Cand (umhas/cm)	Temp (°C)	DO mg/L	Coninents
1140	0		0		30	-100,8	7.20	11131	25.89	1.45	
	PUMP	STOPPED			庇 5	SEC. ATTE	MPT TO	PURBE W		AITED	
1908	GRAB	SAMPI	E W/	DISPO	SARLE	-69.6	7.27	12117	25.2	1.97	
1217	-	_	_	-	52	-100.9	7.25	12138	25.30	1.74	
								14.11.	_		
											
	+						ļ				
							·				
										9	
Well Cond Iolor: Odor	dition	ng Samplin Goup Vary SU6#	GREG	V	_	Purge Water D Turbidity(qualit Other (OVA, Fil	ative) VU,etc.):	FM-3 SMALL			
Sample II	D: [] -	7D-1101	18	#05#C	Sample D	ate & Time:	-18-11	000/			

INActive\Lompoc\QAPP\Field FormsWTR forms xlsx i/11/2011

Groundwate Project Number: Date: Weather:	er Sampling RC000753. 01- 17 WARM		Task: Sample Record	ed By:	O0002 Well ID: PT-8S Gary Clift				
			Coded	Duplicate No	_				
Instrument Identi	fication PID				The second				
Model	PID				Water Qual				
Serial #:	-				175	556 MPS			
361101 #.					(37	5#1			
Purging Informati	on								
Casing Material: Casing Drameter: Total Depth: Depth to Water Water Column: Gallons/Foot: Gallons in Well	2" 147' 100.83 40.17 .16			Purge Techniq Purge Equipme Screen Interva Pump Intake S Volumes to be Total Volume F Pump on	ent (arcle one) 1: From: etting Purged Purged	3 CASINO Off 15	f)7' g	ladder Pens	Bail Dry staltic Bailer 1 7'
C N+6 (1560)	.0	35	mg/L	Well Casing V	olumes (gal	(ft): $2'' = 0$ 3'/2'' = 6'' = 1	0.50	3" = 0.37 4" = 0.65	
Field Parameter M		iken During Pu	rging						
Minutes Time Flapsed		oed off ator	In ribidity bill us	ORP	pH (SI Units)	Spec Cond probas/cm-	Temp	DQ (mg/L)	Comments
1454 0 1457 3 1501 7 1504 10 1507 13 1511 17 1514 20	C	3 /	44 19 19 19 19 19 19 19 19 19 19 19 19 19	-162.7 -175.3 -186.7 -189.4 -199.4 -202.3 -205.6	7.09 7.05 7.05 7.05 7.05 7.05 7.05 7.05	5507 5461 546 5408 5385 5370 5389	28.23 29.57 30.33 30.53 30.53 30.62 30.52	0.80 0.34 0.25 625 0.15 925 0.24	
Observations Durin Well Condition: Color Odor: Sample ID:	GOOD CLEAR NONE PT-85-1101	17 ne COC	Sample D	Purge Water Di Turbidity(qualita Other (OVA, HN ate & Time: J-	ative): IU,etc.): -/7-// (0	IM-3 CWAR 15/5			

L\Active\Lompoc\QAPP\Field FormsWTR forms xlsx 1/11/2011

Project Nui	wate mber:	RCOOO	753.0001		Task		00002	Well	ID:	PT-8M	
Date	noci.		7 -1		- Sample	d Rvi	Gary Clift		IU.	PI-OIVI	
Weather		WAR		•	Records		CM				
vved(ner		- VONC	,70(_	Duplicate No.:					
					Coded	Daplicate No.	*				
Instrumen	t Identif	PID					Water Qualit	ty Motor(s)			
Model		I ID						b MFS			
Serial #							1375#				
							15174	- [
Purging In	formatio	on									
						Purge Techniq	ue (circle one)	Low-Flow	ernove 3 Wel	Valumes	Bail Dry
Casing Mat	erial:		PVC			Purge Equipmi	ent (circle one)	Submersible Co	entrifugal B	ladder Pens	staltic Barle
Casing Diar		2"	li:			Screen Interva	From	162'	То	18	32'
Total Depth	ו	182'	-		-	Pump Intake S	etting	172	^		
Depth to W		106,6	2			Volumes to be	Purged	3 CASI			
Water Colu		75.			÷c	Total Volume I	Purged	36.2	2		
Gallons/Foo		_0.	16			Pump on	1337	Off 140	(
Gallons in V	Vell	12									
0 0 1	, .					Well Casing \	olumes (gal/			3" = 0.37	
C ()	-6	-	247		mg/L				0.50	4" = () 65	
(1	560)							6" = 1	46		
Field Parar	neter Me	easuremer	its Taken	During Pu	rging						
Enne	Minutes Flatised	GPM	Purged CAL	DTW -It bloc	Torbidity ddTUs)	ORP (mV)	SEQUES-	Spec Cond rumhas/cm)	temp - C-	650 (1)(am	(ome en
1339	0	2	0	1	COOLY	-49.1	6.52	8301	29,03	057	-
342	3	2	G		>1(XX)	- 50.4	6.45	8320	30.03		
1345	19	2	13		398	-57.1	6.43	8270	30.38	0.41	
1351	7)	2	18	/	173	-60.1	6.43	8177	30.41	0,39	
1254	15	à	31	/	162	-60.0	6.43	8/65	30.48	950	
358	19	2	37		150	-59,8	6.43	8/60	30.49	0,30	
	186						30			~	
						<u> </u>					
				2324							
							L		L		
Observatio			g								
Vell Condit	ion:	6000			 2	Purge Water Di		Im-3			
olor Odor		BROWN				Turbidity(qualit		WEDINA	^		
		NOINS				Other (OVA, HI	vu,etc.)				
doi		M-110						a a co			

1 VActive\Lompoc\QAPP\Field Forms\WTR forms xlsx = 1/1 1/2011

Date:		753.0001		Task:		00002	Well	iU.	PT-8D	
7 7 7 7 7	01-	7 -1	1	Sample	ed By	Gary Clift				
Weather:	WA	em		Record	ed By:	Cm				
				Coded	Duplicate No					
Instrument Identi	fication									
	PID					Water Quali	ty Meter(s)			
Model			-			YST 550				
Serial #						1375				
Purging Informati	on									
Casing Material	p	٧٥			Purge Technique					
Casing Diameter	2"				Purge Equipme Screen Interval		190'	randugac H To	ladde* Pens 21	
Total Depth	210'				Pump Intake S			00		
Depth to Water	106,8	33			Volumes to be	_	3 CAS		lumes	
Water Column	103.1	7			Total Volume F		49.6	J		
Gallons/Foot	-16				Pump on	1419	Off JUY	8		
Gallons in Well	16,4	2								
CAH		_			Well Casing V	olumes (gal/		16	3'' = 0.37	
(1560)		2.04		mg			6" = T		4" = 0.65	
							() - 1	+0		
Field Parameter M	easuremer	volume	During Pur		0.00	1	T a soon taken on		The said	
I'me Harsed	GPM	CAL.	fi bloc	furbality NEED	ORP	pH (St.thms)	Spec Cand underscon	Temp	DO Impdo	Comments
1419 0	2	0	1	36	-1822	7.36	16954	30.39	0.37	
1723 3	1 2	17	/	3	-177.4	7.54	17-195	30.53	0.33	
137 12	2	25		2	-178	762	16676	品站	027	
1435 1516	2	33		T	-180.3	7.67	16520	3073	0.25	
1439 20	3	42		-	-181.8	7.66	16457	30,74	026	
1777 23	- X	50	/		-182,7	7.66	16468	30,75	0.27	
					-					
Observations Durir		g								
	6000			_	Purge Water Di		FM-3			
Well Condition		15								
Tolor:	LIGHT G	REEN		_	Turbidity(qualita		CLEAR			
	MONE MONE			-	Other (OVA, HN	NU,etc)	2,1445			

I \Active\Lompoc\QAPP\Field FormsWTR forms xlsx = 1/11/2011

Groundwate Project Number:	-	89.0001.		Task:		00006	Well II	D;	PT-9	C
Date:		& -11		Sampled	By:	GC				
Weather		MAA		Recorded	-	C.F.				
		10.1			ouplicate No.:		21		g ign is	
Instrument Identi										
	PID					Water Qualit				
Model						ISI S	56 MP	2		
Serial #:	_					B75#	1			
Purging Informat	ion									
					-	ue (circle one):		move 3 Well		Bail Dry
Casing Material:	DVC				-	ent (circle one)				tallic Baile
Casing Diameter	2"	,			Screen Interva		128'	- 10	147	
Total Depth	147				Pump Intake S	3	2 0450	D		
Depth to Water					Volumes to be		Z CASIN	10		
Water Column	42.				Total Volume	J.	20.7	\ 		
Gallons/Foot: Gallons in Well:	- 1t				Pump on:	1400	Off 143	57	7.7	
Gallons in Well:	<u>.</u>		-		Well Casing	Volumes (gal/	ft): 2" = ()	16	3" = 0 ₋ 37	
00+6	1	10 /		0.00	i.	volumes (gan	$3^{1}/_{2}$ " =		$4^{\circ} = 0.65$	
C 1+6 (1560)	it.	.36		M	1/		6" = 1			
Field Parameter I		Volume	During Pu	Turbidity	ORP	рН	Spec Cond	Temp	po	
Lune Claused		Parged	dt btoci	(MTUs)	(mV)	(SI Units)	fumbos/cmi	100	ang/Li	Conme
		GAL .	E. (4.503	and b	- AG (0) (3-1)	LOUIS A	de Norman	NE SU	n 10	
TAW OOF	URA PUM	P MA	LEVINCT	216	-72.3	TOING A	VIS VIET	28.69	PUMP 1.63	
1400 0	1	3	/	104	-63.1	7.27	F 202	29.96	1.32	
1407 7		7			-59.1	7 26	4980	30.11	1.20	
1410 10		10	_/_	35	-58.3	7.25	4958	20.15	1.14	
1414 14		17		IX	-58.0	7.24	4946	30.07	1.09	-
1421 31		31	/	7 5	-58°Z	7.24	4930	3007	1.06	
7 (2)					-30	1.27		70,10	1.0	
								(Delinera		
	_						-			<u> </u>
								*>	-	
		-					-		-	
Observations Du	ring Samplin	19			Purge Water (Disposal:	IME			
Well Condition: Color:	Clest	R	-		Turbidity(qual		LEAR.			
Odor:	Clep	180			Other (OVA, F		00/113			

See the COC

Samples Analyzed For:

ARCA	DIS	2 "	× - 2	5	1	4		2.92	* 90		
Groun	idwate	r Sampl	ing Fo	rm							
Project N		•	753.000°		Task		00002	Mall	10-	DT ON	
Date:	umber.	01- /			Sample	d Du	Gary Clift	Well	ID:	PT-9M	
Weather			RM		-		CAT CITE				
weather		VV 14	NCM)		Records						
					Codea	Duplicate No			-		
Instrume	ent Identif										
		PID					Water Quali				
Model							YSI SS	6 MPS			
Serial #			_				1375#				
Purging I	Informatio	on									
						Purge Techniq	ue (circle one)	Low Flow	emove 3 Well	Volumes)	Bail Dry
Casing M	aterial	Y	Prc_			Purge Equipmi		_			
Casing Di	ameter :	/	Ta			Screen Interva		162'	To		
Total Dep	th	182'				Pump Intake S	etting	17.	2		
Depth to '	Water	104	20 10.	5.99		Volumes to be	Purged	3 CASIA	q		
Water Co	lumn	78.	01			Total Volume I	Purged	37.5	,		
Gallons/Fo	oot	.16				Pump on	1013	Off /	36		
Gallons in	Well	12.5	5							-	
0011	,					Well Casing \	olumes (gal/	ft): $(2'' = 0)$	16)	3" = (),37	
C1+6		2.46	,		mali			317,"=	= ().5()	4" = 0.65	
(15b0))				ng/L			6" = 1	40		
Field Para	amotor M	ozeuromon	te Takon	During Pu	reloe						
Hetti Fara	Minutes	Flow Rate	Volume	During Pu	Facility	ORP	ρН	Spec Cond	Verain	DG	Ţ
fune.	Fatisea	GPM	Purged	rit times	1411157	14.74	Stillows	margarini	ME	maiL	(Description)
1013	0	2	0	/	642	46,1	7.03	9740	29 NI	208	-
1016	3	3	6		93	44.2	6.99	9137	29.99	752	
1020	7	2	13		11	41.5	7-02	9109	30.08	11.53	
1023	10	2	19		6	38,8	7.03	9100	30.12	7.57	
1026	13	2	25	+/-	4	36.5	7-03	9575	30.14	1.60	
1035	13	7	38	1/	3	33.5	7.03	9044	30.14 30.15	1.67	
1000	- 11	- CA	30	1	24	2212	1.03	1002	50,13	1.10-	
								-			
							L	L			
Observati	ions Durin	g Samplin	g								
Well Cond		GOOD				Purge Water D	sposal:	\$M-3			
Color		NONE	-			Turbidity(qualit	ative)	MEAR			
Odor		NONE				Other (OVA, HI	VU.etc.):				

See the COC

Sample ID: PT- 9M - 110118
Samples Analyzed For: See the

Ground	wate	Sampl	ing Foi	m							
Project Nun	nber	RC000	753.0001	•	Task:		00002	Well I	D.	PT-9D	
Date		01-)	B -1	1	Sample	d By:	Gary Clift				
Weather:		W	ARM		Recorde	ed By:	CI				
					Coded	Duplicate No				30:5	
nstrumen	: Identifi	ication									
ns (rannen	dentil	PID					Water Quali	tv Meter(s)		-	
Aodel								6 MPS			
erial #							DTS#				
urging Int	formatio	n					10/2				
		P	VC			Purge Techniq		The second secon			
asing Mate						Purge Equipme		ubmersible Ce			
asing Dian		2"			e.	Screen Interva		190' 200	Γο	21	0.
otal Depth		210'	nis		-	Pump Intake S					
epth to W		104.0	/ 0			Volumes to be		3 casin	9		_
Vater Colui Iallons/Foo		106				Total Volume I	=	50.9	i		
allons in V		-16	. /			Pump on	0916	Off 694	6	4	
idiiOnz iii v	ven	16.9	6			Well Casing V	Johnnas (aal/	ft): (2" 0	1	3" = () 37	
01+	6		CIA			well casing v	rolumes (gai/	it): (2 = 0		-1'' = 0.65	
C /+ (156	<u>.</u>		5,60	/	29/1			6" = 1		-1 - () (12)	
(136	0)				-/			0 -1	40.		
eld Param				During Pu	,						
Tone	Moutes Elapsed	"GPM"	Paraed GAL	DTV9	Furtherly 12TUs	ORE	pH iSi Dritsi	Specicond (umany/cm	Leggs	+chitz	Comen
0916	0	2		/	317	1614	6,68	14119	28.72	2.39	
1920	4	ス	8		16	144.3	7.74	17412	30.32	2.17	
924	8	1	17		8	128.0	7.78	17420	30.44	2.17	
2928	12	3	25	-/-	- 5	1111	7-79	17.300	30.47	2.2)	
		2	34		3	90.5		17.281	30.51	2 33	
2942	26	2	92		2	905	7.18	17262	30.52	2.23	
								1,			
-											
beorustis	as Duels	a Camalia									
ell Conditi		g Samplin	9			Purge Water D	isnosal·	Tm 3			
olor	011	CREEN)			Turbidity(qualit		Im-3 Clear			
	3	NONE			-	Other (OVA, HI					
dor:		U IIII II									

I \Active\Compac\QAPP\Field Forms\UTR forms xlsx 1/11/2011

Ground			_								
Project Num	iber:		753.000		Task:		00002	Well	ID:	MW-24	IA
Date:			7 -1	1	Sample	•	Gary Clift				
Weather		wA	hem		Record	1	CM				
					Coded	Duplicate No			_		
Instrument	Identif										
Model		PID					Water Quali				
							BISH	YSI 550	MPS		
Serial #;				-			(B) 450	556	B15#	1	
Purging Info	ormatic	on									
		3	^ .			Purge Techniq	ue (circle one)	Low-Flow	emove 3 Wel	l Volumes	Bail Dry
Casing Mate		(DVC.		_	Purge Equipmi					staltic Bailer
Casing Diam	eter	4"				Screen Interva	l: From	104'	-7.	12	24'
Total Depth		124'	,			Pump Intake S	3		18'		
Depth to Wa		111.50	2		=	Volumes to be		3			
Water Colum		Jd.d				Total Volume I		23.9			
Gallons/Foot Gallons in W		91	<u>ን</u>			Pump on	1203	Off 12	10	=	
OBIIOUS III VV	Ć11		/		e.	Well Casing \	Jolumes (aa)/	ft): 2" == ()	16	3" = () 37	
C 1+6			<i>"</i> 2 7		. 11		orannes (gan	$3^{1}/_{5}^{0} =$		$\frac{3 - 0.37}{1^{0} = 0.65}$	>
Cr+6	(0)	•	023		mgl	_		6" = 1	(/
Field Parame		easuremen	its Taken	During Pu	raina						
1	Minutes	Flow Rate	Volume	DTW	Turbidity	ORP	nH	Spec Cond	Temp	DO.	T
Tane 1	Flapsed	GPM	Purged	ift broci	(NTUs)	ım\/ 1	isithitsi	quahos/cm/	CCC	ImgT	Comment
1203	0	2	0	/	7	-70.3	7.28	4077	28.92	120	
1305	2	2	4		9	-93.1	7.30	3970	29.96	0,60	
1207	4	2_	12		11	-1127	7.38	3667	30.19	0,5,5	
1311	8	3	6		_&	_118.8	7.42	3440	30.25	6.63	
13/3	10	3	20		4	-133.5	7.46	3397	30.27	The state of the s	
1215	12	2	24	/	4_	-135.9	7.45	3421	30.	0.60	
								<u> </u>			
			-							- 	
) Dbservation:	s Durin	g Samplin	n								
Vell Condition						Purge Water Di	sposal	IM-3			
olor	7	600D 616HT 1	J ED			Turbidity(qualita		IM-3 CULAR			
Odor:	-					Other (OVA, HM					
iample ID:	ALM	NHI	MAL	1			V 1- 11	0/2/6			
ample ID:			NO	LT	Sample D	ate & Time:0	11-11-11	@ 1a/6			

I \Active\Lompoc\QAPP\Field FormsWTR forms xlsx = 1/11/2011

Ground Project Nur Date: Weather:	mber:	01- W#	ng Fori 589.0001. 7 -11 &M		Task: Sampled Recorde Coded D	•	0000g GC UT	Well II	D:	MW 21	IB
		PID					Water Qualit	y Meter(s)			
Model							44I 55	6 MPS			
Serial #:			/				B75#				
Purging In	nformatio					Purge Techniq	ue (circle one):	Low-Flow Re	move3 Well	Dilumes E	3ail Dry
Casing Ma		PVC				Purge Equipme					
Casing Dia		41				Screen Interval		193'	*:-	2131	
Total Depti		213				Pump Intake S	9	DEDICA	the desir	umr	
Depth to W		109.4	17			Volumes to be	_	3			
Water Colu		163.				Total Volume F	_	201-9			
Gallons/Foo		.65				Pump on:	1246	Off 1311	0	ez .	
Gallons in V		67	2.18		Mg	Well Casing V	olumes (gal/	ft): $2'' = 0$, $3^{1}/2'' = 6'' = 1$.	0.50	$3^{\circ} = 0.37$ $4^{\circ} = 0.65$	>
Field Para	meter Me	easuremen	its Taken	During Pu	rging						
1me	Monutes Dapsed	Flow Rate	Volume Purged	OTW (ft btoc)	Turbidity (NTUs)	ORP (mV)	gH (St Units)	Spec Cond (jimhos/cm)	lemp 1°C1	DO .mg/L:	Curi-ments
1246	0	8	0		1	-60.7	7.63	16655	29.36	0.90	-
1250	4	8	34		1	-80.8	7.66	1769R	30.19	_	
1254	13	8	68		3	-91.0	7.64	17688	30.26	0.33	
1303	17	2	10.2		1	-97.8	7.64	1767	30.27	0.33	
1347	21	8	135		1	-101,1	7.63	17654	20-29	0,20	
1312	26	2	202		2	-102.5	7.63	17665	3029	0.30	
			-				-				
											ļ
Observati Well Condi Color: Odor: Sample ID Samples A	ition:	Good Clear Now 24B-	-11011-		Sample D	Purge Water D Turbidity(qualit Other (OVA, H Date & Time:	ative): NU,etc.):	Im-3 10w ———————————————————————————————————			
Jampies A	wiaryzed	i Oi.	See the C	<i></i>	** 1	E "	±i;		af.		*

Groundy Project Numb Date: Weather:	ber:	01- Y	753.0001 7 -1		Task: Sample Record Coded		Gary Clift				
Instrument	identin	PID					Water Quali	ity Meter(s)			
Model								56 MPS			
Serial #							13751				
Purging Info	ormatio	on									
Casing Mater Casing Diamond Total Depth Depth to Wa Water Colum Gallons/Foot Gallons in Wi	eter: ter on: ell:		VC 84 .65 b.6		914	Purge Technic Purge Equipm Screen Interva Pump Intake S Volumes to be Total Volume Pump on Well Casing V	ent (circle one) I. From: etting Purged Purged:	Submersible Co	### A S T		taltic Baile
Field Parame	eter Me	asuremen	ts Taken				E:	-		_	,
	Ainutes Elapsed	GPM	Yorume Purged	DTW ift bloc!	Turbidity	ORP UNIV	pH (St Units)	Spec Cond (µmhos/cm)	1emp	DO -mg/L)	Commen
1116 1119 1126 1130 1133 1137	0 3 7 10 14 7 21	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	20 7 41 14 61 21 28 35 41		239 92 43 26 20 16 15	47.2 45.2 34.3 25.9 23.5 22.2 20.7	7. 48 7. 46 7. 43 7. 41 7. 31 7. 38 7. 38	2235 2208 2142 2120 2100 2100 2112	29.10 29.63 29.64 29.64 29.65	6.02 6.06 6.12 6.23 6.24 6.24	
Observations Well Condition Color: Odor:	n:	g-Samplin 6000 CLEAR NONSE 1] - 1101	3.0		-	Purge Water D Turbidity(qualit Other (OVA, HI	ative):	IM3 CLEAR //38	€99M	466	

See the COC

Samples Analyzed For:

Groun Project N		Sampli	ng For '53.0007		Task:		00002	Well II	· ·	PT-7M	
Date:	umber:		53.0007 니 -11		Sampled	4 D	Gary Clift	vveii ii	U.	F 1-7 [VI	
Weather:			_		Recorde	•	CF				
vveatner:		WARM	1 -			ou by. Duplicate No.	-				
					Coded t	Juplicate No.			=		
Instrume	ent Identif	ication									
	-	PID					Water Qualit				
Model			-				YSI PRI	o plus			
Serial #:							10110	0830			
Purging	Informatio	on							15-1		
Casing M Casing Di Total Dep Depth to	ameter oth Water	2" 185' 104.				Purge Techniqu Purge Equipme Screen Interval Pump Intake So Volumes to be	ent (circle one) (: From etting Purged	165'	itrifugal Bla	dder Perista	altic (Gailer)
Water Co	lumn:	80.8	4		-	Fotal Volume P	Purged: 🍞	384	88.9		
Gallons/Fi	oot	.16				Pump on:		Off		- 1	
Gallons in	n Well.	_13.€)		6						
Cr	+6	· 0ł	4	m	11	Well Casing V	olumes (gal/	ft): $(2^n = 0)$		$3^n = 0.37$ $4^n = 0.65$	
_ (1	560) -				, _			$6^{m} = 1$	46		
_		easuremen		During Pu	raina						
rieiu rai	Minutes	Flow Rate	Volume	During Fu	Turbidity	ORP	рн	Spec Cond	Temp	DO	T
fime	Flapsed	()	Purged ()	(ft btnc)	(NTUs)	(mV)	(SI Units)	(mwpos/cm)	(°C)	(mg/L)	Comments
0940	0		0	/	3.7 25	-117.6	6.97	6085	25,6	0.64	
0945	5		0.5		25	-123.6	7.04	6100	24.7	0.68	
0948	8		1.0		22	-197.8	6.98	0194	25.)	0.53	
_	GEYSE	e" we	L, USI	D DIS	POSABL	E BAILER	TO CR	B SAM	PLE		
4											
	1					 					
	-										
Observat Well Cond Color: Odor:	tions Durin	GREEN TES			—31 —31	Purge Water D Turbidity(qualit Other (OVA, HI	ative): NU.etc.):	CLEAR) IM	· 3	
Sample II	D: VI-	1M-1	164 14 Soo the C	06	Sample D	ate & Time:	1/14/11 @	0950			

Groun	dwate	r Sampl	ina For	m							
Project N		-	753.0007		Task:		00002	Well I	D.	PT-7D	
Date:	arrioer.	-	H -11		Sample	d Bv:	Gary Clift			1175	
Weather:		WAR			Recorde		II				
**Catrici.		_ (VAIR)	4		_	Duplicate No					
						ap neate tro			-		
Instrume	ent Identif	PID					Water Qualit	··· Motos(s)			
Model		IFIU					Water Qualit				
Serial #:					<u> </u>						
Sellal #.							101410	00830			
Purging	Informatio	on						9			
		7	S. A.			Purge Techniq	ue (circle one):	Low-How R	move 3 Well	Volumes B	ail Dry
Casing M)VC		-	Purge Equipme			ntrifugal Bla		
Casing Di		2"			-	Screen Interval		197'	То	21	7'
Total Dep		217'				Pump Intake S	3.1	7 (1	207	-	
Depth to		92.7	2		47	Volumes to be	_	3 (ASI	ng Vo	lunes	
Water Co Gallons/Fo		107.0	6		7)	Total Volume F	'urged:	59,7 Off			
Gallons in		19,0			→ 0.	Pump on			-	-	
CIBIIONS II	i vveii				=/	Well Casing V	olumes (gal/:	ft): (2" = 0	16	3'' = 0.37	
\bigcirc	1+6	,^	70			tren casing t	oranies (gan	31, 4" =		4" 10.65	
	(1560)	, C			ng/l	_		6" = 1	-16		
				During Du							- 4
rieiu ran	Minutes	Flow Rate	Volume	During Pu	Turbidity	ORP	ρΗ	Spec Cond	Temp	Тоо	
lime	Elapsed	()	(GAL)	(ft btoc)	(NIUs)	/mVi	(SLt/mits)	(mnhos/cm)	197°)	(mg/L)	Comments
0900	0	-	0		49	-97.4	7.38	9926	26.4	0.63	
0905	3		0,5		49	-135.5	7.41	10073	24.9	0.55	
0908	6		1.0		56	-133.4	7.40	9988	25-8	0.25	
	PUMP (AIR LUCK	ED. U	SED D'	BPOSAB	LE BAIL	TO 10	COLLET	PARA	METERS	4
	SAMP	E-									
											3
		j+:									
					J						-
Observat	ions Durir	n g Sam plin	g					_			
Well Cond		6000				Purge Water D		TUNK	IM	3	
Color: . , Odor:		NONE			_	Turbidity(qualit		CUEAR			
		NONE				Other (OVA, HI					
Sample II	D: 17-	-7D-1	1041	1	Sample D	ate & Time:	1114/11 0	0920			
-	Analyzed		See the C				7 11				

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Project N Date:	umber:	RC000	1753.00	001.	– Task: Sample	ad Rv-	00002	Well	ID:	PT-8	3M
Weather:		WARM					Blainetecl	1			
· · · · · · · · · · · · · · · · · · ·		0.11/11	ra .		_ Record Coded	Duplicate No.:	DUP IN	10413 @	MILLOW		
instrume	nt Identii	ication				populate No.:	DOI	10413 6	0140		
		PID					Water Quali	ty Materia)		mva.	
Model				_				PRO PLU	2		
Serial #:								0830	7		
Purging I	nformatio	on		els.			110/10	0630			
		0				Purge Techniqu	ue (circle one)	: Low-Flow (R	emove 3 We	II Volumes	Rail Dry
Casing M			VC		-	Purge Equipme	ent (circle one)	Submersible Ce	ntrifugal 8	Bladder Peris	staltic Rail
Casing Di		2)		_	Screen Interval	: From:	127		: 147	
Total Dep		180)′		-	Pump Intake Se	etting:		137		
Depth to		105.	7:7			Volumes to be	Purged:	3 CAS	NG		
Water Co		+6.	23			Total Volume F	urged:	36.6			
Gallons/Fo Gallons in		- 12	2			Pump on:	2000		929	-	
					•	Well Casing V	olumes (gal/	ft): 2" = 0.	.16	3" = 0.37	
C	r+6.		59		11			31/2" =	0.50	4" = 0.65	
	(1560)			^	14/1			6" = 1	.46		
				During Pu	rging						
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)	Commer
2000	Q	3	0)1000	95.9	6.53	7999	29.1	0.04	
0908	3	2	6		203	40.1	6.52	7997	30.1	0.03	†
0911	G		13		26	22.6	6.53	6103	30.2	0.06	
0718	13	2	26		20	24.6	6.53	8034	30.2	0.05	
2921	16	2	32	/	22	36.9	6.54	8039	30.3 30.3	004	-
0924	19	2	- 37		21	27.0	6.54	8031	30.3	0.04	-
			- 00								
						-					
										-	-
											_
										-	
bservatio	ons During	g Sampling	0					•			-
ell Condi		G000	9			Purge Water Dis	nocal:	IM-3 ?	ANK		
olor:		LIGHT	BROWN			Turbidity(qualita		SI to Unv	· Link		
dor:	=	NONE				Other (OVA, HN		-			
		35-110									

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		RC000	753.00	001.	Task:		กกกาว	1A1-11	10-2	VIT-8	_
Date:						ed Bv:			ID:	P 1 - 03	>
Weather:					_	•					
					-	-					
instrume	nt Identif	ication							_		
		PID			_		Water Quali	tu Motov(s)			
Model				_	***************************************				C		
Serial #:				-					7		
Purging (nformatio	on					1 1011	100830		***	
33						Puras Tochnia					
Casing Ma	iterial:	· ·	DUC			Purge Fauinme	ue (circle one)	Low-Flow R	emove 3 We	Il Volumes	Bail Dry
Casing Dia	meter:	2	K		- 3	Screen Interval	: From:				ataltic Bailer
Total Dept	h:	14	7		-				رر ا ــــــــــــــــــــــــــــــــــــ	102	
Depth to \	Vater:				• <u>•</u>		-				
Water Col	umn:	41	2				_	198	100		
						Pump on:			3		
Gallons in	Well:		6			p*		/		-	
	+6					Well Casing V	olumes (gal/	ft): 2"=0	.16	3" = 0.37	
	1510	. D	13	4	1611-			31/2"=	0.50	4" = 0.65	
					•			6" = 1	.46		
Date:											
Time			The state of the s					1 .	Temp	DO	
		(GP)4		(It bloc)	(14105)	((110)	(Si Units)	(µmhos/cm)	(°C)	(mg/L)	Comments
038		1	_	/	83	-1323	7.23	CUZD	180	8 63	-
1047		_/_				F.231~					
1000									30.4	0.00	
	14	1									
	18	1								The second name of	
1058	30		20							0.02	
		7									
bservatio	กร During		}				T				
	ion:				_	- '	posal:	INK Q 11	4-3		
	_				4	rurbidity(qualitat	tive):	LEAR			
dor:		NONE				Other (OVA LINE	Lote V.				

		r Sampl	_		TI		00000	3 A J = 11 - 1	D.	NAVA - 241	,
Project Nu	mber:		753.0007.		Task:	al D.	Gary Clift	Well I	D:	MW-24	3
Date Weather		04-			Sample	-	CAT CITE				
vveatner		WAR	7		Recorde	Duplicate No	- (4				
					Colded I	Duplicate No.	- 12 2		-		
nstrumer	nt Identif	_					T				
Model		PID					Water Quali				
							YSI P	RO PLUS			
Serial #:							1017101	0830			
Purging Ir	nformati	on									
			0.1.			Purge Techniq	ue (circle one)	: Low-Flow Re	move 3 Well	Volumes B	ail Dry
Casing Ma	terial:	S	PVC			Purge Equipme	ent (circle one)		itrifugal Bla		
Easing Dia		4"				Screen Interva		193'	7)	21	3'
fotal Dept		213'	9			Pump Intake S	_	17	17.	1	
Depth to V		108.5				. Volumes to be		3 CASVA 203.8	rg Vo	lunes.	
Water Colu		104.				Total Volume I	Purged 1329				
Gallons/Foi Gallons in '		68				Puṛṇp on	1201	off 130	<u>) </u>		8
חוו לווטוומר	v v C II					Well Casing V	/olumes (gal/	/ft): 2" = ()	16	3'' = 0.37	
0 1+	-6						(541)	3 2" =		4" - 0.65	\supset
(15	-6 (60) -	2-	72	,	ng/L	559		6" = 1			
_		easuremer	ats Takon		-						
iciu i aid	Minutes	Flow Rate	Volume	DUTING FUI	Turbidity	ORP	рН	Spec Cond	Гетр	DO	
Time	Elapsed	(GPM)	Purged (GAL)	(It btoc)	(NTUs)	(mV)	(SI Units)	(µmhos/cm)	(°C)	(mg/L)	Cornmen
1329	0	8	O		2	45.1	7.79	18084	30.2	5.03	
333	8	8	523		3	25.0	7.44	17925	30.3	0.03	
1337	13	8	1056		<u> </u>	10.3	7.78	17909	30.3	0.03	
1342	17	8	210 13		3	-62.2	7.88	17833	30.3	0.03	
350	21	8	204		Ĩ	- 66.9	7.90	17820	30.3	0.03	
355	26	8	204		7	-72.0	7-93	17812	30.3	0.03	
) Dservati	ons Duri	ng Samplir	na								
Vell Condi		Good	· 3	y.		Purge Water D	isposal:	TANK @	Im-	3	
olor		MONT G	REEN		-	Turbidity(qualit	tative):	TANK @ CLEAR			
)dor:		NON	U		-	Other (OVA, H					
	MIN	'-24B-	11041)	c ! -	Date & Time:	1/11/11/10	1387			
ample ID amples A			See the C	70-20	Sample L	vate & TIME:	1119111	120			
COLLIDICS P	MIGITACU	101.	JEE LILE C	U C							

Project Number:	er Sampling Form RC000753.0007.	Task		00002	Well	ID:	PT-9D	
Date	04- 13 -11	Sampled	l Bv	Gary Clift		10,	1130	
Weather	WARM	Recorded	-	CE				
			uplicate No.	-6-	D2			
Instrument Identi	fication							
	PID			Water Quali	ty Meter(s)			
Model				455	PRO PLI	JS		
Serial #:	·			10410				
Purging Informati	ion							
	•		Purge Technic	que (circle one)	Low-Flow	emove 3 Wel	l Volumes B	ail Dry
Casing Material	PVC		Purge Equipm	(-	ntrifugal Bl	adder Peristi	altic Bailer
Casing Diameter			Screen Interva		190'	To	21	0'
Total Depth	210'	_	Pump Intake S	-		200		
Depth to Water	102.83 102.91		Volumes to be		3 (AS/1	g volu	nes	
Water Column	107.09	—	Total Volume	i 50 7	Off 153			
Gallons/Foot Gallons in Well	17-2		Pump on:	1707	OII J.		-	
	1120		Well Casing	Volumes (gal	(ft): $(2^4 = 0)$	16	$3^{44} = ().37$	
C 1749 (1560)	14.36		3	.5		-0.50	4"-0.65	
(1560)	7 (1)	myIL			6" = I	.46		
Field Parameter M	leasurements Taken During P	urging						
Minutes Time Flapsed	Flow Rate Volume DTW Purged GAL	Turbidity (NTUs)	ORP:	pH (SI Units)	Spec Cond (umhas/cm)	1emp (°C)	(mg/L)	Comment
1507 0		/ 319	101.9	7.59	16348	29.5	0.87	
1500 3	3 90 3 189 3 327 3 3527 3 4435	146	91.1	7.79	16943	30.3	1.08	
1513 6	3 3718	19	85.2	7.79	16621	30.4	1.04	
1519 12	3 4435	6	提出	579	16604	30.5	0.99	
1512 15	3 8244	5	74.9	7.79	16592	30.5	1.00	
1525 18	3 52/	4	75.2	7.79	16583	30.5	0.99	
					-	-		
Observations Duri Well Condition:	0 to 0		Purge Water D	Nepocal	TANK O	O TM	- 3	
Color:	GRAEN		Turbidity(quali		TANK 6 CIBAR	1/1/	2	
Odor:	GREEN		Other (OVA, H					
0-	-9D-110413			4/13/11	0 15	6		
Sample ID: // Samples Analyzed		Sample Da	ate & Time:	-111-11	1/4			
Samples Analyzed	LOE. SEE THE COL							

Project Number:	Recoon	753,0007	1	Task:		00002	Well	ID.	PT-9S	
Date:		3 -1		- Sample	d Bv	Gary Clift	VVEII	ID_	11-33	
Weather	WARN			Records	•	C.I				
. readilet	/// - //	1		_	Duplicate No	1				
Instrument Identi	fication									
The state of the s	PID					Water Quali	ty Meter(s)			
Model							PRO PLUS			
Serial #						101100	330			
Purging Informati	on					•				
	0	10			Purge Technic	que (circle one)	Low-How (R	emove 3 Wel	l Volumes) . B	lail Dry
Casing Material		/C		-0		ent (circle one)		ntrifugai Bl		altic Bail
Casing Diameter	2" 147'				Screen Interva		128'	13.00	14	7'
Fotal Depth Depth to Water	102.83	2		•	Pump Intake !	_	3 CAN	138	4.45	
Nater Column	74.)				Volumes to be Total Volume		31,3	9 001	emo	
Gallons/Foot	. 16	1		6: 3063	Pump on	14/6	91, 3 Off 14	42		
Gallons in Well	7.1			.c	, amp on	1116			=	•
C 16					Well Casing	Volumes (gal/			3" = 0.37	
(1560)	1.	12		MIL				0.50	4" = 0.65	
_	•						() =	-1()		
ield Parameter M										
Time Hapsed	Flow Rate	Purged (64L)	(It btoc)	Turbidity (NTU5)	ORP ImV	St threts	Spec Cond	lemp	DO (mg/l)	Comment
14/6 0	1	0		776	94.1	7.16	4927	27.6	2.32	
420 4	1	8		22	68.0	7.42	4825	27.9	224	
1427 11		11	-/-	16	35.8	7.48	4878	28.1	2.18	
1430 14	1	14	1	15	35.9	7.48	4689	28,1	2,20	
1434 18	1	18	/	14	36.0	7.49	4660	38.)	2.18	
1478 40	1	O CA	1	13	33.7	7.77	4647	28.1	9.12	
	N. T.									
Observations Duri		g			Disame WA 1 = 5)	TA- 11 6	Tan	. >	
Vell Condition olor:	NONE				Purge Water E Turbidity(quali		TIME CUEAR	I IM	·)	
dor.	NONE			_	Other (OVA, F	NU etc.).		-		
n-	r-95-1		7	-		1/13/11@	1139			
ample ID:	13-1	1071		Sample D	ate & Time: 💄	1113/11	1121			

Instrument Ident	PID					Water Quali				
Serial #:			_			-	pho phy			
Purging Informa	tion									
Casing Material: Casing Diameter: Total Depth: Depth to Water Water Column Gallons/Foot Gallons in Well:	2" 182' 103.8 79.	7		ng/L	Purge Techniq Purge Equipme Screen Interva Pump Intake S Volumes to be Total Volume Pump on Well Casing V	ent (arcle one) I. From etting Purged Purged 1325	Subi ersible Cert 162'	172' 172' 172' 1348		altic Bailer
Field Parameter I		nts Taken Volume	During Pu	rging Furbidity	ORP	рН	Spec Cond	Temp	DO	1
Time Elapsed	(GPM)	GAL Purged	(ft bloc)	(NTIJS)	(mV)	(St Units)	(unihos/em)	TaC)	(mg/L)	Comment
345 0 348 3 331 6 534 9 338 13 341 16 344 79	2627 27 27	06319		85H 100 20 7 9 4 3	99.8 88.0 80.0 74.1 71.1 67.6 65.4	7.15 7.06 7.06 7.05 7.05 7.05 7.05	906 0 8 96 3 8 8 9 7 8 8 9 9 8 7 5 8 8 7 2 9 8 7 5 1	29,2 30,1 30,2 30,3 30,3 30,4 30,4	0.16 0.09 0.08 0.07 0.07 0.07	

Ground Project Nu		r Sampl	ing Fo		Task:		00002	Well	ID-	PT-7S	
Date:	mber.	04-	3 -1		- Sample	d Bv	Gary Clift	v v e ii	ID.	11-75	
Weather:		WAR,			Record		CF		_		
						Duplicate No	-				
Instrumer	nt Idontii	ication							-		
instrumer	nt identii	PID					Water Quali	ty Meter(s)			
Model								RO PLU	٢		
Serial #							10410		J		
			·				101110	0820			
Purging In	nformatio	on						9			
		Δı	10			Purge Techniq		Comments of the Comments of th			Bail Dry
Casing Ma Casing Dia		2 1	<u></u>		=	Purge Equipmi Screen Interva		Sumersible Ce 130'		adder Perist	
Total Dept		150'			-	Pump Intake S			ا ' ۲۵'	15	20,
Depth to V		104.1	0		-	Volumes to be	_	3. CASIL			
Water Colu		450				Total Volume I		22.1	19 1010	MO	77
Gallons/Fo		-16	-		5	Pump on	1127	Off		-	
Gallons in	Weil	7.			it.						
	51					Well Casing V	/olumes (gal/	ft): $(2" = 0)$	1.16	37 = 0.37	
CA	+6	•	591		ng/L			31-2"	= (),5()	$4^* \equiv 0.65$	
(1.	560)				719/C			6" = 1	.46		
Field Para	meter M	easuremer	nts Taken	During Pu	rging						
Time	Minutes Elaosed	Flow Rate	Volume Purged (AL	DTW (frithtoot	Turbidity (ATUS)	ORP (mV)	pH (SI (Imits)	Spec Cond (µmhos/cm)	Temp (°C)	DO /mg/l	Comments
1127	0	1	0	/	234	-28.9	7.40	5392	21.5	0.16	
1131	4	1	4	/	191	- 25.0	7-36	5382	29.3	0.06	
1135	8	1	8	 	107	-23.7	7.35	5352	30.7	0.04	
1142	15	1	15	1	81	- 15.9	7.34	5354	30.7	0.04	
1146	19	1	19		14	-14.9	7.34	5376	30.9	0.03	
1156	23		23	/		-13.9	7-34	5327	20.9	0.03	
		L									
Observation	ons Durin	ng Samplin	ıg								
Well Condi					_	Purge Water D	isposal	TANK C	e In	1-3	
Color:		NONE				Turbidity(qualit	ative):	TANK C CLEAR			
Odor:					_	Other (OVA, H	VU.etc.)				
Sample ID	PT-	15-110	4/3		Sample D	ate & Time: 💆	1/13/11 0	1/5/			
Samples A	nalyzed	For:	See the C	OC	F						

EVActive\Lompoc\QAPP\Field FormsWTR forms xlsx 4/5/2011

Groundwate	er Sampl	ing Fo	rm							
Project Number:		753.0007		Task:		00002	Well I	D:	PT-8D	
Date	04-	13 -1	1	Sample	d By:	Gary Clift				
Weather	W AR	n		Recorde		Cit				
	-			-	Duplicate No.:	-				
Instrument Ident	ification							-		
The state of the s	PID					Water Quali	ty Meter(s)	2.5		
Model		_	_			PRO PL	VS (95	I)		
Serial #:						IDHIDO				
Purging Informati	tion									
	,	1.10			Purge Techniq	ue (circle one)	Low-Flow (Re	ernove 3 Well	Volumey i	Bail Dry
Casing Material		IVC			Purge Equipmi	ent (circle one)	Submersible Cer	ntrifugal Bla	ndder Perist	altic Bailer
Casing Diameter	2"				Screen Interva		190'	To	21	10'
Fotal Depth	210'				Pump Intake S	_		100'		
Depth to Water	105.9			4	Volumes to be		3			
Water Column	104.			-	Total Volume I		X50	- 20		
Gallons/Foot	. 16,				Pump on	0957	Off	0 28	-	31
Gallons in Well	10,	T.			Well Casing \	/nl	/ft): (2" = 0		3" = 0.37	
C 16)	111		SECSIO 1 1	Well Cashig V	rolullies (gair	3'13" =		4"= 0.65	
(1560)	,	. 40		Mg/L			6" = 1		11110	
Field Parameter I		ots Taken Volume	During Pu	rging Furbidity	ORP	На	Spec Cond	Temp	DO	
Time Elapsed		Purped (GAL		(NTUs)	(m/V)	-15" Units)	(hwposycin)	(°C)	/mg/L)	Cinitimaté
0957 0	12	0	-	75	-107.9	7.21	18059	29.4	0.07	
1001 4	2	8		6	-89.0	7.51	19098	50.4	0.04	
1002 8	a	17		3	-70.)	7.75	19004	30.5	0.04	
1009 12	2	35	 /-	3	-58.6	7.80	18362	30.6	0.03	-
1017 20		42	1/	3	- 70.87	778	18056	306	0.03	1
1022 25	2	50		2	-71.)	7.78	18000	30.6	0.03	
			1							
										1
			 						-	
			<u> </u>				L			
Observations Dur Well Condition	Ing Samplir	ıg			Purge Water D	isposal:	TANK	et Ta	1-3	
Color:	C/OAA	7		_	Turbidity(qualit		TANK O	مارىد.	. /	
Odor:	NON				Other (OVA, H					
OT	Q.D	sunti t 2		_		Just h 6	0 1023			
Sample ID:	8D-110		10.5	Sample D	Date & Time: 🚣	1110111	2 1012			
Samples Analyzed	For:	See the C	.0C							

Date: 04- 12-11 Sampled By: Gary Clift Whem Recorded By: C# Coded Duplicate No.: Instrument Identification PID Water Quality Meter(s) Model Serial #: 100100830 Purging Information Purge Technique (circle one): Low-Flow Remove 3 Well Volume Casing Material: Purge Equipment (circle one): Centrifugal Bladder Casing Diameter: 4" Screen Interval: From: 63' Total Depth: 88' Pump Intake Setting: 75' Depth to Water: 66,17 Volumes to be Purged: 75' Water Column: 21.9 Total Volume Purged: 42.6 Gallons/Foot: 65 Pump on: 102 Y Off: 105 (Gallons in Well: 14.2 Well Casing Volumes (gal/ft): 2" = 0.16 3" 4" 5" 5" 5" 5" 5" 5" 5" 5" 5" 5" 5" 5" 5"	
Recorded By: Coded Duplicate No.: Coded D	Peristaltic Bailer
Instrument Identification	Peristaltic Bailer
PID Water Quality Meter(s)	Peristaltic Bailer
PID Water Quality Meter(s) VSE PRO PLUS Serial #: Purging Information	Peristaltic Bailer
Node Serial #:	Peristaltic Bailer
Purging Information	Peristaltic Bailer
Purging Information Casing Material: PVC Purge Technique (circle one): Low-Flow Remove 3 Well Volume Purge Equipment (circle one): Commercial: Centrifugal Bladder Screen Interval: From: 63' Total Depth: 88' Pump Intake Setting: 75' Depth to Water: 66,17 Volumes to be Purged: 75' Water Column: 21,9 Total Volume Purged: 72' Gallons/Foot: 65 Pump on: 102' Off: 105' Gallons in Well: 14.2 Well Casing Volumes (gal/ft): 2" = 0.16 3" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 4" = 0.50 <t< td=""><td>Peristaltic Bailer</td></t<>	Peristaltic Bailer
Purge Technique (circle one): Low-Flow Remove 3 Well Volume Casing Material: Purge Equipment (circle one): Low-Flow Remove 3 Well Volume Casing Diameter: 4" Screen Interval: From: 63'	Peristaltic Bailer
Casing Material: Casing Diameter: 4" Screen Interval: From: 63' Total Depth: 88' Pump Intake Setting: 75 Depth to Water: Water Column: Gallons/Foot: Gallons in Well: 14.2 Well Casing Volumes (gal/ft): Well Casing Volumes (gal/ft): 2" = 0.16 3" = 3"/2" = 0.50 4" = 6" = 1.46 Field Parameter Measurements Taken During Purging Time Minutes Flow Rate Flow Rate CAM Purge Equipment (circle one): Screen Interval: From: 63' Total Volume Purged: Yolume Yolume Well Casing Volumes (gal/ft): 2" = 0.16 3" = 3"/2" = 0.50 4" = 6" = 1.46 Field Parameter Measurements Taken During Purging Time Elapsed Flow Rate Flow Rate Yolume DTW Turbidity ORP Purged (ft bloc) (NTUs) (mV) (SI Units) (pumbos/cm) (pumbos/cm	Peristaltic Bailer
Casing Diameter: 4" Screen Interval: From: 63'	
Depth to Water: Go, 17	88'
Depth to Water: 66, 17	
Water Column: 21.9 Total Volume Purged. 42.6 Gallons/Foot: , 65 Pump on: 102.7 Off: 105.1 Well Casing Volumes (gal/ft): 2" = 0.16 3" = 31/2" = 0.50 4" = General State Puring Purging Time Plapsed (GPM) Flow Rate Purged (ft btoc) (NTUs) (NTUs) (NTUs) (mV) (SI Units) (µmhos/cm) (°C) (n 2188 1027 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
Gallons/Foot: Gallons in Well: Well Casing Volumes (gal/ft): 2" = 0.16 3" = 31/2" = 0.50 4" = 6" = 1.46 Field Parameter Measurements Taken During Purging Time Blapsed (GPM) Purged (fft bloc) (NTUs) (mV) (SI Units) (pmhos/cm) ("C) (nture) (GAL) To 2 203 [73.4 755 21.93 29.3 8.1037 3 29.4 8.1037 10 3 17 20 20 5 29.4 8.1038 14 20 20 20 3 17 4 4 5 20 20 3 17 4 4 5 20 20 3 17 4 4 5 20 20 3 17 4 4 5 20 20 3 17 4 4 5 20 20 3 17 4 4 5 20 20 3 17 4 4 5 20 20 3 17 4 4 5 20 20 3 17 4 4 5 20 20 3 17 4 4 5 3 20 20 20 20 20 20 20 20 20 20 20 20 20	
Well Casing Volumes (gal/ft): 2" = 0.16 3" = 31/3" = 0.50 4" = 0.50 4" = 1.46	
Well Casing Volumes (gal/ft): 2" = 0.16 3" = 0.50 4" = 0.50 4" = 0.50 6" = 1.46	
192 193 194 195 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197	
Field Parameter Measurements Taken During Purging Minutes Flow Rate Volume DTW Turbidity ORP PH Spec Cond Temp (mV) (SI Units) (mV) (SI Units) (mV) (mV)	
Field Parameter Measurements Taken During Purging Minutes Flow Rate Volume DTW Turbidity ORP Purged (GPM) Purged (ft btoc) (NTUs) (mV) (SI Units) (pmhos/cm) ("C) (nTUs) (mV) (SI Units) (mV) (2.03
Time Minutes Flow Rate Volume DTW Turbidity ORP PH Spec Cond Temp (GAL) (GAL) (If bloc) (NTUs) (MV) (SI Units) (January 1888) (CAL) (If bloc) (NTUs) (MV) (SI Units) (January 1888) (CAL) (If bloc)	
Time Elapsed (GPM) Purged (fl bloc) (NTUs) (mV) (SI Units) (µmhos/cm) (°C) (n 2168 (
1027 0 2 0 203 173.4 7.55 21.93 29.28. 1027 3 2 7 62 152.0 7.49 2103 29.4 8. 1031 7 2 14 48 138.7 7.49 2055 29.4 8.5 1034 10 3 21 27 130.7 7.49 2067 29.4 8.5 1038 14 3 28 10 124.0 7.49 2042 29.4 8.5 1040 17 2 35 8 122.9 7.49 2042 29.4 8.5	O g/L) Comment
1027 3 2 7 62 152.0 7.49 2103 29.4 8. 1031 7 2 14 48 138.7 7.49 2055 29.4 8.5 1034 10 9 21 27 130.7 7.49 2067 29.4 8.5 1038 14 9 28 10 124.0 7.49 2042 29.4 8.5 1041 17 2 35 8 122.9 7.49 2026 29.4 8.5	
1031 7 2 14 48 138,7 7.49 2055 29.4 8.5 1034 10 3 21 27 130.7 7.49 2067 29.4 8.5 1038 14 2 28 10 124.0 7.49 2042 29.4 8.5 1041 17 2 35 8 122.9 7.49 2026 29.4 8.5	
1038 14 d 28 / 10 124.0 7.49 2042 29.4 8.5 1041 17 d 25 / 3 122.9 7.49 2026 29.4 8.5	3
1038 14 d 28 / 10 124.0 7.49 2042 29.4 8.5 1041 17 d 25 / 3 122.9 7.49 2026 29.4 8.5	7
1041 17 2 35 / 8 122 9 7.49 2026 29.4 85 1046 22 2 43 / 7 121.8 7.49 2036 24.4 8.	5
1046 22 2 4 43 / 7 121.8 4.49 2036 29.4 8.	3
	2
	_
Observations During Sampling	
Well Condition: Color: Purge Water Disposal: TANK © FM-3 Clear	
Color: Turbidity(qualitative): CleAR	
Odor: Other (OVA, HNU,etc.):	
Sample ID: 104/12 Sample Date & Time: 4/12/11 @ 1047	
Sample ID: PNW-11-1105/12 Sample Date & Time: 1105/12 Sample Sample Date & Time: 1105/12 Sample Date & Time: 1105/	

Project Number: Date: Weather: Instrument Identif Model Serial #: Purging Informati Casing Material: Casing Diameter Total Depth Depth to Water: Water Column Gallons/Foot Gallons in Well C. (1560) Field Parameter M Inne Minutes Elapsed	PID			•	ue (circle one): ent (circle one): l: From: etting: Purged:	Low-Flow (Resolution of the control	emove 3 Well ntnfugal Bla 117/ 19 Vol.	adder Pensta 12	iail Dry altic Bailer
Instrument Identify Model Serial #: Purging Informati Casing Material: Casing Diameter: Total Depth: Depth to Water: Water Column: Gallons/Foot: Gallons in Well: C (+6) (1560) Field Parameter M	Fication PID on PV C 4" 124' 110.75 13.25 -65 8.7		Recorde Coded I	Purge Techniq Purge Equipme Screen Interval Pump Intake S Volumes to be Total Volume I Pump on:	Water Quality ISE Pro 10H1008 ue (circle one): ent (circle one): l: From: etting: Purged: iii8	Low-Flow (Resolution of the control	ntnfugal Bla	adder Pensta 12	altic Bailer
Instrument Identify Model Serial #: Purging Informati Casing Material: Casing Diameter: Total Depth Depth to Water: Water Column Gallons/Foot Gallons in Well: C (1560) Field Parameter M	Fication PID On PV C 4" 124' 110.75 13.25 -6.5 8.7		Coded I	Purge Techniq Purge Equipme Screen Interva Pump Intake S Volumes to be Total Volume I Pump on:	Water Quality ISE Production (circle one): ent (circle one): l: From: etting: Purged: Purged: 1118	Low-Flow (Resolution of the control	ntnfugal Bla	adder Pensta 12	altic Bailer
Model Serial #: Purging Informati Casing Material: Casing Diameter: Total Depth: Depth to Water: Water Column: Gallons/Foot: Gallons in Well: C (+6) (1560) Field Parameter M	PID			Purge Techniq Purge Equipme Screen Interva Pump Intake S Volumes to be Total Volume I Pump on:	ue (circle one): ent (circle one): l: From: etting: Purged:	Low-Flow (Resolution of the control	ntnfugal Bla	adder Pensta 12	altic Bailer
Model Serial #: Purging Informati Casing Material: Casing Diameter: Total Depth: Depth to Water: Water Column: Gallons/Foot: Gallons in Well: C (+6) (1560) Field Parameter M	PID			Purge Equipme Screen Interva Pump Intake S Volumes to be Total Volume I Pump on:	ue (circle one): ent (circle one): l: From: etting: Purged:	Low-Flow (Resolution of the control	ntnfugal Bla	adder Pensta 12	altic Bailer
Purging Informati Casing Material: Casing Diameter Total Depth: Depth to Water: Water Column Gallons/Foot Gallons in Well: C. (+6) (1560) Field Parameter M	124' 110.75 13.25 -6.5 8.7			Purge Equipme Screen Interva Pump Intake S Volumes to be Total Volume I Pump on:	ue (circle one): ent (circle one): l: From: etting: Purged:	Low-Flow (Resolution of the control	ntnfugal Bla	adder Pensta 12	altic Bailer
Purging Informati Casing Material: Casing Diameter Total Depth: Depth to Water: Water Column Gallons/Foot Gallons in Well: C. (+6) (1560) Field Parameter M	4" 124' 110.75 13.25 -65 8.7			Purge Equipme Screen Interva Pump Intake S Volumes to be Total Volume I Pump on:	ue (circle one): ent (circle one): l: From: etting: Purged:	Low-Flow (Risubmersible Certification of the control of the contro	ntnfugal Bla	adder Pensta 12	altic Bailer
Purging Informati Casing Material: Casing Diameter Total Depth Depth to Water: Water Column Gallons/Foot Gallons in Well C (+6 (1560) Field Parameter M	4" 124' 110.75 13.25 -65 8.7			Purge Equipme Screen Interva Pump Intake S Volumes to be Total Volume I Pump on:	ue (circle one): ent (circle one): l: From: etting: Purged: ill 8	Low-Flow (Rusumersible Certain 104') 3 CASI 25.9 Off.	ntnfugal Bla	adder Pensta 12	altic Bailer
Casing Material: Casing Diameter Total Depth Depth to Water: Water Column Gallons/Foot Gallons in Well C (+6 (1560) Field Parameter M	4" 124' 110.75 13.25 -65 8.7			Purge Equipme Screen Interva Pump Intake S Volumes to be Total Volume I Pump on:	ent (circle one): l: From: etting: Purged: Purged:	3 CASI Off	ntnfugal Bla	adder Pensta 12	altic Bailer
Casing Material: Casing Diameter Total Depth Depth to Water: Water Column Gallons/Foot Gallons in Well C (+6 (1560) Field Parameter M	4" 124' 110.75 13.25 -65 8.7			Purge Equipme Screen Interva Pump Intake S Volumes to be Total Volume I Pump on:	ent (circle one): l: From: etting: Purged: Purged:	3 CASI Off	ntnfugal Bla	adder Pensta 12	altic Bailer
Casing Diameter Total Depth Depth to Water: Water Column Gallons/Foot Gallons in Well C (+6 (1560) Field Parameter M	4" 124' 110.75 13.25 -65 8.7			Purge Equipme Screen Interva Pump Intake S Volumes to be Total Volume I Pump on:	ent (circle one): l: From: etting: Purged: Purged:	3 CASI Off	ntnfugal Bla	adder Pensta 12	altic Bailer
Casing Diameter Total Depth Depth to Water: Water Column Gallons/Foot Gallons in Well C (+6 (1560) Field Parameter M	4" 124' 110.75 13.25 -65 8.7			Screen Interval Pump Intake S Volumes to be Total Volume I Pump on:	l: From: etting: Purged: Purged:	104' 3 (AS)(117'	12	
Total Depth: Depth to Water: Water Column: Gallons/Foot: Gallons in Well: C (+6 (1560) Field Parameter M	124' 110.75 13.25 -65 8.7			Pump Intake S Volumes to be Total Volume I Pump on:	etting: Purged: Purged:	3 CASI 25.9 Off 114			
Depth to Water: Water Column Gallons/Foot Gallons in Well C (+6 (1560) Field Parameter M	13.25 -65 8.7			Volumes to be Total Volume F Pump on:	Purged:			unos	
Water Column Gallons/Foot Gallons in Well C (+6 (1560) Field Parameter M Minutes	13.25 -6.5 8.7			Total Volume F Pump on	Purged:			-	
Gallons in Well: C (+6 (1560) — Field Parameter M Minutes	-65 8.7			Pump on	1118	Off III	9	-	
C / + 6 (1560) — Field Parameter M	8.7		-	Well Casing V				7	
(1560) — Field Parameter M	.022			Well Casing V	olumes (gal/	F+1 20 ()			
(1560) — Field Parameter M	-072							3" = ().37	
Field Parameter M	.062		611			3 2" =	= ().5()	4" = 0.65	>
Minutes		m	91 —			6" = 1	.46		
	easurements Taken I	During Purg	ging						
unis Esabsea	Flow Rate Volume	DTW (ft btoc)	Turbidity	ORP	pH (STURNA)	Spec Cond	Temp	DO	
	(GPM) Purged (GAL)	(It otoe)	1983,002	(mV)	(SI Units)	(umhos/cm)	(nc)	(mg/L)	Comments
1118 0	1 0	/	16	-1.3	7.89	2751	29.2	0.16	
	5		24	- 56.1	7-90	2734	30,1	0.10	
1132 14	1 14		19	-175.1	7.94	2711	30.6	0.08	
1136 18	1 8	/ 	8	- 198,5	7.93	2700	30.7 30.8	0.05	
1140 22	22		7	-204,6	7.93	2701	30,8	0.04	
1140 32	1 26		6	-206,8	7.93	2711	30,8	0,04	
	380					1	•	<u> </u>	
									-
									531-11
Observations Duri						There	777	·	
Well Condition:	6001)		-	Purge Water Di		TANKe	+M-	3	
Color.	PINK		-	Turbidity(qualit		CLEAR			
Odor:	NONB	7 1/8/	-	Other (OVA, Hi	vu,etc.):				
Sample ID: MV	V-24A-1104	/d s	sample D	ate & Time: 💾	14/18 Q	1145			
Samples Analyzed				4	112/11	Marie Transport			

Groundwate		_								
Project Number: Date:		753.0007 2 -1		_ Task:	d D	00002 Gary Clift	Well	ID:	PT-7S	
Weather:	\NAR.		<u> </u>	_ Sample Record	•	dary Clift	-			
weather.	VITAC	<u>~</u>		_	ви ву. Duplicate No.:					
				Coucu	Dapricate 110			_		
Instrument Ident						There's a m				
Model	PID	-			· · · · · · · · · · · · · · · · · · ·	Water Quality 7515				
Serial #:										
Serial #.						05.0	1500 A	<u> </u>		
Purging Informat	ion									
Casing Material:	2"	PVC		-	Purge Technique Purge Equipme	ent (circle one):	Submersible Co	entrifugal Bl	adder Peris	staltic Bailer
Casing Diameter: Total Depth:	150'			-	Screen Interval		130'	To	15	50'
Depth to Water:	103.5	9		-	Pump Intake Solumes to be	•	140			
Water Column:	46.4	12		•	Total Volume F	•	3 CASH	Vons		
Gallons/Foot:	16				Pump on:	1419	Off:	1438		
Gallons in Well:	7.4							1138	-	
C 1+6 (1560)	. 6	(01)			Well Casing V	olumes (gal/		0.16 = 0.50	3" = 0.37 4" = 0.65	
(1560)	. 0			ng/L			6" = 1	.46		
Field Parameter M	leasuremer	nts Taken	During Pu	raina						
Minutes	Flow Rate	Volume	DTW	Turbidity	ORP	pH	Spec Cond	Temp	DO	
Time Elapsed	(64m)	Purged (exc(5)	(ft btoc)	(NTUs)	(mV)	(SI Units)	(µmhos/cm)	(°C)	(mg/L)	Comments
1423 4	2	8		85	-59.0	7.36	5502	30.38	040	
1425 6		12		40	- 64.9	7.33	5479	30.43	0.39	
1427 8		14		17	-86.6	7.32	5481	30, 43	0.30	
1429 10		20	(0.2.86	15	~93.7	7.32	5476	3044		
1730	 	M	103.84	19	-95.8	7.32	5470	30-38	0.25	
									3	
	 									ļ
	1									ļ
							·			
										
Observations Duri Well Condition:	ng Samplin احمی				Purge Water Di	snosal·	TANK @	Im-	3	
Color:		yellow t	nt		Turbidity(qualita	•	Cha			
Odor:	RON				Other (OVA, H		-			
Sample ID: PT.	7511	フッフ				-12.11	@ 1435	-		
Sample ID: 13		See the CC		Sample D	ate & Time: 7	-,0 1	رداري			

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Groundwa	_	-								
Project Number	: RC000	753.0007	<u>'. </u>	Task:		00002	Well	ID:	PT-7M	
Date:	07	13 -1	1	Sample	d By:	Gary Clift				
Weather:	WAR	<u> </u>		Record	ed By:	Jul				
				Coded	Duplicate No.:					
Instrument Ide	entification							_		
	PID					Water Quali	ty Meter(s)			
Model						Y515				
Serial #:							1520 AK			
Purging Inform	nation									
		Prc			Purge Techniq					
Casing Material		710			Purge Equipme					
Casing Diamete					Screen Interval		165'	_ To:	18	35'
Total Depth:	185'				Pump Intake S	•				
Depth to Water			· · · · · · · · · · · · · · · · · · ·		Volumes to be	-	3 CAS/A	9		· · · · · · · · · · · · · · · · · · ·
Water Column: Gallons/Foot:	53.	36			Total Volume F	'urged:	011			
Gallons in Well:	12				Pump on:		_Off:	85	-	
Gallotts III Well.	12	•			Well Casing V	Johnman (gal/	ft): (2" = 0	16	28 0.27	•
C1+6		34			wen casing v	olumes (gai/	11): $2^{-1} = 0$		3" = 0.37 4" = 0.65	
CN+6 (1560)	, ()37	m	1/1			6" = 1		4 = 0.03	
				_			0 - 1	.70		
Field Paramete		volume			000		T			
Time Elaps			(ft btoc)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Spec Cond (µmhos/cm)	Temp (°C)	DO (mg/L)	Comments
1245		^		42	-1016	6.55	6673	33.62	1.67	
		-	0				THE STATE OF THE S			
		 								
										1
						7				
		 								
		 								
							= -	1		
		6 11		••••			4			
		1 -								
							N =			_
								11 19		
Observations D	uring Samplii	ng								
Well Condition:	مص	٨			Purge Water Di	•	TANK @	IM-3	\$	
Color:		low			Turbidity(qualita		Clear			
Odor:					Other (OVA, HN	IU,etc.):				
Sample ID:	T-7M1	10713	ç.	mnle D	ate & Time:	7/13/4 (2 1245			
Samples Analyz		See the CO		יט אולוויי	are or Hille:	, , ,	- 1-13			
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Bond in casing at liver water level - unable to get pump past

_			ing For				_				
Project N	umber:		753.0007		_ Task:		00002	Well	ID:	PT-7D	
Date:		07- [Sample	d By:	Gary Clift				
Weather:		WARM	<u>ገ</u>	·····	Recorde	ed By:	n				
					Coded	Duplicate No.:			_ 1		
Instrume	nt Identif	ication									
		PID					Water Quali	ty Meter(s)			
Model				7			YS1 55	L			
Serial #:	030						OSC	S2011L			
Purging	Informatio	on									1.5
		0	1116			Purge Techniqu					Bail Dry
Casing M			YC			Purge Equipme	ent (circle one):	Submersiole Co	entrifugal Bl	adder Peris	taltic Bailer
Casing Di	ameter:	2"			_	Screen Interval		197'	То		
Total Dep	th:	217'			-	Pump Intake S	etting:	2001			
Depth to	Water:	967	!		-	Volumes to be	Purged:	3 CASM	9		
Water Co	lumn:	120-	29			Total Volume P	Purged:	1057.6	60		
Gallons/Fo		19.	2			Pump on:	0959	Off: 12	05	-	
						Well Casing V	olumes (gal	/ft): 2" = 0	0.16	3" = 0.37	
CN	-6	.0	36					31/2"=		4" = 0.65	
(15	160) -	٠٥.			mylL			6" = 1	.46		
		easuremer		Durina Pu	ırging						
	Minutes	Flow Rate	Volume	DTW	Turbidity	ORP	рН	Spec Cond	Temp	DO	
Time	Elapsed	(FP7)	Purged (Gelf)	(ft btoc)	(NTUs)	(mV)	(SI Units)	(µmhos/cm)	(°C)	(mg/L)	Comment
1019	20	0.5	10		929	-79.9	6-79	11965	33.02	1.25	
1039	60		40		718	105.2	6.84	12272	32.95	1.35	
1059	10		30		31	-1065	6.89	12685	33.27	0.87	
1134	100		50		25	-114.2	6.85	12714	33.04	0.84	
1159	120	V	60		2	-115-2	6.44	12602	32-87	0.50	
Ti-	- 1						I II y	all C	5	11 31	
										- IK	
						14		-3.V			
	11. 7 =	Mary 1								I I PELL A	
	1						***	- [-]			100
	1			Tri .				74,00	Ţ		W.
					- 17			47			
₹ _{jg}				-							Table 1
	_			Ä		111					
Observati	one Desir	a Camali									
Well Cond		g Samplin	9			Puras Mater Di	enoral:	Trale A	Tm-	3	
weii Cond Color:	iuon.				_	Purge Water Dis	,	Jank @	4-1-1-	ر	
Odor:		Sour			-	Turbidity(qualita Other (OVA, HN		· ·			W .
J401.	•	2001			_	Other (OVA, RI	10,etc./.				
		7Dilo									

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Project Number:	RC000	753.0007	7.	Task:		00002	Well	ID:	PT-8S	
Date:	07-	12 -1	1	- Sample	d Bv:	Gary Clift			1105	
Weather:	WAR	M		 Recordo	(2)	In				
			· · · · · · · · · · · · · · · · · · ·	-	Duplicate No.:					
Instrument Identi	fication							_		
	PID					Water Quali	tv Meter(s)			
Model	8.	_				4513			· · ·	
Serial #:		_	-				1520 A	-10		
	377				414		13 00 6			
Purging Informati	on									
	6	prc			Purge Techniqu			emove 3 Well		•
Casing Material:		7	·		Purge Equipme					
Casing Diameter:	2"				Screen Interval		127'	_ To	:14	17'
Total Depth:	147' er: 105-34				Pump Intake Se	_	137'		· · · · · · · · · · · · · · · · · · ·	
· ·					Volumes to be	•	3 CASING			
Water Column: 41-66					Total Volume P		27 gullo			
Gallons/Foot: Gallons in Well:	716	7			Pump on:	0950	_Off:	007	_	
		/			Well Casing V	olumes (nal/	ft): (2" = 0	16	3" = 0.37	
C C+6 .00Ll			1.	trem casing t	olumes (gui)	$3^{1}/_{2}$ " =		4'' = 0.65		
C (1560) -004/ N				1916			6" = 1		1 0.03	
Field Parameter M			Duning Du							
Minutes	Flow Rate	Volume	DTW	Turbidity	ORP	pH	Spec Cond	Temp	DO	
Time Elapsed	(60 A)	Purged (Gels)	(ft btoc)	(NTUs)	(mV)	(SI Units)	(µmhos/cm)	(°C)	(mg/L)	Comments
0952 2	2	ч	105.60	7	~121.7	7.05	5535	29.80	0,48	
0954 4		10	-		-124.7	7-07	5518	29.94	0.43	
0758 8		12			-134.3	7:15	5352	30.13	0.39	
1000		20		'	-151.3	1.17	5215	30.27	0.31	
1001	¥	22	105.45	6	~15Y.M	7.19	5270	30.30	0.33	
				<u> </u>						
										ļ
	7			·				-	· · · · · · · · · · · · · · · · · · ·	
	ļ									
										
									,	
	ng Samplin	a				*10				
Observations Duri	Good				Purge Water Dis	snosal·	TOOK	@ IM	-3	
	6			_	-		11711	C 7/1	_	
Well Condition:	Yellow				Turbidity(qualita	itive):	1105			
Observations Durion Well Condition: Color: Odor:	10.81				Turbidity(qualita Other (OVA, HN		diar			

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Project N		r Samp	753.0007		Task:		00002	\$4¢. 11	ID.	DT OSS		
Date:	umber.		/33.000/ [小1		-	d Dur	00002 Gary Clift	Weli	ID:	PT-8M		
Weather:		WAR			_ Sample Record	-	Gary Clift					
weather.				-	-	Duplicate No.:						
					Codea	Dupireate No			_			
Instrume	ent Identif						Water Quali					
Model		PID				·		 				
			_				YS1 550					
Serial #:			_			2	050	1520 AX	<u> </u>			
Purging	Informatio	on										
Casing M	aterial:	D	VC				ue (circle one): ent (circle one):	_				
Casing Di		2"			-	Screen Interva		taltic Bailer 32'				
Total Dep		182'			-	Pump Intake S		162'	- To:			
Depth to					•	Volumes to be	-	3 casino	4			
Water Co					Total Volume	-	37 90	Um 1				
Gallons/Fo	oot:	.16				Pump on:	0825		547			
Gallons in	Well:	12.	3				2-324			<u> </u>		
CN+6 .056 N				Well Casing \	/olumes (gal/	ft): $(2'' = 0)$		3" = 0.37 4" = 0.65				
(1560)		<u> </u>	M	9/4			6" = 1	.46			
		easuremer		During Pu	rging							
	Minutes	Flow Rate	Volume	DTW	Turbidity	ORP	рН	Spec Cond	Temp	DO		
Time	Elapsed	(Gpm)	Purged (BAS)	(ft btoc)	(NTUs)	(mV)	(SI Units)	(µmhos/cm)	(°C)	(mg/L)	Comments	
0629	3	2	Ø		478	86.4	6.55	\$507	30.10	0.94		
6832	30	1	14		2280	50.3	6.45	8428	30.50	1.17		
0835	13		20	-	112	34.4	6.49	8404	30.52	1.15		
0838	15		30	-	70	11.1	6.50	8359 6360	30.57		 	
0843	18	1	37	107-57	82	7.8	6.50	8346	30,56	0.55		
							ļ					
			<u> </u>									
											<u> </u>	
,												
 												
											<u> </u>	
								•		,	-	
						V						
Observati	ions Durir	ng Samplin	ıg				*					
Well Cond		Goo				Purge Water D	isposal:	TANKE	In-	3		
Color:		toffen				Turbidity(qualit	•	Clouby				
Odor:		Man	- 27			Other (OVA, HNU,etc.):						
e	DT-	8m-1	10712				ala b	@ 0845				
Sample i	Analyzed		See the Co		Sample D	ate & Time:	TIVE	W UDIJ				
-allinies 4	ZIOIVZEU I		see uitt	4.5								

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Project M	Project Number: RC000753.0007.		Task:		00002	14.1×11	ID.	DT OD			
Date:	Jinber,	07-	133.0007 1 -1		-	al Dv.		Well	ID:	PT-8D	- (3)
Weather:				<u> </u>	Sample	•	Gary Clift				
vveatner:		WAR	<u> </u>		Records	•	-JR				
					Coded	Duplicate No.:			-		
Instrume	nt identii										
Mandal		PID					Water Qualit	ty Meter(s)	764		
Model							YS1 53	16			
Serial #:	5 :						0501	520 AK	6		
Purging	nformati	on									
			010=			Purge Techniq				Volumes	Bail Dry
Casing M			PVC			Purge Equipme			entrifugal Bl	adder Peris	taltic Bailer
Casing Di		2"			i	Screen Interval		190'	_ To	:21	10,
Total Dep		210'			,	Pump Intake S	_	700			
Depth to Water: 105.25				Volumes to be	-	3 CASIA	g				
Water Column: 104-65						Total Volume F		50 gell			The state of the s
Gallons/Fo		-16	n 1/ -			Pump on:	0907	_Off:	38	_	
Gallons in		-10.	16.			Mall Casine V	/aluma- /1/	f4). (011 0		0" 005	
$C \wedge$	+6	2.0	~	Mg	.11	Well Casing V	olumes (gai/	ft): $2'' = 0$		3'' = 0.37 4'' = 0.65	
(1560)	2.0	00		16			6" = 1		4" = 0.65	
								0 -1	.40		
Field Para				During Pu			Y				
Time	Minutes Elapsed	Flow Rate	Volume Purged	(ft btoc)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Spec Cond (µmhos/cm)	Temp (°C)	DO (mg/L)	Comments
0911	9	2	(Gals)	105.49	19	in items	1 2 2 /	l a a a	2 10	40 4-1	
0914	9	1	18	/US: 41/	3	-53.5	7.70	17710	30.43	0.51	 -
0920	13		26		i	- 56.5	7.77	1 433	30.74	0.30	1
924	17		34		Z.	-60.0	7.78	173W	39.73	0.21	
0928	21		42			-64.0	7.78	17221	30.77	0.25	
0932	25	8	50	105.82	1	-65.8	7.78	17211	30.78	0.24	
										ļ	'
			_				 	ļ — — —			-
									ļ		
				1							
					;				<u> </u>		
01.						-20 A(1)					
		g Samplin	g			B 144			· T	2	
Well Cond	ition:	Good			-	Purge Water Di	•	TANKC	1M-	>	
Color:		Yellow			_	Turbidity(quality	Tank@Im-3 Clear				
Odor:	or: North			Other (OVA, HNU,etc.):							
						ate & Time:					

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Grour	Foundwater Sampling Form											
Project N		•	753.0007		Task:		00002	Welli	D·	PT- 9	7 5	
Date:			2 -11		_ Sample	d Bv:	Gary Clift		.	,	<u></u>	
Weather:	:	War	~~		Recorde	-	Jon Renire	1-				
					_	Duplicate No.:						
Instrume	ent Identif	ication				·			-			
		PID				T "NT- 1	Water Qualit	y Meter(s)		-		
Model				_		151556						
Serial #:								1520 AK	=			
Purging	Informatio	on								-		
		_				Purge Techniq	ue (circle one):	Low-Flow Re	move 3 Well	Valumes B	ail Dry	
Casing M		P	VC			Purge Equipme	ent (circle one):	Submenible Ce	ntrifugal Bla	dder Perist	altic Bailer	
Casing Di					-	Screen Interval	: From:	24, (1.9)	_ To:	147'		
Total Dep		- 1'	4''		_	Pump Intake S	_	138				
	Depth to Water: 102,32			-	Volumes to be	-	3 095	79				
	Water Column: 44.68 Gallons/Foot:			-	Total Volume-	Purged: 1235	Llage	Mons-				
Gallons/Fo	=:	- 1	10		-	Pump on:	1 633	_Off:	305	1 11		
Gailons III	i vveii.		1	-	-	Well Casing V	Johnmos (ani/	ft): $2" = 0$	16)	3" = 0.37		
	c+6	,	900		mg/L	ten casing t	ordines (gan	$3^{1}/_{2}$ " =		4" = 0.65		
					" J/C			6" = 1.		0.05		
Field Par	ameter Me	easuremer	nts Taken	Durina Pi	urging							
	Minutes	Flow Rate	Volume	DTW	Turbidity	ORP	pН	Spec Cond	Temp	DO		
Time	Elapsed	(QPM)	Purged (Gal)	(ft btoc)	(NTUs)	(mV)	(SI Units)	(µmhos/cm)	(°C)	(mg/L)	Comments	
1739	4	1 2	4		56	-20.5	7.66	4848	29.99	3.10	Do	
1245	4		4		34	- 49.4	7.49	4500	29.46	2.70	Taker	
1251	16		16			-51.3 -55.7	7.46	4796	29.42	2-24	inco	
1285	70		20		29 25	- 50.1	7.47	4750	29.48	1.98		
1257	12	1	n		27	-63.2	7 42	4722	29.40	1.70		
									0	1,70	 	
						ļ						
	 											
	 				 				 			
											=	
						<u> </u>						
						ļ						
								12.0				
Observat	ions Durir	ng Samplin	ng						•••		·	
Well Cond	•		7			Purge Water Di	snosal·	Tank @	TM	- 2		
Color:						Turbidity(qualit	•	cloudy	4			
Odor:		Mone			_	Other (OVA, H						
e	DT.	95-1	10717		_			1200				
Sample II	O: Analyzed				Sample D	ate & Time:	111-14	2 1300				
Januales /	mnaivzed	ror:	See the CO	JC.								

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Groundwate	water Sampling Form									
Project Number:	=	753.0007		Task:		00002	Well I	D.	AT- 9	40
Date:	07-	2 -1		Sample	d Bv·	Gary Clift		υ.	P1-7	<i></i>
Weather:	W	arm		Recorde	•	1/				
				-	Duplicate No.:				9	
Instrument Identii	ilention				•			-		
mstrument identi	PID					Water Qualit	v Motor(s)			
Model	1.10					4 .	556		25	
Serial #:	-									
						010	15201	12		49.6
Purging Informati	on								20	
). (.			Purge Techniqu	ue (circle one):	Low-Flow Re	nove 3 Well	Volumes 6	lail Dry
Casing Material:	<u> </u>)VC		_	Purge Equipme		_			altic Bailer
Casing Diameter:	2	1		-	Screen Interval	: From:	162'	To:	182	•
Total Depth:			_	Pump Intake So	etting:		72'			
Depth to Water: 102.54			•	Volumes to be	Purged:	3 Casin				
Water Column: 7946			-	Total Volume F	-	39	allon			
Gallons/Foot:	,10			_	Pump on:	1022	Off:	1113	_	
Gallons in Well:	12,	<u>'</u>		-						
	~ .	,			Well Casing V	olumes (gal/			3" = 0.37	
Cr+6	Cr+6 2.16 m			9/2			31/2" =		4" = 0.65	
				J	L		6" = 1	.46		
Field Parameter M		-	7	The state of the s						
Minutes Time 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
1 2 2 2	01	(ents)								
1057 2 1059 4	1 3	6		79	1.2	7.06	4352	30.28	948	
1101 6		14)4	-1511	7.06	9328	30.48.	0.35	
1103 8		26		8	-24.5	7,07	9297	30.41	0.32	<u> </u>
1106 10		33		6	-30.6	7.06	9271	30.50	0.30	
1(36)	. •	37	10311	6	-32.9	706	9276	30.23	0.19	
								Ø		
						1		<u> </u>		:
								 	<u> </u>	
							<u> </u>			
Observations Duri	ng Samplir	na							×-117	
Well Condition:	£190	-			Purge Water Di	snosal·	Tank	a I	M - 3	
Color:	TRILOW				Purge Water Disposal: ant @ Turbidity(qualitative): Clean				7-1 -	<u> </u>
Odor:	SIGHT				Other (OVA, H			-		
Sample ID: AT	- 9h -	llaz.	7		ate & Time:	2001	@ 1110			
Sample ID:			<u>. c</u>	Sample D	ate & Time:	1115111	9 1110			

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		r Sampl	_							07	2
Project Nu	umber:		753.0007	•	Task:		00002	Well I	D:	PT-9	70
Date:		07-	<u>レ -11</u>	<u> </u>	Sample	d By:	Gary Clift				
Weather:		h	loca		Recorde	ed By:	JK				
					Coded	Duplicate No.:			4	18	
Instrume	nt Identif	ication									
		PID	000/11-				Water Quali	ty Meter(s)			
Model		-					Y5/	176		- 20	
Serial #:							050	1520 AK			
Purging I	Informatio	on									
		Δ.	Ca			Purge Techniqu					Bail Dry
Casing Ma			rc			Purge Equipme		Submersible Ce			
Casing Dia		2'				Screen Interval		190'	_	210	, /
Total Dep		210				Pump Intake S	_	200			
Depth to Water: /02,43					Volumes to be	_	3 carry				
Water Column: 107.57 Gallons/Foot:					Total Volume F	rurged:	Off:	Umas			
Gallons in		17.	2		•	Pump on:	1 [3]	_On:	7 4	•	
				·	•	Well Casing V	olumes (gal	/ft): 2"=10	16	3" = 0.37	
Cr +6 15,4		27/6			31/2" =	0.50	4" = 0.65				
Ci	560)				71-			6" = 1.	46		
Field Para	ameter M	easuremer	its Taken	During Pu	rging						
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
1.35	7	2	(Ed5)		line in					1	
1136	1	7	18		43	22.2	7.61	17/07	30.73	1.63	
1142	9		27		34	77.5	7. 80	17385	30.58	1.65	-
1145	12		36		15	14.6	7.80	17295	30.25	152	
1148	15		45		12	10.4	7 80	17166	3076	1.54	
1100	17	. 9	37	102.87	10	8.1	7.90	17132	30.78	1.52	
						<u> </u>	ļ	 	Ø		
								+			
							<u> </u>				
		1									
								-			
	•										
.010002	West .					L					
		ng Samplin	ıg					7	-		
Well Cond	lition:	Gen	4			Purge Water Di	•	Tank (3 T	7.3	
Color: Yellow			_	Turbidity(quality		ch	-				
Odor:		Non	4		_	Other (OVA, HI	NU,etc.):		<u> </u>		· · · · · ·
Sample ID	o: <u>PT</u>	-90-	1/07/2		Sample D	ate & Time:	7/12/11	Q 1151			
	Analyzed		See the Co				to and and				

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Groundwater Sampling Form Project Number: RC000753.0007.			Task:		00002	Well	ID.	MW-11				
Date:	arriber.	07-	// -1		_ Sample	d Bv	Gary Clift		U.	101.00-1.1		
Weather:		WAR	•	-	Recorde	-	VL.					
					_	Duplicate No.:						
Instrume	ent Identif	fication						-	_	0.5		
	int lacital	PID					Water Quali	ty Meter(s)				
Model			-	·			7515					
Serial #:			_				0561	560 AK			W. e.	
Purging	Informati	on							M	7		
						Purge Techniqu	ue (circle one)	: Low-Flow (Re	emove 3 Well	Volumes B	ail Dry	
Casing M			PVC		-	Purge Equipme	ent (circle one):	104				
Casing Di		4"			-	Screen Interval	_	63' 88'				
Total Dep		88'	A-3-		_	Pump Intake S	_	77				
Depth to Water: 65.55			-	Volumes to be	_	3 casing						
Water Column: 22.45 Gallons/Foot: 45			Total Volume F Pump on:	rurgea:	Off: 1	<u>prs</u> 208						
Gallons in Well:			-	rump on.	1120		LUB					
Cr+6 (1560) 235			~9/L	Well Casing Volumes (gal/ft): $2" = 0.16$ $3^{1}/_{2}" = 0.50$ 6" = 1.46				3" = 0.37 4" = 0.65				
			nts Taken	During Pu	ırging	(A)	=	6" = 1.	.46			
Time	Minutes Elapsed	Flow Rate	Volume	DTW (ft btoc)	Turbidity (NTUs)	ORP (mV)	pH (SLUpite)	Spec Cond	Temp	DO		
ر ر	-> Clopsed		(fals)		(14105)	((114)	(SI Units)	(µmhos/cm)	(°C)	(mg/L)	Comments	
7	1152	3	8		360	92.6	7.38	2256	2954	9.40		
7	1155		15	66.26	100	84-5	7.39	7231	29.64	9.42		
10	1200		30	<u> </u>	50	78.6	7.38	2220	29.67	9.42		
12	1202		37	(2/ 2/	27	76.4	7.38	22,0	29.63	9.39	£	
14	1204	_	44	66-26	20	754	7-38	21 05	29.64	9.39		
										Al	WI	
	-								-6			
										72.		
					,				•		- 28-	
						19		 		74	-	
					-24				ISPA	11.5	4	
									·			
					h							
Observati			ng					T	-			
Well Cond	ition:	Good			_	Purge Water Dis		TANK (e Im-	3		
Color: Non. Odor: April				Turbidity(qualita Other (OVA, HN		Clary						
			0711									
Sample ID Samples A			See the C	oc	Sample Da	ate & Time:	-11-11 @	1205				

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Project N	umber:	RC000	753.0007	7.	Task:		00002	Well	ID.	MW-24A			
Date:	1		11 -1		– Sample	d Rv.	Gary Clift		iD.	14144-74			
Weather:		WAL	/	•	_ Record	-	JAL						
weather.		- V HIC.			_	Duplicate No.:				-			
		r			Coucu	Dupilcate 140		- 10.	_				
Instrume	ent Identii	PID					Water Quali	hy Matar(s)					
Model		1,10		_			YS1 53		-				
Serial #:						•		1520 /	16				
Purging	Information	on				-	.1	1300 /	TA				
3 3						Purge Techniq	ue (circle one)	Low-Flow R	emove 3 Well	Volumes E	Bail Dry		
Casing M	aterial:		Prc			Purge Equipme					•		
Casing Di	ameter:	4"	•		_	Screen Interval		104'		12			
Total Dep	th:	124'			_	Pump Intake Setting: 117'							
Depth to	Depth to Water:				-	Volumes to be Purged: 3 CASY'ng							
Water Column: 13.40					Total Volume F	urged:		ellons					
Gallons/Fo	oot:	. 6	3			Pump on:	1401		417	***			
Gallons in	Well:	9.0)			•			9		2		
00	Ha					Well Casing V	olumes (gai/	- 10		3" = 0.37			
Cr	1560	2:	20	4.0	.11			31/2" =		4" = 0.65	ント		
(1200)			Acer	IJIL			6" = 1	.46				
Field Para	ameter M	easuremer	nts Taken	During P	irging		70.00						
Time	Minutes Elapsed	Flow Rate	Volume Purged	DTW (ft btoc)	Turbidity	ORP	pH	Spec Cond	Temp	DO			
Time	Liapsed	2	(Gus)		(NTUs)	(mV)	(SI Units)	(µmhos/cm)	(°C)	(mg/L)	Comments		
1403	2	2	4		84	-278.0	8,07	2656	30.44	0.99	* 7.		
1405	4	4	9	111.34	71	-338.5	8,10	2611	30.43	0.56			
M08	7		14		25	-359.8	8.09	2 596	30.45	0.43	1		
1410	1 4		18	ļ	18	-364.9	8.09	2602	30, 47	0.39			
1412	13		22	110 0-1	12	-366.4	8.07	2605	30.46	0.35			
1414	1>	7	-7	111.51	9	-369.5	8.05	2613	30,48	0.33			
 ·						 							
									 		Troving)		
					Α.	1							
					.31								
		-							ļ				
-													
								-	-				
								÷					
Ohservat	ions Durir	ng Samplin	a				8						
Well Cond		Good				Purge Water Di	snosal.	DAK	@ In	3			
Color:	- W	to Se				Turbidity(quality	•	chiar	C 7/1	,)			
		164	7.10	4450				- Cucr		***************************************			
Odor:		MUTU				Other (OVA, HI	vu.etc.):						

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Groundwater Sampling FormProject Number:RC000753.0007.Date:07- 1 -11Weather:WARM				Task: Sample Records	ed By:	00002 Gary Clift	Gary Clift					
					Coded	Duplicate No.:	DUPS 1-1	(0))	21330			
instrume	nt Identif	PID					Mater Qualit	n. Matar/s				
Model		TID.				····	Water Qualit					
Serial #:			_	_		• • • • • • • • • • • • • • • • • • • •		1520 4	K			
Purging	Informatio	on					h. 661					
			0			Purge Techniq	ue (circle one):	Low-Flow R	emove 3 Well	Volumes y	Bail Dry	
Casing M			PV C	Ē		Purge Equipment (circle one): Submersible Centrifugal Bladder						
Casing Di		4"			-	Screen Interva		193'	_	21	3'	
Total Dep		213'			-	Pump Intake S	•					
Depth to Water: 108.10 Water Column: 104.90				-	Volumes to be	-	3 CASIA	ıg				
Gallons/Foot: . 6 5					Total Volume I Pump on:	1240		332				
Gallons in			5.2		-	rump on.	100	_,011	J3 E	-		
(1560) .004 a			1916	Well Casing Volumes (gal/ft): $2" = 0.16$ $3" = 0.37$ $3^{1}/_{2}" = 0.50$ $4" = 0.65$ $6" = 1.46$								
Field Para		eas <mark>ure</mark> mer	2000	-	CONTRACTOR OF THE PERSON NAMED IN		0					
Time	Minutes Elapsed	Flow Rate	Volume Purged (Gals)	(ft btoc)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Spec Cond (µmhos/cm)	Temp · (°C)	DO (mg/L)	Comments	
1247	7	5	35		2	36.1	7.75	18890	30.61	0.25		
1254	14 21		105	k;	1	-2.5	7.77	18861	3968	0.24		
1302	28		40	115.22		- 86.9 - h5.7	7.75	18808	30,71	0.22	1 19 10	
1315	35		175			-130.2	7.78	16795	30.71	0,23	150	
1321	41	V	205	115.22	1	-134.8	7.18	18793	30.79	0. 23	331	
									*			
											_	
											,	
				t					<u> </u>		ļ	
											 	
										Ey .		
Observations During Sampling Well Condition: 4aod Color: Arr			_	Purge Water Di Turbidity(qualit	ative):	TANK () Im	- 3				
Odor:		Ron				Other (OVA, H	NU,etc.):				2	
Sample ID Samples A	: M N Analyzed	/-24 [j For:	See the C		Sample D	ate & Time:	1-11-11	@ 132	5_		10	

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Appendix D

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