



**Pacific Gas and
Electric
Company**

Yvonne J. Meeks
Topock Project Manager
Chromium Remediation Project Office
Gas Transmission & Distribution

6588 Ontario Road
San Luis Obispo, CA 93405

Mailing Address
4325 South Higuera Street
San Luis Obispo, CA 93401

805.546.5243
Internal: 664.5243
Fax: 805.546.5232
E-Mail: YJM1@pge.com

August 31, 2007

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

Subject: Groundwater and Surface Water Monitoring Report, Second Quarter 2007
PG&E Topock Compressor Station, Needles, California

Dear Mr. Yue:

Enclosed is the Groundwater and Surface Water Monitoring Report, Second Quarter 2007 for the Pacific Gas and Electric Company (PG&E) Topock Compressor Station. This report provides results for the quarterly monitoring event conducted during April 30 to May 4, 2007 at 48 groundwater monitoring wells. This report also presents results for the shoreline and in-channel Colorado River sampling conducted during May 2007, the June monthly sampling at the new slant wells MW-52 and MW-53, as well as results for other monthly and bi-weekly sampling events throughout the second quarter. A few select samples collected in July 2007 are also included in this second quarter report.

Modified Report Format

This submittal is the first quarterly report prepared with the new streamlined technical memorandum format agreed to at the July 10th, 2007 meeting among DTSC, PG&E and CH2M HILL regarding Groundwater Monitoring Program (GMP) optimization. PG&E understands that changes to this new format may be made based on DTSC review and comment. PG&E will incorporate any DTSC comments on this 2nd Quarter report into preparation of subsequent GMP reports.

Annual GMP reports will continue to be submitted in the current format, and will present 4th quarter and preceding data for the reporting year. Electronic copies of analytical data and field sampling logs will be submitted with annual reports.

Additional Results from Non-Routine Sampling

This report also presents the data collected from two additional data collection activities that are outside the routine GMP data collection program. Samples from selected wells collected in May and July 2007 were analyzed for volatile organic compounds, semivolatile organic compounds, and total petroleum hydrocarbons to supplement existing RCRA Facility Investigation (RFI) data. A multi-step sampling program was also conducted at well MW-23 in June-July 2007 to evaluate anomalous results from March 2007. The results and a summary of the MW-23 sampling investigation are provided in Appendix B of this report. Finally, the San Bernardino

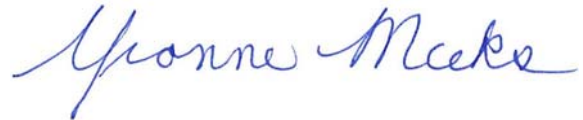
August 31, 2007

Page 2

County Park Moabi Campground new water supply well PM-04 was sampled for the first time under the GMP program in May and July 2007 and those results are presented with this report.

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

Sincerely,

A handwritten signature in blue ink that reads "Yvonne Meeks". The signature is written in a cursive, flowing style.

Enclosure

cc: Chris Guerre/DTSC
Karen Baker/DTSC
Susan Young/SLC

Groundwater and Surface Water Monitoring Report, Second Quarter 2007 Topock Compressor Station, Needles, California

PREPARED FOR: Pacific Gas and Electric Company
PREPARED BY: CH2M HILL
DATE: August 31, 2007
PROJECT NUMBER: 354631.MP.04.GM.00

This technical memorandum presents the results of the second quarter 2007 groundwater and surface water monitoring activities conducted at Pacific Gas and Electric Company's (PG&E) Topock Compressor Station near Needles, California. The monitoring activities are conducted as part of PG&E's Groundwater and Surface Water Monitoring Program (GMP) for the Topock site.

Figure 1 shows the locations and sampling frequencies of the monitoring wells in the GMP as of June 2007, the location of the PG&E Topock Compressor Station, and other site features. There are 94 groundwater monitoring wells, two groundwater extraction wells, and nine shoreline and nine in-channel Colorado River surface water sampling locations that are included in the GMP monitoring schedule. For background and description of the current groundwater and surface water sampling, analyses, and monitoring program, refer to PG&E's *Groundwater and Surface Water Monitoring Report, Fourth Quarter 2006 and Annual Summary, PG&E Topock Compressor Station*, dated April 2, 2007.

Monitoring Summary

The following monitoring activities were conducted during second quarter (April through June) 2007 and are addressed in this report:

- The second quarter GMP monitoring event was conducted from April 30 through May 4, 2007 and included sampling 46 groundwater monitoring wells and nine shoreline surface water stations for analyses of constituents of concern (COC). COCs at the Topock Compressor Station include hexavalent chromium [Cr(VI)], total chromium [Cr(T)], specific conductance, and pH. During this GMP event, six selected wells were also sampled for Title 22 California Code of Regulations metals, and a water level measurement survey was conducted.
- Sampling and analysis for the site COCs and selected general chemistry parameters were conducted on May 8 and May 9, 2007 at nine in-channel surface water locations.
- Monthly groundwater sampling events were conducted April 2 through April 4 and June 12 and June 13, 2007; sampling events included sampling 10 monitoring wells for

the site COCs. Additional biweekly sampling for Cr(VI) and Cr(T) was conducted during the second quarter at one well (MW-34-100).

PG&E performed several additional, non-GMP, groundwater sampling and analysis activities during second quarter 2007. These activities included:

- During the second quarter monitoring event, seven selected GMP wells were sampled and analyzed for total petroleum hydrocarbons, volatile organic compounds, and semivolatile organic compounds analyses to support the Topock project Resource Conservation and Recovery Act Facility Investigation and Remedial Investigation (RFI/RI). These results are reported here.
- A focused groundwater sampling and analysis study was conducted in late June through July 2007 at monitoring well MW-23. PG&E performed this study to investigate anomalous chromium sampling results for this well. These results are reported here.
- Groundwater sampling and analyses of selected GMP wells was also performed during second quarter as part PG&E's upland *in-situ* pilot study and chromium isotope study. These results will be reported separately in their respective reports.

Monitoring Activities and Results

GMP Groundwater Monitoring

The groundwater monitoring data presented in Tables 1 through 4 include the results from January through June 2007.

Figure 1 shows the locations of the GMP monitoring wells. Results for chromium and other site COCs in groundwater samples collected from January through June 2007 are presented in Table 1. In second quarter 2007, the maximum detected Cr(VI) concentration was 13,500 micrograms per liter ($\mu\text{g/L}$) at well MW-20-130. Overall, the second quarter 2007 chromium results are consistent with the prior quarterly sampling results. Groundwater sampling and chain-of-custody forms are included in Attachment 1.

Figures 2 through 4 present the Cr(VI) results for wells monitoring the upper, middle, and lower depth intervals of the Alluvial Aquifer, respectively, from the May 2007 quarterly sampling event. Consistent with earlier observations, declining concentrations were observed across the transition from the alluvial upland environment to the fluvial floodplain environment. A more detailed review of concentration trends will be included in the annual report.

GMP Surface Water Monitoring

Figure 1 shows the locations of the shoreline and in-channel surface water monitoring stations in the Colorado River. Table 2 presents the results of chromium and other analytes in shoreline surface water sampling events performed from January through June 2007. The Cr(VI) sampling results of the Cr(VI) shoreline surface water monitoring during second quarter 2007 are shown on Figure 2. Cr(VI) and Cr(T) were not detected in any of the water samples collected at the nine shoreline surface water stations during the second quarter 2007.

Table 3 presents the results of site COC, hardness, total dissolved solids, and total suspended solids analyses for the in-channel surface water sampling events performed from January through June 2007. Cr(VI) and Cr(T) were not detected in any of the water samples collected at the nine in-channel surface water stations during the second quarter 2007.

Title 22 Metals Groundwater Analyses

Table 4 presents the Title 22 California Code of Regulations metal results for the GMP monitoring wells sampled from January through June 2007. In addition to Cr(T), the trace metals detected during the May 2007 groundwater sampling were arsenic, barium, molybdenum, nickel, selenium, vanadium, and zinc. Excluding Cr(T) and arsenic (well MW-12), the dissolved concentrations of the trace metals detected during the May 2007 sampling are below the respective California drinking water standards.

RFI/RI Groundwater Analyses

Table 5 presents the RFI groundwater results collected in May 2007. The RFI data gap groundwater samples from selected wells were analyzed for volatile organic compounds, semivolatile organic compounds, and total petroleum hydrocarbons. The results from these samples will be evaluated in the RFI/RI Report, Volume II which is being prepared in late 2007.

MW-23 Groundwater Sampling

Attachment 2 presents a summary of the groundwater data collection activities and results from bedrock well MW-23 (see Figure 1 for well location). The chromium results from bedrock monitoring well MW-23 since fourth quarter 2006 were considered to be anomalous, and a multi-step investigation focused on MW-23 was developed, started in late June, and completed in July 2007, with results from each step of the investigation reported to the Department of Toxic Substances Control in several e-mail communications.

Data Validation and Completeness

The laboratory analytical data from GMP monitoring in second quarter 2007 were independently reviewed by project chemists to assess data quality and to identify deviations from analytical requirements. The completeness objectives were met for all method and analyte combinations. No significant analytical deficiencies were identified in the second quarter 2007 monitoring data.

Schedule for Third Quarter 2007 GMP Activities

The third quarter 2007 monitoring period (July through October 2007) will consist of the following events:

- The third quarter event will be conducted in October 2007. This biennial event will include 92 monitoring wells.

- The first two monthly events of the third quarter 2007 occurred on July 10 and July 11 and August 7 and August 8, 2007. The last monthly event is scheduled for September 5 and September 6, 2007.
- Quarterly surface water sampling, including nine shoreline and nine in-channel locations, will be conducted in September 2007.
- As approved by Department of Toxic Substances Control, starting with the second quarter 2007 monitoring event, upland wells MW-24A, MW-24B, MW-38S, MW-38D, and MW-11 are being excluded from the GMP sampling and reporting for the duration of the upland *in-situ* pilot test. Following the completion of the upland *in-situ* pilot study test, the GMP sampling frequency for these five wells will be re-evaluated.
- The groundwater and surface water monitoring report for the third quarter 2007 GMP event will be submitted approximately 12 weeks after the October 2007 sampling event.

Certification

This report was prepared by CH2M HILL under the supervision of the professional whose seal and signature appears herein in accordance with currently accepted professional practices. No warranty, expressed or implied, is made.

Paul F. Bertucci, C.E.G. No 1977
California Certified Engineering Geologist



Report Reviewed by:

Jay Piper
CH2M HILL Project Manager

TABLE 1
Groundwater COC Sampling Results, January through June 2007
PG&E Topock Groundwater and Surface Water Monitoring Program

Well ID	Sample Date		Hexavalent Chromium (µg/L)	Dissolved Total Chromium (µg/L)	Specific Conductance (µS/cm)	pH
MW-10	06-Mar-07		1640	1700	2,760	7.67
	03-May-07		1230	1440	2,840	7.58 J
MW-12	06-Mar-07		2630	2440	4,820	8.41
	03-May-07		2620	2880	5,220	8.40 J
MW-13	05-Mar-07		23.4	25.2	1,860	7.66
MW-14	12-Mar-07		13.0	13.4	1,450	7.75
MW-18	12-Mar-07		35.6	35.6	1,200	7.69
	12-Mar-07	FD	35.6	34.1	1,200	7.73
MW-19	06-Mar-07		1040	1030	2,240	7.69
	02-May-07		836	777	2,310	7.70 J
MW-20-70	14-Mar-07		2820	2720	2,850	7.62
	03-May-07		2790	3050	2,750	7.62 J
MW-20-100	14-Mar-07		9470	9270	3,590	7.63
	03-May-07		10100	9820	3,560	7.56 J
	03-May-07	FD	10000	10500	3,590	7.54 J
MW-20-130	08-Mar-07		12800	11900	12,600	7.59
	08-Mar-07	FD	14400	12100	12,800	7.57
	03-May-07		13400	16200	12,700	7.58 J
	03-May-07	FD	13500	14800	12,800	7.53 J
MW-21	09-Mar-07		ND (1.0)	ND (1.0) LF	11,100	7.26
	01-May-07		ND (1.0)	1.40	12,200	7.23 J
MW-22	08-Mar-07		ND (1.0)	ND (1.0)	27,700	7.02
MW-23	06-Mar-07		1020	1020	10,200	7.75
	02-May-07		13.0	10.9	17,100	7.38
MW-24A	06-Mar-07		3540	3600	3,190	7.69
MW-24B	05-Mar-07		5980	6100	14,900	7.92
MW-24BR	06-Mar-07		ND (1.0)	ND (1.0)	14,200	8.26
	03-May-07		ND (1.0)	ND (1.0) LF	14,000	8.29 J
MW-25	06-Mar-07		945	951	1,330	7.59
MW-26	12-Mar-07		3440	3540	3,580	7.57
MW-27-85	10-Jan-07		ND (1.0)	4.40	---	---
	06-Feb-07		ND (1.0)	ND (1.0)	---	---
	07-Mar-07		ND (0.2)	ND (1.0)	18,100	7.31
	03-Apr-07		ND (1.0)	ND (1.0)	---	---
	01-May-07		ND (1.0)	1.00	18,500	7.21 J
	13-Jun-07		ND (1.0)	ND (1.0)	---	---
MW-28-90	08-Mar-07		ND (1.0)	ND (1.0)	7,450	7.56
	04-May-07		ND (0.2)	ND (1.0)	7,560	7.49 J
MW-31-60	12-Mar-07		626	638	2,730	7.69
MW-31-135	08-Mar-07		51.0	55.2	9,980	7.91
	08-Mar-07	FD	52.0	54.2	9,970	7.93

TABLE 1
Groundwater COC Sampling Results, January through June 2007
PG&E Topock Groundwater and Surface Water Monitoring Program

Well ID	Sample Date	Hexavalent Chromium (µg/L)	Dissolved Total Chromium (µg/L)	Specific Conductance (µS/cm)	pH
MW-32-20	06-Mar-07	ND (2.0)	ND (1.0)	37,200	6.85
	30-Apr-07	ND (2.0)	ND (1.0)	27,500	6.86 J
MW-32-35	06-Mar-07	ND (1.0)	ND (1.0)	17,300	7.22
	30-Apr-07	ND (1.0)	ND (1.0)	19,400	7.07 J
MW-33-40	06-Mar-07	ND (0.2)	ND (1.0)	4,960	8.31
	02-May-07	ND (0.2)	ND (1.0)	4,500	8.38 J
MW-33-90	12-Mar-07	17.1	18.0	9,750	7.53
	02-May-07	18.8	16.8	9,980	7.56 J
MW-33-150	06-Mar-07	6.90	7.00	15,900	7.67
	02-May-07	6.80	6.10	16,000	7.61 J
MW-33-210	05-Mar-07	11.2	11.0	18,900	7.45
	02-May-07	9.20	9.30	18,800	7.46 J
MW-34-80	09-Jan-07	ND (1.0)	3.20	---	---
	05-Feb-07	ND (1.0)	ND (1.0)	---	---
	05-Mar-07	ND (1.0)	ND (1.0)	10,000	7.33
	02-Apr-07	ND (0.2)	ND (1.0)	---	---
	30-Apr-07	ND (1.0)	1.10	10,000	7.40 J
	13-Jun-07	ND (1.0)	ND (1.0)	---	---
MW-34-100	09-Jan-07	797	830	---	---
	24-Jan-07	832	817	---	---
	05-Feb-07	780	646	---	---
	05-Feb-07 FD	764	634	---	---
	21-Feb-07	804	895	---	---
	07-Mar-07	806	788	16,400	7.76
	21-Mar-07	724	642	---	---
	02-Apr-07	749	786	---	---
	02-Apr-07 FD	720	800	---	---
	18-Apr-07	687	641	---	---
	30-Apr-07	626	500	16,500	7.60 J
	30-Apr-07 FD	632	572	16,300	7.68 J
	16-May-07	588	573	---	---
	30-May-07	597	656	---	---
	13-Jun-07	609	644	---	---
	13-Jun-07 FD	608	633	---	---
	27-Jun-07	574	536	---	---
MW-35-60	08-Mar-07	31.3	35.1	6,750	7.53
	08-Mar-07 FD	30.8	32.7	6,740	7.50
MW-35-135	08-Mar-07	32.0	39.2	9,820	7.76
	04-May-07	27.2	26.2	10,800	7.62 J
	04-May-07 FD	27.8	25.2	10,500	7.65 J
MW-36-70	07-Mar-07	ND (0.2)	ND (1.0)	2,780	7.93
	01-May-07	ND (0.2)	ND (1.0)	2,210	8.02 J
MW-36-90	10-Jan-07	6.00	9.70	---	---
	05-Feb-07	5.40	4.90	---	---

TABLE 1

Groundwater COC Sampling Results, January through June 2007
PG&E Topock Groundwater and Surface Water Monitoring Program

Well ID	Sample Date	Hexavalent Chromium (µg/L)	Dissolved Total Chromium (µg/L)	Specific Conductance (µS/cm)	pH
MW-36-90	07-Mar-07	3.10	3.70	7,060	7.54
	03-Apr-07	2.90	3.20	---	---
	02-May-07	2.00	1.80	6,080	7.54 J
	02-May-07 FD	1.90	1.80	6,170	7.43 J
	12-Jun-07	2.60	2.80	---	---
MW-36-100	10-Jan-07	571	554	---	---
	05-Feb-07	538	474	---	---
	08-Mar-07	436	454	14,100	7.33
	02-Apr-07	366	378	---	---
	02-May-07	297	348	13,500	7.25 J
	14-Jun-07	181	192	---	---
MW-37D	07-Mar-07	1420	1310	14,700	7.84
	03-May-07	1350	1260	14,400	7.56 J
MW-37S	07-Mar-07	7.80	8.50	4,640	7.86
MW-39-40	05-Mar-07	ND (1.0)	ND (1.0)	9,480	7.43
	03-May-07	ND (1.0) J	ND (1.0)	9,490	7.26 J
MW-39-70	05-Mar-07	35.0	37.2	8,250	7.31
	03-May-07	10.1 R	10.4	6,920	7.42 J
	07-Jun-07	4.50	4.30 LF	---	---
MW-39-80	10-Jan-07	302	292	---	---
	08-Feb-07	286	247	---	---
	05-Mar-07	151	144	13,300	7.10
	04-Apr-07	112	126	---	---
	03-May-07	156	146	12,400	7.27 J
	12-Jun-07	83.6	72.7	---	---
MW-39-100	10-Jan-07	2930	2560	---	---
	08-Feb-07	2880	2400	---	---
	12-Mar-07	2850	2770	18,700	7.20
	04-Apr-07	3190	2990	---	---
	03-May-07	2670	2920	18,600	7.20 J
	13-Jun-07	2530	2730	---	---
MW-40D	09-Mar-07	104	91.6	15,300	7.68
	04-May-07	78.0	79.6	15,300	7.60 J
MW-41D	07-Mar-07	ND (1.0)	ND (1.0)	20,800	7.86
	07-Mar-07 FD	ND (1.0)	ND (1.0)	20,700	7.84
MW-41M	08-Mar-07	10.0	12.0 LF	14,500	7.76
MW-41S	08-Mar-07	19.9	20.9	4,710	7.96
MW-42-30	07-Mar-07	ND (0.2)	ND (1.0)	13,300	7.38
MW-42-55	07-Mar-07	ND (0.2)	ND (1.0)	15,000	7.35
	07-Mar-07 FD	ND (0.2)	ND (1.0)	15,200	7.35
	01-May-07	ND (1.0)	ND (1.0)	15,400	7.33 J
MW-42-65	07-Mar-07	ND (0.2)	ND (1.0)	17,500	7.06
	01-May-07	ND (1.0)	ND (1.0)	16,300	7.10 J

TABLE 1

Groundwater COC Sampling Results, January through June 2007
PG&E Topock Groundwater and Surface Water Monitoring Program

Well ID	Sample Date	Hexavalent Chromium (µg/L)	Dissolved Total Chromium (µg/L)	Specific Conductance (µS/cm)	pH
MW-43-25	06-Mar-07	ND (0.2)	ND (1.0)	1,250	7.55
MW-43-75	06-Mar-07	ND (1.0)	ND (1.0)	13,800	7.47
	30-Apr-07	ND (1.0)	ND (1.0)	13,600	7.46 J
MW-43-90	06-Mar-07	ND (1.0)	ND (1.0)	19,700	6.99
	30-Apr-07	ND (1.0)	ND (1.0)	19,800	6.99 J
MW-44-70	09-Mar-07	ND (1.0)	ND (1.0)	6,320	7.50
	03-May-07	ND (0.2)	ND (1.0)	5,890	7.38 J
MW-44-115	09-Jan-07	1140	1260	---	---
	06-Feb-07	1140	1020	---	---
	09-Mar-07	1210	1340 LF	13,000	7.79
	09-Mar-07	1200	1340	13,000	7.81
	02-Apr-07	1210	1420	---	---
	04-May-07	1080	1190	13,200	7.81 J
	14-Jun-07	1030	1110	---	---
MW-44-125	09-Jan-07	285	285	---	---
	09-Jan-07	284	268	---	---
	06-Feb-07	213	190	---	---
	09-Mar-07	258	287	12,300	7.85
	03-Apr-07	296	272	---	---
	03-May-07	254	315	11,700	7.54 J
	03-May-07	300	309	12,200	7.87 J
	14-Jun-07	229	258	---	---
MW-45-095a	04-May-07	169	140	10,100	7.57 J
MW-46-175	10-Jan-07	138	133	---	---
	08-Feb-07	130	108	---	---
	08-Mar-07	153	147	16,200	8.47
	03-Apr-07	113	95.8	---	---
	04-May-07	86.4	114	16,100	8.35 J
	14-Jun-07	101	109	---	---
MW-46-205	08-Mar-07	4.00	5.40	19,900	8.32
	04-May-07	3.90	3.10	20,400	7.49 J
MW-47-55	06-Mar-07	54.6	53.0	3,610	7.70
	04-May-07	30.3	31.6	3,990	7.64 J
MW-47-115	06-Mar-07	10.6	10.8	12,500	7.77
	04-May-07	14.1	13.0	12,700	7.68 J
MW-48	07-Mar-07	ND (1.0)	ND (1.0) LF	17,400	7.89
	01-May-07	ND (1.0)	1.00	17,900	7.37 J
MW-49-135	09-Mar-07	ND (1.0)	ND (1.0)	13,500	7.67
	04-May-07	ND (0.2)	ND (1.0)	13,400	7.83 J
MW-49-275	09-Mar-07	ND (1.0)	ND (1.0)	23,700	8.10
	04-May-07	ND (0.2)	ND (1.0)	23,400	8.05 J
MW-49-365	09-Mar-07	ND (2.0)	ND (1.0)	36,100	7.98
	04-May-07	ND (0.2)	ND (1.0)	36,900	7.91 J

TABLE 1
Groundwater COC Sampling Results, January through June 2007
PG&E Topock Groundwater and Surface Water Monitoring Program

Well ID	Sample Date	Hexavalent Chromium (µg/L)	Dissolved Total Chromium (µg/L)	Specific Conductance (µS/cm)	pH
MW-50-095	07-Mar-07	274	372	4,770	7.98
	02-May-07	304	264	4,810	7.87 J
MW-50-200	07-Mar-07	12300	14600	20,700	7.92
	30-Apr-07	10900	12100	20,300	7.83 J
MW-51	06-Mar-07	4690	5090	10,500	7.56
	01-May-07	4670	5120	11,100	7.52 J
MW-52D	13-Mar-07	ND (1.0)	ND (1.0)	---	---
	01-May-07	ND (1.0)	ND (1.0)	---	---
	05-Jun-07	ND (1.0)	ND (1.0)	20,700	8.03 J
MW-52M	13-Mar-07	ND (1.0)	ND (1.0)	---	---
	01-May-07	ND (1.0)	ND (1.0)	---	---
	05-Jun-07	ND (1.0)	ND (1.0)	16,100	7.94 J
MW-52S	13-Mar-07	ND (1.0)	ND (1.0)	---	---
	01-May-07	ND (1.0)	ND (1.0)	---	---
	05-Jun-07	ND (1.0)	ND (1.0)	10,600	7.40 J
MW-53D	03-Apr-07	ND (1.0)	ND (1.0)	---	---
	02-May-07	ND (1.0)	1.41	---	---
	05-Jun-07	ND (1.0)	ND (1.0)	26,100	8.91 J
	05-Jun-07 FD	ND (1.0)	ND (1.0)	23,100	8.85 J
MW-53M	03-Apr-07	ND (1.0)	ND (1.0)	---	---
	01-May-07	ND (1.0)	ND (1.0)	---	---
	05-Jun-07	ND (1.0)	ND (1.0)	14,400	8.71 J
OW-3D	09-Mar-07	3.10	3.00	7,680	8.18
OW-3M	09-Mar-07	18.3	17.0	5,100	8.07
OW-3S	09-Mar-07	22.8	22.1	1,730	7.71
PE-1	10-Jan-07	88.9	103	8,410	7.75
	06-Feb-07	80.8	89.5	8,390	7.49
	07-Mar-07	84.7	91.0	8,360	7.52
	13-Jun-07	52.0	48.1	7,650	7.52 J
PM-3	02-May-07	0.90	1.30 UF	1,890	7.82 J
PM-4	02-May-07	ND (0.2)	ND (1.0) UF	1,530	7.99 J
TW-3D	10-Jan-07	2440	2580	8,670	7.34
	06-Feb-07	2400	2310	8,610	7.30
	07-Mar-07	2420	2500	8,740	7.37
	13-Jun-07	2000	2350	8,670	7.32 J
TW-4	07-Mar-07	35.2	31.1	20,700	7.85
	07-Mar-07 FD	35.5	36.9	20,800	7.77

TABLE 1
Groundwater COC Sampling Results, January through June 2007
PG&E Topock Groundwater and Surface Water Monitoring Program

NOTES:

µg/L micrograms per liter
 µS/cm microSiemens per centimeter
 ND not detected at listed reporting limit
 J concentration or reporting limit estimated by laboratory or data validation
 R result exceeded analytical criteria for precision and accuracy; should not be used for project decision-making
 (---) not collected or not available
 FD field duplicate sample
 LF lab filtered
 UF unfiltered

Hexavalent chromium analysis methods: SW 7196A (reporting limit 10 µg/L) and SW 7199 (reporting limit 0.2 µg/L for undiluted samples).

Other analysis methods: total chromium (dissolved concentrations, Methods SW 6020A and SW 6010B), specific conductance (SW 9050), pH (SW 9040).

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

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

The March, April and May 2007 results for slant wells MW-52 and MW-53 are from initial groundwater sampling events.

TABLE 2

Shoreline Surface Water COC Sampling Results, January through June 2007
 PG&E Topock Groundwater and Surface Water Monitoring Program

Location	Sample Date	Hexavalent Chromium (µg/L)	Total Chromium (µg/L)	Specific Conductance (µS/cm)	pH
CON	22-Jan-07	ND (0.2)	ND (1.0)	---	---
	14-Mar-07	ND (0.2)	ND (1.0)	949	8.25
	09-May-07	ND (0.2)	ND (1.0)	949	8.23
I-3	22-Jan-07	ND (0.2)	ND (1.0)	---	---
	13-Mar-07	ND (0.2)	ND (1.0)	908	8.34
	08-May-07	ND (0.2)	ND (1.0)	957	8.29
NR-1	22-Jan-07	ND (0.2)	ND (1.0)	---	---
	14-Mar-07	ND (0.2)	ND (1.0)	958	8.33
	09-May-07	ND (0.2)	ND (1.0)	952	8.32
NR-2	22-Jan-07	ND (0.2)	ND (1.0)	---	---
	14-Mar-07	ND (0.2)	ND (1.0)	945	8.30
	09-May-07	ND (0.2)	ND (1.0)	952	8.29
NR-3	22-Jan-07	ND (0.2)	ND (1.0)	---	---
	14-Mar-07	ND (0.2)	ND (1.0)	942	8.30
	09-May-07	ND (0.2)	ND (1.0)	950	8.27
R-22	22-Jan-07	ND (0.2)	ND (1.0)	---	---
	13-Mar-07	ND (0.2)	ND (1.0)	928	8.30
	08-May-07	ND (0.2)	ND (1.0)	958	8.30
R-27	22-Jan-07	ND (0.2)	ND (1.0)	---	---
	13-Mar-07	ND (0.2)	ND (1.0)	956	8.31
	08-May-07	ND (1.0)	ND (1.0)	967	8.28
R-28	22-Jan-07	ND (0.2)	ND (1.0)	---	---
	14-Mar-07	ND (0.2)	ND (1.0)	914	8.16
	09-May-07	ND (0.2)	ND (1.0)	951	8.27
RRB	22-Jan-07	ND (0.2)	ND (1.0)	---	---
	14-Mar-07	ND (0.2)	ND (1.0)	929	8.18
	09-May-07	ND (0.2)	ND (1.0)	947	8.13

NOTES:

µg/L micrograms per liter

µS/cm microSiemens per centimeter

ND not detected at listed reporting limit

J concentration or reporting limit estimated by laboratory or data validation

(---) data not collected or not available

R result exceeded analytical criteria for precision and accuracy; should not be used for project decision-making

Hexavalent chromium analysis method: SW7199 (reporting limit 0.2 µg/L)

Other analysis methods: total chromium (Methods SW 6020A and SW 6010B), specific conductance (EPA120.1), pH (EPA150.1)

TABLE 3

In-Channel Surface Water COC and Additional Parameters Sampling Results, January through June 2007
PG&E Topock Groundwater and Surface Water Monitoring Program

Location	Sample Date	Hexavalent Chromium (µg/L)	Dissolved Total Chromium (µg/L)	Specific Conductance (µS/cm)	pH	Hardness mg/L	Total Dissolved Solids mg/L	Total Suspended Solids mg/L
C-CON-S	22-Jan-07	ND (0.2)	ND (1.0)	---	---	355	---	---
C-CON-M	22-Jan-07	ND (0.2)	ND (1.0)	---	---	345	---	---
C-CON-D	22-Jan-07	ND (0.2)	ND (1.0)	---	---	350	---	---
C-CON-D	20-Feb-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-CON-S	14-Mar-07	ND (0.2)	ND (1.0)	932	8.28	332	760	ND (10)
C-CON-M	14-Mar-07	ND (0.2)	ND (1.0)	930	8.30	320	755	ND (10)
C-CON-D	14-Mar-07	ND (0.2)	ND (1.0)	939	8.26	340	720	ND (10)
C-CON-S	09-May-07	ND (0.2)	ND (1.0)	948	8.25	324	670	ND (10)
C-CON-M	09-May-07	ND (0.2)	ND (1.0)	951	8.27	324	670	ND (10)
C-CON-D	09-May-07	ND (0.2)	ND (1.0)	949	8.25	316	715	ND (10)
C-I-3-S	23-Jan-07	ND (0.2)	ND (1.0)	---	---	360	---	---
C-I-3-M	23-Jan-07	ND (0.2)	ND (1.0)	---	---	375	---	---
C-I-3-D	23-Jan-07	ND (0.2)	ND (1.0)	---	---	345	---	---
C-I-3-D	20-Feb-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-I-3-S	13-Mar-07	ND (0.2)	ND (1.0)	945	8.29	336	720 J	ND (10)
C-I-3-M	13-Mar-07	ND (0.2)	ND (1.0)	931	8.30	336	695 J	ND (10)
C-I-3-D	13-Mar-07	ND (0.2)	ND (1.0)	920	8.25	328	710 J	ND (10)
C-I-3-S	08-May-07	ND (0.2)	ND (1.0)	953	8.28	316	675 J	ND (10)
C-I-3-M	08-May-07	ND (0.2)	ND (1.0)	952	8.24	320	705 J	ND (10)
C-I-3-D	08-May-07	ND (0.2)	ND (1.0)	950	8.32	320	680 J	ND (10)
C-MAR-M	23-Jan-07	ND (0.2)	ND (1.0)	---	---	350	---	---
C-MAR-D	20-Feb-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-MAR-S	13-Mar-07	ND (0.2)	ND (1.0)	1,030	8.04	352	760 J	48.0
C-MAR-D	13-Mar-07	ND (0.2)	ND (1.0)	1,030	8.06	348	770 J	68.0
C-MAR-S	09-May-07	ND (0.2)	ND (1.0)	951	8.24	320	695	18.0
C-MAR-D	09-May-07	ND (0.2)	ND (1.0)	929	8.08	316	655	ND (10)
C-NR1-S	22-Jan-07	ND (0.2)	ND (1.0)	---	---	360	---	---
C-NR1-M	22-Jan-07	ND (0.2)	ND (1.0)	---	---	350	---	---
C-NR1-D	22-Jan-07	ND (0.2)	ND (1.0)	---	---	365	---	---
C-NR1-D	20-Feb-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-NR1-S	14-Mar-07	ND (0.2)	ND (1.0)	935	8.27	320	760	ND (10)

TABLE 3

In-Channel Surface Water COC and Additional Parameters Sampling Results, January through June 2007
 PG&E Topock Groundwater and Surface Water Monitoring Program

Location	Sample Date	Hexavalent Chromium (µg/L)	Dissolved Total Chromium (µg/L)	Specific Conductance (µS/cm)	pH	Hardness mg/L	Total Dissolved Solids mg/L	Total Suspended Solids mg/L
C-NR1-M	14-Mar-07	ND (0.2)	ND (1.0)	934	8.22	304	760	ND (10)
C-NR1-D	14-Mar-07	ND (0.2)	ND (1.0)	942	8.30	300	730	ND (10)
C-NR1-S	09-May-07	ND (0.2)	ND (1.0)	957	8.32	328	705	ND (10)
C-NR1-M	09-May-07	ND (0.2)	ND (1.0)	952	8.31	324	700	ND (10)
C-NR1-D	09-May-07	ND (0.2)	ND (1.0)	951	8.29	324	715	ND (10)
C-NR3-S	22-Jan-07	ND (0.2)	ND (1.0)	---	---	320	---	---
C-NR3-M	22-Jan-07	ND (0.2)	ND (1.0)	---	---	320	---	---
C-NR3-D	22-Jan-07	ND (0.2)	ND (1.0)	---	---	330	---	---
C-NR3-D	20-Feb-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-NR3-S	14-Mar-07	ND (0.2)	ND (1.0)	931	8.31	320	755	ND (10)
C-NR3-M	14-Mar-07	ND (0.2)	ND (1.0)	944	8.30	332	740	ND (10)
C-NR3-D	14-Mar-07	ND (0.2)	ND (1.0)	945	8.27	316	740	ND (10)
C-NR3-S	09-May-07	ND (0.2)	ND (1.0)	957	8.27	316	670	ND (10)
C-NR3-M	09-May-07	ND (0.2)	ND (1.0)	955	8.31	324	665	ND (10)
C-NR3-D	09-May-07	ND (0.2)	ND (1.0)	952	8.28	324	690	ND (10)
C-NR4-S	22-Jan-07	ND (0.2)	ND (1.0)	---	---	316	---	---
C-NR4-M	22-Jan-07	ND (0.2)	ND (1.0)	---	---	350	---	---
C-NR4-D	22-Jan-07	ND (0.2)	ND (1.0)	---	---	360	---	---
C-NR4-D	20-Feb-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-NR4-S	14-Mar-07	ND (0.2)	ND (1.0)	943	8.28	332	745	ND (10)
C-NR4-M	14-Mar-07	ND (0.2)	ND (1.0)	947	8.31	332	755	ND (10)
C-NR4-D	14-Mar-07	ND (0.2)	ND (1.0)	946	8.30	316	765	ND (10)
C-NR4-S	09-May-07	ND (0.2)	ND (1.0)	954	8.22	320	720	ND (10)
C-NR4-M	09-May-07	ND (0.2)	ND (1.0)	950	8.21	320	670	ND (10)
C-NR4-D	09-May-07	ND (0.2)	ND (1.0)	957	8.25	316	695	ND (10)
C-R22-S	23-Jan-07	ND (0.2)	ND (1.0)	---	---	345	---	---
C-R22-M	23-Jan-07	ND (0.2)	ND (1.0)	---	---	370	---	---
C-R22-D	23-Jan-07	ND (0.2)	ND (1.0)	---	---	365	---	---
C-R22-D	20-Feb-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-R22-S	13-Mar-07	ND (0.2)	ND (1.0)	937	8.18	328	750 J	ND (10)
C-R22-M	13-Mar-07	ND (0.2)	ND (1.0)	934	8.30	324	720 J	ND (10)

TABLE 3

In-Channel Surface Water COC and Additional Parameters Sampling Results, January through June 2007
PG&E Topock Groundwater and Surface Water Monitoring Program

Location	Sample Date	Hexavalent Chromium (µg/L)	Dissolved Total Chromium (µg/L)	Specific Conductance (µS/cm)	pH	Hardness mg/L	Total Dissolved Solids mg/L	Total Suspended Solids mg/L
C-R22-D	13-Mar-07	ND (0.2)	ND (1.0)	941	8.25	332	740 J	ND (10)
C-R22-S	08-May-07	ND (0.2)	ND (1.0)	963	8.29	320	660 J	ND (10)
C-R22-M	08-May-07	ND (0.2)	ND (1.0)	960	8.28	328	680 J	ND (10)
C-R22-D	08-May-07	ND (0.2)	ND (1.0)	960	8.30	324	700 J	ND (10)
C-R27-S	23-Jan-07	ND (0.2)	ND (1.0)	---	---	370	---	---
C-R27-M	23-Jan-07	ND (0.2)	ND (1.0)	---	---	365	---	---
C-R27-D	23-Jan-07	ND (0.2)	ND (1.0)	---	---	325	---	---
C-R27-D	20-Feb-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-R27-S	13-Mar-07	ND (0.2)	ND (1.0)	949	8.31	352	730 J	ND (10)
C-R27-M	13-Mar-07	ND (0.2)	ND (1.0)	953	8.34	340	735 J	ND (10)
C-R27-D	13-Mar-07	ND (0.2)	ND (1.0)	948	8.33	336	740 J	ND (10)
C-R27-S	08-May-07	ND (1.0)	ND (1.0)	962	8.27	320	705 J	ND (10)
C-R27-M	08-May-07	ND (1.0)	ND (1.0)	960	8.26	324	715 J	ND (10)
C-R27-D	08-May-07	ND (0.2)	ND (1.0)	963	8.25	320	650 J	ND (10)
C-TAZ-S	23-Jan-07	ND (0.2)	ND (1.0)	---	---	350	---	---
C-TAZ-M	23-Jan-07	ND (0.2)	ND (1.0)	---	---	345	---	---
C-TAZ-D	23-Jan-07	ND (0.2)	ND (1.0)	---	---	350	---	---
C-TAZ-D	20-Feb-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-TAZ-S	13-Mar-07	ND (0.2)	ND (1.0)	922	8.31	336	700 J	ND (10)
C-TAZ-M	13-Mar-07	ND (0.2)	ND (1.0)	941	8.35	324	710 J	ND (10)
C-TAZ-D	13-Mar-07	ND (0.2)	ND (1.0)	936	8.33	324	690 J	ND (10)
C-TAZ-S	08-May-07	ND (0.2)	ND (1.0)	950	8.31	316	640 J	ND (10)
C-TAZ-M	08-May-07	ND (0.2)	ND (1.0)	951	8.32	328	670 J	ND (10)
C-TAZ-D	08-May-07	ND (0.2)	ND (1.0)	947	8.30	324	690 J	ND (10)

TABLE 3

In-Channel Surface Water COC and Additional Parameters Sampling Results, January through June 2007
PG&E Topock Groundwater and Surface Water Monitoring Program

NOTES:

µg/L micrograms per liter
µS/cm microSiemens per centimeter
ND not detected at listed reporting limit
(---) data not collected or not available
NA not analyzed

Hexavalent chromium analysis method: SW 7199 (reporting limit 0.2 µg/L)

Other analysis methods: total chromium (dissolved concentrations, Methods SW 6020A and SW 6010B, reporting limit 1 µg/L for undiluted samples), specific conductance (EPA120.1), pH (EPA150.1), hardness (EPA130.2), total dissolved solids (EPA160.1), and total suspended solids (EPA160.2).

The sample ID's for the depth-specific surface water samples are:

S = shallow (1 foot from water surface)
M = middle (mid-point of water column)
D = deep (1 foot from river bottom)

In December 2006, river samples were not collected at C-MAR-S, C-MAR-D, C-R27-S and C-R27-D due to shallow water column at locations.

In January 2007, river samples were not collected at C-MAR-S and C-MAR-D due to shallow water column at locations.

In March 2007, river sample was not collected at C-MAR-M due to shallow water column at location.

In May 20007, river sample was not collected at C-MAR-M due to shallow water column at location.

A one-time river sampling event of only the deep locations in the 9 in-channel stations was conducted on February 20, 2007.

TABLE 4
Title 22 Metal Results, January through June 2007
PG&E Topock Groundwater and Surface Water Monitoring Program

California MCL:		6	10 ^	1000	4	5	NE	50	1000 *	NE	2	NE	100	50	100*	2	NE	5000 *
Well ID	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Cobalt	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
MW-10	06-Mar-07	ND (2.0)	7.77	60.9	ND (1.0)	ND (1.0)	ND (1.0)	1700	ND (1.0)	ND (1.0)	ND (0.2)	130	1.65	4.06	ND (1.0)	ND (1.0)	36.1	ND (10)
MW-10	03-May-07	ND (2.0)	8.18	54.4	ND (1.0)	ND (1.0)	ND (1.0)	1440	2.30	1.89	ND (0.2)	120	2.55	4.54	ND (1.0)	ND (1.0)	35.2	ND (10)
MW-12	18-Apr-06	ND (2.0)	127	48.2	ND (1.0)	ND (1.0)	ND (1.0)	1300	ND (1.0)	ND (1.0)	ND (0.2)	52.8	3.91	4.30	ND (1.0) J	ND (1.0)	40.8	ND (10)
MW-12	06-Mar-07	ND (2.0)	81.9	78.8	ND (1.0)	ND (1.0)	ND (1.0)	2440	ND (1.0)	ND (1.0)	ND (0.2)	28.3	2.70	5.72	ND (1.0)	ND (1.0)	28.6	ND (10)
MW-12	03-May-07	ND (2.0)	78.5	83.1	ND (1.0)	ND (1.0)	ND (1.0)	2880	ND (1.0)	ND (1.0)	ND (0.2)	30.3	4.21	5.84	ND (1.0)	ND (1.0)	26.3	ND (10)
MW-20-70	14-Mar-07	ND (2.0)	1.79	34.3	ND (1.0)	ND (1.0)	ND (1.0)	2720	ND (1.0)	ND (1.0)	ND (0.2)	25.9	1.20	11.5	ND (1.0)	ND (1.0)	8.96	ND (10)
MW-20-70	03-May-07	ND (2.0)	1.66	33.7	ND (1.0)	ND (1.0)	ND (1.0)	3050	1.61	ND (1.0)	ND (0.2)	26.3	ND (1.0)	11.1	ND (1.0)	ND (1.0)	7.77	14.5
MW-20-130	08-Mar-07	ND (2.0)	5.52	25.0	ND (1.0)	ND (1.0)	1.09	11900	ND (1.0)	ND (1.0)	ND (0.2)	43.8	ND (1.0)	16.1	ND (1.0)	ND (1.0)	2.74	ND (10)
MW-20-130 FD	08-Mar-07	ND (2.0)	5.44	25.2	ND (1.0)	ND (1.0)	ND (1.0)	12100	ND (1.0)	ND (1.0)	ND (0.2)	44.0	ND (1.0)	15.7	ND (1.0)	ND (1.0)	2.80	ND (10)
MW-20-130	03-May-07	ND (2.0)	5.94	24.8	ND (1.0)	ND (1.0)	ND (1.0)	16200	ND (1.0)	ND (1.0)	ND (0.2)	49.3	ND (1.0)	12.8	ND (1.0)	ND (1.0)	2.75	ND (10)
MW-20-130 FD	03-May-07	ND (2.0)	5.92	24.7	ND (1.0)	ND (1.0)	ND (1.0)	14800	ND (1.0)	ND (1.0)	ND (0.2)	47.9	ND (1.0)	11.9	ND (1.0)	ND (1.0)	3.13	ND (10)
MW-25	06-Mar-07	ND (2.0)	1.91	41.3	ND (1.0)	ND (1.0)	ND (1.0)	951	ND (1.0)	ND (1.0)	ND (0.2)	3.36	1.22	2.04	ND (1.0)	ND (1.0)	11.1	ND (10)
MW-34-80	05-Mar-07	ND (2.0)	1.30	29.9	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.2)	13.3	1.53	ND (1.0)	ND (1.0)	ND (1.0)	1.61	ND (10)
MW-34-80	30-Apr-07	ND (2.0)	1.75	31.8	ND (10)	ND (1.0)	ND (1.0)	1.10	ND (1.0)	ND (1.0)	ND (0.2)	14.9	3.47	ND (1.0)	ND (1.0)	ND (1.0)	1.67	ND (10)
MW-37D	07-Mar-07	ND (2.0)	3.17	40.9	ND (1.0)	ND (1.0)	1.17	1310	ND (1.0)	ND (1.0)	ND (0.2)	45.1	ND (1.0)	3.42	ND (1.0)	ND (1.0)	5.03	ND (10)
MW-37D	03-May-07	ND (2.0)	3.43	40.4	ND (1.0)	ND (1.0)	ND (1.0)	1260	ND (1.0)	ND (1.0)	ND (0.2)	47.5	1.50	2.78	ND (1.0)	ND (1.0)	5.01	ND (10)

NOTES:

ND not detected at listed reporting limit

FD field duplicate sample

J concentration or reporting limit estimated by laboratory or data validation

^ U.S. Environmental Protection Agency (USEPA) MCL as of January 23, 2006

NE not established

The USEPA MCL for arsenic has been lowered to 10 ug/L as of January 2006. The California MCL of 50 ug/L is currently under review as of the writing of this monitoring report. California Division of Drinking Water and Environmental Management is proceeding the regulatory and adoption process."

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

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

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

Metals analyzed by Methods SW6010B, SW6020A, and SW7470A.

Analytes detected above MCL are in bold.

TABLE 5

RFI Groundwater TPH, VOC and SVOC Results, May 2007

PG&E Topock Groundwater and Surface Water Monitoring Program

Method	Analyte	Units	MW-10 5/3/2007	MW-10 (FD) 5/3/2007	MW-11 5/3/2007	MW-12 5/3/2007	MW-20-070 5/3/2007	MW-20-100 5/3/2007	MW-20-130 5/3/2007	MW-24A 7/18/2007	MW-25 5/4/2007
8015M	TPH as diesel	µg/L	ND (470)	ND (470)	ND (470)	ND (500)	---	---	---	ND (480)	ND (500)
	TPH as gasoline	µg/L	ND (100)	ND (100)	ND (100)	ND (100)	---	---	---	ND (100)	ND (100)
	TPH as motor oil	µg/L	ND (470)	ND (470)	ND (470)	ND (500)	---	---	---	ND (480)	ND (500)
8260	1,1,1,2-tetrachloroethane	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	1,1,1-trichloroethane	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	1,1,2,2-tetrachloroethane	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	1,1,2-trichloroethane	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	1,1,2-Trichlorotrifluoroethane (Freon 113)	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	1,1-dichloroethane	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	1,1-dichloroethene	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	1,2,3-trichloropropane	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	1,2,4-trichlorobenzene	µg/L	ND (1.0) J	ND (1.0) J	ND (1.0) J	ND (1.0) J	ND (1.0) J	ND (1.0) J	ND (1.0) J	---	ND (1.0)
	1,2,4-trimethylbenzene	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0) J
	1,2-dibromo-3-chloropropane	µg/L	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	---	ND (2.0)
	1,2-dibromoethane	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	1,2-dichlorobenzene	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	1,2-dichloroethane	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	1,2-dichloropropane	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	1,3,5-trimethylbenzene	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	1,3-dichlorobenzene	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	1,4-dichlorobenzene	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	2-chlorotoluene (o-chlorotoluene)	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	Acetone	µg/L	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	---	ND (10) J
	Acrolein	µg/L	ND (20) J	ND (20) J	ND (20) J	ND (20) J	ND (20) J	ND (20) J	ND (20) J	---	ND (20) J
	Acrylonitrile	µg/L	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	---	ND (20) J
	Benzene	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	Bromobenzene	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	Bromodichloromethane	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	Bromoform	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	Bromomethane	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0) J

TABLE 5

RFI Groundwater TPH, VOC and SVOC Results, May 2007

PG&E Topock Groundwater and Surface Water Monitoring Program

Method	Analyte	Units	MW-10 5/3/2007	MW-10 (FD) 5/3/2007	MW-11 5/3/2007	MW-12 5/3/2007	MW-20-070 5/3/2007	MW-20-100 5/3/2007	MW-20-130 5/3/2007	MW-24A 7/18/2007	MW-25 5/4/2007
8260	Carbon disulfide	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	Carbon tetrachloride	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	Chlorobenzene	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	Chloroethane	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	Chloroform	µg/L	1.10	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	1.30	ND (1.0)	---	ND (1.0)
	Chloromethane	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	Cis-1,2-dichloroethene	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	Dibromochloromethane	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	Dichlorodifluoromethane	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	Ethylbenzene	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	Isobutyl Alcohol	µg/L	ND (80)	ND (80)	ND (80)	ND (80)	ND (80)	ND (80)	ND (80)	---	ND (80)
	Isopropylbenzene	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	M+p-xylenes	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	Methyl Ethyl Ketone	µg/L	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	---	ND (10)
	Methyl isobutyl ketone	µg/L	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	---	ND (10)
	Methyl t-butyl ether (mtbe)	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	Methylene chloride	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	---	ND (5.0)
	N-butylbenzene	µg/L	ND (1.0) J	ND (1.0) J	ND (1.0) J	ND (1.0) J	ND (1.0) J	ND (1.0) J	ND (1.0) J	---	ND (1.0)
	N-propylbenzene	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	O-xylene	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	Sec-butylbenzene	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0) J
	Styrene	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	T-butylbenzene	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	Tetrachloroethene	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	Toluene	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	Total xylenes	µg/L	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	---	ND (2.0)
	Trans-1,2-dichloroethene	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	Trichloroethene	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
	Vinyl chloride	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	---	ND (1.0)
8270C	1,2,4-trichlorobenzene	µg/L	ND (9.4)	ND (9.4)	ND (9.5) J	ND (11)	ND (9.4)	ND (9.6)	ND (9.5)	---	ND (10)

TABLE 5

RFI Groundwater TPH, VOC and SVOC Results, May 2007

PG&E Topock Groundwater and Surface Water Monitoring Program

Method	Analyte	Units	MW-10 5/3/2007	MW-10 (FD) 5/3/2007	MW-11 5/3/2007	MW-12 5/3/2007	MW-20-070 5/3/2007	MW-20-100 5/3/2007	MW-20-130 5/3/2007	MW-24A 7/18/2007	MW-25 5/4/2007
8270C	1,2-dichlorobenzene	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	1,3-dichlorobenzene	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	1,4-dichlorobenzene	µg/L	ND (9.4)	ND (9.4)	ND (9.5)	ND (11)	ND (9.4)	ND (9.6)	ND (9.5)	---	ND (10)
	2,4,5-trichlorophenol	µg/L	ND (47) J	ND (47) J	ND (47) J	ND (55) J	ND (47) J	ND (48) J	ND (47) J	---	ND (50) J
	2,4,6-trichlorophenol	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	2,4-dichlorophenol	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	2,4-dimethylphenol	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	2,4-dinitrophenol	µg/L	ND (19) J	ND (19) J	ND (19) J	ND (22) J	ND (19) J	ND (19) J	ND (19) J	---	ND (20) J
	2,4-dinitrotoluene	µg/L	ND (9.4)	ND (9.4)	ND (9.5)	ND (11)	ND (9.4)	ND (9.6)	ND (9.5)	---	ND (10)
	2,6-dinitrotoluene	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	2-Chloronaphthalene	µg/L	ND (47) J	ND (47) J	ND (47) J	ND (55) J	ND (47) J	ND (48) J	ND (47) J	---	ND (50) J
	2-chlorophenol	µg/L	ND (9.4)	ND (9.4)	ND (9.5) J	ND (11)	ND (9.4)	ND (9.6)	ND (9.5)	---	ND (10)
	2-methylnaphthalene	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	2-methylphenol	µg/L	ND (47) J	ND (47) J	ND (47) J	ND (55) J	ND (47) J	ND (48) J	ND (47) J	---	ND (50) J
	2-nitroaniline	µg/L	ND (47) J	ND (47) J	ND (47) J	ND (55) J	ND (47) J	ND (48) J	ND (47) J	---	ND (50) J
	3,3'-dichlorobenzidene	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	3-nitroaniline	µg/L	ND (47) J	ND (47) J	ND (47) J	ND (55) J	ND (47) J	ND (48) J	ND (47) J	---	ND (50) J
	4,6-dinitro-2-methylphenol	µg/L	ND (19) J	ND (19) J	ND (19) J	ND (22) J	ND (19) J	ND (19) J	ND (19) J	---	ND (20) J
	4-chloroaniline	µg/L	ND (19) J	ND (19) J	ND (19) J	ND (22) J	ND (19) J	ND (19) J	ND (19) J	---	ND (20) J
	4-methylphenol	µg/L	ND (47) J	ND (47) J	ND (47) J	ND (55) J	ND (47) J	ND (48) J	ND (47) J	---	ND (50) J
	4-nitroaniline	µg/L	ND (47) J	ND (47) J	ND (47) J	ND (55) J	ND (47) J	ND (48) J	ND (47) J	---	ND (50) J
	4-nitrophenol	µg/L	ND (47)	ND (47)	ND (47)	ND (55)	ND (47)	ND (48)	ND (47)	---	ND (50)
	Acenaphthene	µg/L	ND (9.4)	ND (9.4)	ND (9.5)	ND (11)	ND (9.4)	ND (9.6)	ND (9.5)	---	ND (10)
	Acenaphthylene	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	Anthracene	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	Benzo(a)anthracene	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	Benzo(a)pyrene	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	Benzo(b)fluoranthene	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	Benzo(ghi)perylene	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	Benzo(k)fluoranthene	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J

TABLE 5

RFI Groundwater TPH, VOC and SVOC Results, May 2007

PG&E Topock Groundwater and Surface Water Monitoring Program

Method	Analyte	Units	MW-10	MW-10 (FD)	MW-11	MW-12	MW-20-070	MW-20-100	MW-20-130	MW-24A	MW-25
			5/3/2007	5/3/2007	5/3/2007	5/3/2007	5/3/2007	5/3/2007	5/3/2007	7/18/2007	5/4/2007
8270C	Bis (2-ethylhexyl) phthalate	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	Bis(2-chloroethyl)ether	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	Bis(2-chloroisopropyl)ether	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	Butyl benzyl phthalate	µg/L	ND (19) J	ND (19) J	ND (19) J	ND (22) J	ND (19) J	ND (19) J	ND (19) J	---	ND (20) J
	Chrysene	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	Di-N-butyl phthalate	µg/L	ND (19) J	ND (19) J	ND (19) J	ND (22) J	ND (19) J	ND (19) J	ND (19) J	---	ND (20) J
	Di-N-octyl phthalate	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	Dibenzo(a,h)anthracene	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	dibenzofuran	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	diethyl phthalate	µg/L	ND (19) J	ND (19) J	ND (19) J	ND (22) J	ND (19) J	ND (19) J	ND (19) J	---	ND (20) J
	dimethyl phthalate	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	Fluoranthene	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	Fluorene	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	Hexachlorobenzene	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	Hexachlorobutadiene	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	Hexachloroethane	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	Indeno(1,2,3-cd)pyrene	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	Isophorone	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	N-Nitroso-di-n-propylamine	µg/L	ND (9.4)	ND (9.4)	ND (9.5)	ND (11)	ND (9.4)	ND (9.6)	ND (9.5)	---	ND (10)
	N-nitrosodiphenylamine	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	Naphthalene	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	Nitrobenzene	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	Pentachlorophenol/pcp	µg/L	ND (19)	ND (19)	ND (19)	ND (22)	ND (19)	ND (19)	ND (19)	---	ND (20)
	Phenanthrene	µg/L	ND (9.4) J	ND (9.4) J	ND (9.5) J	ND (11) J	ND (9.4) J	ND (9.6) J	ND (9.5) J	---	ND (10) J
	Phenol	µg/L	ND (9.4)	ND (9.4)	ND (9.5)	ND (11)	ND (9.4)	ND (9.6)	ND (9.5)	---	ND (10)
	Pyrene	µg/L	ND (9.4)	ND (9.4)	ND (9.5)	ND (11)	ND (9.4)	ND (9.6)	ND (9.5)	---	ND (10)

TABLE 5
RFI Groundwater TPH, VOC and SVOC Results, May 2007
PG&E Topock Groundwater and Surface Water Monitoring Program

Notes:

FD field duplicate
ND parameter not detected at the listed reporting limit (listed in the adjacent parenthesis)
J analyte was present, but reported value was estimated
--- not collected or not available
µg/L micrograms per liter

Detected results are circled

TABLE 6
New Park Moabi Well Results
PG&E Topock Groundwater and Surface Water Monitoring Program

Group	Analyte	Units	PM-04	PM-04
			5/2/2007	7/18/2007
Anion	Bromide	mg/L	ND (0.2)	---
	Chloride	mg/L	330	---
	Nitrate as Nitrogen	mg/L	25.9	2.80
	Sulfate	mg/L	73.9	---
General	Alkalinity, as carbonate	mg/L	ND (5.0)	---
	Alkalinity, bicarb as CaCO ₃	mg/L	67.5	---
	Alkalinity, total as CaCO ₃	mg/L	67.5	---
	Ammonia as nitrogen	mg/L	ND (0.5)	---
	pH	PHUNITS	7.99 J	---
	Specific conductance	µS/cm	1530	---
	Sulfide	mg/L	ND (2.0)	---
	Total dissolved solids	mg/L	928	---
	Total organic carbon	mg/L	0.376	---
Metals (Dissolved)	Antimony, dissolved	µg/L	ND (2.0)	---
	Arsenic, dissolved	µg/L	ND (1.0)	---
	Barium, dissolved	µg/L	112	---
	Beryllium, dissolved	µg/L	ND (1.0)	---
	Cadmium, dissolved	µg/L	ND (1.0)	---
	Chromium	µg/L	ND (1.0)*	---
	Cobalt, dissolved	µg/L	ND (1.0)	---
	Copper, dissolved	µg/L	1.96	---
	Hexavalent chromium	µg/L	ND (0.2)	---
	Lead, dissolved	µg/L	ND (1.0)	---
	Mercury, dissolved	µg/L	ND (0.2)	---
	Molybdenum, dissolved	µg/L	6.02	---
	Nickel, dissolved	µg/L	6.30	---
	Selenium, dissolved	µg/L	1.45	---
	Silver, dissolved	µg/L	ND (1.0)	---
	Thallium, dissolved	µg/L	ND (1.0)	---
	Vanadium, dissolved	µg/L	1.57	---
	Zinc, dissolved	µg/L	605 J	---

ND parameter not detected at the listed reporting limit (listed in the adjacent parenthesis)

(---) not collected or not available

J analyte was present but reported value is estimated

* unfiltered chromium

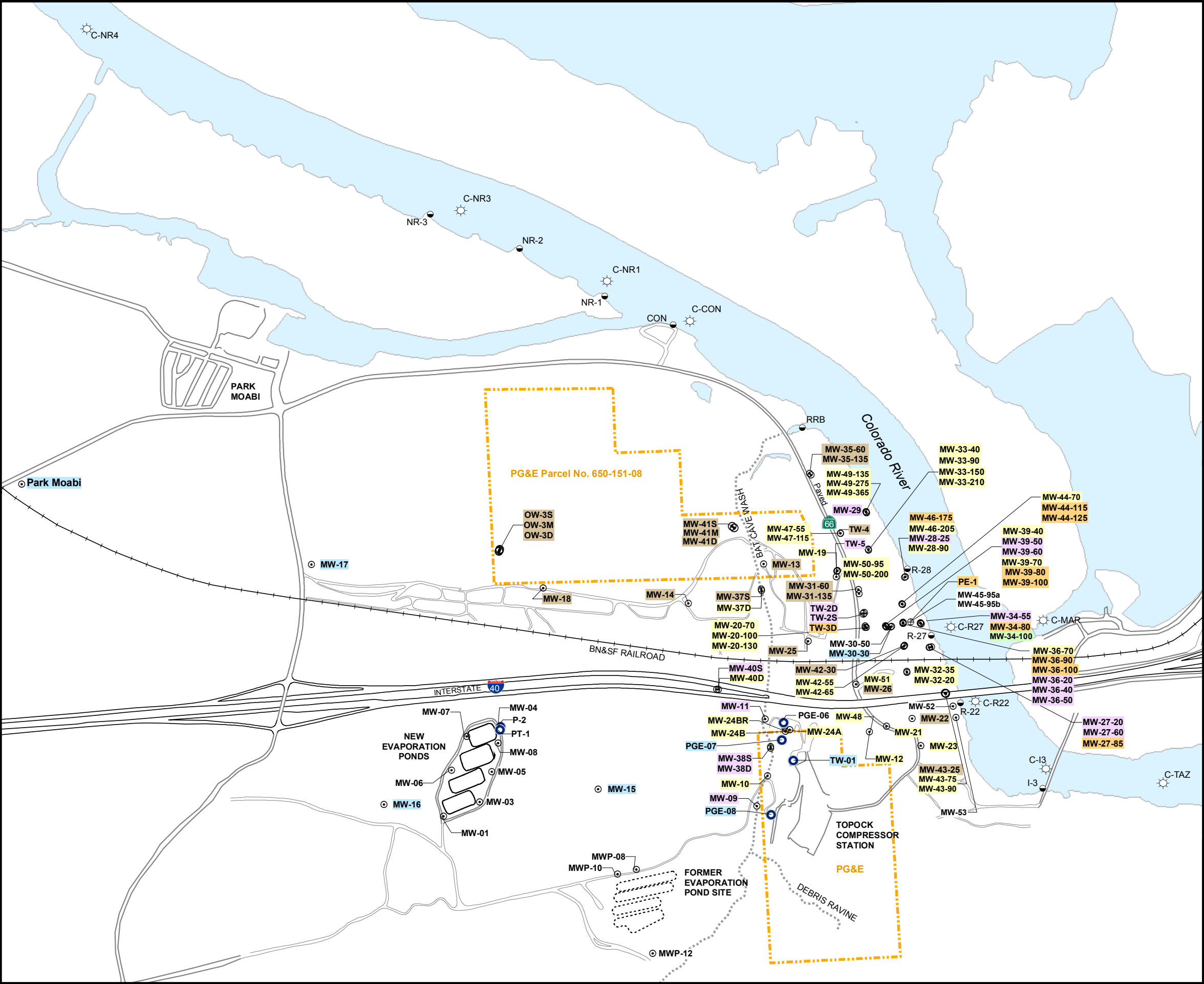
µg/L micrograms per liter

mg/L milligrams per liter

0/00 differences from global standards in parts per thousand

NTU nephelometric turbidity units

µS/cm microSiemens per centimeter



LEGEND

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

Sampling Frequency for Groundwater and Surface Water Monitoring Program (GMP) - May 2007

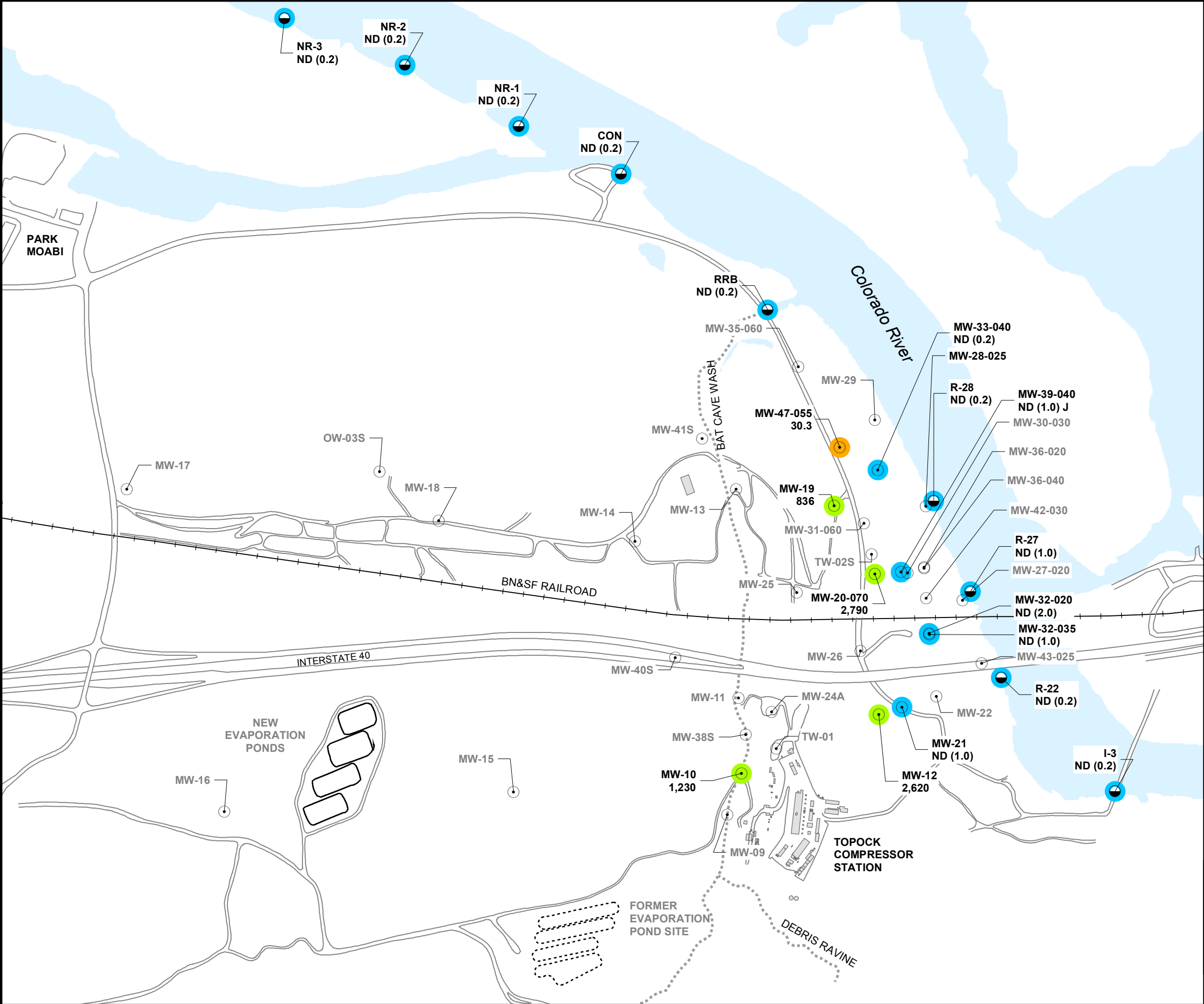
- PGE-08 Biennial Sampling
- MW-09 Annual Sampling
- MW-25 Semi-Annual Sampling
- MW-10 Quarterly Sampling
- MW-39-100 Monthly Sampling
- MW-34-100 Bi-Weekly Sampling

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

0 500 1,000 Feet

California State Plane NAD83 Zone 5 US Feet

**FIGURE 1
MONITORING LOCATIONS AND
SAMPLING FREQUENCY FOR GMP
MAY 2007**
GROUNDWATER AND SURFACE WATER
MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA



LEGEND

- Well Monitoring GMP Upper Depth Interval of Alluvial Aquifer
- Shoreline Surface Water Monitoring Location

Results for May 2007 Quarterly Monitoring Event

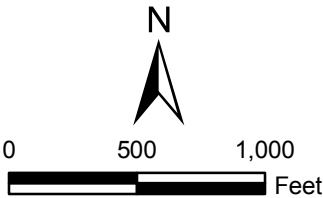
6.48 Concentration of hexavalent chromium [Cr(VI)] in micrograms per liter (µg/L)

Results shown are maximum concentrations detected in primary and duplicate samples from wells completed in **Upper** Depth Interval of Alluvial Aquifer, Second Quarter monitoring event conducted April 30 to May 4, 2007

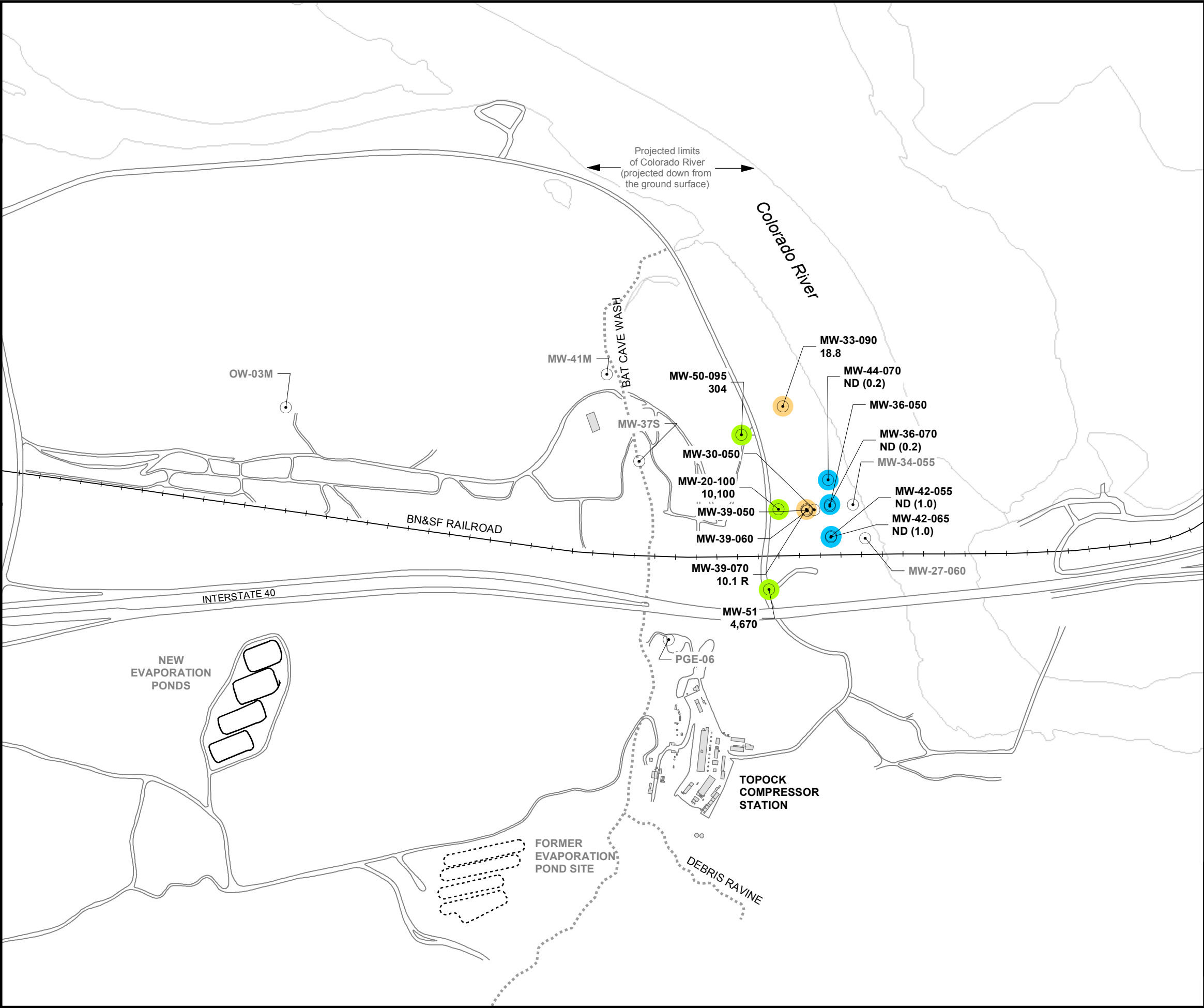
ND (0.2) Cr(VI) not detected, at listed reporting limit

**Cr(VI) Concentrations in Water Samples
May 2007 Monitoring Event**

- Not detected at analytical reporting limit
- Concentration between reporting limit and 50 µg/L
- Concentration greater than 50 µg/L



**FIGURE 2
CR(VI) SAMPLING RESULTS
UPPER DEPTH INTERVAL OF AQUIFER
2ND QUARTER 2007 MONITORING EVENT**
GROUNDWATER AND SURFACE WATER
MONITORING PROGRAM
PG&E TOPECK COMPRESSOR STATION
NEEDLES, CALIFORNIA



LEGEND

⊙ GMP Monitoring Well Middle Depth Interval of Alluvial Aquifer

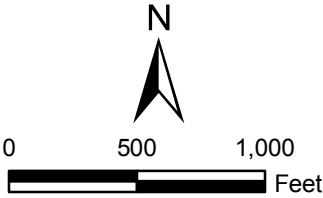
Results for May 2007 Quarterly Monitoring Event

6.48 Concentration of hexavalent chromium [Cr(VI)] in micrograms per liter (µg/L)
Results shown are maximum concentrations detected in primary and duplicate samples from wells completed in **Middle** Depth Interval of Alluvial Aquifer, Second Quarter monitoring event conducted April 30 to May 4, 2007

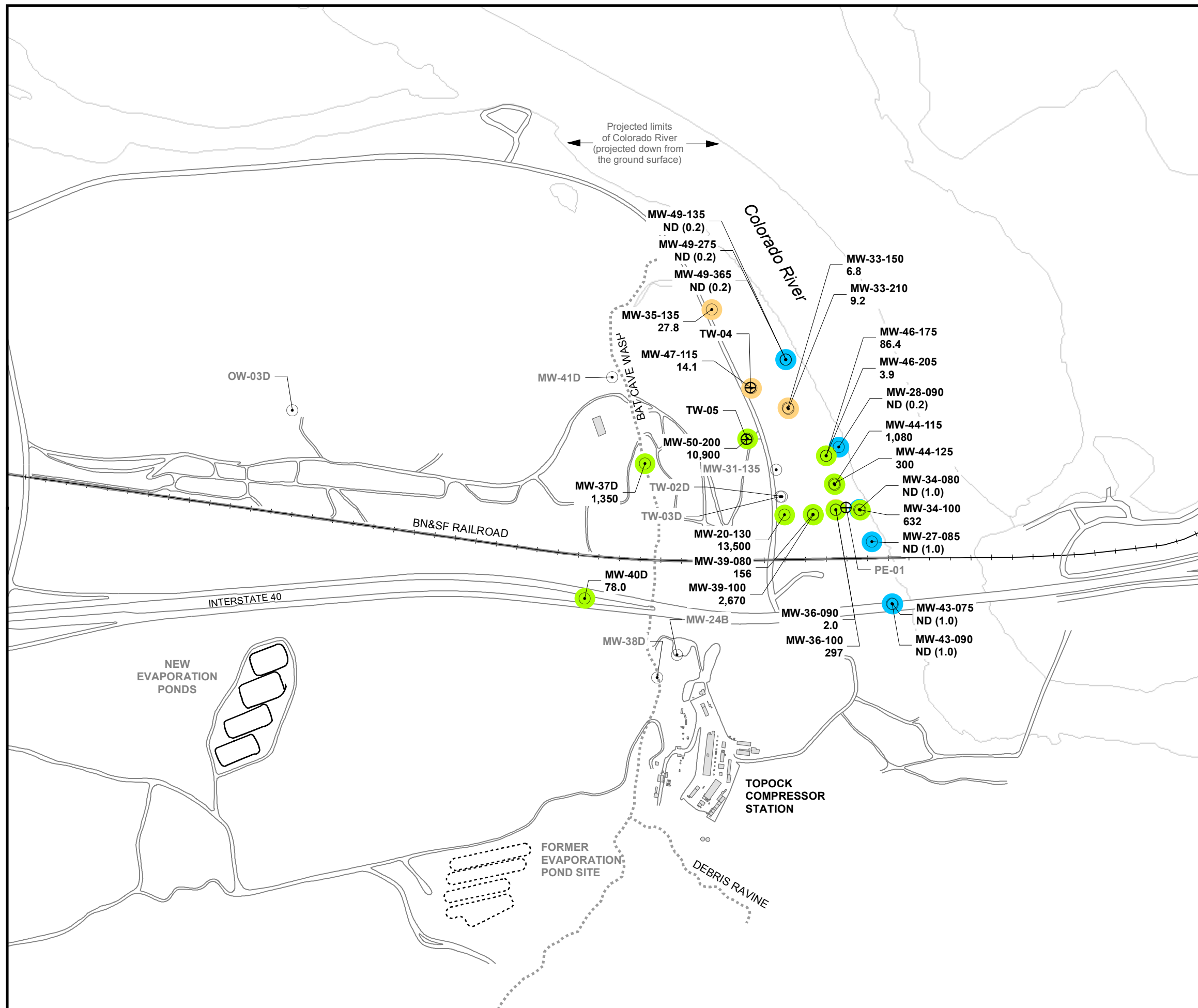
ND (0.2) Cr(VI) not detected, at listed reporting limit

**Cr(VI) Concentrations in Groundwater Samples
May 2007 Monitoring Event**

- Not detected at analytical reporting limit
- Concentration between reporting limit and 50 µg/L
- Concentration greater than 50 µg/L



**FIGURE 3
CR(VI) SAMPLING RESULTS
MIDDLE DEPTH INTERVAL OF AQUIFER
2ND QUARTER 2007 MONITORING EVENT**
GROUNDWATER AND SURFACE WATER
MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA



LEGEND

- ⊙ GMP MonitoringWell Lower Depth Interval of Alluvial Aquifer

Results for May 2007 Quarterly Monitoring Event

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

Results shown are maximum concentrations detected in primary and duplicate samples from wells completed in **Lower** Depth Interval of Alluvial Aquifer, Second Quarter monitoring event conducted April 30 to May 4, 2007

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

Cr(VI) Concentrations in Groundwater Samples May 2007 Monitoring Event

- Not detected at analytical reporting limit
- Concentration between reporting limit and 50 µg/L
- Concentration greater than 50 µg/L

Refer to the Performance Monitoring Report for May 2007 Figure 3-1 for the basis of the 50 µg/L outline shown in the floodplain area. The Cr(VI) distribution map for the lower depth interval incorporates all available data and depicts the inferred location of the Cr(VI) plume based upon analysis of the relevant hydrogeologic, water quality, and geochemical data collected during 2005-2007 site monitoring. There is no data confirming the existence of Cr(VI) under the Colorado River.

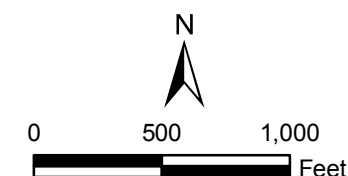


FIGURE 4 CR(VI) SAMPLING RESULTS LOWER DEPTH INTERVAL OF AQUIFER 2ND QUARTER 2007 MONITORING EVENT

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

CH2MHILL

Special Sampling Activities at MW-23

Background

Well MW-23 is located near the Historic Route 66 sign just outside the gate at the bottom of the drive leading up to the compressor station. Well MW-23 is screened between 60-80 feet below ground surface. Although classified as a shallow zone well, MW-23 is screened in bedrock. As is typical of bedrock wells at the Topock site, MW-23 produces only small amounts of water.

MW-23 is sampled quarterly as part of the routine groundwater monitoring program. Hexavalent chromium [Cr (VI)] was non-detect from the initial sample in 1998 through 2003. Note that the analytical method used prior to mid-2003 had a detection limit of 10 parts per billion (ppb). From 2004 to present, typical Cr(VI) detections in MW-23 have been 15 ppb or less. These concentrations are consistent with background concentrations of Cr(VI) at the Topock site.

Anomalously high Cr(VI) results were observed in two recent samples from MW-23. In December 2006, a Cr(VI) value of 1,920 ppb was reported in one of two duplicate samples (samples collected on the same day) from this well. The anomalously high sample was re-analyzed at the lab, and the elevated Cr(VI) concentration was confirmed. This anomalously high result was “discounted” because four out of four samples from MW-23 collected on that day (the primary sample of total chromium [Cr(T)] and the duplicate Cr(VI) and Cr(T) samples) contained Cr(VI) in the typical range of 15 ppb or less. Because the elevated Cr(VI) concentration in the primary sample was completely out of range of the duplicate, as well as out of range of any previous samples from this well, the anomalously high result was flagged as “rejected” during the data validation process. This is consistent with standard practices when there are large discrepancies between primary and duplicate samples and/or large deviations from historical trends in a single sample.

The second anomalous sample was taken in March 2007 and contained 1,020 ppb Cr(VI). No duplicate was collected on this day, but a reanalysis of the sample and a careful review of all field and lab procedures did not reveal any sample collection or lab testing irregularities. A subsequent sample collected in early May 2007 from MW-23 contained Cr(VI) at the more typical concentration of 14.4 ppb.

To identify potential causes of these anomalies, a thorough review of sampling procedures, equipment, and observed field conditions was performed. No noteworthy variation in sample collection equipment, sample handling and transport, or sample analytic procedures was identified. However, one field observation of potential significance was noted. MW-23 is a low-yield well that typically pumps dry during purging and recovers at a very slow rate. Because of this, water samples are typically collected on the day the following purging, after the well has had time to recharge. However, both the December and March samples from MW-23 were able to be collected on the same day that the well was purged. The

December sample was collected within about 2.5 hours after the well was purged. The March sample was collected immediately after the well was purged. It is possible that this variation from typical sampling protocol may have been related to the unusually high Cr(VI) concentrations in the December and March samples.

After consultation with and at the direction of the Department of Toxic Substance Control, a special sampling effort was initiated for well MW-23 in June 2007 in an attempt to better understand how this well responds to different purging rates and to evaluate the possibility that corrosion from the stainless-steel pump installed in the well might be the source of the elevated Cr(VI) concentrations.

Procedures

The sampling test at MW-23 consisted of three stages, each designed to test a different purging scenario:

- To evaluate the hypothesis that corrosion of the existing sampling pump may have contributed to the high detections, two samples were collected while purging with the existing pump. This initial test was run on July 27, 2007. The pump was run at full speed during the purge. Three samples were collected. One was collected at the beginning of the purge after the volume of water purged was approximately equal to the volume contained in the pump column. The second sample was collected just before the well ran dry. The third sample was collected after the well had recharged for approximately 3 hours. All samples were analyzed for dissolved and total Title 22 metals. At the end of this stage, the dedicated pump was pulled from the well. No significant corrosion or pitting was observed on the stainless-steel casing of the pump.
- The second stage was designed to obtain a series of samples during a slow purge using a smaller adjustable-flow pump. A variable-speed electric submersible pump (Grundfos Redi-flo II) was installed in the well at a depth of approximately 70 feet, near the middle of the screened interval. The purge rate was controlled to slow the drawdown. The original plan called for samples to be collected every 5 minutes as the water level in the well declined. When the water level reached a depth near the pump, the flow rate was to be decreased so that more samples could be collected with the water level at or near equilibrium and the well in a drawdown condition. However, even at the lowest flow rate, the pump could operate (0.10 to 0.15 gallons per minute), the water level continued to decline and the well purged dry. Therefore, after the initial eight samples were collected (up until 10:00 a.m. on July 28, 2007), the well was allowed to recharge for 3 hours, purging was reinitiated, and four more samples were collected (from 1:20 to 1:48 p.m.). The following day (July 29, 2007), an additional sample was collected after the well had recharged.

All samples were analyzed for Cr(VI) and specific conductance at the IM No. 3 treatment plant laboratory onsite. Four samples were selected to be analyzed for arsenic, Cr(T), manganese, and molybdenum at an offsite certified laboratory. Both filtered and unfiltered aliquots were analyzed.

The following week three HydraSleeve™ bag samplers were deployed in the well at depths of 64, 72, and 80 feet below the top of casing to determine if there was a significant

concentration gradient within the screened interval. The HydraSleeve™ samplers remained in the well for approximately 20 days (June 29 to July 19, 2007), then the samples were retrieved and analyzed for Cr(VI) at the onsite laboratory.

Results and Conclusions

Table 1 presents the results of the MW-23 sampling test. The Cr(VI) detections during the test ranged from non-detect to 42 micrograms per liter (µg/L) from all stages of the test. The detection limit for the onsite laboratory analyses was 10 µg/L. The Cr(T) results from the offsite lab largely agree with the Cr(VI) results, with one exception. The Cr(T) results from the last sample collected with the old dedicated pump were detections of 55.4 µg/L and 92.3 µg/L from the filtered and unfiltered samples, respectively.

The depth specific samples from the HydraSleeve™ samplers showed a slight increasing concentration trend with depth across the screened interval. The Cr(VI) concentrations measured from these samples were 12 µg/L, 17 µg/L, and 22 µg/L at depths of 64, 72, and 80 feet below the top of casing, respectively (Table 1).

The anomalous concentrations and pumping conditions observed in December 2006 and March 2007 were not reproducible in the sampling test. Although the maximum detection of 49.4 µg/L was greater than is typically observed in MW-23, it did not approach the anomalous detections of 1,920 µg/L and 1,020 µg/L. PG&E plans to continue quarterly sampling of well MW-23. An electronic water level measuring and recording device (transducer and data logger) has now been installed in MW-23 to provide continuous water level data. Future quarterly samples will be carefully analyzed and the data will be reviewed for any future data trends.

TABLE 1
Groundwater Results Summary for well MW-23
PG&E Topock Groundwater and Surface Water Monitoring Program

Sample Date and Time			Sample Type	IM3 Lab Analyses		Certified Lab Analyses																	
				Hexavalent Chromium	Specific Conductance	Antimony	Arsenic	Barium	Beryllium	Cadmium	Cobalt	Total Chromium	Copper	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Initial Sampling																							
27-Jun-07	11:45:00 AM	Filtered	---	---	ND (3.0)	ND (5.0)	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	9.70	ND (10)	2.10	ND (10)	---	ND (5.0)	ND (20)	5.80	ND (5.0)	ND (1.0)	ND (5.0)	ND (20)	
		unfiltered	ND (10) S	---	ND (3.0)	ND (5.0)	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	8.90	82.2	8.60	ND (10)	ND (0.2)	6.80	56.8	6.70	ND (5.0)	ND (1.0)	ND (5.0)	107	
27-Jun-07	11:47:00 AM	Filtered	---	---	9.60	ND (5.0)	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	7.30	ND (10)	4.40	33.8	---	7.30	ND (20)	5.90	ND (5.0)	ND (1.0)	ND (5.0)	ND (20)	
		unfiltered	12.0 S	---	10.2	ND (5.0)	ND (300)	ND (1.0)	ND (2.0)	ND (5.0)	8.50	73.0	17.2	30.9	ND (0.2)	7.70	56.3	6.00	ND (5.0)	ND (1.0)	ND (5.0)	145	
27-Jun-07	2:59:00 PM	Filtered	---	---	ND (3.0)	ND (5.0)	ND (300)	ND (1.0)	ND (2.0)	5.40	55.4	ND (10)	17.0	168	---	ND (5.0)	78.0	ND (5.0)	ND (5.0)	ND (1.0)	14.1	52.2	
		unfiltered	ND (10) S	---	3.00	ND (5.0)	ND (300)	ND (1.0)	ND (2.0)	9.50	92.3	69.4	25.1	241	ND (0.2)	6.90	132	5.20	ND (5.0)	ND (1.0)	23.2	166	
Drawdown Sampling																							
28-Jun-07		unfiltered	39.0 S	17330 S	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
28-Jun-07	8:55:00 AM	Filtered	---	---	---	ND (5.0)	---	---	---	---	29.2	---	---	21.5	---	5.70	---	---	---	---	---	---	
		unfiltered	39.0 S	17410 S	---	ND (5.0)	---	---	---	---	29.7	---	---	24.4	---	6.50	---	---	---	---	---	---	
28-Jun-07	9:08:00 AM	Filtered	---	---	---	ND (5.0)	---	---	---	---	29.7	---	---	ND (10)	---	6.40	---	---	---	---	---	---	
		unfiltered	37.0 S	17300 S	---	ND (5.0)	---	---	---	---	32.3	---	---	ND (10)	---	7.50	---	---	---	---	---	---	
28-Jun-07	9:11:00 AM	unfiltered	29.0 S	17430 S	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
28-Jun-07	9:20:00 AM	unfiltered	24.0 S	17560 S	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
28-Jun-07	9:25:00 AM	unfiltered	19.0 S	17750 S	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
28-Jun-07	9:32:00 AM	unfiltered	18.0 S	17870 S	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
28-Jun-07	10:00:00 AM	Filtered	---	---	---	ND (5.0)	---	---	---	---	32.8	---	---	ND (10)	---	6.60	---	---	---	---	---	---	
		unfiltered	32.0 S	17560 S	---	ND (5.0)	---	---	---	---	27.1	---	---	ND (10)	---	5.80	---	---	---	---	---	---	
28-Jun-07	1:20:00 PM	unfiltered	ND (10) S	18640 S	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
28-Jun-07	1:32:00 PM	unfiltered	ND (10) S	18090 S	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
28-Jun-07	1:41:00 PM	unfiltered	15.0 S	17870 S	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
28-Jun-07	1:48:00 PM	Filtered	---	---	---	ND (5.0)	---	---	---	---	20.0	---	---	65.3	---	ND (5.0)	---	---	---	---	---	---	
		unfiltered	21.0 S	17730 S	---	ND (5.0)	---	---	---	---	17.9	---	---	124	---	8.50	---	---	---	---	---	---	
29-Jun-07	8:39:00 AM	Filtered	---	---	---	ND (5.0)	---	---	---	---	32.4	---	---	22.7	---	6.30	---	---	---	---	---	---	
		unfiltered	42.0 S	17540 S	---	ND (5.0)	---	---	---	---	49.4	---	---	34.1	---	8.30	---	---	---	---	---	---	
Hydro Sleeve Sampling Depth, ft																							
19-Jul-07	64	unfiltered	12.0 S	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	72	unfiltered	17.0 S	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	80	unfiltered	22.0 S	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	

NOTES:

ND
S
ft
(---)

not detected at listed reporting limit
Screening Level data analyzed by on-site laboratory
feet below top of casing
not collected or not available

All results are reported in µg/L except specif conductance which is in microSiemens per centimeter.

Metals analyzed by Methods SW6010B, SW6020A, and SW7470A.

Project Name PGE Topock CIS
 Job Number 354631.MP.02.CI.00
 Field Team 1 Field Conditions _____

Sampling Event 2007-CIS-002
 Date 5/3/07
 Page 1 of 1

Well/Sample Number CIS-003 MW-09

QC Sample ID NA

QC Sample Time _____

Purge Start Time 0930/0935
 Flow Cell Y / N 0940

Purge Method _____

Ded. Pump yes

Min. Purge Volume (gal)/(L) 17 gal Purge Rate (gpm)/(mLpm) 3

Comments
(See description below)

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity μ mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity %	TDS g/L	En/ORP mv	Comments
	<u>0940</u> <u>0935</u>		<u>7.50</u>	<u>3214</u>	<u>8.0</u>	<u>4.94</u>	<u>28.8</u>	<u>1.54</u>	<u>1.93</u>	<u>123</u>	<u>Pump Surges - 3+^{gals}/min to less than 1/min</u>
	<u>0943</u>	<u>9</u>	<u>7.38</u>	<u>3280</u>	<u>4.6</u>	<u>7.92</u>	<u>29.1</u>	<u>1.56</u>	<u>1.95</u>	<u>121</u>	
	<u>0946</u>	<u>18</u>	<u>7.42</u>	<u>3258</u>	<u>4.0</u>	<u>7.72</u>	<u>29.2</u>	<u>1.56</u>	<u>1.96</u>	<u>120</u>	
	<u>0949</u>	<u>27</u>	<u>7.44</u>	<u>3266</u>	<u>2.2</u>	<u>7.60</u>	<u>29.3</u>	<u>1.56</u>	<u>1.96</u>	<u>119</u>	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?			<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>NA</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	
Previous Field measurement (10/12/2006)			<u>7.24</u>	<u>3490</u>	<u>2.04</u>	<u>11.39</u>	<u>28.69</u>	<u>0.18</u>		<u>166</u>	
Are measurements consistent with previous?							<u>NA</u>				

Sample Time 0955 Sample Location: _____ pump tubing _____ well port _____ spigot X bailer _____ other _____

Comments: _____

Initial Depth to Water (ft BTOC): 81.11
 Field measured confirmation of Well Depth (ft btoc): _____
 WD (Well Depth - from database) ft btoc (89.44)
 SWH (Standing Water Height) = WD-Initial Depth 8.33
 D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (4 in)
 One Casing Volume = D*SWH 5.50
 Three Casing Volumes = 16.5
 Color: clear, grey, yellow, brown, black, cloudy, green

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

Initial DTW / Before Removal		Approx. 5 min After Reinstallation		Time of Removal
Time	Initial DTW	Time	Final DTW	Time of Reinstallation
			<u>79.97</u>	
Comments: _____				

Odor: none, sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1 Field Conditions _____

Sampling Event 2007-GMP-125-Q2
 Date 5/3/07
 Page 1 of 1

Well/Sample Number MW-10-125

QC Sample ID MW-96-125

QC Sample Time Notes only

Purge Start Time 10:23

Purge Method _____

Ded. Pump yes

Min. Purge Volume (gal)/(L) 45

Purge Rate (gpm)/(mLpm) 4

Flow Cell: Y N

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity μ S/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
77.41	10:25	8	7.45	3491	2.2	2.47	28.62	1.67	2.07	120	
77.41	10:27	16	7.49	3381	1.9	2.81	29.09	1.64	2.05	114.0	
74.55	10:29	24	7.51	3325	2.1	3.19	29.19	1.59	2.00	109.9	
74.55	10:31	32	7.51	3340	1.3	3.38	29.23	1.60	2.00	107.9	
74.61	10:33	40	7.52	3282	1.5	3.51	29.26	1.57	1.97	107.0	
74.61	10:35	48	7.53	3234	1.2	3.65	29.27	1.54	1.94	106.5	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
			Did Parameters Stabilize prior to sampling?				NA				
			Previous Field measurement (3/6/2007)	7.34	2870	0.8	4.95	28.76	0.1	164	
			Are measurements consistent with previous?				NA				

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

Comments: _____

Initial Depth to Water (ft BTOC): 74.25
 Field measured confirmation of Well Depth (ft btoc):
 WD (Well Depth - from database) ft btoc (96.93)
 SWH (Standing Water Height) = WD-Initial Depth 22.68
 D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (4 in)
 One Casing Volume = D*SWH 14.98
 Three Casing Volumes = 44.9
 Color: clear, grey, yellow, brown, black, cloudy, green

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

Initial DTW / Before Removal		Approx. 5 min After Reinstallation		Time of Removal
Time	Initial DTW	Time	Final DTW	Time of Reinstallation
Comments: _____				

Odor: none, sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1 Field Conditions _____

Sampling Event 2007-GMP-125-Q2
 Date _____
 Page _____ of _____

Well/Sample Number MW-11-125

QC Sample ID NA

QC Sample Time 1315

Purge Start Time 12:45

Purge Method CD Ded. Pump yes

Min. Purge Volume (gal)/(L) 37 Purge Rate (gpm)/(mLpm) 5

Flow Cell: (Y) N

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity µmS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
62.44	1246	5	7.44	2618	65.6	7.11	29.05	1.21	1.54	79.3	
62.15	1247	10	7.44	2503	126	7.48	29.15	1.18	1.51	75.7	
65.21	1248	15	7.42	2506	50	7.57	29.21	1.17	1.49	73.8	
67.81	1249	20	7.42	2475	36	7.68	29.32	1.16	1.48	71.3	
66.99	1250	25	7.42	2450	14	7.79	29.35	1.15	1.47	69.4	
67.93	1251	30	7.42	2426	6	7.78	29.44	1.13	1.45	68.2	
67.93	1252	35	7.42	2418	6	7.76	29.42	1.13	1.44	67.2	
67.89	1253	40	7.42	2410	6.1	7.75	29.42	1.13	1.44	67.5	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?							NA				
Previous Field measurement (10/12/2006)			7.27	2930	3.95	9.58	29.66	0.15		90	
Are measurements consistent with previous?							NA				

Sample Time 1300 Sample Location: _____ pump tubing _____ well port _____ spigot _____ bailer _____ other _____

Comments: _____

Initial Depth to Water (ft BTOC): 66.02

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

WD (Well Depth - from database) ft btoc (86.11)

SWH (Standing Water Height) = WD-Initial Depth 20.09

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

One Casing Volume = D*SWH 12.05

Three Casing Volumes = 36.2

Color: clear, grey, yellow, brown, black, cloudy, green

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

Initial DTW / Before Removal		If Transducer		Time of Removal
Time	Initial DTW	Time	Final DTW	Time of Reinstallation
		1321	66.11	
Comments: _____				

Odor: none, sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1 Field Conditions Sunny

Sampling Event 2007-GMP-125-Q2
 Date 5-03-07
 Page 1 of 1

Well/Sample Number MW-12-125

QC Sample ID NA

QC Sample Time NA

Purge Start Time 1140

Purge Method 2-Rel Flo Ded. Pump NO

Min. Purge Volume (gal)/(L) 44.28 Purge Rate (gpm)/(mLpm) 3

Flow Cell Y / N

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
28.22	1142	6	8.22	5.43	5.3	7.52	28.1	0.3	3.4	+114	
28.23	1144	12	8.23	5.39	3.3	7.39	28.1	0.3	3.4	+114	
28.23	1146	18	8.24	5.44	2.5	7.35	28.2	0.3	3.4	+114	
28.23	1148	24	8.25	5.48	1.3	7.34	28.1	0.3	3.4	+114	
28.24	1150	30	8.25	5.53	0.9	7.32	28.2	0.3	3.5	+114	
28.24	1152	36	8.26	5.61	0.6	7.30	28.2	0.3	3.5	+115	
28.24	1154	42	8.26	5.59	0.4	7.29	28.2	0.3	3.5	+115	
28.24	1156	48	8.26	5.60	0.4	7.28	28.2	0.3	3.5	+115	
			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Parameter Stabilization Criteria											
Did Parameters Stabilize prior to sampling?			YES	YES	YES	YES	NA	YES	YES	YES	
Previous Field measurement (3/6/2007)			8.17	4940	1.2	6.67	28.03	0.3		117	
Are measurements consistent with previous?			YES	higher	lower	higher	NA	YES	NA	YES	

Sample Time 1200 Sample Location: pump tubing X well port spigot bailer other

Comments:

Initial Depth to Water (ft BTOC): 2803

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

WD (Well Depth - from database) ft btoc (50.4)

SWH (Standing Water Height) = WD-Initial Depth 22.37

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

One Casing Volume = D*SWH 14.76

Three Casing Volumes = 44.28

Color: clear, grey, yellow, brown, black, cloudy, green

Measure Point: Well TOC Steel Casing

WATER LEVEL METER SERIAL NUMBER: 12245

Initial DTW / Before Removal		If Transducer <u>NA</u>		Time of Removal
Time	Initial DTW	Time	Final DTW	Time of Reinstallation
<u>1133</u>	<u>28.03</u>			
Comments: <u></u>				

Odor: none, sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock CIS
 Job Number 354631.MP.02.CI.00
 Field Team 1

Sampling Event 2007-CIS-002

Date 5/4/07

Page 1 of 1

Field Conditions Hazy, 78°F, calm

Well/Sample Number CIS-026 MW-15

QC Sample ID NA

QC Sample Time

Purge Start Time 0656

Purge Method

Ded. Pump

Min. Purge Volume (gal)/(L) 36.75

Purge Rate (gpm)/(mLpm) 5

Flow Cell 1 N

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
184.96	0657	5	7.28	2810	132	8.40	29.51	1.32	1.67	-10.1	
184.91	0658	10	7.5	2764	16	8.21	29.50	1.30	1.65	39.1	
184.91	0659	15	7.53	2684	9.2	8.19	29.54	1.25	1.59	50.1	
184.91	0700	20	7.55	2595	8.0	8.22	29.61	1.20	1.52	50.5	
184.91	0701	25	7.56	2491	6.9	8.21	29.62	1.16	1.48	49.4	
184.91	0702	30	7.57	2456	6.4	8.21	29.63	1.14	1.46	50.3	
184.91	0703	35	7.57	2412	4.3	8.22	29.64	1.12	1.42	51.9	
184.91	0704	40	7.58	2396	3.6	8.24	29.65	1.11	1.42	53.5	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
			✓	✓	✓	✓	NA	✓	✓	✓	
			Did Parameters Stabilize prior to sampling?				29.69	0.1		16	
			Previous Field measurement (10/5/2006)	7.5	2110	4.24	8.93	NA	N	N	
			Are measurements consistent with previous?	✓	N	N	N	NA	N	N	

Sample Time 0715 Sample Location:

pump tubing ✓

well port

spigot

bailer

other

Comments:

Initial Depth to Water (ft BTOC): 184.43

Field measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc (203)

SWH (Standing Water Height) = WD-Initial Depth

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

One Casing Volume = D*SWH 12.25

Three Casing Volumes = 36.75

Color: clear grey, yellow, brown, black, cloudy, green

Measure Point: Well TOC Steel Casing

WATER LEVEL METER SERIAL NUMBER:

Initial DTW / Before Removal		Approx. 5 min After Reinstallation		If Transducer	
Time	Initial DTW	Time	Final DTW	Time of Removal	Time of Reinstallation
		NA			

Comments:

Odor: none, sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1

Sampling Event 2007-GMP-125-Q2

Date 5/2/07

Page 1 of 1

Field Conditions Sunny, windy

Well/Sample Number MW-19-125

QC Sample ID NA

QC Sample Time N/A

Purge Start Time 0738

Purge Method CD pump Ded. Pump Y

Min. Purge Volume (gal)/(L) 44 Purge Rate (gpm)/(mLpm) 5

Flow Cell: Y N

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
44.81	0739	5	7.46	2.55	49.0 1.57	78.4	27.98	1.23	1.57	69.9	
44.86	0741	15	7.49	2.56	5.6	87.7	28.32	1.23	1.57	86.1	
44.93	0743	25	7.50	2.56	2.9	92.4	28.39	1.23	1.56	96.7	
44.95	0745	35	7.51	2.56	10.8	95.0	28.43	1.23	1.56	102.6	
44.95	0747	45	7.51	2.56	2.4	95.7	28.44	1.22	1.56	104.8	
44.95	0748	50	7.51	2.56	36.2	97.4	28.46	1.22	1.56	106.3	
44.95	0749	55	7.51	2.56	23.9	97.9	28.47	1.22	1.56	108.1	
44.95	0750	60	7.51	2.56	1.7	98.0	28.46	1.22	1.56	108.4	
44.95	0751	65	7.51	2.56	2.0	98.2	28.47	1.22	1.56	109.2	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?			Y	Y	N	Y	NA			Y	
Previous Field measurement (3/6/2007)			7.4	2280	2.4	7.03	28.45	0.1		95	
Are measurements consistent with previous?			Y	Y	Y	N	NA			Y	

Sample Time 0752 Sample Location: pump tubing X well port _____ spigot _____ bailer _____ other _____

Comments: _____

Initial Depth to Water (ft BTOC): 43.61

Field measured confirmation of Well Depth (ft btoc): 62.87

WD (Well Depth - from database) ft btoc (65.77)

SWH (Standing Water Height) = WD-Initial Depth 22.16

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

One Casing Volume = D*SWH 14.62

Three Casing Volumes = 43.88

Color: clear, grey, yellow, brown, black, cloudy, green

Measure Point: Well TOC Steel Casing

WATER LEVEL METER SERIAL NUMBER: PGE 2005-02

If Transducer			
Initial DTW / Before Removal		Approx. 5 min After Reinstallation	
Time	Initial DTW	Time	Final DTW
<u>0722</u>	<u>43.61</u>		
Comments:			

Odor: none, sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1 Field Conditions sunny

Sampling Event 2007-GMP-125-Q2
 Date 5-03-07
 Page 1 of 1

Well/Sample Number MW-20-070-125

QC Sample ID NA

QC Sample Time NA

Purge Start Time 8:56

Purge Method 3 CV

Ded. Pump No

Min. Purge Volume (gal)/(L) 48

Purge Rate (gpm)/(mLpm) 3

Flow Cell: Y / N

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
47.22	0859	9	7.43	3.18	0.7	8.60	28.8	0.2	2.0	+171	
47.23	0902	13	7.60	3.18	0.5	8.69	28.9	0.2	2.0	+169	
47.26	0905	27	7.73	3.19	0.5	8.70	28.9	0.2	2.0	+164	
47.30	0908	36	7.81	3.19	0.2	8.70	28.9	0.2	2.0	+159	
47.33	0911	45	7.84	3.20	0.4	8.69	28.9	0.2	2.0	+154	
47.36	0914	54	7.85	3.21	0.3	8.68	28.9	0.2	2.1	+151	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?			YES	YES	YES	YES	NA	YES	YES	YES	
Previous Field measurement (3/14/2007)			7.4	2260	2.6	8.37	28.89	0.1		152	
Are measurements consistent with previous?			higher	higher	lower	YES	NA	YES	NA	YES	

Sample Time 0915 Sample Location: pump tubing X well port spigot bailer other

Comments:

Initial Depth to Water (ft BTOC): 45.01

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

WD (Well Depth - from database) ft btoc (69.55)

SWH (Standing Water Height) = WD-Initial Depth 24.32

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

One Casing Volume = D*SWH 16.05

Three Casing Volumes = 48.15

Color: clear, grey, yellow, brown, black, cloudy, green

Measure Point: Well TOC Steel Casing

WATER LEVEL METER SERIAL NUMBER: 12245

Initial DTW / Before Removal		Approx. 5 min After Reinstallation		If Transducer	
Time	Initial DTW	Time	Final DTW	Time of Removal	Time of Reinstallation
842	45.00	0930	45.03	842	923
Comments: <u>45.01 m</u>					

Odor: none, sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1

Sampling Event 2007-GMP-125-Q2
 Date 8/2/07
 Page 1 of 1

Field Conditions Sunny, Warm, Slight Breeze

Well/Sample Number MW-20-100-125

QC Sample ID MW-90-125

QC Sample Time 1035

Purge Start Time 0953

Purge Method 2" Rods

Ded. Pump Groutos

Flow Cell (Y) N

Min. Purge Volume (gal)/(L) 108.32

Purge Rate (gpm)/(mLpm) 4

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
—	0957	16	7.75	4.44	0.2	4.37	29.1	0.2	2.9	+155	
50.82	1001	32	7.72	5.99	0.3	4.31	29.3	0.3	3.8	+152	
50.83	1005	48	7.70	8.09	0.3	3.98	29.3	0.5	5.0	+149	
50.84	1009	54	7.71	14.3	0.3	3.65	29.4	0.8	9.0	+146	
50.84	1013	70	7.73	20.3	0.3	3.48	29.4	1.2	12.0	+142	
50.85	1017	86	7.74	31.84	0.1	3.34	29.4	1.9	19.0	+140	and TDS
50.85	1021	102	7.75	—	0.1	3.19	29.4	2.0	—	+138	* Conductivity not working; giving Error 3 on Hlonba
50.85	1025	118	7.75	—	0.1	3.14	29.4	2.1	—	+137	
				3.98					2.6		→ Took reading w/new Hlonba
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?			YES		YES	YES	NA	YES		YES	
Previous Field measurement (3/14/2007)			7.31	2820	2	3.01	29.37	0.1		153	
Are measurements consistent with previous?			higher	higher	lower	YES	NA	higher		lower	

Sample Time 1030 Sample Location: pump tubing ☒ well port ☐ spigot ☐ bailer ☐ other ☐

Comments:

Initial Depth to Water (ft BTWC): 45.85

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

WD (Well Depth - from database) ft btoc (101.4)

SWH (Standing Water Height) = WD-Initial Depth 55.59

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

One Casing Volume = D*SWH 36.10

Three Casing Volumes = 108.32

Color: clear, grey, yellow, brown, black, cloudy, green

Measure Point: Well TOC Steel Casing

WATER LEVEL METER SERIAL NUMBER: 12245

Initial DTW / Before Removal		Approx. 5 min After Reinstallation		If Transducer	
Time	Initial DTW	Time	Final DTW	Time of Removal	Time of Reinstallation
0937	9.37	1049	45.90	0940	1044
Comments: 45.85'					

Odor: none, sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1 Field Conditions _____

Sampling Event 2007-GMP-125-Q2
 Date 5/3/07
 Page _____ of _____

Well/Sample Number MW-20-130-125

QC Sample ID MW-95-125

QC Sample Time _____

Purge Start Time 0645

Purge Method 3CV

Ded. Pump NA

Min. Purge Volume (gal)/(L) 258

Purge Rate (gpm)/(mLpm) 3.5

Flow Cell: 01 N

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity μ S/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
51.37	647		7.42	9972	2.1	1.50	28.73	5.29	6.05	180.4	
51.62	656	32	7.40	10300	1.8	0.53	29.34	5.30	6.18	182.7	
52.72	705	63	7.48	14720	1.2	1.96	29.48	7.77	8.81	188.2	
52.72	714	95	7.48	14688	0.8	2.03	29.54	7.75	8.78	185.9	
52.72	723	126	7.48	14670	1.1	2.04	29.53	7.74	8.77	185.3	
52.72	732	158	7.48	14675	1.1	2.05	29.57	7.73	8.77	186.3	
52.72	741	189	7.48	14665	0.8	2.07	29.58	7.73	8.76	185.1	
52.72	750	221	7.49	14653	0.9	2.07	29.57	7.72	8.76	184.3	
52.72	801	258	7.49	14664	0.8	2.07	29.62	7.72	8.76	183.0	
			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Parameter Stabilization Criteria											
Did Parameters Stabilize prior to sampling?			Y	Y	Y	Y	NA	-	-	Y	
Previous Field measurement (3/8/2007)			7.4		0.3	1.11	30			91	
Are measurements consistent with previous?			Y	-	Y	Y	NA	-	-	Higher	

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

Comments: _____

Initial Depth to Water (ft BTOC): 46.38
 Field measured confirmation of Well Depth (ft btoc): NA
 WD (Well Depth - from database) ft btoc (132.34) 85.96
 SWH (Standing Water Height) = WD-Initial Depth .66
 D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (4 in) .66
 One Casing Volume = D*SWH 56.73
 Three Casing Volumes = 257.88
 Color: clear, grey, yellow, brown, black, cloudy, green

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

Initial DTW / Before Removal		Approx. 5 min After Reinstallation		If Transducer	
Time	Initial DTW	Time	Final DTW	Time of Removal	Time of Reinstallation
6.36	46.38	7.18	46.58	6.36	8.13
Comments: _____					

Odor: none sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1 Field Conditions unny hot

Sampling Event 2007-GMP-125-Q2
 Date 4/30/07
 Page 1 of 1

Well/Sample Number MW-21-125QC Sample ID NA

QC Sample Time

Purge Start Time 1120Purge Method Temp PF2 Ded. Pump -Min. Purge Volume (gal)/(L) 42 gpm Purge Rate (gpm)/(mLpm) 1/2 gpm 180 #2Flow Cell (Y) N

Water Level	Time	Vol. Purged gallons/ liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
90.14	1122	1/2	7.01	14.1	5.3	7.11	32.30	0.8	8	106	
91.85	1124	1.5	7.12	14.4	6.3	5.44	30.76	0.8	9	86	
52.35	1126	2.5	7.02	14.5	5.1	4.96	30.97	0.8	9	76	
52.04	1128	3.5	6.98	14.5	4.8	4.72	31.24	0.8	9	68	
53.49	1130	4.5	6.96	14.5	6.1	4.54	31.42	0.8	9	62	
54.02	1132	5.5	6.94	14.5	7.4	4.46	31.63	0.8	9	52	
54.47	1134	6.5	6.94	14.5	8.9	4.41	31.77	0.8	9	-6	
---	not de-watered @ 6.5 gpm										
93.63	0720	none today	7.02	12.3	2	3.20	26.9	0.7	8	187	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?							NA				
Previous Field measurement (3/9/2007)			6.87	19700	4.9	2.04	28.75	1.2		11	
Are measurements consistent with previous?							NA				

Sample Time 7:25 Sample Location: pump tubing well port spigot bailer X other ---

Comments: turbidity meter 5/1/07 PGE 2005-01C ; HORIBA 10556

Initial Depth to Water (ft BTOC): 44.85

Field measured confirmation of Well Depth (ft btoc): 58.28

WD (Well Depth - from database) ft btoc (58.45)

SWH (Standing Water Height) = WD-Initial Depth 8.43

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

One Casing Volume = D*SWH 5.5

Three Casing Volumes = 16.5

Color: clear, grey, yellow, brown, black, cloudy, green

Measure Point: Well TOC

Steel Casing

WATER LEVEL METER SERIAL NUMBER: 12511 same 5/1/07

Initial DTW / Before Removal		Approx. 5 min After Reinstallation		Time of Removal
Time	Initial DTW	Time	Final DTW	Time of Reinstallation
Comments:				

Odor: none, sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1 Field Conditions overcast, 76°

Sampling Event 2007-GMP-125-Q2
 Date 5/11/07 / 5/12/07
 Page 1 of 1

Well/Sample Number MW-23-125QC Sample ID NA

QC Sample Time

Purge Start Time 8:46 A.H. 8:48Purge Method CD Pump Ded. Pump yesMin. Purge Volume (gal)/(L) 59.1 Purge Rate (gpm)/(mLpm) 5Flow Cell: Y / N

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
UTM	8:50	10	7.33	16.6	0.7	3.52	28.1	1.0	10	91	
71.98	8:52	20 A.H.	7.15	16.8	—	4.96	28.0	1.0	9	78	
72.12	8:54	30 20	7.11	17.1	1.4	6.70	28.3	1.0	11	55	
	8:56 A.H.	40	Purged dry @ about 1V casing								
	8:58 A.H.	50									
	8:59 A.H.	60									
—	5/12/07 06:53	—	7.22	17.0	11.07	5.11	24.77	—	11.07	234	Water was clear
63.48	13:31	choked w/ not 80% recharged				42%					
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?							NA				
Previous Field measurement (3/6/2007)			7.03	19700	17.9	4.15	28.66	0.7		62	
Are measurements consistent with previous?							NA				

Sample Time 9:02 Sample Location: 512/07 pump tubing X well port — spigot — bailer — other —
 Comments: Installed a new plug. Checked flow rate - it is right on.
UTM = Unable to measure. Flow rate slowed to less than 2 gpm @ after 1st parameter.

Initial Depth to Water (ft BTOC): 51.58

Field measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc (81.45)

SWH (Standing Water Height) = WD - Initial Depth 29.87

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

One Casing Volume = D * SWH 19.7Three Casing Volumes = 59.1Color: clear, grey, yellow, brown, black, cloudy, greenMeasure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 12511

Initial DTW / Before Removal		Approx. 5 min After Reinstallation		Time of Removal
Time	Initial DTW	Time	Final DTW	Time of Reinstallation
<u>8:30</u>	<u>51.58</u>			
Comments: <u>DTW in 5/12/07 @ 0644 was 53.79</u>				

Odor: none, sulphur, organic, otherSolids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1 Field Conditions Sunny, hot

Sampling Event 2007-GMP-125-Q2
 Date 5/2/07
 Page 1 of 1

Well/Sample Number MW-24BR-125

QC Sample ID NA

QC Sample Time N/A

Purge Start Time 1257

Purge Method grundfos Ded. Pump No

Min. Purge Volume (gal)/(L) 1064 Purge Rate (gpm)/(mLpm) 3.88

Flow Cell (Y) N

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
111.73	1258	4	7.51	6.27	6.6	71.2	31.02	2.96	3.62	26.9	
118.77	1302	13	8.00	15.99	8.9	2.2	30.16	8.38	9.46	-228.1	
—	1304	22	8.00	16.01	9.3	1.6	30.21	8.39	9.47	-224.7	
—	1307	31	7.98	16.02	8.5	1.5	30.23	8.39	9.47	-232.9	
—	1310	40	7.95	16.04	9.3	1.4	30.29	8.39	9.47	-240.9	
—	1313	49	7.97	16.07	11.3	1.4	30.37	8.39	9.48	-248.9	
—	1316	58	7.95	16.09	12.0	1.4	30.44	8.40	9.48	-254.9	
—	1321	73	7.95	16.15	12.4	1.5	30.65	8.39	9.48	-240.2	
—	1326	88	7.94	16.24	10.4	1.4	30.98	8.38	9.47	-259.6	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?							NA				
Previous Field measurement (3/5/2007)			8.01	15200	3.6	0.53	34.74	0.9		-213	
Are measurements consistent with previous?							NA				

Sample Time _____ Sample Location: _____ pump tubing _____ well port _____ spigot _____ bailer _____ other _____
 Comments: Water level indicator is getting stuck in pump, so we can't get reading S.
Well went dry @ 1327, turned pump off & pulled pump. Final DTW = 180.76
@ 1334

Initial Depth to Water (ft BTOC): 107.22/102.94

Field measured confirmation of Well Depth (ft btoc): 3

WD (Well Depth - from database) ft btoc (441)

SWH (Standing Water Height) = WD-Initial Depth 333.78

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

One Casing Volume = D*SWH 220.29

Three Casing Volumes = 660.88

Color: clear grey, yellow, brown, black, cloudy, green

Measure Point: Well TOC Steel Casing

WATER LEVEL METER SERIAL NUMBER: PGE 2005-02 / Blain Tech's VL

If Transducer			
Initial DTW / Before Removal		Approx. 5 min After Reinstallation	
Time	Initial DTW	Time	Final DTW
<u>1234</u>	<u>107.22</u>		
Comments:			

Odor: none, sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP

Sampling Event 2007-GMP-125-Q2

Job Number 345631.MP.02.GM

Date 5/4/07

Field Team 1

Field Conditions Sunny, 78°F, calm

Page 1 of 1

Well/Sample Number MW-25-125

QC Sample ID NA

QC Sample Time

Purge Start Time 0939

Purge Method

Ded. Pump

Flow Cell (Y) / N

Min. Purge Volume (gal)/(L) 39

Purge Rate (gpm)/(mLpm)

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
90.60	0940	5	7.44	1571	1.4	5.41	28.97	0.72	0.946	101.6	
92.30	0941	10	7.41	1558	1.4	5.94	29.03	0.72	0.938	100.9	
93.30	0942	15	7.42	1529	1.8	6.51	29.10	0.70	0.920	100.2	
93.85	0943	20	7.42	1534	4.8	6.62	29.15	0.71	0.923	100.1	
94.20	0944	25	7.42	1526	7.0	6.42	29.16	0.70	0.921	100.1	
—	0954	30	7.43	1517	6.4	6.54	29.42	0.69	0.902	102.7	Stopped pump - Silt drain
—	0955	35	7.42	1508	3.1	6.74	29.18	0.69	0.909	102.5	Resumed purge - 0954
—	0956	40	7.40	1520	2.8	6.85	29.16	0.70	0.915	103.4	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?			✓	✓	✓	✓	NA	✓	✓	✓	
Previous Field measurement (3/6/2007)			7.24	1350	8	6.84	29.3	0.1	✓	120	
Are measurements consistent with previous?			N	N	N	✓	NA	✓	✓	✓	

Sample Time 1000 Sample Location: pump tubing ✓ well port spigot bailer other

Comments: Pump off at 0942 - Plug in drain - Clean
Pump back on at 0954 - Drain ok

Initial Depth to Water (ft BTOW): 86.70'

Field measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc (106.54)

SWH (Standing Water Height) = WD-Initial Depth 19.84

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

One Casing Volume = 13

Three Casing Volumes = 39

Color: clear, grey, yellow, brown, black, cloudy, green

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

Initial DTW / Before Removal		If Transducer	
Time	Initial DTW	Approx. 5 min After Reinstallation	Time of Removal
		Time Final DTW	Time of Reinstallation
Comments:			

Odor: none sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1 Field Conditions OVERCAST

Sampling Event 2007-GMP-125-Q2
 Date 5/1/07
 Page _____ of _____

Well/Sample Number MW-27-085-125QC Sample ID NA

QC Sample Time _____

Purge Start Time 0754Purge Method Bed Pump Temp BF2Flow Cell: YI NMin. Purge Volume (gal)/(L) 37Purge Rate (gpm)/(mLpm) 2

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
5.87	0756	4	6.94	50.3	1	1.48	20.33	3.2	29	-81	
5.87	0759	10	6.94	34.4	1	0.64	20.90	2.1	20	-84	
5.89	0802	16	6.95	28.3	0.76	0.40	21.05	1.7	17	-82	
5.87	0805	22	6.95	25.8	0.64	0.48	21.12	1.6	16	-81	
5.90	0808	28	6.95	23.4	0.65	0.45	21.19	1.4	15	-79	
5.90	0811	34	6.96	21.1	0.44	0.43	21.20	1.2	13	-75	
5.91	0814	40	6.96	20.8	1.11	0.40	21.29	1.1	11	-73	
5.91	0817	46	6.96	20.6	0.51	0.38	21.47	1.0	10	-69	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?							NA				
Previous Field measurement (4/3/2007)			6.95	23100	0.5	2.16	21.07	1.4		-97	
Are measurements consistent with previous?							NA				

Sample Time 0835 Sample Location: pump tubing X well port _____ spigot _____ bailer _____ other _____

Comments: _____

Initial Depth to Water (ft BTOW): 4.69

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

WD (Well Depth - from database) ft btoc (80)

SWH (Standing Water Height) = WD-Initial Depth

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

One Casing Volume = D*SWH 12.1Three Casing Volumes = 37

Color: clear, grey, yellow, brown, black, cloudy, green

Measure Point: Well TOC Steel Casing

WATER LEVEL METER SERIAL NUMBER: _____

Initial DTW / Before Removal		If Transducer	
Time	Initial DTW	Approx. 5 min After Reinstallation	Time of Removal
0750	4.69	084	0748
		4.93	Time of Reinstallation 0842
Comments: _____			

Odor: none, sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1 Field Conditions hot, sunny

Sampling Event 2007-GMP-125-Q2
 Date 5/4/07
 Page 1 of 1

Well/Sample Number MW-28-090-125

QC Sample ID

NA

QC Sample Time

NA

Purge Start Time 0943

Purge Method

3WV

Ded. Pump

NO

Flow Cell Y / N

Min. Purge Volume (gal)/(L)

45gal

Purge Rate (gpm)/(mLpm)

2gpm

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
12.04	0948	10	7.21	6734	1.0	0.38	19.05	3.72	4.385	-137	
12.11	0953	20	7.32	7348	1.0	0.25	20.13	4.04	4.782	-147	
12.09	0958	30	7.35	7444	1.0	0.21	20.16	4.12	4.844	-152	
12.08	1003	40	7.35	7481	0.4	0.19	20.16	4.14	4.865	-154	
12.10	1008	50	7.36	7492	1.0	0.18	20.17	4.15	4.873	-156	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?							NA				
Previous Field measurement (3/8/2007)			7.29	6910	1	4.13	21.2	0.4		-154	
Are measurements consistent with previous?							NA				

Sample Time 1010 Sample Location: pump tubing X well port _____ spigot _____ bailer _____ other _____

Comments: _____

Initial Depth to Water (ft BTOC): 10.82Field measured confirmation of Well Depth (ft btoc): 98.2

WD (Well Depth - from database) ft btoc (98.36)

SWH (Standing Water Height) = WD-Initial Depth 87D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in) .17One Casing Volume = D*SWH 14.79Three Casing Volumes = 45Color: clear, grey, yellow, brown, black, cloudy, greenMeasure Point: Well TOC Steel CasingWATER LEVEL METER SERIAL NUMBER: Slope-Blaine Tech

Initial DTW / Before Removal		If Transducer		Time of Removal
Time	Initial DTW	Time	Final DTW	Time of Reinstallation
<u>0934</u>	<u>10.82</u>	<u>1020</u>	<u>10.90</u>	<u>0935</u> <u>1015</u>
Comments:				

Odor: none, sulphur, organic, otherSolids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP

Sampling Event 2007-GMP-125-Q2

Job Number 345631.MP.02.GM

Date 4/30/07

Field Team 1

Field Conditions sunny / hot

Page 1 of 1

Well/Sample Number MW-32-020-125

QC Sample ID NA

QC Sample Time

Purge Start Time 1221

Purge Method Ded. PFZ Ded. Pump Ded. PFZ

Flow Cell: Y / N

Min. Purge Volume (gal)/(L) 7

Purge Rate (gpm)/(mLpm) 1.5

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
6.85	1222	1	6.62	32.9	31.3	5.47	24.54	2.1	20	-161	
6.97	1223	2	6.61	33.3	45.1	5.29	24.68	2.1	20	-162	
6.98	1224	3	6.60	33.2	47.7	5.14	24.61	2.1	20	-163	
7.04	1225	4	6.60	33.6	27.8	5.07	24.61	2.1	20	-163	
7.06	1226	5	6.60	33.7	20.2	4.98	24.60	2.1	20	-164	
7.03	1227	6	6.60	34.7	28.2	4.73	24.62	2.2	21	-165	
7.02	1228	7	6.60	34.9	13.0	4.60	24.60	2.2	21	-165	
			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Parameter Stabilization Criteria											
Did Parameters Stabilize prior to sampling?			YES	YES			NA	✓	✓	✓	
Previous Field measurement (3/6/2007)			6.51	39700	200	0.11	26.8	2.6		-84	
Are measurements consistent with previous?			YES				NA				

Sample Time 1235 Sample Location: pump tubing X well port spigot bailer other

Comments:

Initial Depth to Water (ft BTOC): 5.83

Field measured confirmation of Well Depth (ft btoc): N/A

WD (Well Depth - from database) ft btoc (19.6)

SWH (Standing Water Height) = WD-Initial Depth 13.77

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

One Casing Volume = D*SWH 2.3

Three Casing Volumes = 7.0

Color: clear, grey, yellow, brown, black, cloudy, green

Measure Point: Well TOC Steel Casing

WATER LEVEL METER SERIAL NUMBER: 12511

Initial DTW / Before Removal		Approx. 5 min After Reinstallation		If Transducer	
Time	Initial DTW	Time	Final DTW	Time of Removal	Time of Reinstallation
1206	5.83	1245	5.84	1207	1240
Comments:					

Odor: none, sulphur, organic, other

Solids: Trace Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1 Field Conditions Jimmy Wot

Sampling Event 2007-GMP-125-Q2
 Date 4/30/07
 Page 1 of 1

Well/Sample Number MW-32-035-125

QC Sample ID NA

QC Sample Time NA

Purge Start Time 1308

Purge Method Ded. Pump

Flow Cell: Y N

Min. Purge Volume (gal)/(L) 62.1 Purge Rate (gpm)/(mLpm) 2gpm 182 Hz

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
7.25	1313	10	7.01	19.0	16.8 4.25 BW	4.75 35.03 BW	25.07	1.1	12	-45	
7.30	1318	20	6.96	21.8	32.2	4.28	25.64	1.3	14	-148	
7.32	1323	30	6.90	23.7	4.6	4.03	25.73	1.5	15	-149	
7.33	1328	40	6.91	23.7	3.3	3.93	25.76	1.4	15	-152	
7.34	1333	50	6.93	23.5	2.1	3.87	25.75	1.4	14	-155	
7.35	1338	60	6.94	23.5	2.7	3.83	25.75	1.4	15	-157	
7.35	1340	64	6.94	23.5	1.3	3.82	25.78	1.4	15	-158	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?			✓	✓		✓	NA	✓	✓	✓	
Previous Field measurement (3/6/2007)			5.98	14800	1	0	27.9	0.9		-66	
Are measurements consistent with previous?							NA				

Sample Time 1345 Sample Location: pump tubing X well port spigot bailer other

Comments:

Initial Depth to Water (ft BTOC): 5.83
 Field measured confirmation of Well Depth (ft bloc): N/A
 WD (Well Depth - from database) ft bloc (37.15)
 SWH (Standing Water Height) = WD-Initial Depth 31.32
 D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (4 in)
 One Casing Volume = D*SWH 20.7
 Three Casing Volumes = 62.1
 Color: clear, grey, yellow, brown, black, cloudy, green

Measure Point: Well TOC Steel Casing

WATER LEVEL METER SERIAL NUMBER: 12511

If Transducer			
Initial DTW / Before Removal		Approx. 5 min After Reinstallation	
Time	Initial DTW	Time	Final DTW
1302	5.83	1303	5.87
Comments:			

Odor: none, sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1 Field Conditions sunny, clear, low 80s

Sampling Event 2007-GMP-125-Q2
 Date 5/2/07
 Page 1 of 1

Well/Sample Number MW-33-040-125

QC Sample ID NA

QC Sample Time N/A

Purge Start Time 9:15 9:16 9:17

Purge Method temp. Radi-P Ded. Pump NO

Flow Cell: Y / N

Min. Purge Volume (gal)/(L) 5.6 Purge Rate (gpm)/(mLpm) 0.5

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
36.11	9:19	1	8.09	5.6 ^{5.31}	82.2	0.54	27.25	0.4	4.4	12	silty looking at first
36.09	9:21	1.8	8.04	16.1	54.9	0.61	27.51	1.0	10	3	
35.99	9:23	2.9	8.09	19.5	—	0.59	28.28	1.2	13	-4	
35.24	9:24	3.6	8.10	37.3	66.7	0.39	28.63	2.6	25	-6	
34.91	9:26	4.6	8.12	46.3	53.6	0.12	28.95	2.8	27	-7	
34.68	9:28	5.6	8.14	48.4 ^{49.2}	33.6	0.13	28.31	2.7	25	-11	
34.50	9:30	6.5	8.16	29.7	22.3	0.51	28.77	1.9	19	-12	
34.45	9:32	7.5	8.17	28.8	22.9	0.52	29.21	1.8	18	-15	
34.43	9:34	8	8.18	20.2	28.6	0.55	29.40	1.1	12	-10	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?			Y	Y	Y	Y	NA	Y	Y	Y	
Previous Field measurement (3/6/2007)			8.14	27000	139	1.7	27.08	4	—	—	
Are measurements consistent with previous?			Y	Y	lower	lower	NA	lower	—	—	

Sample Time 9:34 Sample Location: Y pump tubing X well port — spigot — bailer — other —

Comments: This well is NOT a 4" well!

Initial Depth to Water (ft BTOC): 30.90

Measure Point: Well TOC Steel Casing

WATER LEVEL METER SERIAL NUMBER: PGE-2005-01B

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

WD (Well Depth - from database) ft btoc (41.84)

SWH (Standing Water Height) = WD-Initial Depth 10.94

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

One Casing Volume = D*SWH 1.9

Three Casing Volumes = 5.6

Color: clear, grey, yellow, brown, black, cloudy, green

Odor: none, sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Initial DTW / Before Removal		Approx. 5 min After Reinstallation		If Transducer	
Time	Initial DTW	Time	Final DTW	Time of Removal	Time of Reinstallation
9:05	30.90	9:47	32.87	9:05	9:42
Comments:					

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1
 Field Conditions *high 80s sunny, clear, top 80s 90s*
 Sampling Event 2007-GMP-125-Q2
 Date *5/11/07*
 Page 1 of 1

Well/Sample Number MW-33-090-125

QC Sample ID NA

QC Sample Time N/A

Purge Start Time 10:08

Purge Method *rediflo* Ded. Pump NO

Flow Cell: Y / N

Min. Purge Volume (gal)/(L) 113 Purge Rate (gpm)/(mLpm) 2

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
31.56	10:19	19	7.34	17.4	7.22	0.00	26.96	1.2	13	36	
31.59	10:27	38	7.33	19.2	3.31	0.00	27.00	1.1	11	27	
31.60	10:37	57	7.34	15.4	1.98	0.00	27.00	1.0	10	24	
31.60	10:46	76	7.36	21.2	0.97	0.14	27.00	1.2	13	23	
31.62	10:56	95	7.35	20.3	0.60	0.16	27.02	1.1	12	21	
31.59	11:05	114	7.35	16.0	0.58	0.00	27.05	0.9	10	18	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?							NA				
Previous Field measurement (3/12/2007)			7.46	11600	0.5	0.41	27.09	0.6		97	
Are measurements consistent with previous?							NA				

Sample Time 11:07 Sample Location: pump tubing well port spigot bailer other

Comments: This well was marked as having a dedicated pump, but it does NOT!

Initial Depth to Water (ft BTOC): 31.13

Measure Point: Well TOC Steel Casing

WATER LEVEL METER SERIAL NUMBER: PGE-2005-01B

Field measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc (88.28)

SWH (Standing Water Height) = WD-Initial Depth 57.15

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

One Casing Volume = D*SWH 37.7

Three Casing Volumes = 113.2

Color: clear, grey, yellow, brown, black, cloudy, green

Odor: none, sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team MRZ Field Conditions sunny, clear, 100% A.H.

Sampling Event 2007-GMP-125-Q2
 Date 5/2/07
 Page 1 of 1

Well/Sample Number MW-33-150-125QC Sample ID NAQC Sample Time N/APurge Start Time 12:36Purge Method Redi-Flo Ded. Pump NoFlow Cell: Y / NMin. Purge Volume (gal)/(L) 162.9 Purge Rate (gpm)/(mLpm) 3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
34.45	12:39	10.5	7.32	43.4 37.4	2.05	0.48	27.20	2.7	26	50	
34.50	12:43	21	7.39	35.8	4.88	0.44	27.30	2.0	20	39	
34.52	12:46	31.5	7.39	37.1	0.65	0.78 0.76	27.34	2.1	21	-83	
34.53	12:50	42	7.40	36.6 36.6 A.H.	1.16	0.53	27.34	2.3	22	-93	
34.54	12:53	52.5	7.39	36.3	2.57	0.51	27.33	1.8	18	-79	
34.48	12:57 13:01	63	7.40	31.2	3.36	0.85	27.35	1.9	19	-65	
	13:01 13:01 A.H.										
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?							NA				
Previous Field measurement (3/6/2007)			7.51		0.08	0	27.61			37	
Are measurements consistent with previous?							NA				

Sample Time 13:03 Sample Location: 12:55 A.H. pump tubing X well port spigot bailer other

Comments: Shut off 12:55 to switch water tanks. Restart 12:59

EB-125-6 taken after this well @ 13:30

Initial Depth to Water (ft BTOC): 32.09Measure Point: Well TOC Steel CasingWATER LEVEL METER SERIAL NUMBER: PGE-2005-01B

Field measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc (155.38)

SWH (Standing Water Height) = WD-Initial Depth 123.29

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

One Casing Volume = D*SWH 21Three Casing Volumes = 63Color: clear, grey, yellow, brown, black, cloudy, greenOdor: none, sulphur, organic, otherSolids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Initial DTW / Before Removal		Approx. 5 min After Reinstallation		If Transducer	
Time	Initial DTW	Time	Final DTW	Time of Removal	Time of Reinstallation
12:27	32.09	13:15	32.15	12:26	13:09
Comments:					

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1

Sampling Event 2007-GMP-125-Q2
 Date 5/2/07
 Page 1 of 1

Well/Sample Number MW-33-210-125

QC Sample ID NA

QC Sample Time N/A

Purge Start Time 11:41

Purge Method ded. Rel. Ph Ded. Pump yes

Flow Cell: Y / N

Min. Purge Volume (gal)/(L) 97.5 Purge Rate (gpm)/(mLpm) 3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
33.70	11:46	16.	7.27	24.5	1.34	0.68	27.36	1.8	18	-18	
33.72	11:52	32	7.23	27.3	1.48	0.00	27.68	1.8	18	-44	
33.74	11:57	49	7.29	24.26	1.13	0.00	27.69	1.6	16	-49	
33.74	12:02	65	7.20	26.3	0.91	0.00	27.71	1.6	16	-53	
33.75	12:08	81	7.18	24.4	1.24	0.00	27.71	1.5	15	-50	
33.74	12:13	98	7.19	22.6	0.75	0.12	27.72	1.4	15	-52	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?			Y	Y	Y	Y	NA	—	—	Y	
Previous Field measurement (3/5/2007)			7.25	57300	6.26	0.31	28.39	3.8		-2	
Are measurements consistent with previous?			Y	lower	lower	lower	NA	lower		lower	

Sample Time 12:15 Sample Location: pump tubing X well port spigot bailer other

Comments:

Initial Depth to Water (ft BTOC): 31.91

Measure Point: Well TOC Steel Casing

WATER LEVEL METER SERIAL NUMBER: PGE-2005-0113

Field measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc (223)

SWH (Standing Water Height) = WD-Initial Depth 197.09

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

One Casing Volume = D*SWH 32.48

Three Casing Volumes = 97.5

Color: clear, grey, yellow, brown, black, cloudy, green

Odor: none, sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Initial DTW / Before Removal		If Transducer <u>N/A</u>	
Time	Initial DTW	Time	Final DTW
<u>11:37</u>	<u>31.91</u>		
Comments: <u> </u>			

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1 Field Conditions Sunny, 100s,

Sampling Event 2007-GMP-125-Q2
 Date 4/30/07
 Page of

Well/Sample Number MW-34-080-125QC Sample ID NAQC Sample Time N/APurge Start Time 13:33Purge Method ded. pump Ded. Pump yesFlow Cell Y / NMin. Purge Volume (gal)/(L) 156 Purge Rate 3 (gpm)/(mLpm)

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
6.96	13:42	26	7.15	8.71	1.09	1.08	18.99	0.5	—	-182	
7.01	13:50	52	7.10	8.71	1.65	0.60	19.48	0.5	—	-169	
7.01	13:59	78	7.09	9.0	0.51	0.48	19.88	0.6	—	-131	
7.27	14:08	104 78	7.07	9.0	0.44	0.57	19.92	0.6	—	-127	
7.29	14:17	130 104	7.06	9.0	0.93	0.37	19.99	0.4	—	-123	
7.29	14:31	156 130	7.10	9.0	0.81	0.44	19.99	0.6	—	-122	
7.29	14:40	156	7.09	9.0	0.63	0.12	19.94	0.6	—	-121	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?			yes	yes	y	y	NA	y	—	y	
Previous Field measurement (4/2/2007)			7.65	10800	0.4	0	20.4	0.6	—	-89	
Are measurements consistent with previous?			lower	lower			NA	y	—	higher	

Sample Time 14:41 Sample Location: pump tubing X well port spigot bailer other

Comments: Purge rate for 1st 3 readings was < 3 gpm, therefore vol. is slightly less; more readings were collected. Shut off 14:27 switch purge containers, restart 14:28

Initial Depth to Water (ft BTOC): 5.44Measure Point: Well TOC Steel CasingWATER LEVEL METER SERIAL NUMBER: PGE-2005-01AField measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc (84.3)

SWH (Standing Water Height) = WD-Initial Depth 78.86

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

One Casing Volume = D*SWH 52.04Three Casing Volumes = 156.14Color: clear, grey, yellow, brown, black, cloudy, greenOdor: none, sulphur, organic, otherSolids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock CIS
 Job Number 354631.MP.02.CI.00
 Field Team 1 Field Conditions Sunny, clear, 90s

Sampling Event 2007-CIS-002
 Date 4/30/07
 Page of

Well/Sample Number CIS-004 mw-34-100

QC Sample ID CIS-096

QC Sample Time 12:29-11:45 A.H.

Purge Start Time 11:58

Purge Method ded. Ded. Pump yes

Flow Cell (Y) N

Min. Purge Volume (gal)/(L) 57 Purge Rate (gpm)/(mLpm) 2

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
6.55	12:03	9.5	7.55	12.1	2.18	2.50	20.17	0.7	—	48	
6.58	12:08	19	7.56	12.5	2.32 2.32 A.H.	2.33	21.08	0.7	—	38	
6.60	12:12	28.5	7.57 A.H.	12.5	2.94	2.25	21.14	0.7	—	38 30 A.H.	
6.60	12:17	38	7.44	12.5	1.30	2.21	21.18	0.7	—	28	
6.60	12:22	47.5	7.44	12.4	1.04	2.18	21.21	0.7	—	24	
6.60	12:27	57	7.44	12.4	0.83	2.11	21.22	0.7	—	22	
			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Parameter Stabilization Criteria											
Did Parameters Stabilize prior to sampling?			Y	Y	Y	Y	NA	Y	Y A.H.	yes	
Previous Field measurement (4/18/2007)			8.08	18100	0.3	0	21.4	0.9		114	
Are measurements consistent with previous?							NA				

Sample Time 12:29 Sample Location: pump tubing ☒ well port ☐ spigot ☐ bailer ☐ other ☐

Comments:

Initial Depth to Water (ft BTOC): 5.68

Measure Point: Well TOC Steel Casing

WATER LEVEL METER SERIAL NUMBER: PGE-2005-01A

Field measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc (117)

SWH (Standing Water Height) = WD-Initial Depth 111.32

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

One Casing Volume = D*SWH 18.92

Three Casing Volumes = 56.8

Color: clear, grey, yellow, brown, black, cloudy, green A.H.

Odor: none, sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Initial DTW / Before Removal		Approx. 5 min After Reinstallation		If Transducer	
Time	Initial DTW	Time	Final DTW	Time of Removal	Time of Reinstallation
<u>11:54</u>	<u>5.68</u>				
Comments: <u> </u>					

Project Name PGE Topock CIS
 Job Number 354631.MP.02.CI.00
 Field Team 1 Field Conditions *Sunny, windy*

Sampling Event 2007-CIS-002
 Date *5-09-07*
 Page 1 of 1

Well/Sample Number *CIS-027 MW-35-135*

QC Sample ID *NA-CIS-035*

QC Sample Time *1145*

Purge Start Time *1046*

Purge Method *Z-RediFlo* Ded. Pump *NO*

Flow Cell *Y1 N*

Min. Purge Volume (gal)/(L) *66.96* Purge Rate (gpm)/(mLpm) *Z*

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	EH/ORP mv	Comments (See description below)
28.20	1051	10	7.46	29.4	0.1	2.23	26.92	1.8	18	+33	
28.23	1056	20	7.42	27.1	0.2	2.18	27.07	1.7	17	+37	
28.23	1101	30	7.44	25.6	0.1	2.19	27.10	1.6	16	+35	
28.23	1106	40	7.46	24.7	0.1	2.17	27.15	1.5	15	+32	
28.23	1111	50	7.47	24.5	0.1	2.16	27.20	1.5	15	+31	
28.23	1116	60	7.47	24.3	0.1	2.15	27.22	1.5	15	+30	
28.23	1121	70	7.48	24.0	0.1	2.15	27.20	1.4	15	+28	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?			YES	YES	YES	YES	NA	YES	YES	YES	
Previous Field measurement (3/8/2007)			5.75	8580	1	0.22	29.9	0.5	NA	218	
Are measurements consistent with previous?			<i>higher</i>	<i>higher</i>	<i>lower</i>	<i>high</i>	NA	<i>high</i>	NA	<i>lower</i>	

Sample Time *1125* Sample Location: *pump tubing X* well port *_____* spigot *_____* bailer *_____* other *_____*

Comments: *_____*

Initial Depth to Water (ft BTOC): *27.36*

Measure Point: *Well TOC* Steel Casing

WATER LEVEL METER SERIAL NUMBER: *12245*

Field measured confirmation of Well Depth (ft btoc): *---*

WD (Well Depth - from database) ft btoc (158.7)

SWH (Standing Water Height) = WD-Initial Depth *131.34*

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

One Casing Volume = D*SWH *22.32*

Three Casing Volumes = *66.96*

Color: *clear*, grey, yellow, brown, black, cloudy, green

Odor: *none*, sulphur, organic, other

Solids: *Trace*, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Initial DTW / Before Removal		If Transducer	
Time	Initial DTW	Time	Final DTW
<i>1034</i>	<i>27.36</i>	<i>11:35</i>	<i>27.49</i>
Comments:			

Time of Removal *1035*

Time of Reinstallation *_____*

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1 Field Conditions Cloudy 85°F

Sampling Event 2007-GMP-125-Q2
 Date 5/1/07
 Page 1 of 1

Well/Sample Number MW-36-070-125QC Sample ID NA

QC Sample Time

Purge Start Time 1229Purge Method peristaltic Ded. Pump NFlow Cell: Y / NMin. Purge Volume (gal)/(L) 9.2 Purge Rate (gpm)/(mLpm) 0.4

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
13.83	1233	1.6	7.65	2.84	3.22	2.45	23.42	0.1	1.9	-151	
13.83	1236	2.8	7.67	3.41	1.41	1.70	23.28	0.2	2.2	-152	
13.84	1239	4.0	7.71	2.98	1.37	0.00	23.29	0.1	2.0	-147	
13.84	1242	5.2	7.72	2.84	2.34	0.65	23.29	0.1	1.8	-147	
13.84	1245	6.4	7.74	2.59	6.94	1.00	23.27	0.1	1.6	-144	
13.84	1248	7.6	7.75	2.57	1.67	0.80	23.36	0.1	1.5	-149	
13.88	1251	8.8	7.72	2.53	0.78	1.68	23.26	0.1	1.5	-144	
			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Parameter Stabilization Criteria											
Did Parameters Stabilize prior to sampling?			Y	Y	Y	Y	NA	Y	Y	Y	
Previous Field measurement (3/7/2007)			7.66	3000	4.81	0.54	26.1	0.1		-128	
Are measurements consistent with previous?			Y	Y	N	Y	NA	Y	Y	Y	

Sample Time 1255 Sample Location: pump tubing ☒ well port ☐ spigot ☐ bailer ☐ other ☐

Comments:

Initial Depth to Water (ft BTOC): 13.47

Measure Point: Well TOC Steel CasingWATER LEVEL METER SERIAL NUMBER: 11881

Field measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc (72.48)SWH (Standing Water Height) = WD-Initial Depth 58.99D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (1 in)One Casing Volume = D*SWH 2.4Three Casing Volumes = 7.2

Color: clear, grey, yellow, brown, black, cloudy, green

Odor: none, sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1 Field Conditions Sunny, high clouds, 70's

Sampling Event 2007-GMP-125-Q2
 Date 5/2/07
 Page 1 of 1

Well/Sample Number MW-36-090-125QC Sample ID MW-93-125

QC Sample Time

N/A H. 6:45Purge Start Time 7.10Purge Method peri Ded. Pump noFlow Cell: Y / NMin. Purge Volume (gal)/(L) 9.7 Purge Rate (gpm)/(mLpm) 0.4

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
14.10	7:14:16	1.6	7.13	25.9	4.09	0.37	22.95	1.5	15	-62	
14.10	7:18:20	3.2	7.23	12.5	1.76	0.72	22.92	0.6	7	-87	
14.12	7:22:24	4.8	7.25	10.2	1.72	1.07	23.23	0.4	4.5	-84	
14.14	7:26:28	6.4	7.14	7.84	2.33	0.22	23.47	0.4	5.1	-55	
14.14	7:30:32	8	7.18	7.88	3.68	0.3	23.53	0.4	5.0	-45	
14.15	7:34:36	9.7	7.15	7.58	1.22	0.00	23.59	0.4	4.7	-35	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?			Y	Y	Y	Y	NA	Y	—	Y	
Previous Field measurement (4/3/2007)			7.3	6970	0.4	2.2	24.28	0.4	—	-17	
Are measurements consistent with previous?			Y	higher	higher	lower	NA	yes	—	higher	

Sample Time 7:36:38 Sample Location: pump tubing X well port _____ spigot _____ bailer _____ other _____

Comments: 2 min delay to fix pump.

Initial Depth to Water (ft BTOC): 13.97

Measure Point: Well TOC Steel Casing

WATER LEVEL METER SERIAL NUMBER: PGE-2005-01B

Field measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc (92.48)

SWH (Standing Water Height) = WD-Initial Depth 78.51

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

One Casing Volume = D*SWH 3.21

Three Casing Volumes = 9.7

Color: clear grey, yellow, brown, black, cloudy, green

Odor: none sulphur, organic, other

Solids: Trace Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Initial DTW / Before Removal		If Transducer	
Time	Initial DTW	Approx. 5 min After Reinstallation	Time of Removal
6:30	13.97	7:51	14.09
Comments:		Time of Reinstallation	7:46

Project Name PGE Topock GMP		Sampling Event 2007-GMP-125-Q2	
Job Number 345631.MP.02.GM		Date 5/2/07	
Field Team 1	Field Conditions sunny, clear, high 70's		
Page _____ of _____			

Well/Sample Number MW-36-100-125	QC Sample ID NA	QC Sample Time N/A
Purge Start Time 7:59 8:00	Purge Method Redi-Flu	Ded. Pump yes
Flow Cell (Y) / N	Min. Purge Volume (gal)/(L) 49	Purge Rate (gpm)/(mLpm) 2

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
16.88	8:04	8	7.11	11.3	2.02	2.01	24.16	0.7	8	-183	very strong sulphuric ^{A.H.} odor
16.90	8:08	16	6.98	16.16	2.36	0.00	24.77	1.0	10	-111	
16.91	8:12	24	6.97	16.4	0.77	0.00	24.79	1.0	10	-91	
16.93	8:16	32	6.96	15.9	0.55	0.00	24.81	1.0	10	-65	
16.92	8:20	40	6.97	15.9	0.40	0.00	24.82	1.0	10	-57	
16.92	8:24	49	6.98	16.1	0.54	0.00	24.83	1.0	10	-51	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?			yes	y	y	y	NA	y	y	y	
Previous Field measurement (4/2/2007)			7.55	16600	0.8	0	25	1		-58	
Are measurements consistent with previous?			lower	y	lower	yes	NA	y		yes	

Sample Time 8:26 Sample Location: pump tubing ☒ well port _____ spigot _____ bailer _____ other _____

Comments: _____

Initial Depth to Water (ft BTOC): 14.29

Field measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc (110.15)

SWH (Standing Water Height) = WD-Initial Depth 95.86

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

One Casing Volume = D*SWH 16.3

Three Casing Volumes = 49

Color (clear, grey, yellow, brown, black, cloudy, green)

Measure Point: Well TOC Steel Casing

WATER LEVEL METER SERIAL NUMBER: PGE-2005-015

Initial DTW / Before Removal		If Transducer	
		N/A	
Time	Initial DTW	Approx. 5 min After Reinstallation	Time of Removal
7:54	14.29	Time	Final DTW
		Time of Reinstallation	

Comments: _____

Odor: none, strong sulphur, organic, other

Solids: (trace) Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1 Field Conditions Sunny

Sampling Event 2007-GMP-125-Q2
 Date 5-03-07
 Page 1 of 1

Well/Sample Number MW-37D-125QC Sample ID NAQC Sample Time NAPurge Start Time 1240Purge Method 2-Red-96 Ded. Pump NOFlow Cell 0 / NMin. Purge Volume (gal)/(L) 100.08 Purge Rate (gpm)/(mLpm) 3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
30.73	1245	15	7.74	16.3	0.4	3.77	29.1	1.0	10	-79	
30.73	1250	30	7.72	16.4	0.1	3.87	29.4	1.0	10	-33	
30.73	1255	45	7.72	16.5	0.1	3.94	29.8	1.0	10	+6	
30.73	1300	60	7.72	16.4	0.2	3.95	29.9	1.0	10	+24	
30.73	1305	75	7.73	16.5	0.1	3.93	30.0	1.0	10	+31	
30.73	1310	90	7.74	16.5	0.2	3.92	30.0	1.0	10	+36	
30.73	1315	105	7.75	16.6	0.1	3.91	30.0	1.0	10	+41	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?			YES	YES	YES	YES	NA	YES	YES	YES	
Previous Field measurement (3/7/2007)			7.67	18000	0.2	1.68	30.07	1.1		109	
Are measurements consistent with previous?			YES	lower	YES	higher	NA	YES	NA	lower	

Sample Time 1320 Sample Location: pump tubing X well port spigot bailer other

Comments: Initial Depth to Water (ft BTOC): 30.43Measure Point: Well 00 Steel CasingWATER LEVEL METER SERIAL NUMBER: 12245Field measured confirmation of Well Depth (ft btoc): —

WD (Well Depth - from database) ft btoc (226.72)

SWH (Standing Water Height) = WD-Initial Depth 196.29

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

One Casing Volume = D*SWH 33.36Three Casing Volumes = 100.08Color: 0, grey, yellow, brown, black, cloudy, greenOdor: 0, sulphur, organic, otherSolids: 0, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Initial DTW / Before Removal		If Transducer	
Time	Initial DTW	Time	Final DTW
<u>1230</u>	<u>30.43</u>		
Comments:			

Project Name PGE Topock CIS
 Job Number 354631.MP.02.CI.00
 Field Team 1 Field Conditions _____

Sampling Event 2007-CIS-002
 Date 5/3/07
 Page _____ of _____

Well/Sample Number CIS-017 MW-38D

QC Sample ID NA

QC Sample Time _____

Purge Start Time 11:33

Purge Method 2" Gro Ded. Pump No

Flow Cell: Y / N

Min. Purge Volume (gal)/(L) 62 Purge Rate (gpm)/(mLpm) 3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity μ S/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity %	TDS g/L	EH/ORP mv	Comments (See description below)
70.71	11:37	12	7.72	19955	1.4	0.09	29.64	10.76	11.90	108.3	
70.40	11:41	24	7.79	23554	0.9	0.07	30.14	12.90	14.08	105.1	
70.10	11:45	36	7.81	23943	0.8	0.07	30.22	12.99	14.15	100.6	
70.71	11:49	48	7.81	23926	0.9	0.07	30.24	12.98	14.14	98.7	
70.59	11:53	60	7.81	23918	0.8	0.07	30.25	12.97	14.13	97.5	
70.69	11:57	72	7.82	23900	0.4	0.07	30.27	12.95	14.11	96.1	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?			Y	Y	Y	Y	NA	Y	Y	Y	
Previous Field measurement (10/12/2006)			7.69	26300	1.34	1.25	30.83	1.62		-31	
Are measurements consistent with previous?							NA				

Sample Time 1200 Sample Location: pump tubing ☒ well port _____ spigot _____ bailer _____ other _____

Comments: _____

Initial Depth to Water (ft BTOW): 69.97

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

WD (Well Depth - from database) ft btoc (190.85)

SWH (Standing Water Height) = WD-Initial Depth 120.88

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

One Casing Volume = D*SWH 20.55

Three Casing Volumes = 61.6

Color: clear grey, yellow, brown, black, cloudy, green

Measure Point: Well TBC Steel Casing WATER LEVEL METER SERIAL NUMBER: _____

Initial DTW / Before Removal		If Transducer	
Time	Initial DTW	Approx. 5 min After Reinstallation	Time of Removal
11:30	69.97	Time	Final DTW
			70.23
Comments:			

Odor: none sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1 Field Conditions sunny, clear, 70s

Sampling Event 2007-GMP-125-Q2
 Date 5/3/07
 Page 1 of 1

Well/Sample Number MW-39-040-125

QC Sample ID NA

QC Sample Time N/A

Purge Start Time 6:56 7:14

Purge Method Peri Ded. Pump no

Flow Cell Y N

Min. Purge Volume (gal)/(L) 3.7 Purge Rate (gpm)/(mLpm) .3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
12.06	7:16		7.07	23.5		2.47	25.33	1.5	15	-180	
12.07	7:18	0.6	7.10	23.7	17.5	2.48	25.19	1.5	15	-186	
12.08	7:18	1.2	7.11	23.9	8.9	2.27	25.43	1.5	15	-185	
12.09	7:20	1.8	7.13	23.9	4.1	2.23	25.44	1.5	15	-187	
12.09	7:22	2.4	7.16	24.1	2.6	2.16	25.40	1.4	15	-189	
12.09	7:24	3.0	7.17	23.2	2.4	2.14	25.43	1.4	15	-191	
12.09	7:26	3.7	7.20	23.2	2.4	2.00	25.46	1.5	15	-194	
12.09	7:28	4.0	7.21	23.4	1.9	2.01	25.49	1.4	15	-195	
			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Parameter Stabilization Criteria											
Did Parameters Stabilize prior to sampling?			Y	Y	Y	Y	NA			Y	
Previous Field measurement (3/5/2007)			5.69	8770	2		28.7	0.5		-55	
Are measurements consistent with previous?			higher	higher	Y		NA			lower	

Sample Time 7:28 7:29 Sample Location: pump tubing X well port spigot bailer other
 Comments: Decom WL meter. Had to stop, missing turbidity bottle. Restart 7:14 (Had calibration bottle in turbidity meter)

Initial Depth to Water (ft BTOC): 11.83

Measure Point: Well TOC Steel Casing

WATER LEVEL METER SERIAL NUMBER: PGE-2005-01B

Field measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc (42.1)

SWH (Standing Water Height) = WD-Initial Depth 30.27

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

One Casing Volume = D*SWH 1.24

Three Casing Volumes = 3.7

Color: clear grey (yellow, brown, black, cloudy, green)

Odor: none, sulphur, organic, other

Solids: Trace Small Qu, Med Qu, Large Qu, Particulate Silt, Sand

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1

Field Conditions

low
 sunny, clear, 80s

Sampling Event 2007-GMP-125-Q2

Date 9/3/07

Page 1 of 1

Well/Sample Number MW-39-070-125

QC Sample ID NA

QC Sample Time N/A

Purge Start Time 7:41

Purge Method peri. Ded. Pump no

Flow Cell (Y) N

Min. Purge Volume (gal)(L) 7.3 Purge Rate (gpm)(mLpm) 0.3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
12.74	7:43	1.2	7.24	11.9	3.0	2.78	25.48	0.7	7	-88	
12.76	7:45	2.4	7.07	13.4	2.3	2.37	25.43	0.8	8	-86	
12.79	7:47	3.6	6.95	20.2	1.3	2.20	25.43	1.2	13	-56	
12.78	7:49	4.8	7.00	19.7	0.5	2.07	25.47	1.2	12	-45	
12.78	7:51	6.0	7.06	19.1	0.3	2.03	25.45	1.2	11	-37	
12.79	7:53	7.3	7.08	18.6	0.9	2.07	25.46	1.0	11	-29	
12.79	8:05	8.0	7.09	16.7	0.4	2.14	25.49	1.0	10	-24	
12.80	8:05	7.3	7.08	16.6	0.6	2.22	25.49	1.0	11	-19	
12.79	8:07	8.0	7.12	16.7	0.6	2.08	25.50	1.0	10	-18	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?			Y	Y	Y	Y	NA			Y	
Previous Field measurement (3/5/2007)			6.74	8310	3		28.3	0.5		219	
Are measurements consistent with previous?			higher	higher	lower		NA	Y		lower	

Sample Time 7:55

Sample Location:

pump tubing X

well port

spigot

bailer

other

Comments: Decon'd w/ meter

Initial Depth to Water (ft BTOC): 12.66

Measure Point: Well TOC Steel Casing

WATER LEVEL METER SERIAL NUMBER: PGE-2005-01B

Field measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc (71.69)

SWH (Standing Water Height) = WD-Initial Depth 59.03

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

One Casing Volume = D*SWH 2.42

Three Casing Volumes = 7.3

Color: clear, grey, yellow, brown, black, cloudy, green

Odor: none, sulphur, organic, other

Solids: trace Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Initial DTW / Before Removal		If Transducer	
Time	Initial DTW	Time	Final DTW
7:39	12.66	8:16	12.74
Comments:		Time of Removal	7:38
		Time of Reinstallation	8:11

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1

Sampling Event 2007-GMP-125-Q2

Date 5/3/07
 Page 1 of 1

Field Conditions sunny, clear, mid 80s

Well/Sample Number MW-39-080-125

QC Sample ID NA

QC Sample Time N/A

Purge Start Time 8:21

Purge Method peri Ded. Pump No

Flow Cell ☒ Y ☐ N

Min. Purge Volume (gal)/(L) 8.6 Purge Rate (gpm)/(mLpm) 0.3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
12.82	8:26	1.5	6.83	19.6	1.4	2.36	25.51	1.2	12	62	
12.86	8:31	2.9	6.85	23.5	0.7	2.02	25.49	1.4	15	53	
12.87	8:35	4.3	6.80	26.2	0.7	2.22	25.55	1.6	16	53	
12.89	8:40	5.8	6.79	24.7	2.1	1.98	25.55	1.5	15	59	
12.90	8:45	7.2	6.82	25.5	2.5	2.03	25.57	1.6	16	57	
12.90	8:50	8.6	6.83	25.6	0.7	1.91	25.59	1.9	19	57	* in between
12.91	8:50	8.6	6.84	25.2	1.2	2.00	25.52	1.5	16	58	
12.91	8:52	9.2	6.84	24.3	0.9	1.96	25.55	1.6	16	58	
12.92	8:53	9.5	6.84	25.3	0.5	1.98	25.56	1.6	16	59	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?			Y	Y	Y	Y	NA			Y	
Previous Field measurement (4/4/2007)			7.29	13400	0.2	0	25.7	0.8		157	
Are measurements consistent with previous?			lower	higher	Y	higher	NA	higher		lower	

Sample Time 8:55 Sample Location: pump tubing ☒ well port ☐ spigot ☐ bailer ☐ other ☐

Comments:

Initial Depth to Water (ft BTOC): 12.71

Field measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc (82.55)

SWH (Standing Water Height) = WD-Initial Depth 69.84

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

One Casing Volume = D*SWH 2.86

Three Casing Volumes = 8.6

Color: ☒ clear, ☐ grey, ☐ yellow, ☐ brown, ☐ black, ☐ cloudy, ☐ green

Measure Point: Well TOC Steel Casing

WATER LEVEL METER SERIAL NUMBER: PGE-2005-01B

Initial DTW / Before Removal		If Transducer	
Time	Initial DTW	Time	Final DTW
8:17	12.71	9:03	12.89
Comments:		Time of Removal	8:18
		Time of Reinstallation	8:58

Odor: ☒ none, ☐ sulphur, ☐ organic, ☐ otherSolids: ☒ Small Qu, ☐ Med Qu, ☐ Large Qu, ☐ Particulate, ☐ Silt, ☐ Sand

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1

Sampling Event 2007-GMP-125-Q2
 Date 5/3/07
 Page 1 of 1

Field Conditions sunny, clear, high 90s

Well/Sample Number MW-39-100-125

QC Sample ID NA

QC Sample Time NA

Purge Start Time 9:16

Purge Method redi-fl0 Ded. Pump NO

Flow Cell (Y) / N

Min. Purge Volume (gal)(L) 53.4 Purge Rate (gpm)(mLpm) 2

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
14.37	9:18	9	7.04	83.7	1.1	2.22	26.15	4.0	4.0	99	
missed	9:25	18	6.93	48	missed	2.08	26.80	3.5	33	104	
13.78	9:27	31	6.93	80.9	0.8	1.89	26.54	4.0	46	102	
13.77	9:34	36	6.95	82.6	1.1	1.71	26.54	4.0	50	99	
13.78	9:38	45	6.95	72.7	0.3	1.68	26.64	4.0	45	99	
13.78	9:43	54	6.91	53.4	0.7	1.88	26.65	3.3	31	104	
13.78	9:47	58	6.92	53.9	0.6	1.76	26.67	3.6	33	103	
13.79	9:49	62	6.92	52.5	0.5	1.93	26.67	3.5	32	102	
			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Parameter Stabilization Criteria											
Did Parameters Stabilize prior to sampling?			Y	Y	Y	Y	NA			Y	
Previous Field measurement (4/4/2007)			7.02	25000	0.8	2.73	26.22	1.5		170	
Are measurements consistent with previous?			lower	higher	Y	lower	NA	higher		lower	

Sample Time 9:51 Sample Location: pump tubing well port spigot bailer other

Comments: This well was marked as being DEDICATED, but, IT IS NOT! Shut off @ 9:22 to fix leak that was contained. (Horis in bucket). Reas. Restart 9:24. Took xtra parameters because of conductivity.

Took Equip. Blank EB-125-07 after this well @

Initial Depth to Water (ft BTOC): 13.10

Measure Point: Well TOC Steel Casing

WATER LEVEL METER SERIAL NUMBER: PGE-2005-01B

Field measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc (117.71)

SWH (Standing Water Height) = WD-Initial Depth 104.61

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

One Casing Volume = D*SWH 17.8

Three Casing Volumes = 53.4

Color: clear, grey, yellow, brown, black, cloudy green

Odor: none, sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock CIS
 Job Number 354631.MP.02.CI.00
 Field Team 1 Field Conditions swampy, windy

Sampling Event 2007-CIS-002
 Date 5-04-07
 Page 1 of 1

Well/Sample Number CIS-005 MW-400

QC Sample ID NA

QC Sample Time NA

Purge Start Time 0930

Purge Method Z-Red, Flo Ded. Pump NO

Flow Cell Y / N

Min. Purge Volume (gal)/(L) 79.44 Purge Rate (gpm)/(mLpm) 3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
111.38	0934	12	7.35	52.8	0.2	1.90	30.67	3.3	29	+73	
111.39	0938	24	7.37	41.4	0.1	1.93	31.04	2.6	25	+53	
111.40	0942	36	7.40	35.4	0.1	1.95	31.38	2.2	21	+37	
111.40	0946	48	7.40	35.4	0.2	1.97	31.43	2.3	22	+30	
111.40	0950	60	7.40	37.6	0.1	1.98	31.45	2.4	23	+30	
111.40	0954	72	7.39	37.8	0.1	1.99	31.48	2.4	23	+25	
111.40	0958	84	7.39	38.0	0.4	1.99	31.48	2.5	23	+21	
			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Parameter Stabilization Criteria											
Did Parameters Stabilize prior to sampling?			YES	YES	YES	YES	NA	YES	YES	YES	
Previous Field measurement (3/9/2007)			7.42	18600	0.5	0.62	31.68	1.1		54	
Are measurements consistent with previous?			YES	higher	YES	higher	NA	higher	NA	lower	

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

Comments: _____

Initial Depth to Water (ft BTOC): 110.18

Measure Point: Well TOC Steel Casing

WATER LEVEL METER SERIAL NUMBER: 12245

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

WD (Well Depth - from database) ft btoc (266)

SWH (Standing Water Height) = WD-Initial Depth 155.82

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

One Casing Volume = D*SWH 26.48

Three Casing Volumes = 79.44

Color: clear, grey, yellow, brown, black, cloudy, green

Odor: none, sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Initial DTW / Before Removal		If Transducer	
		Approx. 5 min After Reinstallation	Time of Removal
Time	Initial DTW	Time	Final DTW
<u>0919</u>	<u>10.18</u>		
Comments:			

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1 Field Conditions Sunny

Sampling Event 2007-GMP-125-Q2
 Date 5/1/07
 Page 1 of 1

Well/Sample Number MW-44-115-125 MW-44-055-125

QC Sample ID NA

QC Sample Time

Purge Start Time 1045

Purge Method Ded. Pump Temp RF2

Flow Cell: Y / N

Min. Purge Volume (gal)/(L) 22.8 Purge Rate (gpm)/(mLpm) 2

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
8.64	1045	6	7.26	54.5	226	0.00	24.74	3.1	28	-7	
8.67	1051	12	7.14	19.5	1.13	1.27	24.71	1.2	12	-135	
8.69	1054	18	7.16	14.5	0.52	1.55	24.76	0.8	9	-139	
8.70	1057	24	7.16	14.6	0.75	1.57	24.77	0.9	10	-139	
8.69	1100	30	7.16	14.9	0.69	1.49	24.79	0.9	9	-139	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?							NA				
Previous Field measurement (4/2/2007)			8.31	18100	0.8	0	24	1.1		-2	
Are measurements consistent with previous?							NA				

Sample Time 1102 Sample Location: pump tubing ☒ well port ☐ spigot ☐ bailer ☐ other ☐

Comments: _____

Initial Depth to Water (ft BTOC): 8.07

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

Field measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc 113.5 55

SWH (Standing Water Height) = WD-Initial Depth

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

One Casing Volume = D*SWH 7.6

Three Casing Volumes = 22.8

Color: clear, grey, yellow, brown, black, cloudy, green

Odor: none, sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Initial DTW / Before Removal		Approx. 5 min After Reinstallation		If Transducer	
Time	Initial DTW	Time	Final DTW	Time of Removal	Time of Reinstallation
1040	8.07	1115	8.22	1040	1110
Comments:					

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1 Field Conditions

Sampling Event 2007-GMP-125-Q2
 Date 5/10/07
 Page 1 of 1

Well/Sample Number MW-44-070-125 MW-42-063-723

QC Sample ID NA

QC Sample Time

Purge Start Time 0935

Purge Method Ded-Pump Temp R62

Flow Cell: Y / N

Min. Purge Volume (gal)/(L) 27.6 Purge Rate (gpm)/(mLpm) 2

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
8.13	0958	6	6.92	20.4	1.15	1.18	24.55	1.2	13	-21	
8.14	091001	12	6.86	17.6	0.96	5.36	24.53	1.0	11	-79	
8.15	1001	19	6.86	16.9	0.72	5.79	24.49	2.0	10	-71	
8.17	1007	24	6.87	15.8	0.62	11.84	24.52	0.9	10	-64	
8.17	1010	30	6.87	15.7	1.70	11.36	24.52	0.9	10	-62	
8.18	1013	36	6.87	15.8	1.47	7.70	24.54	0.9	10	-60	* DO may be affected due to recent access
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?							NA				
Previous Field measurement (3/9/2007)			7	8700	1	0	25.1	0.5		-144	
Are measurements consistent with previous?							NA				

Sample Time 1015 Sample Location: pump tubing X well port spigot bailer other

Comments:

Initial Depth to Water (ft BTOC): 7.52

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

Field measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc (70)-65

SWH (Standing Water Height) = WD-Initial Depth

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

One Casing Volume = D*SWH 9.2

Three Casing Volumes = 27.6

Color: clear, grey, yellow, brown, black, cloudy, green

Initial DTW / Before Removal		If Transducer			
		Approx. 5 min After Reinstallation		Time of Removal	0938
Time	Initial DTW	Time	Final DTW	Time of Reinstallation	1020
0940	7.92	1026	7.65		
Comments:					

Odor: none, sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1

Sampling Event 2007-GMP-125-Q2

Date 4/30/2007

Page of

Field Conditions sunny, clear skies, 70's

Well/Sample Number MW-43-075-125

QC Sample ID NA

QC Sample Time

Purge Start Time 9:44

Purge Method ded. pump Ded. Pump yes

Flow Cell Y / N

Min. Purge Volume (gal)/(L) 36.2 Purge Rate (gpm)/(mLpm) 2

A.H.
-10:05 N/A

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
6.54	9:48	6	7.21	26.8	0.98	0.00	20.9	1.6	16	-199	
6.57	9:52	12	7.59	12.2	0.36	0.00	21.2	0.7	8	-209	
6.58	9:55	18	7.68	12.1	0.16	0.00	21.3	0.7	8	-211	
6.59	9:58	24	7.72	12.0	0.11	0.00	21.3	0.7	7	-212	
6.60	10:01	30	7.77	12.1	0.14	0.00	21.3	0.7	7	-213	
6.61	10:04	36	7.75	12.0	0.36	0.00	21.3	0.7	7	-213	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?			yes	yes	yes	yes	NA	yes	yes	yes	
Previous Field measurement (3/6/2007)			7.89		0	0	24.1	1.6		-151	
Are measurements consistent with previous?							NA				

Sample Time 10:05 Sample Location:

pump tubing X

well port

spigot

bailer

other

Comments: pump stopped 9:47 restart ; DO parameter not working it looks like.

Initial Depth to Water (ft BTOC): 6.11

Field measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc (77)

SWH (Standing Water Height) = WD-Initial Depth 70.89

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

One Casing Volume = D*SWH 12.05

Three Casing Volumes = 36.2

Color: clear, grey, yellow, brown, black, cloudy, green

Measure Point: Well TOC Steel Casing

WATER LEVEL METER SERIAL NUMBER: PGE-2005-01A

Initial DTW / Before Removal		If Transducer	
Time	Initial DTW	Approx. 5 min After Reinstallation	Time of Removal
9:44ish	6.11	Time	Final DTW
Comments: N/A		Time of Reinstallation	

Odor: none, sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1 Field Conditions sunny, clear

Sampling Event 2007-GMP-125-Q2
 Date 4/30/2007
 Page of

Well/Sample Number MW-43-090-125QC Sample ID NA

QC Sample Time

Purge Start Time 1047Purge Method temp. RF-2

Ded. Pump

yes not workingFlow Cell (Y) NMin. Purge Volume (gal)/(L) 48.8Purge Rate (gpm)/(mLpm) 211:13 A.H. N/A

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
7.73	10:51	8	6.68	13.2	1.04	2.25	21.07	0.8	—	-130	
7.70	10:55	16	6.64	14.2	1.71	1.92	21.20	0.8	—	-132	
7.71	10:59	24	6.65	14.2	1.62 ^{1.43}	1.61	21.24	0.8	—	-140	
7.71	11:03	32	6.65	14.1	1.30	1.53	21.24	0.8	—	-140	
7.73	11:07	40	6.65	14.1	2.0	1.46	21.24	0.8	—	-147	
7.73	11:12	49	6.65	14.0	0.83	1.42	21.23	0.8	—	-150	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?			yes	yes	yes	yes	NA	yes	—	yes	
Previous Field measurement (3/6/2007)			7.2	37300	0	0	24.4	2.4	—	-97	
Are measurements consistent with previous?							NA				

Sample Time 11:13 Sample Location: pump tubing X well port spigot bailer other

Comments: Pump not working. Installed temp pump @ ~20' bgs. Switched HORIBA: 07024 new serial #. New meter does not have TDS showing.

Initial Depth to Water (ft BTOC): 6.29Measure Point: Well TOC Steel CasingWATER LEVEL METER SERIAL NUMBER: PGE-2008-01AField measured confirmation of Well Depth (ft btoc): WD (Well Depth - from database) ft btoc (102)SWH (Standing Water Height) = WD-Initial Depth 95.71D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)One Casing Volume = D*SWH 16.27Three Casing Volumes = 48.8Color: (clear) grey, yellow, brown, black, cloudy, greenOdor: (none) sulphur, organic, otherSolids: (Trace) Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Initial DTW / Before Removal		Approx. 5 min After Reinstallation		If Transducer	
Time	Initial DTW	Time ^{Art}	Final DTW	Time of Removal	Time of Reinstallation
<u>0930</u>	<u>6.29</u>	<u>11:28</u>	<u>7</u>	<u>1030</u>	<u>11:20</u>
Comments: <u>N/A</u>					

Initial Depth to Water (ft BTOC): 15.98
 Field measured confirmation of Well Depth (ft btoc): 72.49
 D (Well Depth - from database) ft bloc unknown
 W/H (Standing Water Height) = WD-Initial Depth 56.51
 Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 2"
 Casing Volume = D*SWH 9.6
 Free Casing Volumes = 28.8

Color: clear, grey, yellow, brown, black, cloudy, green

Measure Point: (Well TOC) Steel Casing

WATER LEVEL METER SERIAL NUMBER: P6/F-2005-01B

Initial DTW / Before Removal		If Transducer			
		Approx. 5 min After Reinstallation		Time of Removal <u>10:51</u>	
Time	Initial DTW	Time	Final DTW	Time of Reinstallation <u>11:24</u>	
<u>10:50</u>	<u>15.98</u>	<u>11:29</u>	<u>16.13</u>		
Comments:					

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP

Sampling Event

Job Number

Date 5/4/07

Field Team

Field Conditions

Page 1 of 1Well/Sample Number MW 44-115-125

QC Sample ID

QC Sample Time

Purge Start Time 1100Purge Method 3WVDed. Pump yesFlow Cell: Y NMin. Purge Volume (gal)/(L) 51 galPurge Rate (gpm)/(mLpm) 3 gal

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
18.01	1103	9	8.04	13721	1.0	0.52	21.77	7.75	8.125	-53	
17.99	1106	18	7.80	13772	0.0	0.34	22.55	7.77	8.953	-45	
17.98	1109	27	7.78	13707	1.0	0.31	23.43	7.91	8.904	-47	
18.01	1112	36	7.74	13444	0.0	0.28	23.62	7.75	8.734	-49	
18.03	1115	45	7.74	13391	0.0	0.26	23.64	7.72	8.702	-52	
18.01	1118	54	7.73	13366	0.0	0.22	23.64	7.71	8.670	-63	Le 5/4/07
16.41	1124									-61	
			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when > 10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Parameter Stabilization Criteria											
Did Parameters Stabilize prior to sampling?							NA				
Are measurements consistent with previous?							NA				

Sample Time 1120 Sample Location: pump tubing X well port _____ spigot _____ bailer _____ other _____

Comments:

Initial Depth to Water (ft BTOC): 16.31Field measured confirmation of Well Depth (ft btoc): 114.8

WD (Well Depth - from database) ft btoc

SWH (Standing Water Height) = WD-Initial Depth 100D (Volume as per diameter) 2" = 0.17, 4" = 0.66, 1" = 0.041 0.17One Casing Volume = D*SWH 17Three Casing Volumes = 51

Color: clear, grey, yellow, brown, black, cloudy, green

Measure Point: Well TOC

Steel Casing

WATER LEVEL METER SERIAL NUMBER: _____

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal
Time	Initial DTW	Time	Final DTW	Time of Reinstallation
Comments:				

Odor: none, sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock CIS
 Job Number 354631.MP.02.CI.00
 Field Team 1

Sampling Event 2007-CIS-002
 Date 5/3/07
 Page 1 of 1

Field Conditions sunny, clear, 100%

Well/Sample Number CIS-013 MW-44-125

QC Sample ID CIS-087

Purge Start Time 11:47

QC Sample Time 7:45

Purge Method Redi-Flow Ded. Pump No

Flow Cell (Y) N

Min. Purge Volume (gal)/(L) 51.2 Purge Rate (gpm)/(mLpm) 1

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity %	TDS g/L	EH/ORP mv	Comments (See description below)
26.20	11:50	9.5	7.14	17.8	41.2	2.45	22.54	1.1	11	10	
26.84	12:05	19	7.24	14.7	10.5	2.20	23.07	0.9	9	-51	
26.86	12:15	28.5	7.29	14.7	—	2.08	23.82	0.9	9	-64	
26.75	12:24	30	7.37	17.6	5.2	2.01	24.06	1.1	11	-62	
28.80	12:34	47.5	7.37	21.2	3.3	2.03	24.09	1.3	14	-49	
29.07	12:44	51.252	7.46	23.8	2.6	1.88	24.32	1.5	15	-68	
29.00	12:54	57.2	7.50	24.8	1.5	1.97	24.44	1.5	15	-75	
28.80	12:58		7.51	25.0	0.8	1.91	24.54	1.5	15	-76	
28.86	12:58		7.51	25.0	0.8	1.91	24.44	1.5	15	-76	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?			Y	Y	Y	Y	NA			Y	
Previous Field measurement (4/3/2007)			7.71	15700	0.7	2.11	24.14	0.9		-118	
Are measurements consistent with previous?			lower	higher	Y	Y	NA	higher		higher	

Sample Time 12:46 Sample Location: pump tubing X well port spigot bailer other

Comments: @ about 12:30 check flow rate slowed; increased pump power to speed up again. May have A.H. slowed again, to about .5 gal. per min.

Initial Depth to Water (ft BTOC): 16.63

Field measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc (128.8)

SWH (Standing Water Height) = WD-Initial Depth 112.17

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

One Casing Volume = D*SWH 19

Three Casing Volumes = 57.2

Color: clear grey, yellow, brown, black, cloudy, green

Measure Point: Well TOC Steel Casing

WATER LEVEL METER SERIAL NUMBER: PGE-2005-018

Initial DTW / Before Removal		If Transducer	
Time	Initial DTW	Approx. 5 min After Reinstallation	Time of Removal
11:33	16.63	13:24	18.19
Comments:		Time of Reinstallation	11:40

Odor: none sulphur, organic, other

Solids: Trace Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Topock Sampling Log

Project Name PGE Topock CIS
 Job Number 354631.MP.02.CI.00
 Field Team 1 2

Sampling Event 2007-CIS-002
 Date 5/4/07
 Page of

Field Conditions sunny, clear, high 80s

Well/Sample Number CIS-009 MW-45-095A

QC Sample ID NA

QC Sample Time N/A

Purge Start Time 10:20

Purge Method Redi-flo

Ded. Pump No

Flow Cell Y N

Min. Purge Volume (gal)/(L) 40.1

Purge Rate (gpm)(mLpm) 2

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
16.22	10:24	16.7	8.06	7127	4.0	5.60	19.34	4.15	4.791	-72.9	
16.27	10:29	2013.4	7.95	10516	1.6	0.64	20.81	5.96	6.827	-80.8	
16.27	10:31	3020.1	7.96	10488	1.0	0.47	20.81	5.95	6.813	-83.2	
16.27	10:34	26.8	8.11	10460	0.8	0.41	20.79	5.93	6.796	-89.0	
16.27	10:37	33.5	7.91	10437	1.3	0.35	20.79	5.96	6.774	-83.4	
16.26	10:41	40.2	7.96	10378	0.7	0.32	20.78	5.88	6.741	-86.2	
16.26	10:43	44	7.81	10337	0.5	0.30	20.76	5.85	6.716	-83.6	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?			Y	Y	Y	Y	NA	Y	Y	Y	
Previous Field measurement ()			Y	Y	Y	Y	NA	Y	Y	Y	
Are measurements consistent with previous?							NA				

Sample Time 10:45 Sample Location: pump tubing X

well port spigot bailer other

Comments: Pump set @ ≈ 30' bgs.

Initial Depth to Water (ft BTOC): 15.25

Measure Point: Well TOC Steel Casing

WATER LEVEL METER SERIAL NUMBER: PGE-2005-01B

Field measured confirmation of Well Depth (ft btoc): 93.90

WD (Well Depth - from database) ft btoc: unknown

SWH (Standing Water Height) = WD-Initial Depth 78.65

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

One Casing Volume = D*SWH 13.37

Three Casing Volumes = 40.1

Color: clear, grey, yellow, brown, black, cloudy, green

Odor: none, sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Initial DTW / Before Removal		If Transducer	
Time	Initial DTW	Time	Final DTW
10:08	15.25	11:02	15.39
Comments:		Time of Removal <u>10:08</u> Time of Reinstallation <u>10:57</u>	

Project Name PGE Topock CIS
 Job Number 354631.MP.02.C1.00
 Field Team 1

Sampling Event 2007-CIS-002

Date 5/4/07

Page 1 of 1

Field Conditions sunny, clear, 90s - 100s

Well/Sample Number CIS-022 MW-46-175

QC Sample ID NA

QC Sample Time

N/A

Purge Start Time 11:35

Purge Method redi-flo

Ded. Pump DEATH YES.

Flow Cell: Y / N

Min. Purge Volume (gal)(L) 79.2

Purge Rate (gpm)(mLpm) 2 gpm

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
31.05	11:41	13.2	8.99	16516	1.4	0.51	22.57	9.70	10.73	-136.4	
31.03	11:48	26.4	8.95	16464	0.8	0.29	24.68	9.65	10.70	-132.2	
31.02	11:55	39.6	8.96	16480	0.5	0.23	24.81	9.66	10.71	-133.5	
31.01	12:01	52.8	8.97	16508	0.6	0.20	24.80	9.67	10.73	-135.7	
31.06	12:08	66	8.96	16518	1.4	0.18	24.84	9.68	10.74	-137.6	
31.08	12:15	79.2	8.97	16514	0.6	0.16	24.92	9.68	10.73	-137.4	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?			Y	Y	Y	Y	NA	Y	Y	Y	
Previous Field measurement (4/3/2007)			8.34	20700	0.5	2.01	24.7	1.2		-135	
Are measurements consistent with previous?			higher	lower	Y	lower	NA	higher		Y	

Sample Time 12:17

Sample Location:

pump tubing

well port

spigot

bailer

other

Comments: Setup causes transducer to be out of well a bit (started at ~ 11:30.) This pump was marked as temp. pump, but it is DEDICATED! Transducer returned to proper position @ ~ 12:25. WL meter high pressure decon.'d before use.

Initial Depth to Water (ft BTOC): 26.58

Measure Point: Well TOC

Steel Casing

WATER LEVEL METER SERIAL NUMBER: PGE-2005-01B

Field measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc (181.8)

SWH (Standing Water Height) = WD-Initial Depth 155.22

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

One Casing Volume = D*SWH 26.4

Three Casing Volumes = 79.2

Color: clear grey, yellow, brown, black, cloudy, green

Odor: none sulphur, organic, other

Solids: Trace Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Initial DTW / Before Removal		If Transducer	
Time	Initial DTW	Approx. 5 min After Reinstallation	Time of Removal
11:27	26.58	Time	Final DTW
Comments:		Time of Reinstallation	

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1 Field Conditions _____

Sampling Event 2007-GMP-125-Q2
 Date 5/4/07
 Page 1 of 1

Well/Sample Number MW-46-205-125QC Sample ID NAQC Sample Time NAPurge Start Time 1200Purge Method 3WVDed. Pump noFlow Cell Y NMin. Purge Volume (gal)/(L) 100Purge Rate (gpm)/(mLpm) 3 gpm

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
33.30	1205	15	8.20	20288	0.0	0.20	21.62	12.31	13.19	-109	
33.36	1210	30	8.20	20298	0.0	0.14	24.28	12.12	13.19	-103	
33.57	1215	45	8.20	20310	1.0	0.14	25.29	12.11	13.20	-109	
33.12	1220	60	8.18	20329	0.0	0.18	25.50	12.13	13.20	-117	
33.77	1225	75	8.20	20326	2.0	0.14	25.02	12.12	13.21	-122	
33.77	1230	90	8.21	20345	0.0	0.13	25.35	12.14	13.23	-128	
	1233	100	8.20	20373	0.0	0.13	25.62	12.15	13.24	-131	
33.80	1235	105	8.20	20373	0.0	0.13	↓	12.15	13.24	-131	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?							NA				
Previous Field measurement (3/8/2007)			6.42	18100	0	0	28.1	1.1		159	
Are measurements consistent with previous?							NA				

Sample Time 1235 Sample Location: _____

Comments: Equipment blank taken before purging this well, after MW-44-115 and MW-28. EB-125-04

Initial Depth to Water (ft BTOC): 27.19Field measured confirmation of Well Depth (ft btoc): 224

WD (Well Depth - from database) ft btoc (224.67)

SWH (Standing Water Height) = WD-Initial Depth 197

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

One Casing Volume = D*SWH 33.49Three Casing Volumes = 100.5

Color: clear, grey, yellow, brown, black, cloudy, green

Measure Point: Well TOC Steel Casing

WATER LEVEL METER SERIAL NUMBER: _____

Initial DTW / Before Removal		If Transducer	
Time	Initial DTW	Approx. 5 min After Reinstallation	Time of Removal
1153	27.19	1245	1155
		27.21	1240
Comments:			

Odor: none, sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1

Field Conditions Sunny, Slight breeze

Sampling Event 2007-GMP-125-Q2

Date 5/4/07

Page 1 of 1

Well/Sample Number MW-47-115-125

QC Sample ID NA

QC Sample Time

Purge Start Time 0836

Purge Method Upflow Red Flo Ded. Pump

Flow Cell N

Min. Purge Volume (gal)/(L) 45 gal Purge Rate (gpm)/(mLpm) 1.5 gpm

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
28.60	0840	6	7.52	13189	1.5	0.22	27.20	7.24	8.23	142.2	
28.62	0844	12	7.56	13318	0.4	0.11	27.70	7.24	8.23	139.0	
28.62	0848	18	7.61	13560	0.5	0.21	27.90	7.35	8.36	135.7	
28.64	0852	24	7.63	13604	0.8	0.19	28.01	7.36	8.36	132.8	
28.64	0856	30	7.64	13712	0.7	0.22	28.13	7.40	8.41	130.7	
28.64	0900	36	7.64	13772	0.7	0.21	28.22	7.42	8.43	128.5	
28.66	0904	42	7.64	13775	0.5	0.20	28.18	7.43	8.43	126.3	
28.66	0908	48	7.64	13776	0.2	0.20	28.18	7.43	8.44	125.5	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?			✓	✓	✓	✓	NA	✓	✓	✓	
Previous Field measurement (3/6/2007)			7.61		0.37	0.33	28.7			-34	
Are measurements consistent with previous?			✓	✓	✓	✓	NA			N	

Sample Time 0910 Sample Location: pump tubing ☒ well port ☐ spigot ☐ bailer ☐ other ☐

Comments:

Initial Depth to Water (ft BTOC): 27.03

Field measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc (115)

SWH (Standing Water Height) = WD-Initial Depth 87.37

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

One Casing Volume = D*SWH 14.9

Three Casing Volumes = 45

Color: clear grey, yellow, brown, black, cloudy, green

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

Initial DTW / Before Removal		If Transducer			
		Approx. 5 min After Reinstallation		Time of Removal	
Time	Initial DTW	Time	Final DTW	Time of Reinstallation	
0829	27.03	0919	27.05	0829	
				0914	
Comments:					

Odor: none sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock CIS
 Job Number 354631.MP.02.C1.00
 Field Team 1 Field Conditions

Sampling Event 2007-CIS-002

Date 5/4/07

Page 1 of 1

Well/Sample Number CIS-006 MW-47-055

QC Sample ID

NA

QC Sample Time

Purge Start Time 0755

Purge Method Mobile Red-Hot Ded. Pump

Flow Cell (Y) N

Min. Purge Volume (gal)/(L) 14.2 GAL Purge Rate (gpm)/(mLpm) 2 GPM

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
27.61	758	4	7.58	4164	5.3	2.71	27.12	2.13	2.62	118.3	
27.61	759	6	7.57	4202	9.1	2.33	27.44	2.15	2.65	116.9	
27.61	800	8	7.57	4281	12.9	2.28	27.53	2.15	2.65	115.4	
27.65	801	10	7.56	4284	20.0	2.25	27.54	2.16	2.65	114.0	
27.66	802	12	7.56	4295	15.2	2.24	27.61	2.16	2.65	112.5	
27.68	803	14	7.56	4292	16.7	2.27	27.60	2.16	2.65	112.0	
27.74	804	16	7.55	4294	14.5	2.28	27.60	2.16	2.65	111.6	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?			✓	✓	✓	✓	NA	✓	✓	✓	
Previous Field measurement (3/6/2007)			7.54	9400	1.38	3.09	28.19	0.5		55	
Are measurements consistent with previous?			Y	N	N	N	NA	N		N	

Sample Time 0810 Sample Location:

pump tubing ✓

well port

spigot

bailer

other

Comments:

Initial Depth to Water (ft BTOC): 27.18

Field measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc (55)

SWH (Standing Water Height) = WD-Initial Depth 27.82

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

One Casing Volume = D*SWH 4.7

Three Casing Volumes = 14.2

Color: (clear) grey, yellow, brown, black, cloudy, green

Measure Point: (Well TOC) Steel Casing

WATER LEVEL METER SERIAL NUMBER:

Initial DTW / Before Removal		If Transducer	
Time	Initial DTW	Approx. 5 min After Reinstallation	Time of Removal
0745	27.18	0827	27.10
Comments:		Time of Reinstallation	0822

Odor: (none) sulphur, organic, other

Solids: (Trace) Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1 Field Conditions Sunny / Mt

Sampling Event 2007-GMP-125-Q2
 Date 4/30/07
 Page 1 of 2

Well/Sample Number MW-48-125

QC Sample ID NA

QC Sample Time

Purge Start Time 0953

Purge Method Temp PF2 Ded. Pump -

Flow Cell: (N) N

Min. Purge Volume (gal)/(L) 538 Purge Rate (gpm)/(mLpm) 1 gpm (1450 Hz) - 264 Hz
start end

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
38.20	0956	3	7.52	20.4	37.8	4.38	29.14	1.3	13	-85	
74.49	0959	6	7.34	21.0	15.2	4.34	29.26	1.3	13	-50	
54.15	1002	9	7.32	21.1	8.3	4.35	29.31	1.3	13	-41	
68.85	1005	12	7.43	21.1	5.9	4.14	29.91	1.3	13	-32	
78.95	1008	15	7.49	21.2	6.5	4.20	29.73	1.3	13	-30	
93.35	1011	18	7.75	21.3	6.3	4.08	30.45	1.3	13	-32	
101.05	1014	21	8.14	21.1	7.9	4.10	30.35	1.3	13	-22	
113.15	1017	24	8.63	21.2	14.1	4.06	31.05	1.3	13	-1	
120.55	1020	27	8.72	21.1	16.9	4.05	31.04	1.2	13	13	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?							NA				
Previous Field measurement (3/6/2007)			7.5	20700	14	0.91	30.63	1.2		-128	
Are measurements consistent with previous?							NA				

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

Comments: - stand pipe needs to be filled w/ sand
- need cap for casing

Initial Depth to Water (ft BTOC): 30.69

Field measured confirmation of Well Depth (ft btoc): 130.10

WD (Well Depth - from database) ft btoc (138)

SWH (Standing Water Height) = WD - Initial Depth 109.41

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

One Casing Volume = D*SWH 17.9

Three Casing Volumes = 53.8

Color: clear grey, yellow, brown, black, cloudy, green

Measure Point: Well TOC Steel Casing

WATER LEVEL METER SERIAL NUMBER: 12511

Initial DTW / Before Removal		Approx. 5 min After Reinstallation		If Transducer <u>N/A</u>	
Time	Initial DTW	Time	Final DTW	Time of Removal	Time of Reinstallation
Comments:					

Odor: none, sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 12911 5/10/07

Initial DTW / Before Removal		If Transducer <u>N/A</u>	
		Approx. 5 min After Reinstallation	
Time	Initial DTW	Time	Final DTW
		Time of Removal	
		Time of Reinstallation	
Comments:			

Odor: none, sulphur, organic, other Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1

Field Conditions cool, sunny

Sampling Event 2007-GMP-125-Q2

Date 5/4/07

Page 1 of 1

Well/Sample Number MW-49-135-125

QC Sample ID

NA

QC Sample Time

NA

Purge Start Time 0659 5/4/07

Purge Method

3WV

Ded. Pump

Waltera

Flow Cell 0 / N

0705

Min. Purge Volume (gal)/(L)

29.4 50 gal

Purge Rate (gpm)/(mLpm)

0.5 gpm

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
30.6	0715	5	7.58	13.418	7	0.40	24.44	7.74	8.7	172.2	
29.4	0725	10	7.67	13.467	17	0.54	24.66	7.76	8.75	-476	
29.3	0735	15	7.65	13.463	56	0.48	24.67	7.76	8.75	-109.2	
29.4	0745	20	7.69	13.484	188	0.42	24.85	7.77	8.76	-135	
29.5	0755	25	7.69	13.501	173	0.43	24.86	7.78	8.76	-113	
29.5	0805	30	7.70	13.491	165	0.39	24.92	7.77	8.77	-144	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?							NA				
Previous Field measurement (3/9/2007)			7.5	30500	51	0.25	25.4	1.9		-173	
Are measurements consistent with previous?							NA				

Sample Time 0810 Sample Location:

pump tubing

well port

spigot

bailer

other

Comments: DTW is difficult to measure w/ jerky motion of Waltera pump.
Decon'd w/ meter and pump before use.

Initial Depth to Water (ft BTOC):

27.25

Measure Point:

Well TOC

Steel Casing

WATER LEVEL METER SERIAL NUMBER:

Slope 51690030
PGE 2005-01

Field measured confirmation of Well Depth (ft btoc):

135.8

WD (Well Depth - from database) ft btoc (136.6)

DSWH (Standing Water Height) = WD-Initial Depth

109

D (Volume as per diameter) 2" = 0.17, 4" = 0.66, 1" = 0.041 (1.5 in) 0.09

One Casing Volume = D*SWH 9.81 18.53 5/4/07

Three Casing Volumes = 29.4 55.57 5/4/07

Color: clear, grey, yellow, brown, black, cloudy, green

109

09

4.810

Odor: none sulphur, organic, other

Solids: Trace Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1 Field Conditions sunny, clear, 70's

Sampling Event 2007-GMP-125-Q2
 Date 5/4/07
 Page 1 of 1

Well/Sample Number MW-49-275-125QC Sample ID NAQC Sample Time N/APurge Start Time 6:57Purge Method rod-p Ded. Pump noFlow Cell Y / NMin. Purge Volume (gal)/(L) 125.5 Purge Rate (gpm)/(mLpm) 3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
34.05	7:04	21	8.43	23518	2.5	0.57	25.61	14.18	15.25	-83.3	
34.08	7:11	42	8.47	22997	3.6	0.36	26.37	13.85	14.93	-95.6	
34.13	7:18	63	8.73	23480	2.5	0.27	26.88	14.16	15.26	-165.9	
34.14	7:25	84	8.78	23558	1.7	0.23	26.77	14.22	15.31	-181.9	
34.14	7:32	105	8.80	23629	1.6	0.23	27.00	14.26	15.35	-188.2	
34.15	7:39	126	8.76	23656	1.6	0.19	27.03	14.28	15.38	-189.9	
			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Parameter Stabilization Criteria											
Did Parameters Stabilize prior to sampling?			Y	Y	Y	Y	NA	Y	Y	Y	
Previous Field measurement (3/9/2007)			7.94	37700	6	0.24	27.6	2.3		-228	
Are measurements consistent with previous?			higher	lower	higher	Y	NA	higher		higher	

Sample Time 7:45 AM Sample Location: pump tubing X well port spigot bailer other

Comments: Using Blain-Tech VSI 5/N: 05F1258 AL.

Deconid w/ meter & pump before use

Initial Depth to Water (ft BTOW): 28.61Measure Point: Well TOC Steel CasingWATER LEVEL METER SERIAL NUMBER: PGE-2005-01BField measured confirmation of Well Depth (ft btoc): 28.61

WD (Well Depth - from database) ft btoc (274.7)

SWH (Standing Water Height) = WD-Initial Depth 246.09

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

One Casing Volume = D*SWH 41.8Three Casing Volumes = 125.5Color: clear grey, yellow, brown, black, cloudy, greenOdor: none, sulphur organic, otherSolids: Trace Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Initial DTW / Before Removal		If Transducer	
Time	Initial DTW	Approx. 5 min After Reinstallation	Time of Removal
Time	Initial DTW	Time	Final DTW
<u>6:45</u>	<u>28.61</u>	<u>7:54</u>	<u>28.68</u>
Comments:		Time of Reinstallation <u>7:48</u>	

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1 Field Conditions Sunny, clear, 70s

Sampling Event 2007-GMP-125-Q2
 Date 5/4/07
 Page 1 of 1

Well/Sample Number MW-49-365-125

QC Sample ID NA

QC Sample Time N/A

Purge Start Time 8:14

Purge Method Redi-Flow Ded. Pump No

Flow Cell Y / N

Min. Purge Volume (gal)/(L) 171.8 Purge Rate (gpm)(mLpm) 3 slowed to 2.5

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
36.28	8:23	29	8.60	37069	1.0	1.89	25.73	23.44	24.09	-217.2	slowed after 1st parameter
36.28	8:33	57	8.62	36836	1.9	1.09	26.55	23.25	23.93	-220.9	
36.27	8:40	86	8.64	36717	1.2	.87	27.30	23.17	23.87	-205.8	
36.33	8:48	114	8.64	37311	1.1	0.21	27.68	23.56	24.25	-191.1	
36.35	8:57	143	8.67	37352	4.4	0.16	27.79	23.60	24.28	-188.7	
36.39	9:04	172	8.67	37373	4.9	0.13	27.86	23.60	24.29	-184.3	
			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Parameter Stabilization Criteria											
Did Parameters Stabilize prior to sampling?			Y	Y	Y	Y	NA	Y	Y	Y	
Previous Field measurement (3/9/2007)			7.49	42800	1	0	30.2	2.8		-237	
Are measurements consistent with previous?			higher	lower	higher	Y	NA	higher	4x higher		

Sample Time 9:25 Sample Location: 9:25 9:27 pump tubing X well port spigot bailer other

Comments: Shut off 8:34 after parameter to switch containers. Restart 8:36
Decon'd w/ meter and pump before use.

Initial Depth to Water (ft BTOC): 30.47

Measure Point: Well TOC Steel Casing

WATER LEVEL METER SERIAL NUMBER: PGE-2005-01B

Field measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc (367.35)

SWH (Standing Water Height) = WD-Initial Depth 336.88

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

One Casing Volume = D*SWH 57.3

Three Casing Volumes = 171.8

Color: clean grey, yellow, brown, black, cloudy, green

Odor: strong none, sulphur, organic, other

Solids: Trace Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Initial DTW / Before Removal		If Transducer			
		Approx. 5 min After Reinstallation		Time of Removal	1:59
Time	Initial DTW	Time	Final DTW	Time of Reinstallation	9:34
7:57	30.47	9:39	30.53		
Comments:					

If Transducer

Time of Removal 7:59

Time of Reinstallation 9:34

Project Name PGE Topock GMP Sampling Event 2007-GMP-125-Q2
 Job Number 346 345631.MP.02.GM Date 5/2/07
 Field Team A. Hindeley Field Conditions overcast Page 1 of 1

Well/Sample Number MW-50-095QC Sample ID N/AQC Sample Time NAPurge Start Time 0822Purge Method grundfos Ded. Pump NoFlow Cell: Y NMin. Purge Volume (gal)/(L) 29 Purge Rate (gpm)/(mLpm) 2

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. °C	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
40.63	0823	2	7.36	4.2	5.2 94.9	94.9	26.1	2.3	2.77	116.6	
40.63	0826	8	7.41	4.53	13.4	6.0	28.63	2.24	2.75	120.2	
40.63	0829	14	7.67	5.04	13.2	26.5	28.9	2.5	3.07	125.0	
40.63	0832	20	7.77	5.30	8.6	31.3	28.9	2.63	3.21	130.0	
40.63	0835	26	7.79	5.33	5.0	31.8	29.0	2.64	3.22	131.0	
40.63	0838	32	7.78	5.36	2.7	31.3	29.0	2.65	3.24	133.7	
40.63	0839	34	7.79	5.38	1.3	31.3	29.0	2.67	3.25	134.4	
40.63	0840	36	7.79	3.39	1.3	31.4	29.0	2.67	3.26	134.7	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?			Y	Y	Y	Y	NA			Y	
Are measurements consistent with previous?							NA				

Sample Time 0845 Sample Location:pump tubing X

well port

spigot

bailer

other

Comments:

Initial Depth to Water (ft BTOC): 40.45 40.22Field measured confirmation of Well Depth (ft btoC): 96.44WD (Well Depth - from database) ft btoC 595 (estimated)SWH (Standing Water Height) = WD-Initial Depth 34.55 56.22D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.04 1.15 6.00 34One Casing Volume = D*SWH 36.005 9.56Three Casing Volumes = 108 28.7Color: clear grey, yellow, brown, black, cloudy, greenMeasure Point: Well TOC Steel CasingWATER LEVEL METER SERIAL NUMBER: PGE2005-02

Initial DTW / Before Removal		If Transducer	
Time	Initial DTW	Approx. 5 min After Reinstallation	Time of Removal
		Final DTW	Time of Reinstallation
0813	40.22	0853	40.28
Comments:			

Odor: none sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Project Name PGE Topock GMP
 Job Number 345631.MP.02.GM
 Field Team 1 Field Conditions SWAMPY / mt

Sampling Event 2007-GMP-125-Q2
 Date 4/30/07
 Page 1 of 1

Well/Sample Number MW-50-200-125QC Sample ID NAQC Sample Time N/APurge Start Time 1435Purge Method Temp. DF2 Ded. PumpFlow Cell: Y / NMin. Purge Volume (gal)/(L) 83.4 Purge Rate (gpm)/(mLpm) 3

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
46.13	1439	12	7.65	24.0	8.1	4.35	31.06	1.6	15	53	
46.01	1443	24	7.73	24.0	6.8	4.51	31.09	1.5	15	56	
45.91	1447	36	7.73	23.9	2.6	4.60	31.17	1.5	15	59	
45.80	1451	48	7.73	23.8	0.8	4.67	31.22	1.5	15	61	
45.72	1455	60	7.73	23.8	1.5	4.70	31.22	1.5	15	63	
45.68	1459	72	7.72	23.7	1.8	4.74	31.27	1.4	15	64	
45.64	1503	84	7.72	23.7	2.0	4.75	31.27	1.4	15	65	
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Did Parameters Stabilize prior to sampling?			✓	✓	✓	✓	NA	✓	✓	✓	
Previous Field measurement (3/7/2007)			7.78	25600	0.4	3.22	29.83	1.6		114	
Are measurements consistent with previous?							NA				

Sample Time 1510 Sample Location: pump tubing X well port _____ spigot _____ bailer _____ other _____
 Comments: _____

Initial Depth to Water (ft BTOC): 41.21
 Field measured confirmation of Well Depth (ft btoc): 104.42
 WD (Well Depth - from database) ft btoc (204.5)
 SWH (Standing Water Height) = WD-Initial Depth 163.21
 D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
 One Casing Volume = D*SWH 27.8
 Three Casing Volumes = 83.4

Measure Point: Well TOC Steel CasingWATER LEVEL METER SERIAL NUMBER: 12511

Initial DTW / Before Removal		If Transducer	
Time	Initial DTW	Approx. 5 min After Reinstallation	Time of Removal
1404	41.21	1516	41.24
Comments:		Time of Reinstallation	1511

Color: clear, grey, yellow, brown, black, cloudy, greenOdor: none, sulphur, organic, otherSolids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Purge Rate (gpm)/(mLpm)

Project Name	PGE Topock GMP	Sampling Event	2007-GMP-125-Q2
Job Number	345631.MP.02.GM	Date	5/2/07
Field Team	1	Page	1 of 1
Field Conditions			

[illegible]

Sample Time 1145 Sample Location: pump tubing well port spigot bailer other

Comments: _____

Initial Depth to Water (ft BTOC): _____

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

Field measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc

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

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

One Casing Volume = $D \cdot SWH$

Three Casing Volumes = _____

Color: clear, grey, yellow, brown, black, cloudy, green

Initial DTW / Before Removal		If Transducer			
		Approx. 5 min After Reinstallation		Time of Removal	
Time	Initial DTW	Time	Final DTW	Time of Reinstallation	
Comments:					

Odor: none / sulphur, organic, other

Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand



TRUESDAIL LABORATORIES, INC.
14201 Franklin Avenue, Tustin, CA 92780-7008
(714) 730-6239 FAX: (714) 730-6462
www.truesdail.com

CHAIN OF CUSTODY RECORD

[2007-GMP-125-Q2]

COC Number

TURNAROUND TIME

DATE 4/30/07

3 10 Days

PAGE 1 OF 1

COMPANY <u>E2</u>				<div style="display: flex; justify-content: space-between;"> <div> CR6 (218.6) Lab Filtered CR6 (7196A) Lab Filtered CR6 (7199) Lab Filtered Total Metals (200.7) Field Filtered Chromium Specific Conductance (120.1) pH (150.1) TDS (160.1) Anions (300) Br, Cl, SO4, NO3 Total Organic Carbon (415.2) Diss Metals (6010B) Field Filtered Chromium </div> <div> NUMBER OF CONTAINERS Rec'd 04/30/07 Lab.# 965575 </div> </div>												COMMENTS	
PROJECT NAME <u>PG&E Topock</u>																	
PHONE <u>(530) 229-3303</u> FAX <u>(530) 339-3303</u>																	
ADDRESS <u>155 Grand Ave Ste 1000</u> <u>Oakland, CA 94612</u>																	
P.O. NUMBER <u>345631.MP.02.GM</u> TEAM <u>1</u>																	
SAMPLERS (SIGNATURE) <u>[Signature]</u>																	
SAMPLE I.D.	DATE	TIME	DESCRIPTION	CR6 (218.6) Lab Filtered	CR6 (7196A) Lab Filtered	CR6 (7199) Lab Filtered	Total Metals (200.7) Field Filtered Chromium	Specific Conductance (120.1)	pH (150.1)	TDS (160.1)	Anions (300) Br, Cl, SO4, NO3	Total Organic Carbon (415.2)	Diss Metals (6010B) Field Filtered Chromium	NUMBER OF CONTAINERS	COMMENTS		
-1 004	12:29	4/30/07	GW		X	X	X	X	X			X		4			
-2 C15-096	11:45	4/30/07	GW		X	X	X	X	X			X		4			
<div style="display: flex; justify-content: space-around;"> <div style="border: 2px solid black; padding: 10px; transform: rotate(-15deg); font-weight: bold; font-size: 2em;">RUSH</div> <div style="border: 1px solid black; padding: 10px;"> ALERT!! Level III QC </div> <div style="border: 1px solid black; padding: 10px; transform: rotate(15deg); font-weight: bold;"> For Sample Conditions See Form Attached </div> </div>																	

CHAIN OF CUSTODY SIGNATURE RECORD					SAMPLE CONDITIONS		
Signature (Relinquished)	<u>[Signature]</u>	Printed Name	<u>Kenny Brattmiller</u>	Company/Agency	<u>CH2M Hill</u>	Date/Time	<u>4/30/07 1523</u>
Signature (Received)	<u>[Signature]</u>	Printed Name	<u>Nashemi</u>	Company/Agency	<u>T.L.I</u>	Date/Time	<u>4/30/07 2100</u>
Signature (Relinquished)		Printed Name		Company/Agency		Date/Time	
Signature (Received)		Printed Name		Company/Agency		Date/Time	
Signature (Relinquished)		Printed Name		Company/Agency		Date/Time	
Signature (Received)		Printed Name		Company/Agency		Date/Time	
<div style="display: flex; justify-content: space-between;"> <div> RECEIVED COOL <input type="checkbox"/> WARM <input type="checkbox"/> °F CUSTODY SEALED YES <input type="checkbox"/> NO <input type="checkbox"/> </div> <div> SPECIAL REQUIREMENTS: </div> </div>							

EMAX Laboratories, Inc.
1835 W. 205th Street, Torrance, CA 90501
Tel: (310) 618 8889 Ext. 119 Fax: (310) 618 0818
Joe Kelbley jkelbley@emaxlabs.com

[2007-CIS-002]

TURNAROUND TIME

12 Days

DATE 4/30/07

PAGE 1 OF 1

[illegible]

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time
<i>[Signature]</i>	Kenny Bradtmueller	CHZ MHill	4/30/07 1524
Signature (Received)	Printed Name	Company/ Agency	Date/ Time
<i>[Signature]</i>	Phil Hadden	EMAX	5/07 600
Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time
<i>[Signature]</i>	Phil Hadden	EMAX	5/07 1345
Signature (Received)	Printed Name	Company/ Agency	Date/ Time
<i>[Signature]</i>	ANTHONY FLORES	EMAX	5/07 1345
Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time
<i>[Signature]</i>			
Signature (Received)	Printed Name	Company/ Agency	Date/ Time

SAMPLE CONDITIONS

① -30°C

RECEIVED

COOL ☐

WARM ☐

27.3.2°F

CUSTODY SEALED

YES ☐

NO ☐

SPECIAL REQUIREMENTS:

* As, B, Ba, Ca, Cr, Fe, K, Mg, Mn, Mo
Na, V, Ni, Cu, Zn, Pb, Se



TRUESDAIL LABORATORIES, INC.
14201 Franklin Avenue, Tustin, CA 92780-7008
(714) 730-6239 FAX: (714) 730-6462
www.truesdail.com

965577

CHAIN OF CUSTODY RECORD

[2007-GMP-125-Q2]

COC Number

TURNAROUND TIME

10 Days

DATE 4/30/07

PAGE 1 OF 1

COMPANY E2																		COMMENTS
PROJECT NAME PG&E Topock																		
PHONE (530) 229-3303 FAX (530) 339-3303																		
ADDRESS 155 Grand Ave Ste 1000 Oakland, CA 94612																		
P.O. NUMBER 345631.MP.02.GM TEAM 1																		
SAMPLERS (SIGNATURE) <i>[Signature]</i>																		
SAMPLE I.D.	DATE	TIME	DESCRIPTION	CR6 (218.6) Lab Filtered	CR6 (7196A) Lab Filtered	CR6 (7199) Lab Filtered	Total Metals (200.7) Field Filtered Chromium	Specific Conductance (120.1)	pH (150.1)	TDS (160.1)	Anions (300) Br, Cl, SO4, NO3	Total Organic Carbon (415.2)	Diss Metals (00108) Field Filtered Chromium			NUMBER OF CONTAINERS		
1 MW-043-CIS-125	4/30/07	10:05	GW		X		X	X				X				3		
2 MW-043-57-125	4/30/07	11:13	GW				X	X				X				3		
3 CIS-004	4/30/07	12:29	GW				X	X								1	} pH = 2	
4 CIS-096	4/30/07	11:45	GW				X	X								1		
5 MW-34-080-125	4/30/07	14:41	GW		X		X	X	X	X		X				3		
6 EB-125-1	4/30/07	1510	EB		X													

CHAIN OF CUSTODY SIGNATURE RECORD

CHAIN OF CUSTODY SIGNATURE RECORD				SAMPLE CONDITIONS	
Signature (Relinquished) <i>[Signature]</i>	Printed Name Jenny Bradtmueller	Company/Agency CH2M HILL	Date/Time 4/30/07 1520	RECEIVED	COOL <input type="checkbox"/> WARM <input type="checkbox"/> °F
Signature (Received) <i>[Signature]</i>	Printed Name H. G. L. L.	Company/Agency T.L.L.	Date/Time 4/30/07 2100	CUSTODY SEALED	YES <input type="checkbox"/> NO <input type="checkbox"/>
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time	SPECIAL REQUIREMENTS:	
Signature (Received)	Printed Name	Company/Agency	Date/Time		
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time		
Signature (Received)	Printed Name	Company/Agency	Date/Time		

07F011
 C-1408 -
 EMAX Laboratories, Inc.
 1835 W. 205th Street, Torrance, CA 90501
 Tel: (310) 618 8889 Ext. 119 Fax: (310) 618 0818
 Joe Kelbley jkelbley@emaxlabs.com

CHAIN OF CUSTODY RECORD

[2007-GMP-125-Q2]

COC Number
 TURNAROUND TIME 12 Days
 DATE 4/30/07 PAGE 1 OF 1

COMPANY E2																COMMENTS				
PROJECT NAME PG&E Topock GWM																				
PHONE (530) 229-3303 FAX (530) 339-3303																				
ADDRESS 155 Grand Ave Ste 1000 Oakland, CA 94612																				
P.O. NUMBER 345631.MP.02.GM																				
SAMPLERS (SIGNATURE) <i>[Signature]</i>																				
SAMPLE I.D.	DATE	TIME	DESCRIPTION	VOCs (8260B/624)	TPH-gas (SW8015)	SVOCs (8270C)	TPH-Diesel (SW8015)	Diss Metals (6010B) Field Filtered	Ca,Mg,K,Na,B	Diss Metals (6010B) Field Filtered	Ca,Mg,K,Na,B	Diss Metals (6010B) Field Filtered	Title 22	Diss Metals (7470A) Field Filtered	Title 22, Ca, Mg, K, Na, B	Alkalinity (310.1)	Ammonia (350.2)	Sulfide (376.2)	NUMBER OF CONTAINERS	
3 MW-34-080-125	4/30/07	14:41	GW							X	X	X							2	

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished) <i>[Signature]</i>	Printed Name Jenny Brattmiller	Company/Agency CH2M Hill	Date/Time 4/30/07 1522
Signature (Received) <i>[Signature]</i>	Printed Name Phil Hatcher	Company/Agency EMAX	Date/Time 5-1-07 900
Signature (Relinquished) <i>[Signature]</i>	Printed Name Phil Hatcher	Company/Agency EMAX	Date/Time 5-1-07 1345
Signature (Received) <i>[Signature]</i>	Printed Name Anthony Furlan	Company/Agency EMAX	Date/Time 5-1-07 1345
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time
Signature (Received)	Printed Name	Company/Agency	Date/Time

SAMPLE CONDITIONS

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

SPECIAL REQUIREMENTS:



TRUESDAIL LABORATORIES, INC.
14201 Franklin Avenue, Tustin, CA 92780-7008
(714) 730-6239 FAX: (714) 730-6462
www.truesdail.com

965577

CHAIN OF CUSTODY RECORD

[2007-GMP-125-Q2]

COC Number

TURNAROUND TIME

10 Days

DATE 4/30/07

PAGE 1 OF 1

COMPANY	E2														COMMENTS
PROJECT NAME	PG&E Topock														
PHONE	(530) 229-3303		FAX	(530) 339-3303											
ADDRESS	155 Grand Ave Ste 1000														
	Oakland, CA 94612														
P.O. NUMBER	345631.MP.02.GM		TEAM	1											
SAMPLERS (SIGNATURE)	<i>[Signature]</i>														
SAMPLE I.D.	DATE	TIME	DESCRIPTION	CR6 (218.6) Lab Filtered	CR6 (7196A) Lab Filtered	CR6 (7199) Lab Filtered	Total Metals (200.7) Field Filtered Chromium	Specific Conductance (120.1)	pH (150.1)	TDS (160.1)	Anions (300) Br, Cl, SO4, NO3	Total Organic Carbon (415.2)	Diss Metals (60108) Field Filtered Chromium	NUMBER OF CONTAINERS	
7 MW-32-020-125	4/30/07	1235	GW		X		X	X	X	X	X			3	pm = 2
8 MW-32-035-125	4/30/07	1345	GW		X		X	X	X	X	X			3	pm = 2
9 MW-51-125	4/30/07		GW	X			X	X			X			3	pm = 2
10 MW-50-200-125	4/30/07	1510	GW	X			X	X			X			3	pm = 2

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished)	<i>[Signature]</i>	Printed Name	Bob T. [Signature]	Company/Agency	CHEM [Signature]	Date/Time	4/30/07 1530
Signature (Received)	<i>[Signature]</i>	Printed Name	L. Mahum	Company/Agency	TVI	Date/Time	4/30/07 2100
Signature (Relinquished)		Printed Name		Company/Agency		Date/Time	
Signature (Received)		Printed Name		Company/Agency		Date/Time	
Signature (Relinquished)		Printed Name		Company/Agency		Date/Time	
Signature (Received)		Printed Name		Company/Agency		Date/Time	

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °FCUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

CH 0408-

EMAX Laboratories, Inc.
1835 W. 205th Street, Torrance, CA 90501
Tel: (310) 618 8889 Ext. 119 Fax: (310) 618 0818
Joe Kelbley jkelbley@emaxlabs.com

CHAIN OF CUSTODY RECORD

[2007-GMP-125-Q2]

07E011

COC Number
TURNAROUND TIME 12 Days
DATE 4/30/07 PAGE 1 OF 1

COMPANY E2																COMMENTS																																											
PROJECT NAME PG&E Topock GWM																																																											
PHONE (530) 229-3303 FAX (530) 339-3303																																																											
ADDRESS 155 Grand Ave Ste 1000 Oakland, CA 94612																																																											
P.O. NUMBER 345631.MP.02.GM																																																											
SAMPLERS (SIGNATURE) <i>[Signature]</i>																																																											
SAMPLE I.D.				DATE				TIME				DESCRIPTION				VOCs (8260B624)				TPH-gas (SW8015)				SVOCs (8270C)				TPH-Diesel (SW8015)				Diss Metals (6010B) Field Filtered Ca,Mg,K,Na,B				Diss Metals (6010B) Field Filtered Title 22				Diss Metals (6010B) Field Filtered Title 22, Ca,Mg,K				Alkalinity (310.1)				Ammonia (350.2)				Sulfide (376.2)				NUMBER OF CONTAINERS			
1 MW-32-020-125				4/30/07				1235				GW																																								2							
2 MW-32-035-125				4/30/07				GW																																												2							

CHAIN OF CUSTODY SIGNATURE RECORD					SAMPLE CONDITIONS	
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time	RECEIVED	COOL <input type="checkbox"/>	WARM <input type="checkbox"/>
<i>[Signature]</i>	Bob Trebble	CEI/M Bell	4/30/07 15:30			BT-3.2F
Signature (Received)	Printed Name	Company/Agency	Date/Time	CUSTODY SEALED	YES <input type="checkbox"/>	NO <input type="checkbox"/>
<i>[Signature]</i>	Phil Hatcher	EMAX	5:10 5:00			
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time	SPECIAL REQUIREMENTS:		
<i>[Signature]</i>	Phil Hatcher	EMAX	5:10 13:45			
Signature (Received)	Printed Name	Company/Agency	Date/Time			
<i>[Signature]</i>	Anthony Fournier	EMAX	5:10 13:45			
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time			
<i>[Signature]</i>						
Signature (Received)	Printed Name	Company/Agency	Date/Time			
<i>[Signature]</i>						

Kumar, Priya/BAO

From: Duffy, Shawn/RDD
Sent: Tuesday, May 08, 2007 10:19 AM
To: Ringier, Matt/BAO; Kumar, Priya/BAO
Subject: FW: Log in for Topock, SDG 07E011
Attachments: 07E011.pdf

From: Molly Nguyen [mailto:MNguyen@emaxlabs.com]
Sent: Monday, May 07, 2007 6:18 PM
To: Duffy, Shawn/RDD
Cc: Electronic Data/RDD
Subject: Log in for Topock, SDG 07E011

Hi Shawn,

Per our conversation, samples MW-32-020-125 & MW-32-035-125 will be analyzed for Dissolved Cations (B, Ca, Mg, K, Na) instead of Diss. Title 22 + 5 Cations as marked on the COC.



TRUESDAIL LABORATORIES, INC.
14201 Franklin Avenue, Tustin, CA 92780-7008
(714)730-6239 FAX: (714) 730-6462
www.truesdail.com

CHAIN OF CUSTODY RECORD
[2007-CIS-002]

965529

COC Number

TURNDOWN TIME

DATE 4/30/07

10 Days

PAGE 1 OF 1

COMPANY	E2			<div>CR6 (7199A) Lab Filled</div> <div>CR6 (7199) Lab Filled</div> <div>Specific Conductance (120.1)</div> <div>pH (150.1)</div> <div>TDS (160.1)</div> <div>Anions (300) Cl, F, SO4, NO3</div> <div>Total Organic Carbon (415.2)</div> <div>NUMBER OF CONTAINERS</div>	Rec'd 04/30/07 Lab.# 965529	COMMENTS	
PROJECT NAME	PG&E Topock						
PHONE	(530) 229-3303		FAX				(530) 339-3303
ADDRESS	155 Grand Ave Ste 1000 Oakland, CA 94612						
P.O. NUMBER	354631.MP.02.CI.00		TEAM				1
SAMPLERS (SIGNATURE)							
SAMPLE I.D.	DATE	TIME	DESCRIPTION				
-1 CIS-004	4/30/07	12:29	GW			5	
-2 CIS-096	4/30/07	11:45	GW			5	
ALERT!! Level III							

CHAIN OF CUSTODY SIGNATURE RECORD				SAMPLE CONDITIONS	
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time	RECEIVED	COOL <input type="checkbox"/> WARM <input type="checkbox"/> °F
	John Buntz	CH2M Hill	4/30/07 1523		
Signature (Received)	Printed Name	Company/Agency	Date/Time	CUSTODY SEALED	YES <input type="checkbox"/> NO <input type="checkbox"/>
	Hashemi	E.L.I	4/30/07 9:00		
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time	SPECIAL REQUIREMENTS:	
Signature (Received)	Printed Name	Company/Agency	Date/Time		
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time		
Signature (Received)	Printed Name	Company/Agency	Date/Time		

965620



TRUESDAIL LABORATORIES, INC.
14201 Franklin Avenue, Tustin, CA 92780-7008
(714) 730-6239 FAX: (714) 730-6462
www.truesdail.com

CHAIN OF CUSTODY RECORD

[2007-GMP-125-Q2]

COC Number

TURNAROUND TIME

10 Days

DATE 5/1/07

PAGE 1 OF 1

COMPANY	E2																COMMENTS	
PROJECT NAME	PG&E Topock																	
PHONE	(530) 229-3303		FAX	(530) 339-3303														
ADDRESS	155 Grand Ave Ste 1000 Oakland, CA 94612																	
P.O. NUMBER	345631.MP.02.GM		TEAM	1														
SAMPLERS (SIGNATURE)	<i>Matt Kingier</i>																	
SAMPLE I.D.	DATE	TIME	DESCRIPTION	CR6 (218.6) Lab Filtered	CR6 (7196A) Lab Filtered	CR6 (7199) Lab Filtered	Total Metals (200.7) Field Filtered Chromium	Specific Conductance (120.1)	pH (150.1)	TDS (180.1)	Anions (300) Br, Cl, SO4, NO3	Total Organic Carbon (415.2)	Diss Metals (60106) Field Filtered Chromium	NUMBER OF CONTAINERS				
MW-27-085-125	5/1/07	825	GW		X	X	X					X		3	PH 2			
MW-42-065-125	5/1/07	1015	↓		X	X	X					X		3	PH 2			
MW-42-055-125	5/1/07	1102	↓		X	X	X					X		3	PH 2			
EB-125-5	5/1/07	1324	FB		X									1	PH 7			
MW-36-070-125	5/1/07	1255	GW		X	X	X					X		3 ^{JB}	PH 2			

CHAIN OF CUSTODY SIGNATURE RECORD				SAMPLE CONDITIONS	
Signature (Relinquished)	<i>Matt Kingier</i>	Printed Name	Matt Kingier	Company/ Agency	E2
Signature (Received)	<i>Marion Bowles</i>	Printed Name	MARION BOWLES	Company/ Agency	EXECUTIVE
Signature (Relinquished)		Printed Name		Company/ Agency	
Signature (Received)	<i>L. Shalunum</i>	Printed Name	L. Shalunum	Company/ Agency	TV
Signature (Relinquished)		Printed Name		Company/ Agency	
Signature (Received)		Printed Name		Company/ Agency	

RECEIVED

CUSTODY SEALED

SPECIAL REQUIREMENTS:

COOL ☐

YES ☐

WARM ☐

NO ☐

°F



TRUESDAIL LABORATORIES, INC.
14201 Franklin Avenue, Tustin, CA 92780-7008
(714) 730-6239 FAX: (714) 730-6462
www.truesdail.com

CHAIN OF CUSTODY RECORD

[2007-GMP-125-Q2]

COC Number

TURNAROUND TIME

10 Days

DATE 5/1/07

PAGE 1 OF 1

COMPANY E2
PROJECT NAME PG&E Topock
PHONE (530) 229-3303 FAX (530) 339-3303
ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612
P.O. NUMBER 345631.MP.02.GM TEAM 1
SAMPLERS (SIGNATURE) *Aurora M. Hindley*

Rec'd 05/01/07
Lab.# 965620

SAMPLE I.D.	DATE	TIME	DESCRIPTION	ANALYSIS										NUMBER OF CONTAINERS	COMMENTS
				CR6 (218.6) Lab Filtered	CR6 (7198A) Lab Filtered	CR6 (7199) Lab Filtered	Total Metals (200.7) Field Filtered Chromium	Specific Conductance (120.1)	pH (150.1)	TDS (180.1)	Anions (300) Br, Cl, SO ₄ , NO ₃	Total Organic Carbon (415.2)	Diss Metals (60108) Field Filtered Chromium		
MW-48-125	5/1/2007	6:40	GW		X		X	X				X		3	PH 2
MW-21-125	5/1/07	7:25	GW		X		X	X				X		3	PH 2
MW-51-125	5/1/07	1209	GW	X	X		X	X				X		3	PH 2

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished) <i>Aurora M. Hindley</i>	Printed Name <i>Aurora M. Hindley</i>	Company/Agency <i>E2</i>	Date/Time <i>5/1/07</i>
Signature (Received) <i>Marion Bowles</i>	Printed Name <i>MARION BOWLES</i>	Company/Agency <i>EXECUTIVE</i>	Date/Time <i>5-1-07 230 PM</i>
Signature (Relinquished) <i>L. Shakunine</i>	Printed Name <i>L. Shakunine</i>	Company/Agency <i>T21</i>	Date/Time <i>5/1/07 20:00</i>
Signature (Received)	Printed Name	Company/Agency	Date/Time
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time
Signature (Received)	Printed Name	Company/Agency	Date/Time

For Sample Conditions
See Form Attached

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

ALERT!!
Level III QC

Sean



TRUESDAIL LABORATORIES, INC.
14201 Franklin Avenue, Tustin, CA 92780-7008
(714) 730-6239 FAX: (714) 730-6462
www.truesdail.com

CHAIN OF CUSTODY RECORD

965654

COC Number
TURNAROUND TIME 10 Days
DATE 5/2/07 PAGE OF

COMPANY E2																COMMENTS Rec'd 05/02/07 Lab.# 965654																																									
PROJECT NAME PG&E Topock																																																									
PHONE (530) 229-3303 FAX (530) 339-3303																																																									
ADDRESS 155 Grand Ave Ste 1000 Oakland, CA 94612																																																									
P.O. NUMBER 345631.MP.02.GM TEAM 1																																																									
SAMPLERS (SIGNATURE) <i>A. M. Hinchey</i>																																																									
SAMPLE I.D.				DATE				TIME		DESCRIPTION				CR6 (218.6) Lab Filtered				CR6 (71904) Lab Filtered				CR6 (7199) Lab Filtered				Total Metals (200.7) Field Filtered Chromium				Specific Conductance (120.1)				pH (150.1)				TDS (160.1)				Anions (300) Br, Cl, SO4, NO3				Total Organic Carbon (415.2)				Diss Metals (60108) Field Filtered Chromium				NUMBER OF CONTAINERS			
1	MW-36-090-125			5/2/07				7:38		GW				X				X				X				X				X				X				3																			
2	MW-36-125			5/2/07				6:45		GW				X				X				X				X				X				3																							
3	MW-36-100-125			5/2/07				8:26		GW				X				X				X				X				X				3																							
4	MW-33-040-125			5/2/07				9:34		GW				X				X				X				X				X				3																							
5	MW-33-090-125			5/2/07				11:07		GW				X				X				X				X				X				3																							
6	MW-33-210-125			5/2/07				12:15		GW				X				X				X				X				X				3																							
7	MW-33-150-125			5/2/07				13:03		GW				X				X				X				X				X				3																							
8	FB-125-6			5/2/07				13:30		Water				X																				1																							

CHAIN OF CUSTODY SIGNATURE RECORD					SAMPLE CONDITIONS		
Signature (Relinquished)	<i>A. M. Hinchey</i>	Printed Name	A. M. Hinchey	Company/Agency	E2	Date/Time	5/2/07
Signature (Received)	<i>J. Shabunina</i>	Printed Name	J. Shabunina	Company/Agency	TLI	Date/Time	5/2/07
Signature (Relinquished)		Printed Name		Company/Agency		Date/Time	14/07
Signature (Received)		Printed Name		Company/Agency		Date/Time	
Signature (Relinquished)		Printed Name		Company/Agency		Date/Time	
Signature (Received)		Printed Name		Company/Agency		Date/Time	
RECEIVED COOL <input type="checkbox"/> WARM <input type="checkbox"/> °F CUSTODY SEALED YES <input type="checkbox"/> NO <input type="checkbox"/> SPECIAL REQUIREMENTS:							





TRUESDAIL LABORATORIES, INC.
14201 Franklin Avenue, Tustin, CA 92780-7008
(714)730-6239 FAX: (714) 730-6462
www.truesdail.com

CHAIN OF CUSTODY RECORD

965654

2007-GMP-125-Q2]

COC Number

TURNAROUND TIME

10 Days

DATE 5/2/07

PAGE 1 OF 1

COMPANY	E2											COMMENTS			
PROJECT NAME	PG&E Topock														
PHONE	(530) 229-3303	FAX	(530) 339-3303												
ADDRESS	185 Grand Ave Ste 1000 Oakland, CA 94612														
P.O. NUMBER	345631.MP.02.GM	TEAM	1												
SAMPLERS (SIGNATURE)															
SAMPLE I.D.	DATE	TIME	DESCRIPTION	CR6 (218.6) Lab Filtered	CR8 (7196A) Lab Filtered	CR6 (7199) Lab Filtered	Total Metals (200.7) Field Filtered Chromium	Specific Conductance (120.1)	pH (150.1)	TDS (160.1)	Anions (300) Br, Cl, SO4, NO3	Total Organic Carbon (415.2)	Dist. Metals (601.06) Field Filtered Chromium	NUMBER OF CONTAINERS	
9 MW-18-125	5/2/07	0752	GW	X			X	X				X		3	
10 MW-23-125		0650			X		X	X				X		3	
11 MW-50-095-125		0845		X			X	X				X		3	
12 EB-125-10		1215			X									1	
13 Park Mohi-125		1130		X		X	X	X					X	3	
14 PM4-125		1145		X		X	X	X	X	X	X			6	
15 EB-125-3	5/2/07	06:04		X											

Date/Time	5/2/07 1700	SAMPLE CONDITIONS	
Date/Time	5/2/07 1915	RECEIVED	COOL <input type="checkbox"/> WARM <input type="checkbox"/> °F
Date/Time		CUSTODY SEALED	YES <input type="checkbox"/> NO <input type="checkbox"/>
Date/Time		SPECIAL REQUIREMENTS:	
Date/Time			
Date/Time			
Date/Time			

CH 0408-

07E061

COC Number

12 Days

PAGE 1 OF 1

JMF 02.GM
Signature

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ _____ °F

CUSTODY SEALED YES ☐ NO ☐

$$T = 3.0^{\circ}\text{C}$$



TRUESDAIL LABORATORIES, INC.
14201 Franklin Avenue, Tustin, CA 92780-7008
(714)730-6239 FAX: (714) 730-8462
www.truesdail.com

CHAIN OF CUSTODY RECORD

{2007-GMP-125-Q2}

965684

COC Number

TURNAROUND TIME

10 Days

DATE 5/3/07

PAGE 1 OF

COMPANY E2					COMMENTS											
PROJECT NAME PG&E Topock																
PHONE (530) 229-3303 FAX (530) 339-3303																
ADDRESS 155 Grand Ave Ste 1000 Oakland, CA 94612																
P.O. NUMBER 345631.MP.02.GM																
SAMPLERS (SIGNATURE) <i>[Signature]</i>																
SAMPLE I.D.	DATE	TIME	DESCRIPTION	CR6 (218.6) Lab Filtered	CR6 (7196A) Lab Filtered	CR6 (7199) Lab Filtered	Total Metals (200.7) Field Filtered Chromium	Specific Conductance (120.1)	pH (150.1)	TDS (160.1)	Anions (300) Br, Cl, SO4, NO3	Total Organic Carbon (415.2)	Diss Metals (60108) Field Filtered Chromium	NUMBER OF CONTAINERS		
-1- MW-20-130-125	5/3/07	805	GW	X			X	X	X	X		X		3		
-2- MW-95-125	6/3/07	515 1330	GW	X			X	X	X	X		X		3		
-3- MW-20-070-125	5/3/07	915	GW	X			X	X	X	X		X		3		
-4- MW-20-100-125	5/3/07	1030	GW	X			X	X	X	X		X		3		
-5- MW-90-125	5/3/07	1035	GW	X			X	X	X	X		X		3		
-6- MW-12-125	5/3/07	1200	GW	X			X	X				X		3		
-7- MW-370-125	5/3/07	1320	GW	X			X	X				X		3		
FB-125-050307																

CHAIN OF CUSTODY SIGNATURE RECORD					SAMPLE CONDITIONS	
Signature (Relinquished) <i>[Signature]</i>	Printed Name Bob Trebble	Company/Agency Offshore	Date/Time 5/5/07 1400	RECEIVED	COOL <input type="checkbox"/>	WARM <input type="checkbox"/> °F
Signature (Received) <i>[Signature]</i>	Printed Name Hashem	Company/Agency T.L.I	Date/Time 5/3/07 19:30	CUSTODY SEALED	YES <input type="checkbox"/>	NO <input type="checkbox"/>
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time	SPECIAL REQUIREMENTS:		
Signature (Received)	Printed Name	Company/Agency	Date/Time			
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time			
Signature (Received)	Printed Name	Company/Agency	Date/Time			

CH-0408-
 EMAX Laboratories, Inc.
 1835 W. 205th Street, Torrance, CA 90501
 Tel: (310) 618 8889 Ext. 119 Fax: (310) 618 0818
 Joe Kelbley jkelbley@emaxlabs.com

CHAIN OF CUSTODY RECORD
 [2007-GMP-125-Q2]

07E077

COC Number 242
 TURNAROUND TIME 12 Days
 DATE 5/3/07 PAGE 1 OF 1

COMPANY E2																COMMENTS	
PROJECT NAME PG&E Topock GWM																	
PHONE (530) 229-3303 FAX (530) 339-3303																	
ADDRESS 155 Grand Ave Ste 1000 Oakland, CA 94612																	
P.O. NUMBER 345631.MP.02.GM																	
SAMPLERS (SIGNATURE) <i>[Signature]</i>																	
SAMPLE I.D.	DATE	TIME	DESCRIPTION	VOCs (8260B/824)	TPH-gas (SW8015)	SVOCs (8270C)	TPH-Diesel (SW8015)	Diss Metals (6010B) Field Filtered Ca,Mg,K,Na,B	Diss Metals (6010B) Field Filtered Title 22	Diss Metals (6010B) Field Filtered Title 22, Ca, Mg, K, Na	Alkalinity (310.1)	Ammonia (350.2)	Sulfide (376.2)	8015-B/8270-C	8015-B/8012-B	7470A/6010B (FF)	NUMBER OF CONTAINERS
4 MW-20-130-125	5/3/07	805	GW	X	X			X	X	X							8
5 MW-95-125	5/3/07	915	GW					X	X	X							3
6 MW-20-070-125	5/3/07	915	GW	X	X			X	X	X							8
7 MW-20-100-125	5/3/07	1030	GW	X	X		X PK	X	X	X							7
8 MW-90-125	5/3/07	1035	GW				X PK	X	X	X							2
9 MW-25-125	5/3/07		GW	X									X	X	X	10	GW
10 MW-12-125	5/3/07	1200	GW	X									X	X	X	11	
11 MW-370-125	5/3/07	1320	GW												X	1	
TB-125-050307	5/3/07	600	TB	X	X												

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished) <i>[Signature]</i>	Printed Name Bob Treble	Company/Agency CH2M Hill	Date/Time 5/3/07 1:40
Signature (Received) <i>[Signature]</i>	Printed Name Phil Hatcher	Company/Agency EMAX	Date/Time 5-4-07 8:50
Signature (Relinquished) <i>[Signature]</i>	Printed Name Phil Hatcher	Company/Agency EMAX	Date/Time 5-4-07 12:50
Signature (Received) <i>[Signature]</i>	Printed Name ANTHONY TUNAWA	Company/Agency EMAX	Date/Time 5-4-07 12:50
Signature (Relinquished) <i>[Signature]</i>	Printed Name	Company/Agency	Date/Time
Signature (Received) <i>[Signature]</i>	Printed Name	Company/Agency	Date/Time

SAMPLE CONDITIONS

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

SPECIAL REQUIREMENTS:



TRUESDAIL LABORATORIES, INC.
14201 Franklin Avenue, Tustin, CA 92780-7008
(714)730-8239 FAX: (714) 730-8462
www.truesdail.com

CHAIN OF CUSTODY RECORD

[2007-GMP-125-Q2]

COC Number:

TURNAROUND TIME 10 Days

DATE PAGE OF

965684

COMPANY	E2			<div>CR6 (218.6) Lab Filtered</div> <div>CR6 (71964) Lab Filtered</div> <div>CR6 (7199) Lab Filtered</div> <div>Total Metals (200.7) Field Filtered Chromium</div> <div>Specific Conductance (120.1)</div> <div>PH (150.1)</div> <div>TDS (160.1)</div> <div>Anions (300) Br, Cl, SO4, NO3</div> <div>Total Organic Carbon (415.2)</div> <div>Diss Metals (60106) Field Filtered Chromium</div> <div>NUMBER OF CONTAINERS</div>	COMMENTS
PROJECT NAME	PG&E Topock				
PHONE	(530) 229-3303		FAX (530) 339-3303		
ADDRESS	155 Grand Ave Ste 1000 Oakland, CA 94612				
P.O. NUMBER	345631.MP.02.GM		TEAM 1		
SAMPLERS (SIGNATURE)					
SAMPLE I.D.	DATE	TIME	DESCRIPTION		
14 MW-24BR-125	5/3/07	0745		X	X
999 MW-10-125					
15 MW-10-125		1040		X	X

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished)		Printed Name	Shawn Duffy	Company/ Agency	CH2M HILL	Date/ Time	5/3/07
Signature (Received)		Printed Name	T.L.	Company/ Agency	T.L.	Date/ Time	5/3/07 19:30
Signature (Relinquished)		Printed Name		Company/ Agency		Date/ Time	
Signature (Received)		Printed Name		Company/ Agency		Date/ Time	
Signature (Relinquished)		Printed Name		Company/ Agency		Date/ Time	
Signature (Received)		Printed Name		Company/ Agency		Date/ Time	

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

FROM

(FRI) MAY 4 2007 10:08/ST. 10:03/No. 6800000012 P 4

CH-0103-
EMAX Laboratories, Inc.
1835 W. 205th Street, Torrance, CA 90501
Tel: (310) 618 8889 Ext. 119 Fax: (310) 618 0818
Joe Kelbley jkelbley@emaxlabs.com

CHAIN OF CUSTODY RECORD
[2007-GMP-125-Q2]

COC Number
TURNAROUND TIME 12 Days
DATE PAGE OF

COMPANY E2																COMMENTS				
PROJECT NAME PG&E Topock GWM																				
PHONE (530) 229-3303 FAX (530) 339-3303																				
ADDRESS 155 Grand Ave Ste 1000 Oakland, CA 94612																				
P.O. NUMBER 345631.MP.02.GM																				
SAMPLERS (SIGNATURE) <i>Shawn P. Duffy</i>																				
SAMPLE I.D.				DATE		TIME		DESCRIPTION		VOCs (8260B624)	TPH-gas (SW8015)	SVOCs (8270C)	TPH-Diesel (SW8015)	Diss Metals (6010B) Field Filtered Ca,Mg,K,Na,B	Diss Metals (6010B) Field Filtered Title 22	Diss Metals (6010B) Field Filtered Title 22,Ca,Mg,K,Na	Alkalinity (310.1)	Ammonia (350.2)	Sulfide (376.2)	NUMBER OF CONTAINERS
1	MW-10-125	5/3/07	1040		X	X	X	X		X										
2	MW-96-125		1100		X	X	X	X												
3	MW-11-125		1300		X	X	X	X											18 ms/msd/	

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished) <i>Shawn P. Duffy</i>	Printed Name <i>Shawn Duffy</i>	Company/Agency <i>CH2M HILL</i>	Date/Time <i>5/3/07 1400</i>
Signature (Received) <i>Phil Hatcher</i>	Printed Name <i>Phil Hatcher</i>	Company/Agency <i>EMAX</i>	Date/Time <i>5-407 830</i>
Signature (Relinquished) <i>Phil Hatcher</i>	Printed Name <i>Phil Hatcher</i>	Company/Agency <i>EMAX</i>	Date/Time <i>5-407 1250</i>
Signature (Received) <i>Phil Hatcher</i>	Printed Name <i>Phil Hatcher</i>	Company/Agency <i>EMAX</i>	Date/Time <i>5-407 1250</i>
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time
Signature (Received)	Printed Name	Company/Agency	Date/Time

SAMPLE CONDITIONS

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

SPECIAL REQUIREMENTS:

① T-2.9°C ④ T-2.7°C
② T-3.2°C ⑤ T-3.3°C
③ T-3.0°C



TRUESDAIL LABORATORIES, INC.
14201 Franklin Avenue, Tustin, CA 92780-7008
(714)730-6239 FAX: (714) 730-6462
www.truesdail.com

CHAIN OF CUSTODY RECORD

[2007-GMP-125-Q2]

965684

COC Number

TURNAROUND TIME 10 Days

DATE PAGE OF

COMPANY <u>E2</u>				<div style="display: flex; justify-content: space-between;"> <div> CR6 (21&8) Lab Filtered CR6 (7196A) Lab Filtered CR6 (7199) Lab Filtered Total Metals (200.7) Field Filtered Chromium Specific Conductance (120.1) pH (150.1) TDS (160.1) Ammonia (300) Br.CI.SO4.NO3 Total Organic Carbon (415.2) Diss Metals (60106) Field Filtered Chromium </div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">NUMBER OF CONTAINERS</div> </div>												COMMENTS			
PROJECT NAME <u>PG&E Topock</u>																			
PHONE <u>(530) 229-3303</u> FAX <u>(530) 339-3303</u>																			
ADDRESS <u>155 Grand Ave Ste 1000</u> <u>Oakland, CA 94612</u>																			
P.O. NUMBER <u>345631.MP.02.GM</u> TEAM <u>1</u>																			
SAMPLERS (SIGNATURE) <u>Aurora M. Hindley</u>																			
SAMPLE I.D.	DATE	TIME	DESCRIPTION																
8 MW-39-040-125	5/3/07	4:28	GW				X		X	X					X		3		
9 MW-39-070-125	5/3/07	8:09	GW			X			X	X					X		3		
10 mw-39-80-125	5/3/07	8:55	GW			X			X	X					X		3		
11 MW-39-100-125	5/3/07	9:51	GW			X			X	X					X		3		
12 EB-125-07	5/3/07	10:35	Water				X										1		
13 MW-44-070-125	5/3/07	11:19	GW				X		X	X					X		3		
EX-07-015	5/3/07		GW																
EX-08-015	5/3/07		GW																

CHAIN OF CUSTODY SIGNATURE RECORD					SAMPLE CONDITIONS						
Signature (Relinquished)	<u>Aurora M. Hindley</u>	Printed Name	<u>Aurora M. Hindley</u>	Company/Agency	<u>E2</u>	Date/Time	<u>5/3/07 14:00</u>	RECEIVED	COOL <input type="checkbox"/>	WARM <input type="checkbox"/>	°F
Signature (Received)	<u>W.L.</u>	Printed Name	<u>W.L.</u>	Company/Agency	<u>T.L.I.</u>	Date/Time	<u>5/3/07 14:30</u>	CUSTODY SEALED	YES <input type="checkbox"/>	NO <input type="checkbox"/>	
Signature (Relinquished)		Printed Name		Company/Agency		Date/Time		SPECIAL REQUIREMENTS:			
Signature (Received)		Printed Name		Company/Agency		Date/Time					
Signature (Relinquished)		Printed Name		Company/Agency		Date/Time					
Signature (Received)		Printed Name		Company/Agency		Date/Time					

965684



TRUESDAIL LABORATORIES, INC.
14201 Franklin Avenue, Tustin, CA 92780-7008
(714) 730-6239 FAX: (714) 730-6462
www.truesdail.com

CHAIN OF CUSTODY RECORD

[2007-GMP-125-Q2]

COC Number

TURNAROUND TIME

10 Days

DATE

PAGE

OF

COMPANY <u>E2</u>				CR6 (218.6) Lab Filtered CR6 (7196A) Lab Filtered CR6 (7199) Lab Filtered Total Metals (200.7) Field Filtered Chromium Specific Conductance (120.1) pH (150.1) TDS (180.1) Anions (300) Br, Cl, SO4, NO3 Total Organic Carbon (415.2) Diss Metals (6010B) Field Filtered Chromium NUMBER OF CONTAINERS	COMMENTS
PROJECT NAME <u>PG&E Topock</u>					
PHONE <u>(530) 229-3303</u> FAX <u>(530) 339-3303</u>					
ADDRESS <u>155 Grand Ave Ste 1000</u> <u>Oakland, CA 94612</u>					
P.O. NUMBER <u>345631.MP.02.GM</u> TEAM <u>1</u>					
SAMPLERS (SIGNATURE) <u>Aurora M. Hindley</u>					
SAMPLE I.D.	DATE	TIME	DESCRIPTION		
-16 C15-087	5/3/07	745	GW	X	2
-17 C15-013		1300	GW	X	2

CHAIN OF CUSTODY SIGNATURE RECORD				SAMPLE CONDITIONS	
Signature (Relinquished) <u>Aurora M. Hindley</u>	Printed Name <u>Aurora M. Hindley</u>	Company/Agency <u>E2</u>	Date/Time <u>5/3/07 12:00</u>	RECEIVED	COOL <input type="checkbox"/> WARM <input type="checkbox"/> °F
Signature (Received) <u>Har</u>	Printed Name <u>Hashemi</u>	Company/Agency <u>T.L.I</u>	Date/Time <u>5/3/07 14:30</u>	CUSTODY SEALED	YES <input type="checkbox"/> NO <input type="checkbox"/>
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time	SPECIAL REQUIREMENTS:	
Signature (Received)	Printed Name	Company/Agency	Date/Time		
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time		
Signature (Received)	Printed Name	Company/Agency	Date/Time		

965685



TRUESDAIL LABORATORIES, INC.
14201 Franklin Avenue, Tustin, CA 92780-7008
(714)730-6239 FAX: (714) 730-6462
www.truesdail.com

CHAIN OF CUSTODY RECORD

[2007-CIS-002]

COC Number

TURNAROUND TIME

10 Days

DATE

PAGE OF

COMPANY <u>E2</u>				<div style="writing-mode: vertical-rl; transform: rotate(180deg);"> CR6 (7190A) Lab Filtered CR6 (7190) Lab Filtered Specific Conductance (120.1) pH (150.1) TDS (160.1) Anions (300) Cl, F, SO4, NO3 Total Organic Carbon (415.2) </div>												<div style="writing-mode: vertical-rl; transform: rotate(180deg);"> NUMBER OF CONTAINERS </div>				COMMENTS Corrected COC. SMD 5/8/07			
PROJECT NAME <u>PG&E Topock</u>																							
PHONE <u>(530) 229-3303</u> FAX <u>(530) 339-3303</u>																							
ADDRESS <u>155 Grand Ave Ste 1000</u> <u>Oakland, CA 94612</u>																							
P.O. NUMBER <u>354631.MP.02.CI.00</u> TEAM <u>1</u>																							
SAMPLERS (SIGNATURE _____)																							
SAMPLE I.D.	DATE	TIME	DESCRIPTION																				
6 CIS-087	5/8/07	7:45																					
7 CIS-013	5/8/07	13:00							X	X	X												

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished) <i>Shawn P. Duffy</i>	Printed Name <i>Shawn Duffy</i>	Company/Agency <i>CH2M HILL</i>	Date/Time <i>5/8/07 1400</i>
Signature (Received)	Printed Name	Company/Agency	Date/Time
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time
Signature (Received)	Printed Name	Company/Agency	Date/Time
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time
Signature (Received)	Printed Name	Company/Agency	Date/Time

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

EMAX Laboratories, Inc.
1835 W. 205th Street, Torrance, CA 90501
Tel: (310) 618 8889 Ext. 119 Fax: (310) 618 0818
Joe Kelbley jkelbley@emaxlabs.com

CHAIN OF CUSTODY RECORD

[2007-CIS-002]

07E078

COC Number
TURNAROUND TIME 12 Days
DATE PAGE 2 OF 3

COMPANY E2				<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TKN (357.4)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Dissolved Silica (370.1)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Sulfide (376.2)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Dissolved Metals (60108)*</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Alkalinity (310.1)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Ammonia (350.2)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">NUMBER OF CONTAINERS</div> </div>												COMMENTS			
PROJECT NAME PG&E Topock GWM																			
PHONE (530) 229-3303		FAX (530) 339-3303																	
ADDRESS 155 Grand Ave Ste 1000 Oakland, CA 94612																			
P.O. NUMBER 345631.MP.02.CI																			
SAMPLERS (SIGNATURE) <i>Aurora M. Hindley</i>																			
SAMPLE I.D.	DATE	TIME	DESCRIPTION																
2 CIS-087	5/3/07	7:45	GW	X	X	X	X	X	X								5		
3 CIS-013	5/3/07	13:00	GW	X	X	X	X	X	X								5		

CHAIN OF CUSTODY SIGNATURE RECORD					SAMPLE CONDITIONS	
Signature (Relinquished) <i>Aurora M. Hindley</i>	Printed Name Aurora M Hindley	Company/Agency E2	Date/Time 5/3/07 14:00	RECEIVED	COOL <input type="checkbox"/>	WARM <input type="checkbox"/> °F
Signature (Received) <i>Phil Hatcher</i>	Printed Name Phil Hatcher	Company/Agency EMAX	Date/Time 5-4-07 8:56	CUSTODY SEALED	YES <input type="checkbox"/>	NO <input type="checkbox"/>
Signature (Relinquished) <i>Phil Hatcher</i>	Printed Name Phil Hatcher	Company/Agency EMAX	Date/Time 5-4-07 12:50	SPECIAL REQUIREMENTS: * As, B, Ba, Ca, Cr, Fe, K, Mg, Mn, Mo Na, V, Ni, Cu, Zn, Pb, Se		
Signature (Received) <i>Joe</i>	Printed Name JOE FURMAN	Company/Agency EMAX	Date/Time 5-4-07 1:50			
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time			
Signature (Received)	Printed Name	Company/Agency	Date/Time			



TRUESDAIL LABORATORIES, INC.
14201 Franklin Avenue, Tustin, CA 92780-7008
(714)730-6239 FAX: (714) 730-6462
www.truesdail.com

CHAIN OF CUSTODY RECORD

COC Number

TURNAROUND TIME

10 Days

DATE 5/4/07

PAGE OF

965707 [2007-CIS-002]

COMPANY <u>E2</u>				<div style="writing-mode: vertical-rl; transform: rotate(180deg);"> CR6 (7190A) Lab Filtered CR6 (7199) Lab Filtered Specific Conductance (120.1) pH (150.1) TDS (160.1) Anions (300) Cl, F, SO4, NO3 Total Organic Carbon (415.2) </div>										NUMBER OF CONTAINERS		COMMENTS
PROJECT NAME <u>PG&E Topock</u>																
PHONE <u>(530) 229-3303</u> FAX <u>(530) 339-3303</u>																
ADDRESS <u>155 Grand Ave Ste 1000</u> <u>Oakland, CA 94612</u>																
P.O. NUMBER <u>354631.MP.02.CI.00</u> TEAM <u>1</u>																
SAMPLERS (SIGNATURE _____)																
SAMPLE I.D.	DATE	TIME	DESCRIPTION	CR6 (7190A) Lab Filtered	CR6 (7199) Lab Filtered	Specific Conductance (120.1)	pH (150.1)	TDS (160.1)	Anions (300) Cl, F, SO4, NO3	Total Organic Carbon (415.2)						
6 CIS-009	5/4/07	1045	GN	X	X	X	X	X	X	X						5
7 CIS-022	5/4/07	12:17	GW	X	X	X	X	X	X	X						

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time
Signature (Received)	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time
Signature (Received)	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time
Signature (Received)	Printed Name	Company/ Agency	Date/ Time

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °FCUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

ALERT!!
Level III QC

* As, B, Ba, Ca, Cr, Fe, K, Mg, Mn, Mo
Na, V, Ni, Cu, Zn, Pb, Se



TRUESDAIL LABORATORIES, INC.
14201 Franklin Avenue, Tustin, CA 92780-7008
(714)730-6239 FAX: (714) 730-6462
www.truesdail.com

CHAIN OF CUSTODY RECORD

COC Number

TURNAROUND TIME

10 Days

DATE 5/4/07

PAGE 1 OF 1

965707

2007-GMP-125-Q27
2007-CIS-002

COMPANY	E2											COMMENTS			
PROJECT NAME	PG&E Topock														
PHONE	(530) 229-3303	FAX	(530) 339-3303												
ADDRESS	155 Grand Ave Ste 1000 Oakland, CA 94612														
P.O. NUMBER	345631.MP.02.GM CI TEAM 1														
SAMPLERS (SIGNATURE)															
SAMPLE I.D.	DATE	TIME	DESCRIPTION	CR6 (218.6) Lab Filtered	CR6 (71984) Lab Filtered	CR6 (7199) Lab Filtered	Total Metals (200.7) Field Filtered Chromium	Specific Conductance (120.1)	pH (150.1)	TDS (180.1)	Anions (300) ¹¹⁰ HCl, SO4, NO3, F	Total Organic Carbon (415.2)	Diss Metals (60108) Field Filtered Chromium	NUMBER OF CONTAINERS	
-3 CIS-005	5/4/07	1000							X	X	X				
-4 CIS-027		1125			X		X	X	X	X	X				
5 CIS-085		1145			X		X	X	X	X	X				

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished)		Printed Name	Shawn Duffy	Company/Agency	CH2M HILL	Date/Time	5/4/07
Signature (Received)		Printed Name	Shadwinne	Company/Agency	TL	Date/Time	5/4/07 1845
Signature (Relinquished)		Printed Name		Company/Agency		Date/Time	
Signature (Received)		Printed Name		Company/Agency		Date/Time	
Signature (Relinquished)		Printed Name		Company/Agency		Date/Time	
Signature (Received)		Printed Name		Company/Agency		Date/Time	

SAMPLE CONDITIONS

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

SPECIAL REQUIREMENTS:

ALERT!!
Level III QC

EMAX Laboratories, Inc.
1835 W. 205th Street, Torrance, CA 90501
Tel: (310) 618 8889 Ext. 119 Fax: (310) 618 0818
Joe Kelbley jkelbley@emaxlabs.com

CHAIN OF CUSTODY RECORD

[2007-CIS-002]

07E094

COC Number

TURNAROUND TIME

12 Days

DATE 5/4/07

PAGE

OF

COMPANY E2
PROJECT NAME PG&E Topock GWM
PHONE (530) 229-3303 FAX (530) 339-3303
ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612
P.O. NUMBER 345631.MP.02.CI

SAMPLERS (SIGNATURE)

Shawn P. Duffy

SAMPLE I.D.

DATE

TIME

DESCRIPTION

TKN (357.4)
Dissolved Silica (320.1)
Sulfide (376.2)
Dissolved Metals (60108)*
Alkalinity (310.1)
Ammonia (350.2)
NUMBER OF CONTAINERS

COMMENTS

1 CIS-005 5/4/07 1000
2 CIS-027 1125
3 CIS-085 1145

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished)	<i>Shawn P. Duffy</i>	Printed Name	Shawn Duffy	Company/Agency	CH2M Hill	Date/Time	5/4/07
Signature (Received)	<i>Phil Hatcher</i>	Printed Name	Phil Hatcher	Company/Agency	EMAX	Date/Time	5-7-07 905
Signature (Relinquished)	<i>Phil Hatcher</i>	Printed Name	Phil Hatcher	Company/Agency	EMAX	Date/Time	5-7-07 1350
Signature (Received)	<i>J-LUNA</i>	Printed Name	J-LUNA	Company/Agency	EMAX	Date/Time	5-7-07 1350
Signature (Relinquished)		Printed Name		Company/Agency		Date/Time	
Signature (Received)		Printed Name		Company/Agency		Date/Time	

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ 3.6°C
CUSTODY SEALED YES ☐ NO ☐ 3.2°C

SPECIAL REQUIREMENTS:

* As, B, Ba, Ca, Cr, Fe, K, Mg, Mn, Mo
Na, V, Ni, Cu, Zn, Pb, Se



TRUESDAIL LABORATORIES, INC.
14201 Franklin Avenue, Tustin, CA 92780-7008
(714) 730-6239 FAX: (714) 730-6462
www.truesdail.com

CHAIN OF CUSTODY RECORD

[2007-CIS-002]

COC Number

TURNAROUND TIME

10 Days

DATE 5/4/07

PAGE 1 OF 1

965707

COMPANY	E2			<div>Rec'd 05/04/07 965707</div> <div>CR6 (7196A) Lab Filled</div> <div>CR6 (7199) Lab Filled</div> <div>Specific Conductance (120.1)</div> <div>pH (150.1)</div> <div>TDS (160.1)</div> <div>Anions (300) Cl, F, SO4, NO3</div> <div>Total Organic Carbon (415.2)</div> <div>NUMBER OF CONTAINERS</div>										COMMENTS	
PROJECT NAME	PG&E Topock														
PHONE	(530) 229-3303		FAX											(530) 339-3303	
ADDRESS	155 Grand Ave Ste 1000 Oakland, CA 94612														
P.O. NUMBER	354631.MP.02.CI.00		TEAM											1	
SAMPLERS (SIGNATURE)															
SAMPLE I.D.	DATE	TIME	DESCRIPTION	CR6 (7196A)	CR6 (7199)	Specific Conductance	pH	TDS	Anions	Total Organic Carbon	NUMBER OF CONTAINERS				
CAS-026	5/4/07	0815	GW	X	X	X	X	X	X	X	4				
CIS-006	5/4/07	0810	GW	X	X	X	X	X	X	X	4				
CAS-026	5/4/07	0815	GW	X	X	X	X	X	X	X	5				
<div>ALERT!!</div> <div>Level III QC</div>															
											9	total			

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished)	Printed Name	Company/Agency	Date/Time
<i>[Signature]</i>	Laura Hill	CH2M Hill	5/4/07 1315
Signature (Received)	Printed Name	Company/Agency	Date/Time
<i>[Signature]</i>	Shabyniq	TVI	5/4/07 1845
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time
Signature (Received)	Printed Name	Company/Agency	Date/Time
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time
Signature (Received)	Printed Name	Company/Agency	Date/Time

SAMPLE CONDITIONS

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

SPECIAL REQUIREMENTS:

For Sample Conditions
See Form Attached

* As, B, Ba, Ca, Cr, Fe, K, Mg, Mn, Mo
Na, V, Ni, Cu, Zn, Pb, Se



TRUESDAIL LABORATORIES, INC.
14201 Franklin Avenue, Tustin, CA 92780-7008
(714)730-6239 FAX: (714) 730-6462
www.truesdail.com

CHAIN OF CUSTODY RECORD

[2007-GMP-125-Q2]

COC Number

TURNAROUND TIME

10 Days

DATE 5/4/07

PAGE OF

COMPANY E2
PROJECT NAME PG&E Topock
PHONE (530) 229-3303 FAX (530) 339-3303
ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612
P.O. NUMBER 345631.MP.02.GM TEAM 1
SAMPLERS (SIGNATURE) Aurora M. Hinkley

COMMENTS

Rec'd 05/04/07
965708

SAMPLE I.D.	DATE	TIME	DESCRIPTION	CR6 (218.6) Lab Filtered	CR6 (7196.4) Lab Filtered	CR6 (7199) Lab Filtered	Total Metals (200.7) Field Filtered Chromium	Specific Conductance (120.1)	pH (150.1)	TDS (160.1)	Anions (300) Br, Cl, SO4, NO3	Total Organic Carbon (415.2)	Diss Metals (60108) Field Filtered Chromium	NUMBER OF CONTAINERS
1 MW-49-275-125	5/4/07	7:41	GW		X	X	X					X		3
2 MW-49-135-125	5/4/07	08:10	GW		X	X	X					X		3
3 MW-49-365-125	5/4/07	9:21	GW		X	X	X					X		3
4 MW-44-115-125	5/4/07	11:20	GW		X	X	X					X		3
5 MW-28-090-125	5/4/07	10:10	GW		X	X	X					X		3
6 MW-46-205-125	5/4/07	12:35	GW		X	X	X					X		3
7 EB-125-09	5/4/07	11:45	GW		X									1
8 EB-125-08	5/4/07	12:45	GW		X									1
9 EB-125-010011	5/4/07	9:25	GW		X									1

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished)	Printed Name	Company/Agency	Date/Time
<u>Aurora M. Hinkley</u>	<u>Aurora M. Hinkley</u>	<u>E2</u>	<u>5/4/07</u>
Signature (Received)	Printed Name	Company/Agency	Date/Time
<u>Shirley M. Hinkley</u>	<u>Shirley M. Hinkley</u>	<u>TV</u>	<u>5/4/07 1845</u>
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time
Signature (Received)	Printed Name	Company/Agency	Date/Time
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time
Signature (Received)	Printed Name	Company/Agency	Date/Time

SAMPLE CONDITIONS

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

SPECIAL REQUIREMENTS:

ALERT!!
Level III QC

For Sample Conditions
See Form Attached



TRUESDAIL LABORATORIES, INC.
14201 Franklin Avenue, Tustin, CA 92780-7001
(714) 730-6239 FAX: (714) 730-8462
www.truesdail.com

CHAIN OF CUSTODY RECORD

[2007-GMP-125-Q2]

COC Number

TURNAROUND TIME

10 Days

DATE 5/4/06

PAGE 1 OF

COMPANY E2

PROJECT NAME PG&E Topock

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

ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612

P.O. NUMBER 345631.MP.02.GM TEAM 1

SAMPLERS (SIGNATURE) [Signature]

SAMPLE I.D. DATE TIME DESCRIPTION

				CR6 (218.6) Lab Filtered	CR6 (7196A) Lab Filtered	CR6 (7199) Lab Filtered	Total Metals (200.7) Field Filtered Chromium	Specific Conductance (120.1)	pH (150.1)	TDS (160.1)	Anions (300) Br, Cl, SO ₄ , NO ₃	Total Organic Carbon (415.2)	Diss Metals (60108) Field Filtered Chromium	NUMBER OF CONTAINERS	COMMENTS
CIS-026	5/4/07	0715	GW		X	X	X	X	X	X	X	X	X	5/4/07	
MW-47-055-125	5/4/07	0810	GW		X	X	X	X	X	X	X	X	X		
MW-47-115-125	5/4/07	0910	GW		X	X	X					X		3	
MW-25-125 Re	5/4/07														
CIS-006	5/4/07	0810	GW		X	X	X					X		3	
CIS-022	5/4/07	1217	GW		X	X	X					X			→ Rec'd sample for metal
														6 total	

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished)	Printed Name	Company/Agency	Date/Time
[Signature]	Laura Elrott	412M HLL	5/4/07 1315
Signature (Received)	Printed Name	Company/Agency	Date/Time
[Signature]	Shadyuma	TLI	5/4/07 1845
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time
Signature (Received)	Printed Name	Company/Agency	Date/Time
Signature (Relinquished)	Printed Name	Company/Agency	Date/Time
Signature (Received)	Printed Name	Company/Agency	Date/Time

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

ALERT!!
Level III QC



TRUESDAIL LABORATORIES, INC.
14201 Franklin Avenue, Tustin, CA 92780-7001
(714) 730-6239 FAX: (714) 730-6462
www.truesdail.com

CHAIN OF CUSTODY RECORD

[2007-GMP-125-Q2]

COC Number

TURNAROUND TIME

10 Days

DATE 5/4/07

PAGE OF

COMPANY E2
PROJECT NAME PG&E Topock
PHONE (530) 229-3303 FAX (530) 339-3303
ADDRESS 155 Grand Ave Ste 1000
Oakland, CA 94612
P.O. NUMBER 345631.MP.02.GM TEAM 1
SAMPLERS SIGNATURE Shawn D. Duffy

SAMPLE I.D. DATE TIME DESCRIPTION

CR6 (218.6) Lab Filtered
CR6 (7196A) Lab Filtered
CR6 (7199) Lab Filtered
Total Metals (200.7) Field Filtered Chromium
Specific Conductance (120.1)
pH (150.1)
TDS (160.1)
Anions (300) Br, Cl, SO4, NO3
Total Organic Carbon (415.2)
Diss Metals (60108) Field Filtered Chromium
NUMBER OF CONTAINERS

COMMENTS

13	CIS-005	5/4/07	1000				X		X	X										

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished) <u>Shawn P. Duffy</u>	Printed Name <u>Shawn D. Duffy</u>	Company/ Agency <u>CH2M HILL</u>	Date/ Time <u>5/4/07</u>
Signature (Received) <u>Shawn P. Duffy</u>	Printed Name <u>Shawn P. Duffy</u>	Company/ Agency <u>CH2M HILL</u>	Date/ Time <u>5/4/07</u>
Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time <u>1845</u>
Signature (Received)	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time
Signature (Received)	Printed Name	Company/ Agency	Date/ Time

SAMPLE CONDITIONS

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

SPECIAL REQUIREMENTS:

ALERT!!
Level III QC

EMAX Laboratories, Inc.
1835 W. 205th Street, Torrance, CA 90501
Tel: (310) 618 8889 Ext. 119 Fax: (310) 618 0818
Joe Kelbley jkelbley@emaxlabs.com

CHAIN OF CUSTODY RECORD

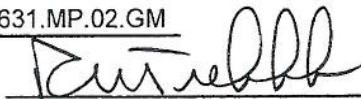
[2007-GMP-125-Q2]

07E092

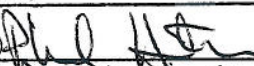


COC Number

TURNAROUND TIME 12 Days

DATE 5/4/07 PAGE 1 OF 1

COMPANY E2																COMMENTS			
PROJECT NAME PG&E Topock GWM																			
PHONE (530) 229-3303 FAX (530) 339-3303																			
ADDRESS 155 Grand Ave Ste 1000 Oakland, CA 94612																			
P.O. NUMBER 345631.MP.02.GM																			
SAMPLERS (SIGNATURE) 																			
SAMPLE I.D.	DATE	TIME	DESCRIPTION	VOCs (8260B/624)	TPH-gas (SW8015)	SVOCs (8270C)	TPH-Diesel (SW8015)	Diss Metals (6010B) Field Filtered	Ca,Mg,K,Na,B	Diss Metals (6010B) Field Filtered	Title 22	Diss Metals (6010B) Field Filtered	Title 22, Ca, Mg, K, Na	Alkalinity (310.1)	Ammonia (350.2)	Sulfide (376.2)	Other	Other	NUMBER OF CONTAINERS
CS-026	5/4/07	07:5	GW					X				X	X	X	X	X	X	X	5/4/07
MW-47-055-125	5/4/07	08:10	GW					X				X	X	X	X	X	X	X	2
MW-25-125	5/4/07	1000	GW	X	X	X	X												10
CS-026	5/4/07	07:15	GW																5/4/07
TB-125-050407	5/4/07	0600	TB	X	X														6
																10 total			

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time
	Phil Holder	EMAX	5-7-07 9:05
	Phil Holder	EMAX	5-7-07 13:50
	J-Luna	emax	5-7-07 13:50
Signature (Received)	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time
Signature (Received)	Printed Name	Company/ Agency	Date/ Time

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS: T= 13.6 °C