Pacific Gas and Electric Company

Yvonne Meeks
Manager

Environmental Remediation
Gas T&D Department

Mailing Address
4325 South Higuera Sreet
San Luis Obispo, CA 93401
Location
6588 Ontario Road
San Luis Obispo, CA 93405
Tel: (805) 234-2257
Email: yjm1@pge.com

December 28, 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, Third Quarter 2007
PG&E Topock Compressor Station, Needles, California

Dear Mr. Yue:

Enclosed is the Groundwater and Surface Water Monitoring Report, Third Quarter 2007 for the Pacific Gas And Electric Company (PG&E) Topock Compressor Station. This report provides results for the quarterly monitoring event conducted from October 1 through 11, 2007, at 88 groundwater monitoring wells. This report also presents results for the shoreline and in-channel Colorado River sampling conducted during September and October, as well as results for sampling events throughout the third quarter.

In addition, this report presents a summary of water level data collected at MW-23 and surrounding wells during the third quarter 2007.

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

Sincerely,

Yvonne Meeks

Enclosure

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

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

PREPARED FOR: Pacific Gas and Electric Company

PREPARED BY: CH2M HILL Inc.

DATE: December 28, 2007

This technical memorandum presents the results of the third quarter 2007 groundwater and surface water monitoring activities conducted at the Pacific Gas and Electric Company (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 October 2007, the location of the PG&E Topock Compressor Station, and other site features. The GMP monitoring schedule includes 100 groundwater monitoring wells, two groundwater extraction wells, and nine shoreline and nine in-channel Colorado River surface water sampling locations. 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 third quarter (typically July through September) was extended to include the biennial sampling event in early October. This sampling round is delayed until after October 1 to avoid impacting sensitive habitat during the southwestern willow flycatcher nesting season, which ends September 30.

The following monitoring activities were conducted during third quarter 2007 (July through October) and are addressed in this report:

- The third quarter GMP monitoring event, which also served as the biennial sampling event, was conducted from October 1 through October 11, 2007, and included sampling 88 groundwater monitoring wells and nine shoreline surface water stations for the site constituents of concern (COCs): hexavalent chromium [Cr(VI)], total chromium [Cr(T)], specific conductance, and pH. During this GMP event, three selected wells were also sampled for California Code of Regulations (CCR) Title 22 metals analyses, and a water level measurement survey was conducted (manual measurements at 30 shallow wells are used to supplement transducer water level data for this task; the water level 'snapshot' data is collected annually and presented with the annual GMP Report).

Monitoring wells MW-11, MW-24A, MW-24B, MW-38D, and MW-38S are being monitored as part of the uplands *in situ* pilot study. Therefore, they were not included in the GMP sampling.

- Quarterly river sampling was conducted from September 11 through September 12, 2007, at nine in-channel surface water locations. Samples were analyzed for site COCs and selected general chemistry parameters. Follow-up sampling at all river locations was conducted on September 13 and September 14, September 25 and September 26, and October 2 and October 3, 2007.
- Monthly groundwater sampling events were conducted from July 11 through July 13, August 6 through August 8, and September 4 through September 7, 2007, and included sampling five monitoring wells for site COCs. Additional biweekly samples were collected at monitoring well MW-34-100.

In addition to routine GMP activities, two groundwater studies were performed during the third quarter. The first was a focused groundwater study conducted at bedrock monitoring well MW-23 and surrounding wells. In late June through July, the groundwater sampling and analysis portion of the study was performed. That data was presented in the Second Quarter Monitoring Report submitted in August 2007. During the August 15, 2007, Consultative Workgroup meeting, DTSC requested long-term transducer monitoring at MW-23 and the surrounding area. The groundwater elevation data from MW-23 and adjacent monitoring wells surrounding MW-23 are presented as Attachment 2 to this report.

The second study was hydraulic testing at wells PGE-7 and PGE-8. This effort included the continuous pumping and collection of analytical samples at PGE-8. Analytical results from the final sample collected during the 75-hour duration pumping test at PGE-8 are included in Table 1. Well PGE-7 was extensively modified and was not sampled until December 2007. Results from that well will be included in the 2007 annual report. All analytical and hydraulic data will be included in an upcoming hydraulic test report.

Monitoring Activities and Results

The groundwater and surface water monitoring data presented in Tables 1 through 4 include the results from January through October 2007.

GMP Groundwater Monitoring

Figure 1 shows the locations of the GMP monitoring wells sampled during the reporting period. The analytical results for Cr(VI), Cr(T), and other site COCs in groundwater samples collected from GMP wells during January through October 2007 are presented in Table 1. Groundwater sampling and chain-of-custody forms are included in Attachment 1.

Figures 2 through 4 present the October 2007 Cr(VI) results for wells monitoring the upper, middle, and lower depth intervals of the Alluvial Aquifer, respectively. Overall, the third quarter 2007 chromium results are in the range of concentrations observed during the prior 2007 sampling events. In the third quarter 2007, the maximum-detected Cr(VI) concentration was 12,200 micrograms per liter (µg/L) at monitoring well MW-20-130. Most wells exhibit either stable or decreasing concentrations of Cr(VI) and Cr(T). Refer to PG&E's Topock

Quarterly Performance Monitoring Report and Evaluation, August through October 2007, dated November 30, 2007, for the recent concentration trends observed in wells in the area of active Interim Measure pumping. A review and discussion of the 2007 groundwater sampling results and concentration trends will be included in the annual GMP monitoring 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 sampling results of chromium and other analytes in shoreline surface water monitoring events performed from January through October 2007. The Cr(VI) sampling results for the shoreline surface water monitored during third quarter 2007 are shown in 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 third quarter 2007.

Table 3 presents the results for the site COCs, hardness, total dissolved solids, and total suspended solids analyses for the in-channel surface water sampling events, January through October 2007. Cr(VI) was detected at C-R22-D at a concentration of 0.40 µg/L for the water sample collected on September 11, 2007. Cr(VI) was not detected in any of the other in-channel water samples collected during the third quarter 2007. As a result of the detected concentration at C-R22-D, all shoreline and in-channel locations were resampled in September and October 2007. Cr(VI) and Cr(T) were not detected in any of the surface water samples collected in the two confirmation sampling events.

Title 22 Metals Groundwater Analyses

Table 4 presents the CCR Title 22 metal results for the GMP monitoring wells sampled from January through October 2007. In addition to Cr(T), the trace metals detected during the October 2007 groundwater sampling were antimony, arsenic, barium, copper, lead, molybdenum, selenium, and vanadium. Excluding Cr(T), antimony (wells MW-12 and MW-20-70), and arsenic (well MW-12), the dissolved concentrations of the trace metals detected during the October 2007 sampling are below their respective California drinking water standards.

Data Validation and Completeness

The laboratory analytical data from GMP sampling during the third 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 third quarter 2007 monitoring data.

Schedule for Fourth Quarter 2007 GMP Activities

The following GMP monitoring activities are scheduled for the fourth quarter 2007 monitoring period:

- The monthly groundwater sampling event was conducted on November 13 and November 14, 2007 (five wells sampled).
- Quarterly surface water sampling at nine shoreline and nine in-channel locations was conducted on December 5 and December 6, 2007.
- The fourth quarter monitoring event was conducted during the week of December 10, 2007 (30 wells on quarterly sampling schedule).
- During the December quarterly sampling event, CCR Title 22 metals samples were collected from 12 monitoring wells for additional metals characterization, in accordance with a Department of Toxic Substances Control letter dated November 6, 2007.

The results of the December 2007 quarterly groundwater and surface water monitoring event and the November 2007 monthly sampling will be reported in the 2007 GMP Annual Monitoring Report. The 2007 Annual Report will be submitted approximately 12 weeks after the December 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

Tables

TABLE 1
Groundwater COC Sampling Results, January through October 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-9	04-Oct-07		304	304	2,810	7.52 J
MW-10	06-Mar-07		1640	1700	2,760	7.67
	03-May-07		1230	1440	2,840	7.58 J
	02-Oct-07		1010	1050	2,700	7.74 J
MW-12	06-Mar-07		2630	2440	4,820	8.41
	03-May-07		2620	2880	5,220	8.40 J
	04-Oct-07		2830	2700	5,560	8.41 J
	04-Oct-07	FD	2970	2800	5,540	8.47 J
MW-13	05-Mar-07		23.4	25.2	1,860	7.66
	02-Oct-07		21.8	23.6	1,860	7.67 J
MW-14	12-Mar-07		13.0	13.4	1,450	7.75
	02-Oct-07		27.2	31.2	1,410	7.86 J
MW-15	02-Oct-07		12.2	12.5	1,450	7.89 J
MW-16	02-Oct-07		8.80	9.70	1,040	8.12 J
MW-17	03-Oct-07		6.50	7.30	1,710	---
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
	02-Oct-07		27.9	27.5	1,250	7.78 J
MW-19	06-Mar-07		1040	1030	2,240	7.69
	02-May-07		836	777	2,310	7.70 J
	05-Oct-07		1390	1510	2,200	7.33 J
MW-20-70	14-Mar-07		2820	2720	2,850	7.62
	03-May-07		2790	3050	2,750	7.62 J
	11-Oct-07		2400	2140	2,800	7.66 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
	10-Oct-07		9000	10700	3,390	7.61 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
	05-Oct-07		12200	13000	11,600	7.55 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
	04-Oct-07		ND (5.0)	ND (1.0)	14,100	7.21 J
MW-22	08-Mar-07		ND (1.0)	ND (1.0)	27,700	7.02
	10-Oct-07		ND (1.0)	ND (1.0)	23,700	6.93 J
MW-23	06-Mar-07		1020	1020	10,200	7.75
	02-May-07		13.0	10.9	17,100	7.38
	04-Oct-07		19.2	22.2	15,800	7.50 J
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

TABLE 1
Groundwater COC Sampling Results, January through October 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-24BR	03-May-07		ND (1.0)	ND (1.0) LF	14,000	8.29 J
	04-Oct-07		ND (1.0)	ND (1.0)	13,500	8.72 J
MW-25	06-Mar-07		945	951	1,330	7.59
	02-Oct-07		895	805	1,190	7.62 J
	02-Oct-07	FD	933	884	1,210	7.69 J
MW-26	12-Mar-07		3440	3540	3,580	7.57
	02-Oct-07		3510	3740	3,490	7.58 J
MW-27-20	02-Oct-07		ND (0.2)	2.20	1,120	7.73 J
MW-27-60	02-Oct-07		ND (0.2)	ND (1.0)	7,400	7.51 J
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)	---	---
	11-Jul-07		ND (1.0)	ND (1.0)	---	---
	08-Aug-07		ND (1.0)	ND (1.0)	---	---
	08-Aug-07	FD	ND (1.0)	ND (1.0)	---	---
	05-Sep-07		ND (1.0)	ND (1.0)	---	---
	02-Oct-07		ND (1.0)	ND (1.0)	16,300	7.24 J
MW-28-25	04-Oct-07		ND (1.0)	ND (1.0)	1,220	7.52 J
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
	04-Oct-07		ND (1.0)	ND (1.0)	7,020	7.42 J
MW-29	04-Oct-07		ND (1.0)	ND (1.0)	2,630	7.46 J
MW-30-30	08-Oct-07		ND (1.0)	ND (1.0) LF	35,800	7.14 J
MW-31-60	12-Mar-07		626	638	2,730	7.69
	04-Oct-07		726 J	669	2,840	7.60 J
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
	01-Oct-07		33.2	29.4	9,750	7.91 J
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
	01-Oct-07		ND (2.0)	ND (1.0)	47,700	6.79 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
	01-Oct-07		ND (1.0)	1.20	18,700	7.12 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
	05-Oct-07		ND (0.2)	1.10	6,260	8.14 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
	05-Oct-07		18.2	19.4	9,540	7.27 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

TABLE 1
Groundwater COC Sampling Results, January through October 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-33-150	09-Oct-07		8.90	8.30	15,600	7.71 J
	09-Oct-07	FD	9.40	7.90	15,500	7.70 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
	05-Oct-07		11.9	11.5	17,500	7.30 J
MW-34-55	03-Oct-07		ND (0.2)	ND (1.0)	1,160	---
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)	---	---
	11-Jul-07		ND (1.0)	ND (1.0)	---	---
	08-Aug-07		ND (1.0)	ND (1.0)	---	---
	06-Sep-07		ND (1.0)	ND (1.0)	---	---
	03-Oct-07		ND (0.2)	ND (1.0)	8,790	---
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	---	---
	12-Jul-07		557	520	---	---
	12-Jul-07	FD	558	521	---	---
	25-Jul-07		560	627	---	---
	08-Aug-07		596	670	---	---
	22-Aug-07		550	490	---	---
	06-Sep-07		551	581	---	---
	06-Sep-07	FD	546	516	---	---
	03-Oct-07		521	609 J	16,000	---
	03-Oct-07	FD	513	424 J	16,100	---
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
	01-Oct-07		24.8	21.3	7,160	7.51 J
	01-Oct-07	FD	24.8	20.6	7,270	7.47 J
MW-35-135	08-Mar-07		32.0	39.2	9,820	7.76

TABLE 1
Groundwater COC Sampling Results, January through October 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-35-135	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
	01-Oct-07		32.4	28.9	9,150	7.83 J
MW-36-20	03-Oct-07		ND (1.0)	ND (1.0)	23,500	---
MW-36-40	03-Oct-07		ND (1.0)	ND (1.0)	8,390	---
MW-36-50	10-Oct-07		ND (0.2)	2.00	3,360	7.88 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
	09-Oct-07		ND (0.2)	ND (1.0)	1,520	8.29 J
MW-36-90	10-Jan-07		6.00	9.70	---	---
	05-Feb-07		5.40	4.90	---	---
	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	---	---
	12-Jul-07		2.90	3.10	---	---
	07-Aug-07		3.00	3.60	---	---
	06-Sep-07		2.90	3.60	---	---
	09-Oct-07		3.20	2.90	3,210	7.84 J
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	---	---
	12-Jul-07		180	219	---	---
	07-Aug-07		159 J	187	---	---
	06-Sep-07		157	184	---	---
	10-Oct-07		228	196	12,500	7.27 J
MW-37D	07-Mar-07		1420	1310	14,700	7.84
	03-May-07		1350	1260	14,400	7.56 J
	04-Oct-07		834	794	13,600	7.78 J
MW-37S	07-Mar-07		7.80	8.50	4,640	7.86
	04-Oct-07		7.70	7.50	4,470	7.89 J
	04-Oct-07	FD	7.60	7.40	4,530	7.91 J
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
	08-Oct-07		ND (1.0)	ND (1.0)	10,800	7.18 J
MW-39-50	08-Oct-07		ND (0.2)	ND (1.0)	3,660	7.98 J
MW-39-60	08-Oct-07		ND (0.2)	ND (1.0)	4,550	7.72 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	---	---
	08-Oct-07		5.50	6.20	5,420	7.56 J
MW-39-80	10-Jan-07		302	292	---	---

TABLE 1
Groundwater COC Sampling Results, January through October 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-39-80	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	---	---
	12-Jul-07		62.8	56.2	---	---
	08-Aug-07		43.3	45.2	---	---
	06-Sep-07		65.3	65.7	---	---
	08-Oct-07		58.6	48.3	11,800	7.24 J
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	---	---
	12-Jul-07		2020	2430	---	---
	07-Aug-07		1830	1780	---	---
	07-Sep-07		1660	1690	---	---
	10-Oct-07		1660	1840	18,600	7.07 J
MW-40D	09-Mar-07		104	91.6	15,300	7.68
	04-May-07		78.0	79.6	15,300	7.60 J
	04-Oct-07		112	104	14,600	7.44 J
MW-40S	04-Oct-07		5.70	7.40	2,040	7.80 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
	03-Oct-07		ND (1.0)	1.30	20,000	---
MW-41M	08-Mar-07		10.0	12.0 LF	14,500	7.76
	03-Oct-07		10.5	8.80	14,100	---
MW-41S	08-Mar-07		19.9	20.9	4,710	7.96
	03-Oct-07		19.5	17.7	4,650	---
	03-Oct-07	FD	19.6	18.2	4,580	---
MW-42-30	07-Mar-07		ND (0.2)	ND (1.0)	13,300	7.38
	04-Oct-07		ND (1.0)	ND (1.0)	20,600	7.17 J
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
	04-Oct-07		ND (1.0)	ND (1.0)	13,900	7.30 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
	03-Oct-07		ND (1.0)	ND (1.0)	14,400	---
MW-43-25	06-Mar-07		ND (0.2)	ND (1.0)	1,250	7.55
	02-Oct-07		ND (1.0)	ND (1.0)	1,210	7.46 J
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
	02-Oct-07		ND (1.0)	ND (1.0)	13,400	7.53 J
MW-43-90	06-Mar-07		ND (1.0)	ND (1.0)	19,700	6.99

TABLE 1
Groundwater COC Sampling Results, January through October 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-43-90	30-Apr-07		ND (1.0)	ND (1.0)	19,800	6.99 J
	02-Oct-07		ND (1.0)	ND (1.0)	18,200	6.93 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
	04-Oct-07		ND (0.2)	ND (1.0)	4,790	7.65 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	FD	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	---	---
	10-Jul-07		919	1060	---	---
	06-Aug-07		834	924	---	---
	05-Sep-07		872	850	---	---
	04-Oct-07		763	866	12,300	7.95 J
	04-Oct-07	FD	783	830	12,200	7.83 J
MW-44-125	09-Jan-07		285	285	---	---
	09-Jan-07	FD	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	FD	300	309	12,200	7.87 J
	14-Jun-07		229	258	---	---
	11-Jul-07		252	283	---	---
	07-Aug-07		278	251	---	---
	04-Sep-07		255	253	---	---
	04-Oct-07		314	347	11,900	7.85 J
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	---	---
	13-Jul-07		103	101	---	---
	06-Aug-07		94.0	98.9	---	---
	04-Sep-07		88.1	94.8	---	---
	05-Oct-07		100	86.7	15,500	8.45 J
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
	05-Oct-07		3.70	4.60	18,900	8.32 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
	04-Oct-07		61.9	59.2	3,660	7.79 J
MW-47-115	06-Mar-07		10.6	10.8	12,500	7.77

TABLE 1
Groundwater COC Sampling Results, January through October 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-47-115	04-May-07		14.1	13.0	12,700	7.68 J
	04-Oct-07		11.6	12.2	12,200	7.69 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
	04-Oct-07		ND (1.0)	ND (1.0)	16,500	7.30 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
	10-Oct-07		ND (1.0)	2.80	12,300	7.81 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
	09-Oct-07		ND (1.0)	ND (1.0)	22,200	8.20 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
	09-Oct-07		ND (2.0)	ND (1.0)	34,200	8.08 J
MW-50-095	07-Mar-07		274	372	4,770	7.98
	02-May-07		304	264	4,810	7.87 J
	04-Oct-07		217	216	4,660	8.06 J
MW-50-200	07-Mar-07		12300	14600	20,700	7.92
	30-Apr-07		10900	12100	20,300	7.83 J
	04-Oct-07		9430	9780	18,800	7.37 J
MW-51	06-Mar-07		4690	5090	10,500	7.56
	01-May-07		4670	5120	11,100	7.52 J
	05-Oct-07		4500	4340	10,100	7.59 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
	12-Jul-07		ND (1.0)	ND (1.0)	20,600	7.44 J
	08-Aug-07		ND (1.0)	ND (1.0)	20,500	7.96 J
	05-Sep-07		ND (1.0)	ND (1.0)	19,200	7.98 J
	11-Oct-07		ND (1.0)	ND (1.0)	19,700	8.02 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
	12-Jul-07		ND (1.0)	ND (1.0)	15,900	7.77 J
	08-Aug-07		ND (1.0)	ND (1.0)	16,400	7.94 J
	08-Aug-07	FD	ND (1.0)	ND (1.0)	16,100	7.86 J
	05-Sep-07		ND (1.0)	ND (1.0)	15,100	7.93 J
	11-Oct-07		ND (1.0)	ND (1.0)	15,800	8.01 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
	12-Jul-07		ND (1.0)	ND (1.0)	11,600	7.48 J
	08-Aug-07		ND (1.0)	ND (1.0)	11,600	7.65 J
	05-Sep-07		ND (1.0)	ND (1.0)	10,800	7.45 J
	11-Oct-07		ND (1.0)	ND (1.0)	11,000	7.50 J
MW-53D	03-Apr-07		ND (1.0)	ND (1.0)	---	---

TABLE 1
Groundwater COC Sampling Results, January through October 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-53D	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
	12-Jul-07		ND (1.0)	ND (1.0)	25,500	8.79 J
	08-Aug-07		ND (1.0)	ND (1.0)	25,700	8.98 J
	05-Sep-07		ND (1.0)	ND (1.0)	23,500	8.56 J
	05-Sep-07	FD	ND (1.0)	ND (1.0)	24,200	8.67 J
	11-Oct-07		ND (2.0)	2.30 J	24,300	8.79 J
	11-Oct-07	FD	ND (1.0)	ND (1.0) J	24,800	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
	12-Jul-07		ND (1.0)	ND (1.0)	15,400	8.52 J
	08-Aug-07		ND (1.0)	ND (1.0)	16,200	8.50 J
	05-Sep-07		ND (1.0)	ND (1.0)	15,500	8.48 J
	11-Oct-07		ND (1.0)	ND (1.0)	16,900	8.57 J
OW-3D	09-Mar-07		3.10	3.00	7,680	8.18
	03-Oct-07		3.90	4.20	7,710	---
OW-3M	09-Mar-07		18.3	17.0	5,100	8.07
	03-Oct-07		16.5 J	18.5	4,980	---
OW-3S	09-Mar-07		22.8	22.1	1,730	7.71
	03-Oct-07		22.3	21.8	1,690	---
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
	11-Jul-07		47.1	39.7	7,450	7.55 J
	08-Aug-07		51.4	60.7	7,290	7.59 J
	05-Sep-07		49.1	49.2	6,590	7.55 J
	03-Oct-07		52.6	45.4	6,550	7.53 J
PGE-8	11-Aug-07		ND (1.0)	ND (1.0)	18,000	8.46 J
Park Moabi-3	02-May-07		0.90	1.30 UF	1,890	7.82 J
	04-Oct-07		ND (1.0)	ND (1.0) UF	1,920	7.93 J
Park Moabi-4	02-May-07		ND (0.2)	ND (1.0) UF	1,530	7.99 J
	04-Oct-07		21.4	23.5 UF	1,720	8.14 J
TW-1	11-Oct-07		4610	4220	6,200	7.54 J
TW-2D	04-Oct-07		210	228	7,350	7.40 J
TW-2S	04-Oct-07		1250	1220	2,380	7.93 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
	11-Jul-07		2000	2390	8,750	7.37 J
	08-Aug-07		1930	1800	8,660	7.28 J
	05-Sep-07		2260	2110	7,750	7.28 J
	03-Oct-07		2000	1860	8,200	7.29 J

TABLE 1
Groundwater COC Sampling Results, January through October 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
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
	03-Oct-07		33.4	32.2	19,400	---
	03-Oct-07	FD	33.6	32.7	19,600	---
TW-5	04-Oct-07		6.60	7.50	12,200	7.91 J

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 October 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
	12-Sep-07	ND (0.2)	ND (1.0)	1,400	8.17 J
	14-Sep-07	ND (0.2)	ND (1.0)	---	---
	26-Sep-07	ND (0.2)	ND (1.0)	---	---
	03-Oct-07	ND (0.2)	ND (1.0)	---	---
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
	11-Sep-07	ND (0.2)	ND (1.0)	943	8.25 J
	13-Sep-07	ND (0.2)	ND (1.0)	---	---
	25-Sep-07	ND (0.2)	ND (1.0)	---	---
	02-Oct-07	ND (0.2)	ND (1.0)	---	---
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
	12-Sep-07	ND (0.2)	ND (1.0)	1,330	8.08 J
	14-Sep-07	ND (0.2)	ND (1.0)	---	---
	26-Sep-07	ND (0.2)	ND (1.0)	---	---
	03-Oct-07	ND (0.2)	ND (1.0)	---	---
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
	12-Sep-07	ND (0.2)	ND (1.0)	1,390	8.07 J
	14-Sep-07	ND (0.2)	ND (1.0)	---	---
	26-Sep-07	ND (0.2)	ND (1.0)	---	---
	03-Oct-07	ND (0.2)	ND (1.0)	---	---
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
	12-Sep-07	ND (0.2)	ND (1.0)	1,320	8.02 J
	14-Sep-07	ND (0.2)	ND (1.0)	---	---
	26-Sep-07	ND (0.2)	ND (1.0)	---	---
	03-Oct-07	ND (0.2)	ND (1.0)	---	---
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
	11-Sep-07	ND (0.2)	ND (1.0)	938	8.27 J
	13-Sep-07	ND (0.2)	ND (1.0)	---	---
	25-Sep-07	ND (0.2)	ND (1.0)	---	---
	02-Oct-07	ND (0.2)	ND (1.0)	---	---
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

TABLE 2
Shoreline Surface Water COC Sampling Results, January through October 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
R-27	11-Sep-07	ND (0.2)	ND (1.0)	934	8.30 J
	13-Sep-07	ND (0.2)	ND (1.0)	---	---
	26-Sep-07	ND (0.2)	ND (1.0)	---	---
	02-Oct-07	ND (0.2)	ND (1.0)	---	---
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
	12-Sep-07	ND (0.2)	ND (1.0)	1,240	8.20 J
	13-Sep-07	ND (0.2)	ND (1.0)	---	---
	26-Sep-07	ND (0.2)	ND (1.0)	---	---
	03-Oct-07	ND (0.2)	ND (1.0)	---	---
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
	12-Sep-07	ND (0.2)	ND (1.0)	1,310	7.92 J
	14-Sep-07	ND (0.2)	ND (1.0)	---	---
	26-Sep-07	ND (0.2)	ND (1.0)	---	---
	03-Oct-07	ND (0.2)	ND (1.0)	---	---

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

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 October 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-CON-S	12-Sep-07	ND (0.2)	ND (1.0)	1,370	8.09 J	308	794	ND (2.5)
C-CON-M	12-Sep-07	ND (0.2)	ND (1.0)	1,350	8.10 J	306	822	ND (2.5)
C-CON-D	12-Sep-07	ND (0.2)	ND (1.0)	1,610	8.07 J	304	924	2.60
C-CON-S	14-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-CON-M	14-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-CON-D	14-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-CON-S	26-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-CON-M	26-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-CON-D	26-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-CON-S	03-Oct-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-CON-M	03-Oct-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-CON-D	03-Oct-07	ND (0.2)	ND (1.0)	---	---	---	---	---
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)

TABLE 3
In-Channel Surface Water COC and Additional Parameters Sampling Results, January through October 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-I-3-S	11-Sep-07	ND (0.2)	ND (1.0)	948	8.19 J	320	657	ND (10)
C-I-3-M	11-Sep-07	ND (0.2)	ND (1.0)	945	8.18 J	316	649	ND (10)
C-I-3-D	11-Sep-07	ND (0.2)	ND (1.0)	936	8.14 J	320	632	ND (10)
C-I-3-S	13-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-I-3-M	13-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-I-3-D	13-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-I-3-S	25-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-I-3-M	25-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-I-3-D	25-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-I-3-S	02-Oct-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-I-3-M	02-Oct-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-I-3-D	02-Oct-07	ND (0.2)	ND (1.0)	---	---	---	---	---
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-MAR-S	11-Sep-07	ND (0.2)	ND (1.0)	1,010	7.81 J	380	666	69.8
C-MAR-D	11-Sep-07	ND (0.2)	ND (1.0)	1,000	7.88 J	375	674	72.4
C-MAR-S	13-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-MAR-D	13-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-MAR-S	26-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-MAR-D	26-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-MAR-S	02-Oct-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-MAR-D	02-Oct-07	ND (0.2)	ND (1.0)	---	---	---	---	---
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)
C-NR1-M	14-Mar-07	ND (0.2)	ND (1.0)	934	8.22	304	760	ND (10)

TABLE 3
In-Channel Surface Water COC and Additional Parameters Sampling Results, January through October 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-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-NR1-S	12-Sep-07	ND (0.2)	ND (1.0)	1,280	8.15 J	320	814	ND (2.5)
C-NR1-M	12-Sep-07	ND (0.2)	ND (1.0)	1,300	8.12 J	312	740	ND (2.5)
C-NR1-D	12-Sep-07	ND (0.2)	ND (1.0)	1,230	8.14 J	312	726	ND (2.5)
C-NR1-S	14-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-NR1-M	14-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-NR1-D	14-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-NR1-S	26-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-NR1-M	26-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-NR1-D	26-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-NR1-S	03-Oct-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-NR1-M	03-Oct-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-NR1-D	03-Oct-07	ND (0.2)	ND (1.0)	---	---	---	---	---
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-NR3-S	12-Sep-07	ND (0.2)	ND (1.0)	1,310	8.16 J	326	750	ND (2.5)
C-NR3-M	12-Sep-07	ND (0.2)	ND (1.0)	1,340	7.86 J	310	750	ND (2.5)
C-NR3-D	12-Sep-07	ND (0.2)	ND (1.0)	1,260	8.00 J	324	696	ND (2.5)
C-NR3-S	14-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-NR3-M	14-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-NR3-D	14-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---

TABLE 3
In-Channel Surface Water COC and Additional Parameters Sampling Results, January through October 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-NR3-S	26-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-NR3-M	26-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-NR3-D	26-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-NR3-S	03-Oct-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-NR3-M	03-Oct-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-NR3-D	03-Oct-07	ND (0.2)	ND (1.0)	---	---	---	---	---
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-NR4-S	12-Sep-07	ND (0.2)	ND (1.0)	1,250	8.17 J	328	716	ND (2.5)
C-NR4-M	12-Sep-07	ND (0.2)	ND (1.0)	1,250	8.14 J	326	---	ND (2.5)
C-NR4-D	12-Sep-07	ND (0.2)	ND (1.0)	1,280	8.09 J	430	720	ND (2.5)
C-NR4-S	14-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-NR4-M	14-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-NR4-D	14-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-NR4-S	26-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-NR4-M	26-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-NR4-D	26-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-NR4-S	03-Oct-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-NR4-M	03-Oct-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-NR4-D	03-Oct-07	ND (0.2)	ND (1.0)	---	---	---	---	---
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)	---	---	---	---	---

TABLE 3
In-Channel Surface Water COC and Additional Parameters Sampling Results, January through October 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-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)
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-R22-S	11-Sep-07	ND (0.2)	ND (1.0)	936	8.17 J	320	646	ND (10)
C-R22-M	11-Sep-07	ND (0.2)	ND (1.0)	932	8.20 J	316	650	ND (10)
C-R22-D	11-Sep-07	0.40 J	ND (1.0)	941	8.22 J	310	646	ND (10)
C-R22-S	12-Sep-07	ND (1.0)	ND (1.0)	---	---	---	---	---
C-R22-M	12-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-R22-D	12-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-R22-D	12-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-R22-D	12-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-R22-D	12-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-R22-D	12-Sep-07	ND (1.0)	ND (1.0)	---	---	---	---	---
C-R22-S	13-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-R22-M	13-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-R22-D	13-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-R22-S	25-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-R22-M	25-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-R22-D	25-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-R22-S	02-Oct-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-R22-M	02-Oct-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-R22-D	02-Oct-07	ND (0.2)	ND (1.0)	---	---	---	---	---
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)

TABLE 3
In-Channel Surface Water COC and Additional Parameters Sampling Results, January through October 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-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-R27-S	11-Sep-07	ND (0.2)	ND (1.0)	944	8.21 J	326	645	ND (10)
C-R27-M	11-Sep-07	ND (0.2)	ND (1.0)	942	8.19 J	320	642	ND (10)
C-R27-D	11-Sep-07	ND (0.2)	ND (1.0)	934	8.18 J	360	655	ND (10)
C-R27-S	13-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-R27-M	13-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-R27-D	13-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-R27-S	25-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-R27-M	25-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-R27-D	25-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-R27-S	02-Oct-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-R27-M	02-Oct-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-R27-D	02-Oct-07	ND (0.2)	ND (1.0)	---	---	---	---	---
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)
C-TAZ-S	11-Sep-07	ND (0.2)	ND (1.0)	938	8.12 J	314	641	ND (10)
C-TAZ-M	11-Sep-07	ND (0.2)	ND (1.0)	941	8.09 J	294	644	ND (10)
C-TAZ-D	11-Sep-07	ND (0.2)	ND (1.0)	935	8.06 J	304	610	ND (10)
C-TAZ-S	13-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-TAZ-M	13-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-TAZ-D	13-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-TAZ-S	25-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---

TABLE 3
In-Channel Surface Water COC and Additional Parameters Sampling Results, January through October 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-TAZ-M	25-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-TAZ-D	25-Sep-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-TAZ-S	02-Oct-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-TAZ-M	02-Oct-07	ND (0.2)	ND (1.0)	---	---	---	---	---
C-TAZ-D	02-Oct-07	ND (0.2)	ND (1.0)	---	---	---	---	---

NOTES:

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

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

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

In October 2007, 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 October 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-10	02-Oct-07	3.30	ND (2.0)	45.0	ND (1.0)	ND (1.0)	ND (3.0)	**1050**	8.40	ND (5.0)	ND (0.2)	80.0	ND (5.0)	20.0	ND (3.0)	ND (2.0)	28.0	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-12	04-Oct-07	**13.0**	**50.0**	76.0	ND (3.0)	ND (3.0)	ND (3.0)	**2700**	ND (5.0)	6.70	ND (0.2)	21.0	ND (5.0)	ND (10)	ND (3.0)	ND (15)	17.0	ND (10)
MW-12 FD	04-Oct-07	**13.0**	**52.0**	80.0	ND (3.0)	ND (3.0)	ND (3.0)	**2800**	ND (5.0)	ND (5.0)	ND (0.2)	22.0	ND (5.0)	ND (10)	ND (3.0)	ND (15)	18.0	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-20-70	11-Oct-07	**8.80**	ND (10)	33.0	ND (3.0)	ND (3.0)	ND (3.0)	**2140**	ND (5.0)	ND (5.0)	ND (0.2)	26.0	ND (5.0)	ND (10)	ND (3.0)	ND (15)	3.40	ND (10)
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
* California EPA MCL

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, except 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.

Figures

C-NR4
C-NR3
NR-3
NR-2
C-NR1
NR-1
CON
C-CON
A-Dock
Park-Moabi 4
PARK MOABI
Park-Moabi 3
PG&E Parcel No. 650-151-08
RRB
Colorado River
Paved
BAT CAVE WASH
OW-3S
OW-3M
OW-3D
MW-17
IW-2
IW-3
MW-18
MW-14
MW-41S
MW-41M
MW-41D
MW-47-55
MW-47-115
MW-19
MW-13
TW-4
TW-5
66
MW-50-95
MW-50-200
MW-31-60
MW-31-135
MW-37S
MW-37D
TW-2S
TW-2D
TW-3D
MW-20-070
MW-20-100
MW-20-130
MW-25
BN&SF RAILROAD
INTERSTATE 40
MW-40S
MW-40D
MW-42-30
MW-42-55
MW-42-65
MW-51
MW-26
MW-30-50
MW-30-30
MW-11
MW-24BR
MW-24B
PGE-06
MW-24A
MW-48
MW-21
MW-22
MW-23
PGE-07
MW-38S
MW-38D
TW-01
MW-12
MW-10
MW-09
PGE-08
MW-15
MW-16
MW-07
MW-04
P-2
PT-1
MW-08
MW-05
MW-03
MW-01
NEW EVAPORATION PONDS
MWP-08
MWP-10
MWP-12
FORMER EVAPORATION POND SITE
TOPOCK COMPRESSOR STATION
PG&E
DEBRIS RAVINE
MW-35-60
MW-35-135
MW-49-135
MW-49-275
MW-49-365
MW-29
MW-33-40
MW-33-90
MW-33-150
MW-33-210
MW-46-175
MW-46-205
MW-28-25
MW-28-90
R-28
PE-1
MW-45-95a
MW-45-95b
MW-32-20
MW-32-35
MW-52S
MW-52M
MW-52D
C-R22
R-22
MW-53S
MW-53M
MW-53D
MW-43-25
MW-43-75
MW-43-90
MW-44-70
MW-44-115
MW-44-125
MW-39-40
MW-39-50
MW-39-60
MW-39-70
MW-39-80
MW-39-100
MW-34-55
MW-34-80
MW-34-100
C-MAR
C-R27
R-27
MW-36-70
MW-36-90
MW-36-100
MW-36-20
MW-36-40
MW-36-50
MW-27-20
MW-27-60
MW-27-85
C-I3
I-3
C-TAZ

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) - October 2007

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

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

N

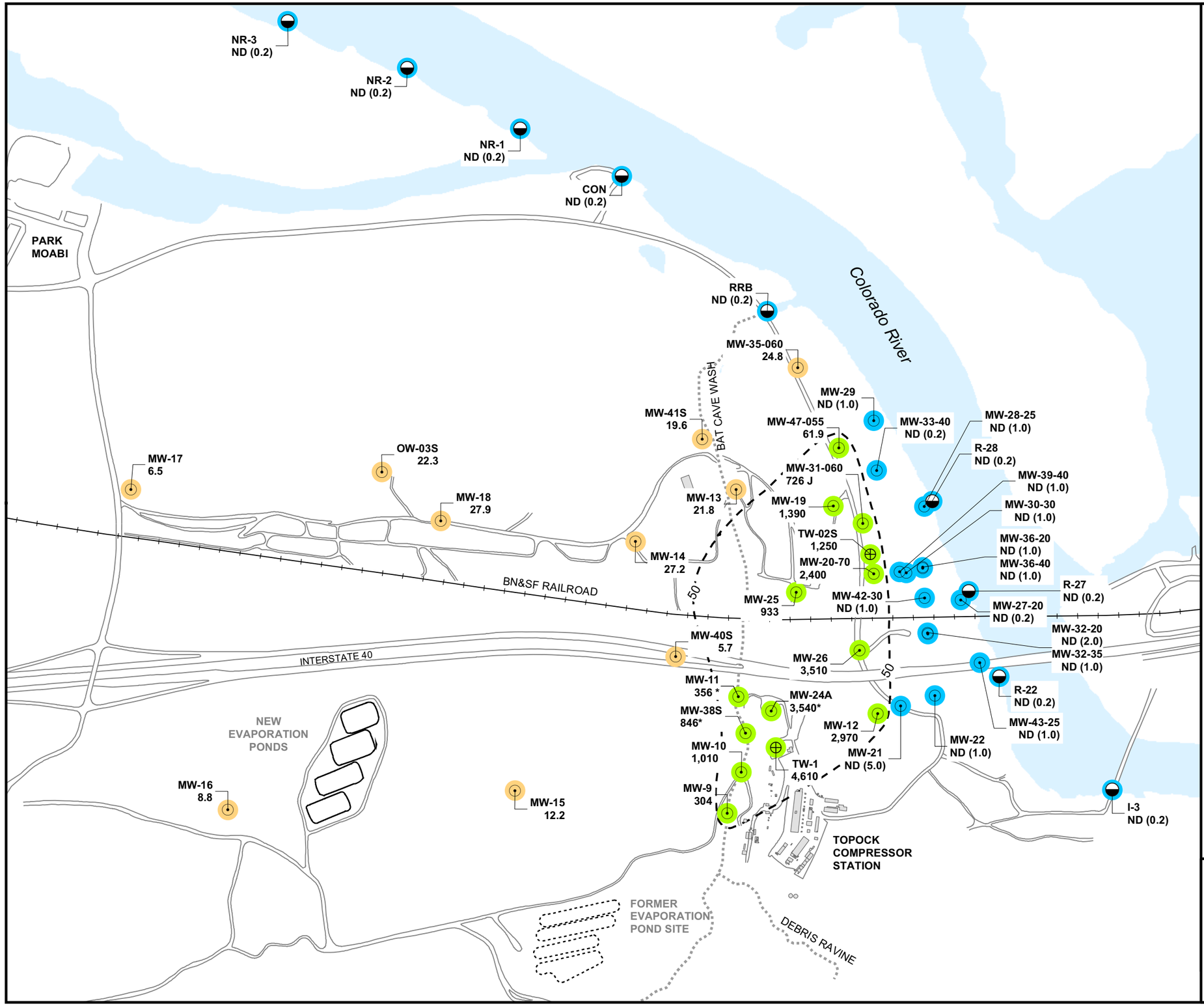
0 500 1,000 Feet

California State Plane NAD83 Zone 5 US Feet

FIGURE 1
MONITORING LOCATIONS AND SAMPLING FREQUENCY FOR GMP OCTOBER 2007

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

CH2MHILL



LEGEND

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

Results for October 2007 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 field duplicate samples from wells completed in **Upper** Depth Interval of Alluvial Aquifer, Third Quarter monitoring event conducted October 1 to11, 2007

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

*Results from last sampling event prior to October 2007

Cr(VI) Concentrations in Water Samples October 2007 Monitoring Event

- Not detected at analytical reporting limit
- Concentration between reporting limit and 50 µg/L
- Concentration greater than 50 µg/L
- -50- Approximate outline of monitoring wells with Cr(VI) concentrations >= 50 µg/L (California drinking water standard for Total Chromium)

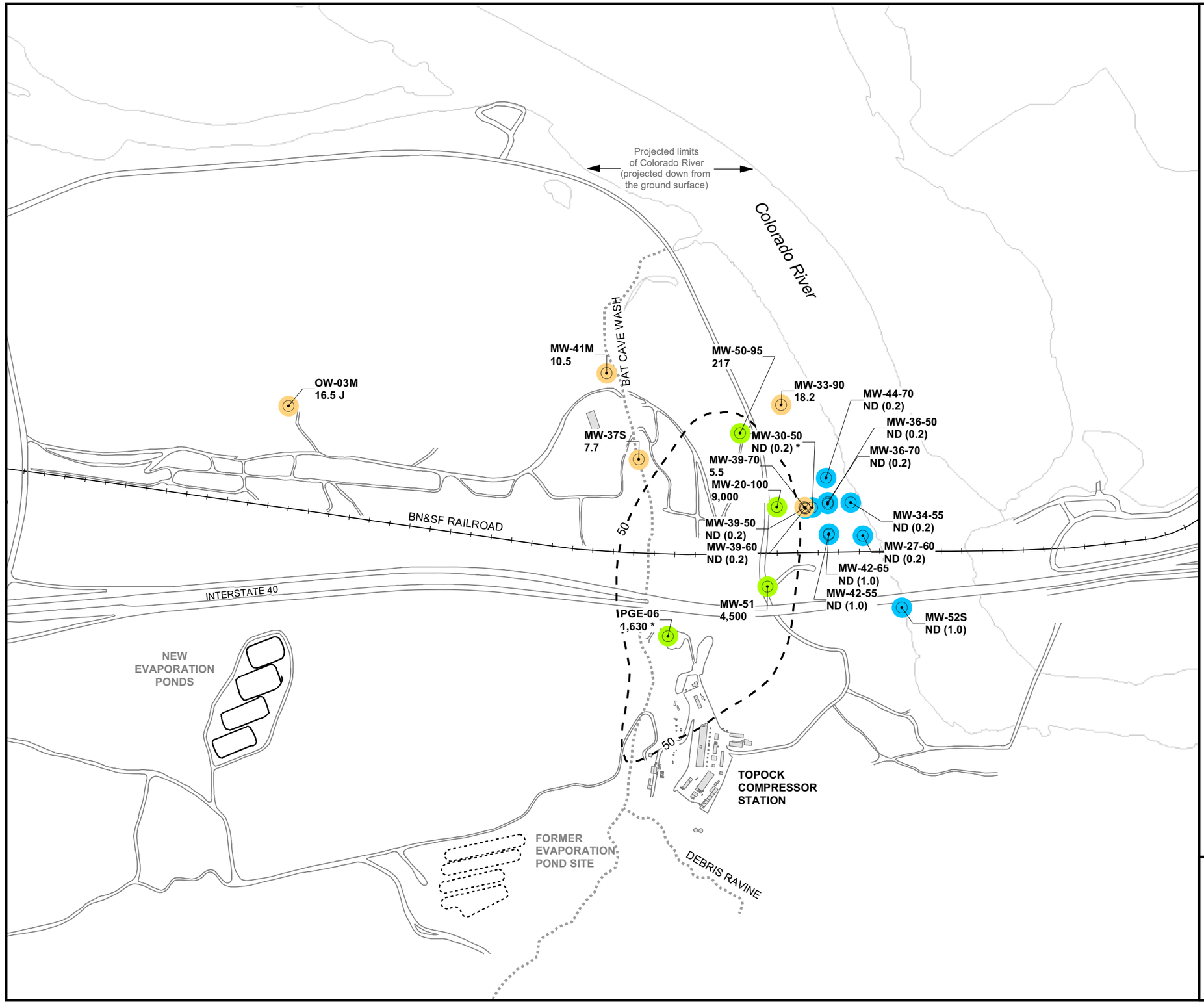
N

0 500 1,000 Feet

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

CH2MHILL

\\ZINFANDEL\PROJ\PACIFICGASELECTRICCO\TOPOCKPROGRAM\GIS\MAPFILES\2007\GMP\GMP_2007Q3_CR6RESULTSMAP_UA_1.MXD GMP_2007Q3_CR6RESULTSMAP_UA_1.PDF 12/26/2007 12:41:58



LEGEND

GMP Well Monitoring Middle Depth Interval of Alluvial Aquifer

Results for October 2007 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 field duplicate samples from wells completed in **Middle** Depth Interval of Alluvial Aquifer, Third Quarter monitoring event conducted October 1 to11, 2007

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

*Results from last sampling event prior to October 2007

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

Not detected at analytical reporting limit

Concentration between reporting limit and 50 µg/L

Concentration greater than 50 µg/L

Approximate outline of monitoring wells with Cr(VI) concentrations >= 50 µg/L (California drinking water standard for Total Chromium)

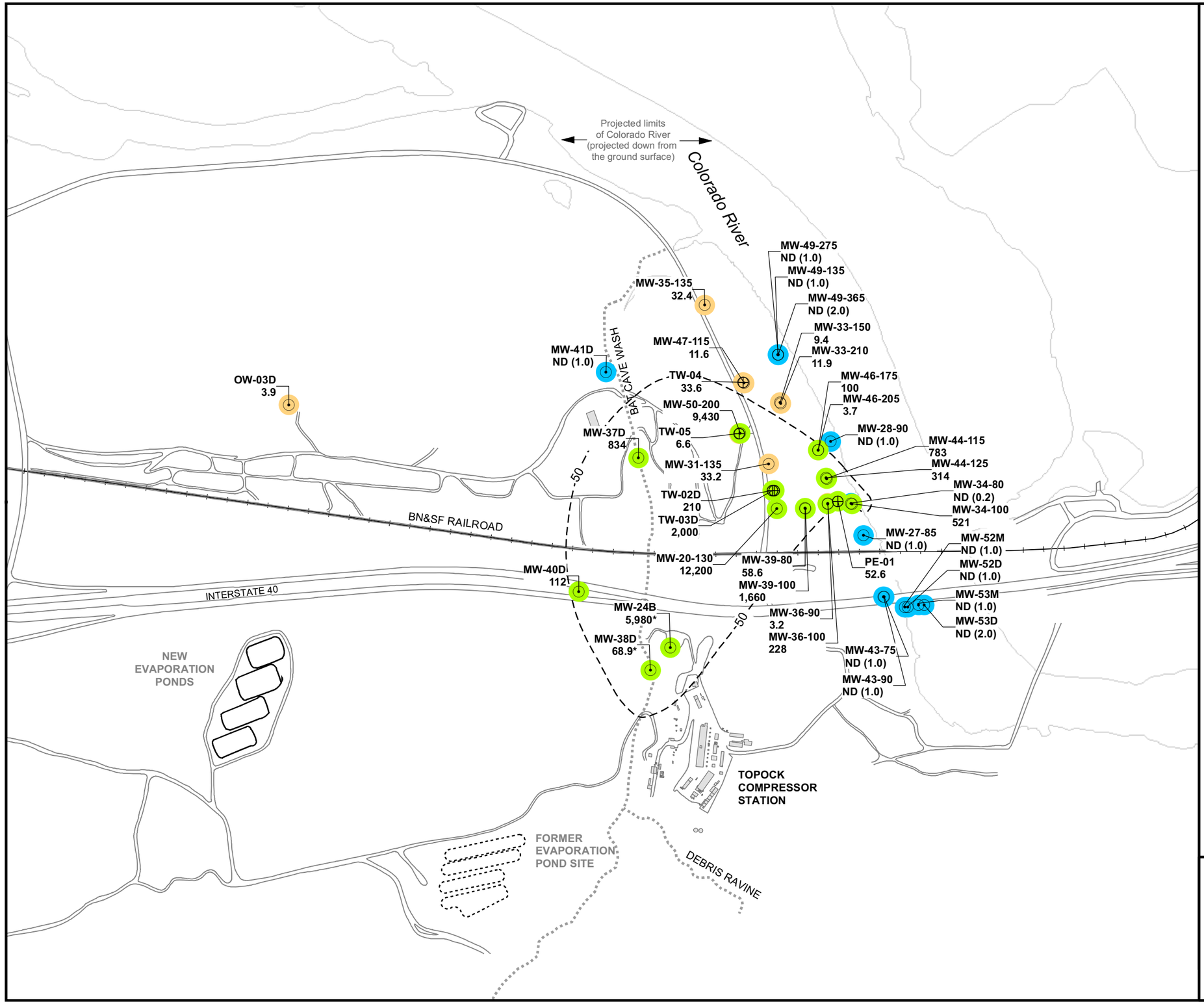
N

0 500 1,000

Feet

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

CH2MHILL



LEGEND

⊙ GMP Well Monitoring Lower Depth Interval of Alluvial Aquifer

Results for October 2007 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, Third Quarter monitoring event conducted October 1 to 11, 2007

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

*Results from last sampling event prior to October 2007

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

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

-50- Approximate outline of monitoring wells with Cr(VI) concentrations >= 50 µg/L (California drinking water standard for Total Chromium)

Refer to the IM Performance Monitoring Reports 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.

N

0 500 1,000 Feet

FIGURE 4
CR(VI) SAMPLING RESULTS
LOWER DEPTH INTERVAL OF AQUIFER
3RD QUARTER 2007 MONITORING EVENT
GROUNDWATER AND SURFACE WATER
MONITORING PROGRAM
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CH2MHILL

\\ZINFANDEL\PROJ\PACIFICGASELECTRICCO\TOPOCKPROGRAM\GIS\MAPFILES\2007\GMP\GMP_2007Q3_CR6RESULTSMAP_LA_1.MXD GMP_2007Q2_CR6RESULTSMAP_LA.PDF 12/26/2007 12:39:14

Attachment 1

Project Name PGE Topock GMP
Job Number 345631.MP.02.GM
Field Team 1
Field Conditions Sunny, clear, MID 90s calm

Sampling Event 2007-GMP-136-Q3
Date 10-2-07
Page 1 of 1

Well/Sample Number MW-09-136
QC Sample ID NA
QC Sample Time N/A
Purge Start Time ~~12:40~~ AH. 12:21
Purge Method Grundfos Ded. Pump Yes AH.
Min. Purge Volume (gal)/(L) 19.0 Purge Rate (gpm)/(mLpm) ~~3~~ 2
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
80.92	~~12:22~~ ~~12:48~~ AH.	2	~~7~~ 7.33	3139	32	3.50	~~1~~ 29.24	1.63	2.040	39.8	
—	12:28	4	7.35	3126	20	3.53	29.27	1.62	2.032	45.4	
81.19	12:24	6	7.38	3123	~~30~~ AH. 16	3.69	29.30	1.61	2.028	48.1	
~~81.14~~	12:25 AH	8	7.37	3119	13	3.84	29.32	1.61	2.031 1.983	49.6	
81.59	12:26? AH	AH 10 12	7.36	3070	6	3.83	29.40	1.58	~~2.~~ AH	49.3	
81.73	12:29	16	7.33	3014 ~~2978~~	4	3.87	29.44	1.55	2991	49.2	
81.80	12:31	20	7.31	~~2978~~ AH	3	3.81	29.47	1.53	2966	48.3	

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 Stablize prior to sampling?	Y	Y	Y	Y	NA	Y	Y	Y
Previous Field measurement (5/3/2007)	7.44	3266	2.2	7.6	29.3			119
Are measurements consistent with previous?	Y	Y	Y	lower	NA			lower

Sample Time 12:32 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____
Comments: Can hear it start, but ~~no~~ pump not work. 10/4/07 Pulled pump

Initial Depth to Water (ft BTOC): ~~79.80~~ 79.87
Field measured confirmation of Well Depth (ft btoc): —
WD (Well Depth - from database) ft btoc (89.44)
SWH (Standing Water Height) = WD-Initial Depth ~~9.64~~ 9.57
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (4 in)
One Casing Volume = D*SWH ~~6.4~~ 6.3
Three Casing Volumes = ~~19.1~~ 19

Measure Point: Well TOC Steel Casing
WATER LEVEL METER SERIAL NUMBER: PGE-2005-01A

Initial DTW / Before Removal		If Transducer: Approx. 5 min After Reinstallation		Time of Removal 11:20
Time	Initial DTW	Time	Final DTW	Time of Reinstallation ~~12:36~~ 12:40
~~11:08~~ ~~12:42~~ AH.	~~79.80~~ 79.78	12:45	AH 74.81	

Comments:

Color: clear, grey, yellow, brown, black, cloudy, green
Odor: none, sulphur, organic, other
Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Water clear for first, then roots in it

Project Name PGE Topock GMP
Job Number 345631.MP.02.GM
Field Team 1
Field Conditions sunny, hot, No Wind

Sampling Event 2007-GMP-136-Q3
Date 10/2/07
Page 1 of ___

Well/Sample Number MW-10-136
QC Sample ID NA
QC Sample Time N/A
Purge Start Time 13:16
Purge Method ~~Grundfos~~ CD Ded. Pump Yes
Flow Cell (Y) N
Min. Purge Volume (gal)/(L) 45 Purge Rate (gpm)/(mLpm) 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
74.98	1318	10	7.51	2.895	3	3.36	28.80	1.52	1.930	31.9	
74.98	1320	20	7.50	2.986	2	3.68	28.84	1.54	1.940	25.5	
75.04	1322	30	7.50	2.969	2	4.04	28.84	1.53	1.933	23.3	
75.04	1324	40	7.52	2.991	2	4.08	28.82	1.55	1.946	21.7	
75.04	1326	50	7.48	3.001	2	4.18	28.81	1.55	1.951	25.2	
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 Stablize prior to sampling?			Y	Y		Y	NA			Y	
Previous Field measurement (5/3/2007)			7.53	3234	1.2	3.65	29.27			106.8	
Are measurements consistent with previous?			Y	Y	Y	Y	NA			lower	

Sample Time ~~1330~~ 1329 Sample Location: pump tubing X well port ___ spigot ___ bailer ___ other ___
Comments: ___

Initial Depth to Water (ft BTOC): 74.08
Field measured confirmation of Well Depth (ft btoc): —
WD (Well Depth - from database) ft btoc (96.93)
SWH (Standing Water Height) = WD-Initial Depth 22.85
D (Volume as per diameter) 2"= 0.17 (4") 0.66, 1"=0.041 (4 in)
One Casing Volume = D*SWH 15.08
Three Casing Volumes = ~~45.5~~ 45.24

Measure Point: (Well TOC) Steel Casing WATER LEVEL METER SERIAL NUMBER: A.H. ~~PG~~ PGE 2005-01A

Initial DTW / Before Removal		Approx. 5 min After Reinstallation		If Transducer	
Time	Initial DTW	Time	Final DTW	Time of Removal	N/A
13:12	74.08	—	—	Time of Reinstallation	

Comments:

Color: (clear), grey, yellow, brown, black, cloudy, green
Odor: (none), sulphur, organic, other
Solids: (Trace), Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Topock Sampling Log

Project Name PGE Topock GMP
Job Number 345631.MP.02.GM
Field Team 1
Field Conditions 95, clear, ~~calm~~ Southerly 5 knots, sunny A.M.

Sampling Event 2007-GMP-136-Q3
Date 10/4/07
Page ____ of ____

Well/Sample Number MW-12-136
QC Sample ID MW-90-136
QC Sample Time 1340

Purge Start Time 13:41
Purge Method ____ Ded. Pump ____
Flow Cell: Y / N
Min. Purge Volume (gal)/(L) 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
28.42	13:44	11	8.25	5921	16	5.88	28.25	3.18	3.835	18.6	
28.41	13:48	22	8.21	~~5676~~ 5681	8	5.78	28.23	3.06	3.702	20.4	
28.41	13:52	33	8.21	5766	6	5.77	28.32	3.11	3.755	19.7	
28.41	13:56	44	8.22	5817	4	5.76	28.29	3.15	3.796	15.6	
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 Stablize prior to sampling?							NA				
Previous Field measurement (5/3/2007)			8.26	5600	0.4	7.28	28.2	0.3		115	
Are measurements consistent with previous?							NA				

Sample Time 1400 Sample Location: pump tubing ____ well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC): 28.15
Field measured confirmation of Well Depth (ft btoc): ____
WD (Well Depth - from database) ft btoc (50.4)
SWH (Standing Water Height) = WD-Initial Depth 22.25
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (4 in)
One Casing Volume = D*SWH 14.7
Three Casing Volumes = 44

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

Initial DTW / Before Removal		If Transducer: Approx. 5 min After Reinstallation		
Time	Initial DTW	Time	Final DTW	Time of Removal ~~1402~~ AH 1338
1335	28.15	28.19	14:07	Time of Reinstallation 1402

Comments: ____

Color: clear, grey, yellow, brown, black, cloudy, green
Odor: none, sulphur, organic, other
Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Topock Sampling Log

Project Name PGE Topock GMP
Job Number 345631.MP.02.GM
Field Team 1
Field Conditions Sunny, Slight breeze, 94°F

Sampling Event 2007-GMP-136-Q3
Date 10/2/07
Page 1 of

Well/Sample Number MW-13-136
QC Sample ID NA
QC Sample Time ✓
Purge Start Time 1406
Purge Method ____ Ded. Pump ____
Min. Purge Volume (gal)/(L.) 40 Purge Rate (gpm)/(mLpm) 4 ~~5~~ 5.5
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
—	1406	1	6.67	2.24	15	7.07	28.98	0.10	1.3	26	
~~32.70~~	1410	~~10~~ 16	6.92	2.00	11	5.35	28.57	0.09	1.3	56	
32.40	1413	28	7.03	1.96	3	5.63	28.57	0.09	1.3	65	
32.68	1416	32	7.09	1.94	3	5.54	28.61	0.09	1.3	69	
	~~1418~~	~~40~~									Generator Surge/Stopped Pump
32.66	1420	40	7.16	1.96	2	6.39	28.45	0.09	1.3	71	
32.63	1422	48	7.18	1.95	1	6.30	28.46	0.09	1.3	72	
32.15	1423	52	7.19	1.93	1	6.28	28.48	0.09	1.3	75	
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 Stablize prior to sampling?			✓	✓	✓	✓	NA	✓	✓	✓	
Previous Field measurement (3/5/2007)			7.5	1840	0.9	6.75	30.54	0.1		59	
Are measurements consistent with previous?			N	N	Y	N	NA	Y		N	

Sample Time 1427 Sample Location: pump tubing ✓ well port ____ spigot ____ bailer ____ other ____
Comments: ____

Initial Depth to Water (ft BTOC): 32.55
Field measured confirmation of Well Depth (ft btoc): ____
WD (Well Depth - from database) ft btoc (52)
SWH (Standing Water Height) = WD-Initial Depth 19.45
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (4 in)
One Casing Volume = D*SWH 12.9
Three Casing Volumes = 38.7 (40 gals)

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	Approx. 5 min After Reinstallation Final DTW	Time of Removal / Time of Reinstallation

Comments:

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, 94°, Slight Breeze

Sampling Event 2007-GMP-136-Q3
Date 10/2/07
Page 1 of

Well/Sample Number MW-14-136
QC Sample ID NA
QC Sample Time
Purge Start Time 1239
Purge Method ~~DDD~~
Ded. Pump ✓
Flow Cell: Y / N
Min. Purge Volume (gal)/(L) 41
Purge Rate (gpm)/(mLpm) 5.0

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
116.20	1241	0	7.66	1,408	33		28.6			175.2	D.O Sensor
116.92	1243	10	7.62	1,395	32		28.5			130.4	is bad unable to
116.99	1245	20	7.64	1,393	38		28.5			146.9	calibrate readings
117.02	1247	30	7.65	1,393	40		28.5			145.4	inaccurate
117.03	1249	40	7.64	1,390	34		28.5			99.2	
117.14	1250	45	7.65	1,391	37		28.5			95.2	
117.09	1251	50	7.66	1,389	38		28.5			99.9	
117.12	1252	55	7.66	1,387			28.5			101.7	
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 Stablize prior to sampling?							NA				
Previous Field measurement (3/12/2007)			7.13	1280	12.6	6.73	29.57	0.1		16	
Are measurements consistent with previous?							NA				

Sample Time 1255 Sample Location: pump tubing ✓ well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC): 113.30
Field measured confirmation of Well Depth (ft btoc): ____
WD (Well Depth - from database) ft btoc (133.83)
SWH (Standing Water Height) = WD-Initial Depth 20.53
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (4 in)
One Casing Volume = D*SWH 13.5
Three Casing Volumes = 41

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:

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, 76°F, Calm

Sampling Event 2007-GMP-136-Q3
Date 10/2/2007
Page 1 of

Well/Sample Number MW-15-136
QC Sample ID NA
QC Sample Time
Purge Start Time 0839
Purge Method
Ded. Pump Yes
Flow Cell (Y) N
Min. Purge Volume (gal)/(L) 37
Purge Rate (gpm)/(mLpm) 5gpm

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
185'	0839	0	7.44	1.701	4	7.25	28.94	0.79	1.032	-19.2	
185.14	0842	12	7.65	1.516	2	7.14	28.34	0.76	0.972	-17.3	
185.15	0845	24	7.54	1.510	2	7.13	29.23	0.76	0.984	-16.7	
185.16	0848	36	7.57	1.543	2	7.12	29.24	0.76	0.975	-17.1	
Top of Pump	0850	44	7.54	1.489	2	7.27	29.25	0.74	0.971	—	YSI SS6 malfunction due to wire

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 Stablize prior to sampling?	Y	Y	Y	Y	NA			Y
Previous Field measurement (5/4/2007)	7.58	2396	3.6	8.24	29.65			53.5
Are measurements consistent with previous?	✓	N	✓	N	NA			N

Sample Time 0855 Sample Location: pump tubing ✓ well port spigot bailer other
Comments: YSI Cable has broken wire - will Replace Instrument

Initial Depth to Water (ft BTOC): 184.45
Field measured confirmation of Well Depth (ft btoc): -
WD (Well Depth - from database) ft btoc (203)
SWH (Standing Water Height) = WD-Initial Depth 18.55
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 (37 gals)

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

Comments:

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, breezy, 78°F

Sampling Event 2007-GMP-136-Q3
Date 10/2/07
Page 1 of

Well/Sample Number MW-16-136
QC Sample ID NA
QC Sample Time
Purge Start Time 1017
Purge Method Grundfos
Ded. Pump
Flow Cell: Y / N
Min. Purge Volume (gal)/(L) 36
Purge Rate (gpm)/(mLpm) 2 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
200.03	1017	0	7.86	1080	43	63.1	28.9			185.3	
200.18	1019	4	7.92	1072	79	69.6	30.4			190.4	
200.20	1021	8	7.93	1071	74	72.3	31.3			192.9	
200.22	1024	14	7.92	1068	77	76.5	31.5			195.9	
200.26	1027	20	7.91	1072	47	77.6	31.6			198.3	
200.29	1030	26	7.90	1061	50	80.2	31.6			201.9	
200.31	1033	32	7.89	1056	51	82.7	31.6			205.3	
200.33	1036	38	7.87	1051	49	84.9	31.6			210.6	
200.34	1038	42	7.86	1047	45	87.5	31.7			213.4	
			+/- 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 Stablize prior to sampling?							NA				
Previous Field measurement (11/1/2006)			7.72	1640	9.16	5.34	32.89	0.08		52	
Are measurements consistent with previous?							NA				

Sample Time 1043 Sample Location: pump tubing ✓ well port spigot bailer other

Comments:

Initial Depth to Water (ft BTOC): 199.85'
Field measured confirmation of Well Depth (ft btoc):
WD (Well Depth - from database) ft btoc (218.15)
SWH (Standing Water Height) = WD-Initial Depth 18.3
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (4 in)
One Casing Volume = D*SWH 12
Three Casing Volumes = 36

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:

Color: clear, grey, yellow, brown, black, cloudy, green
Odor: none, sulphur, organic, other
Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Topock Sampling Log

Project Name PGE Topock GMP
Job Number 345631.MP.02.GM
Field Team 1
Field Conditions Sunny, Calm, ~~88°F~~ 97°F

Sampling Event 2007-GMP-136-Q3
Date ~~10/2/07~~ 10/3/07
Page 1 of

Well/Sample Number MW-17-136
QC Sample ID NA
QC Sample Time
Purge Start Time 1400 pump off 1417
Purge Method
Ded. Pump ✓
Min. Purge Volume (gal)/(L) 42
Purge Rate (gpm)/(mLpm) 7gpm
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
134.32	1407	Ø	7.66	2.35	1	8.58	31.17			73	
134.60	1408	7	7.48	2.29	1	6.22	30.59			-90	
137.33	1409	14	7.29	2.37	1	5.21	30.61			-83	
136.08	1411	21	7.26	2.28	1	1.16	30.74			-72	
136.77	1412	28	7.24	2.26	1	1.14	30.80			-63	
139.24	1413	35	7.24	2.25	1	1.15	30.88			-60	
139.87	1414	42	7.24	2.26	1	1.16	30.94			-64	

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 Stablize prior to sampling?		✓	✓	✓	✓	NA			✓
Previous Field measurement	(10/2/2006)	7.26	1870	3.24		30.12	0.1		79
Are measurements consistent with previous?		Y	N	N	Y	NA			N

Sample Time 1416 Sample Location: pump tubing ✓ well port ____ spigot ____ bailer ____ other ____
Comments:

Initial Depth to Water (ft BTOC): ~~132.56'~~ 132.30'
Field measured confirmation of Well Depth (ft btoc):
WD (Well Depth - from database) ft btoc (153.62)
SWH (Standing Water Height) = WD-Initial Depth ~~21.06~~ 21.32
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (4 in)
One Casing Volume = D*SWH ~~13.8~~ (14)
Three Casing Volumes = 42

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	

Comments:

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, 91°F, Slight breeze

Sampling Event 2007-GMP-136-Q3
Date 10/2/07
Page 1 of

Well/Sample Number MW-18-136
QC Sample ID NA
QC Sample Time
Purge Start Time 1147
Purge Method Grundfos Ded. Pump
Flow Cell: Y / N
Min. Purge Volume (gal)/(L) 37 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. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below
88.24	1148	0	7.93	1031	9		33.2			184.7	*D.O is
88.25	1151	6	7.56	1295	18		30.7			201.7	not working unable
88.27	1154	12	7.55	1289	20		30.1			203.9	to recalibrate
88.28	1157	18	7.55	1281	14		30.0			206.5	
88.26	1200	24	7.55	1272	18		29.9			208.3	
88.27	1203	30	7.56	1258	20		29.9			209.6	
88.30	1207	38	7.55	1246	13		29.8			211.7	
88.28	1208	40	7.55	1238	11		29.9			212.5	
88.28	1210	44	7.55	1230	10		29.8			213.3	
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 Stablize prior to sampling?			Y	Y	Y		NA			Y	
Previous Field measurement (3/12/2007)			7.51	1010	0.6	9.65	29.07	0		151	
Are measurements consistent with previous?			Y	N	N		NA			N	

Sample Time 1213 Sample Location: pump tubing ✓ well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC): 88.24'
Field measured confirmation of Well Depth (ft btoc): ____
WD (Well Depth - from database) ft btoc (106.68)
SWH (Standing Water Height) = WD-Initial Depth 18.64
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (4 in)
One Casing Volume = D*SWH 12.3
Three Casing Volumes = 37

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	

Comments:

Color: (clear), grey, yellow, brown, black, cloudy, green
Odor: (none), sulphur, organic, other
Solids: (Trace), Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Topock Sampling Log

Project Name PGE Topock GMP
Job Number 345631.MP.02.GM
Field Team 1
Field Conditions Sunny; Slight Breeze, 90°F

Sampling Event 2007-GMP-136-Q3
Date 10/5/07
Page 1 of 1

Well/Sample Number MW-19-136
QC Sample ID NA
QC Sample Time
Purge Start Time 0951 stop 1004
Purge Method 4
Ded. Pump ✓
Flow Cell: Y / N
Min. Purge Volume (gal)/(L) 36 42
Purge Rate (gpm)/(mLpm) 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
47.68	0951	0	7.64	2.46	11.5	6.71	28.18	1.20	1.50	39.9	
47.68	0953	7	7.47	2.27	2.77	6.81	28.39	1.14		29.8	
47.67	0956	14	7.50	2.26	2.56	6.82	28.31	1.15		28.6	
47.67	0958	21	7.46	2.26	2.64	6.74	28.34	1.15		32.4	
47.69	0958	28	7.46	2.26	2.30	6.73	28.35	1.15		31.3	
47.69	0959	35	7.46	2.26	2.47	6.67	28.36	1.15		32.8	
47.69	1000	42	7.47	2.26	2.62	6.67	28.36	1.15		33.9	
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 Stablize prior to sampling?			Y	Y	Y	Y	NA	Y		Y	
Previous Field measurement (6/6/2007)			7.19	2240	3.1	6.7	28.7	0.1		88	
Are measurements consistent with previous?			N	Y	N	Y	NA	N		N	

Sample Time 1003 Sample Location: pump tubing ✓ well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC): ~~47.54~~ 44.09
Field measured confirmation of Well Depth (ft btoc): ____
WD (Well Depth - from database) ft btoc (65.77) DV
SWH (Standing Water Height) = WD-Initial Depth ~~19.23~~ 21
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (4 in)
One Casing Volume = D*SWH ~~12~~ 14
Three Casing Volumes = ~~36~~ 42

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:

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, clear sky, calm, 72

Sampling Event 2007-GMP-136-Q3
Date 10/11/07
Page 1 of 1

Well/Sample Number MW-20-070-136
QC Sample ID NA
QC Sample Time NA

Purge Start Time 07:26
Purge Method Grundfus Temp- Ded. Pump
Flow Cell: (Y) / N
Min. Purge Volume (gal)/(L) 46
Purge Rate (gpm)/(mLpm) 4

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity % ppt	TDS g/L	Eh/ORP mv	Comments (See description below
49.97	0729	12	7.33	3.231	2.5	8.92	28.14	1.68	2.099	183.2	
49.97	0732	24	7.53	3.229	2.8	9.14	28.50	1.68	2.099	165.6	
50.42	0735	36	7.53	3.229	1.7	9.07	28.56	1.68	2.099	156.5	
50.54	0738	48	7.53	3.229	1.6	9.14	28.58	1.68	2.099	150.8	
50.60	0741	60	7.52	3.226	2.0	9.14	28.59	1.67	2.097	146.9	
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 Stablize prior to sampling?							NA				
Previous Field measurement (5/3/2007)			7.85	3210	0.3	8.68	28.9	0.2		151	
Are measurements consistent with previous?							NA				

Sample Time 07:48 Sample Location: pump tubing ____ well port ____ spigot ____ bailer ____ other ____
Comments: Pump off 7:48. ~72 gal. total purge volume.
EB-101107@0810

Initial Depth to Water (ft BTOC): 46.35
Field measured confirmation of Well Depth (ft btoc): —
WD (Well Depth - from database) ft btoc (69.55) 23.2
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 15.3
Three Casing Volumes = 46

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	7:17
7:17	46.35	0759	46.45	Time of Reinstallation	7:53

Comments:

Color: clear, grey, yellow, brown, black, cloudy, green
Odor: none, sulphur, organic, other
Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Topock Sampling Log

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

Sampling Event 2007-GMP-136-Q3
Date 10/5/07
Page 1 of 1

Well/Sample Number MW-20-130-136 **QC Sample ID** NA QC Sample Time

Purge Start Time 0834 stop 0915 Purge Method Grundfos Ded. Pump

Flow Cell (Y) N Min. Purge Volume (gal)/(L) 168 Purge Rate (gpm)/(mL/pm) 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
51.61	0835	0	7.43	8.47	1.10	3.15	28.5	4.64	5.42	661.2	
53.04	0840	25	7.41	8.15	0.74	2.21	28.9	4.49	5.29	80.3	
53.10	0845	50	7.40	8.14	0.87	1.83	29.0	4.49	5.29	79.1	
53.12	0850	75	7.33	8.21	1.40	1.13	29.0	4.51	5.35	78.0	
53.14	0855	100	7.35	11.97	1.63	1.60	29.12	6.79	7.77	85.5	
53.17	0900	125	7.36	12.05	0.84	1.64	29.14	6.81	7.833	83.7	
53.17	0905	150	7.36	12.04	1.43	1.58	29.13	6.84	7.828	81.6	
53.17	0909	170	7.36	12.05	1.39	1.60	29.14	6.85	7.838	80.3	
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 Stablize prior to sampling?			Y	Y	Y	Y	NA			Y	
Previous Field measurement (5/3/2007)			7.49	14664	0.8	2.07	29.62			183	
Are measurements consistent with previous?			Y	N	Y	N	NA			N	

Sample Time 913 Sample Location: pump tubing ✓ well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC): 47.54'

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

WD (Well Depth - from database) ft btoc (132.34)

SWH (Standing Water Height) = WD-Initial Depth 84.8

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

One Casing Volume = D*SWH 56

Three Casing Volumes = 168

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 0831
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 0918
0831	47.54	0923	47.77'	

Comments:

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, clear, low 100s, calm

Sampling Event 2007-GMP-136-Q3
Date 10/3/07
Page 1 of 1

Well/Sample Number MW-21-136
QC Sample ID NA
QC Sample Time N/A
Purge Start Time 14:52
Purge Method Grundfos Ded. Pump No
Flow Cell (Y) / N
Min. Purge Volume (gal)/(L) till dry 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
52.78	1453	4 2	7.9	~~+34~~ 14158 ~~+405~~ AH	8	~~20~~ 0.86	35.45	8.10	9.237	-52.0	
54.25	1454	8 4	7.52	~~143~~ AH.	30	3.41	36.09	8.50	9,725	8.2	
55.02	1455	12 6	6.95	15150	10	0.98	30.12	8.78	9.877	19.0	dry

Parameter Stabilization Criteria	+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	52.06 ~~52.81~~ final FDTW
Did Parameters Stablize prior to sampling?					NA				50.93 80%
Previous Field measurement (5/1/2007)	7.02	12300	2	3.2	26.9	0.7		187	10/4/07
Are measurements consistent with previous?					NA				

Sample Time 10/4/07 1420 Sample Location: pump tubing ____ well port ____ spigot ____ bailer X other ____
Comments: Screen: 39-59. Pump Set @ 58. Pump off 1456

Initial Depth to Water (ft BTOC): 49.91
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 (58.45)
SWH (Standing Water Height) = WD-Initial Depth 8.54
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (4 in)
One Casing Volume = D*SWH 5.6
Three Casing Volumes = 16.9

Initial DTW / Before Removal		If Transducer: Approx. 5 min After Reinstallation		
Time	Initial DTW	Time	Final DTW	Time of Removal A.M ~~14:44~~ 1444 ~~15:06~~ P.M
14:44	49.91	15:10	54.91	Time of Reinstallation 15:06

Comments: AM ~~52.06~~ 52.06 13:14

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 | **Sampling Event** 2007-GMP-136-Q3
Job Number 345631.MP.02.GM | Date 5/3/07
Field Team 1 | Field Conditions Sunny, clear, calm, low 100s | Page 1 of

Well/Sample Number MW-23-136 | **QC Sample ID** NA | QC Sample Time N/A
Purge Start Time 16:10 | Purge Method Grundfos | Ded. Pump No
Flow Cell (Y) / N | Min. Purge Volume (gal)/(L) till dry | Purge Rate (gpm)/(mLpm) 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
55.95	16:11	5	6.94	+719256	10	3.89	32.80	9.7	10.97	16.7	
~~60.02~~ 60.02	16:12	10	7.01	17132	7	3.21	28.48	9.96	11.05	21.0	
62.27	16:13	15	6.99	16860	4	3.66	28.62	9.83	10.90	25.5	
~~64.46~~ 64.46	16:14	20	6.92	16587	4	1.90	28.80	9.62	10.72	27.4	
69.69	16:15	25	6.97	16468	3	2.85	28.92	9.66	10.80	28.8	
72.49	16:16	30	7.00	16832	10	2.64	28.76	9.85	10.97	27.4	
74.71	16:17	35	7.03	16916	11	3.66	28.70	9.91	11.02	27.5	
	1617				21						dry

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 Stablize prior to sampling?	Y	Well purge dry			NA				10/4/07 20%: 56.43 Final: 55.96
Previous Field measurement (6/29/2007)	7.06	21900	0.94	6.12	32.48	1.3		31	
Are measurements consistent with previous?	Y	lower	~~too~~ higher	lower	NA	higher		Y	

Sample Time 8:05 (10/4/07) | Sample Location: pump tubing ____ well port ____ spigot ____ bailer X other ____
Comments: No Pump in well

Initial Depth to Water (ft BTOC): 51.86
Field measured confirmation of Well Depth (ft btoc): —
WD (Well Depth - from database) ft btoc (81.45)
SWH (Standing Water Height) = WD-Initial Depth 29.59
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (4 in)
One Casing Volume = D*SWH 19.5
Three Casing Volumes = 58.6

Measure Point: Well TOC Steel Casing | WATER LEVEL METER SERIAL NUMBER: PGE-2005-01A

Initial DTW / Before Removal		If Transducer: Approx. 5 min After Reinstallation		
Time	Initial DTW	Time	Final DTW	Time of Removal 16:05 / Time of Reinstallation 16:21
1603	51.86	16:21	73.47	

Comments:

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 12
Field Conditions Sunny, clearskies, no breeze, high 100s low 70s

Sampling Event 2007-GMP-136-Q3
Date ~~10/2/07~~ A.H. 10/3/07
Page 1 of 2

Well/Sample Number MW-24BR-136
QC Sample ID NA
QC Sample Time N/A
Purge Start Time ~~0930~~ 1315
Purge Method Grund fos
Ded. Pump No
Flow Cell (Y) / N
Min. Purge Volume (gal)/(L) till dry
Purge Rate (gpm)/(mLpm) ~~8~~ A.H. 5 slowed 1.5 gpm (checked)

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity ~~mS/cm~~ µS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below)
~~118~~.14891	13:20	25	7.92	14068	9	1.8	30.57	8.08	9.145	-109.5	pump set @ about 250.0
169.14	13:25	50	7.93	14073	8	0.10	30.53	8.08	9.147	-116.6	
186.52	13:30	75	7.90	14069	7	0.09	30.57	8.08	9.144	-111.9	
>200	13:35	~100	7.89	14077	6	0.08	30.70	8.08	9.150	-101.8	rate slowed, sounder 200' depth beyond reach of sounder.
>200	13:40	107.5	7.87	14094	7	0.07	30.94	8.09	9.161	-93.1	
>200	13:45	114	7.84	14099	8	0.08	31.24	8.09	9.165	-83.1	~~@~~1348 pump off to remove splitter + switch tanks 1348 back on
>200	13:50	121.5	7.82	14066	7	0.12	31.41	8.06	9.147	-81.8	
>200	13:55	129	7.82	14095	8	0.11	31.99	8.08	9.160	-89.3	
>200	14:00	136.5	7.82	14110	12	0.12	32.52	8.08	9.167	-85.7	slowed to 1gpm
Parameter Stabilization Criteria			+/- 0.1 pH units	+/- 3%	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	Final 134.63 10/4/07 80% value: 136.99
Did Parameters Stablize prior to sampling?				Well	purged	dry	NA				
Previous Field measurement (5/2/2007)			7.94	16240	10.4	1.4	30.98			-259.6	
Are measurements consistent with previous?			y	lower	y	y	NA			higher	

Sample Time 7:52 10/4/07 Sample Location: pump tubing ___ well port ___ spigot ___ bailer X other ___

Comments: Pump set @ ≈ 270' ~~Pump down @~~ A.H ~~in @ about 8:05, stopped working, pulled out/put down check. (Vapor Lock?) ; 0936 restart: ran for about 30 sec & stopped. Restart several times, checked wire. BAD PUMP~~ happy wire.

WATER LEVEL METER SERIAL NUMBER:

Initial Depth to Water (ft BTOC): ~~107.24~~ 108.53
Measure Point: (Well TOC) Steel Casing
Field measured confirmation of Well Depth (ft btoc): –
WD (Well Depth - from database) ft btoc (441) 333.47
SWH (Standing Water Height) = WD-Initial Depth ~~333.76~~
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (4 in)
One Casing Volume = D*SWH 219.4 ~~220.28~~ purge dry
Three Casing Volumes = 658 ~~660.84~~

Initial DTW / Before Removal		Approx. 5 min After Reinstallation		If Transducer	10/2/07	10/3/07
Time 10/2/07	Initial DTW 10/3/07	Time	Final DTW	Time of Removal	0826	12:53
0825 / 1251	107.24 / 108.53	14:29	250.83	Time of Reinstallation	1051	14:24

Comments: Blane Tech S/N 26437 used theirs to take last WL. Coby M. showed up w/it around 1416

378-437

Color: (clear), grey, yellow, brown, black, cloudy, green
Odor: (none), ~~(sulphur)~~ A.H, organic, other
Solids: (Trace), Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Topock Sampling Log

Project Name PGE Topock GMP
Job Number ~~35~~ 345631.MP.02.GM
Field Team 2 Field Conditions Sunny, clear skies, low winds

Sampling Event 2007-GMP-136-Q3
Date 10/3/07
Page 2 of 2

Well/Sample Number MW-24BR-136 **QC Sample ID** N/A QC Sample Time N/A

Purge Start Time 1315 Purge Method Grundfos Ded. Pump No

Flow Cell (Y) / N Min. Purge Volume (gal)/(L) till dry 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
>200	14:10	139	7.89	14142	9	0.14	33.22	8.09	9.190	-83.1	slowed to 0.5 gpm
	14:16				pumped "dry"						rate less than 0.5 gpm
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 Stablize prior to sampling?							NA				
Are measurements consistent with previous?							NA				

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

Comments: _____

Initial Depth to Water (ft BTOC): _____

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*SWH _____

Three Casing Volumes = _____

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:				

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, 95, no wind

Sampling Event 2007-GMP-136-Q3
Date 10-2-07
Page 1 of 9

Well/Sample Number MW-25-136
QC Sample ID MW-91-136
QC Sample Time 14:00:00
Purge Start Time ~~14:28~~ A.M. 14:28
Purge Method ~~PP~~ CP Ded. Pump No
Flow Cell: (Y) / N
Min. Purge Volume (gal)/(L) 38
Purge Rate (gpm)/(mLpm) ~~5~~ 7.5

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
	14:30										
91.18	~~14:31~~ A.M.	1015	7.39	1.278	4	6.36	29.16	0.63	0.830	23.5	
93.78	14:31	~~20~~ 225	7.40	1.305	7	6.54	29.20	0.65	0.851	27.5	
94.06	14:32	30	7.39	1.314	9	6.66	29.22	0.65	0.855	27.2	
94.30	14:33	~~40~~ 37.5	7.38	1.318	9	6.65	29.23	0.65	0.858	34.5	
94.41	14:34	45	7.38	1.320	8	6.67	29.24	0.65	0.854	32.5	

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 Stablize prior to sampling?	Y	Y	Y	Y	NA			Y	
Previous Field measurement (5/4/2007)	7.4	1520	2.8	6.85	29.16			103.4	
Are measurements consistent with previous?	Y	Y	Y	Y	NA			lower	

Sample Time ~~13:43~~ A.M. 14:35 Sample Location: pump tubing ___ well port ___ spigot ___ bailer ___ other ___
Comments: started @ 14:24, verified pump off 14:39 ; 82.5 total gal

Initial Depth to Water (ft BTOC): 87.13
Field measured confirmation of Well Depth (ft btoc): —
WD (Well Depth - from database) ft btoc (106.54)
SWH (Standing Water Height) = WD-Initial Depth 19.41
D (Volume as per diameter) 2"= 0.17 4"= 0.66, 1"=0.041 (4 in)
One Casing Volume = D*SWH 12.81
Three Casing Volumes = 38.43

Measure Point: (Well TOC) Steel Casing WATER LEVEL METER SERIAL NUMBER: PGE 2005-01A

Initial DTW / Before Removal		Approx. 5 min After Reinstallation		If Transducer	
Time	Initial DTW	Time	Final DTW	Time of Removal	N/A
1420	87.13	N/A		Time of Reinstallation	

Comments:

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 | **Sampling Event** 2007-GMP-136-Q3
Job Number 345631.MP.02.GM | **Date** 10/2/07
Field Team 1 | Field Conditions Sunny, warm, Low 90s, | Page 1 of 1

Well/Sample Number MW-26-136 | **QC Sample ID** NA | QC Sample Time N/A
Purge Start Time 11:30 | Purge Method CD | Ded. Pump Yes
Flow Cell (Y) / N | Min. Purge Volume (gal)/(L) 46 | Purge Rate (gpm)/(mLpm) ~ 7

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
59.9	11:32	14	7.24	3.902	9	2.64	29.38	2.62	2.5	37.8	stop pump.
55.96	11:43	28	7.30	3.726	24	4.75	29.45	1.95	2.42	21.3	Restart @ 11:41
60.94	11:45	42	7.30	3.780	41	4.60	29.49	1.97	2.47	19.21	
68.23	11:47	56	7.27	3.793	44	5.83	29.53	1.98	2.463	33.2	
—	11:49	70	7.33	3.791	273	6.90	29.85	1.98	2.460	25.3	— Pumped Dry *Recharged 10 ft in 3 min @ 11:53

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 Stablize prior to sampling?		Y	Y	Y	Y	NA	Y		Y	Well dry
Previous Field measurement	(3/12/2007)	7.28	3890	36.9	4.84	30.55	0.2		90	
Are measurements consistent with previous?		Y	Y			NA				

Sample Time 1200 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____
Comments: Samples light green. Final depth to water: Let recharged; a few minutes, restart and took sample

Initial Depth to Water (ft BTOC): 46.88
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 (70.05)
SWH (Standing Water Height) = WD-Initial Depth 23.17
D (Volume as per diameter) 2"= 0.17 (4")= 0.66, 1"=0.041 ~~(2in)~~ 4 incl
One Casing Volume = D*SWH 15.29
Three Casing Volumes = 45.89

Initial DTW / ~~Before Removal~~		Approx. 5 min ~~After Reinstallation~~		If Transducer	
Time	Initial DTW	Time	Final DTW	Time of Removal	None
11:18	46.88	1207	47.29	Time of Reinstallation	

Comments:

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

Sampling Event 2007-GMP-136-Q3
Date 10/02/07
Page 1 of 2

Well/Sample Number MW-27-020-136 **QC Sample ID** NA QC Sample Time

Purge Start Time 1510 Purge Method 2" Grundfos Ded. Pump no

Flow Cell: Y / N Min. Purge Volume (gal)/(L) 5 Purge Rate (gpm)/(mLpm) 2 1

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
6.34	1502	2	7.75	1134	3	0.26	22.12	0.56	0.737	-167.3	
6.34	1504	4	7.77	1134	1	0.19	22.13	0.56	0.736	-169.2	
6.34	1506	6	7.77	1133	1	0.19	22.16	0.56	0.737	-169.6	
6.34	1508	8	7.76	1133	1	0.18	22.15	0.56	0.737	-169.7	

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 Stablize prior to sampling?	yes	yes	yes	yes	NA	yes	yes	yes
Previous Field measurement (10/3/2006)	7.49	1240	0.74	0.48	22.78	0.06		-176
Are measurements consistent with previous?					NA			

Sample Time 1520 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC): ~~7.98~~ 6.00 Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 28460

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

WD (Well Depth - from database) ft btoc (14.4)

SWH (Standing Water Height) = WD-Initial Depth 8.40

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

One Casing Volume = D*SWH 1.428

Three Casing Volumes = 4.28

Initial DTW / Before Removal		If Transducer: Approx. 5 min After Reinstallation		
Time 1454	Initial DTW	Time	Final DTW	Time of Removal 0904
~~0907~~	~~7.98~~ 6.00	1531	6.09	Time of Reinstallation ____

Comments:

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

Sampling Event 2007-GMP-136-Q3
Date 10/02/07
Page 1 of 1

Well/Sample Number MW-27-060-136 **QC Sample ID** NA QC Sample Time

Purge Start Time 1300 Purge Method 2" Grundfos Ded. Pump NO

Flow Cell (Y) / N Min. Purge Volume (gal)/(L) 27 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
7.31	1303	6	7.7	7532	8	0.35	19.6	4.17	4.897	-94.6	
7.32	1306	12	7.8	7535	2	0.32	19.6	4.17	4.897	-100.0	
7.33	1309	18	7.8	7545	2	0.47	19.6	4.18	4.902	-103.4	
7.33	1312	24	7.8	7542	1	0.37	19.6	4.18	4.902	-106.5	
7.34	1315	30	7.7	7542	1	0.43	19.6	4.18	4.902	-109.4	

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 Stablize prior to sampling?	yes	yes	yes	yes	NA	yes	yes	yes
Previous Field measurement (10/3/2006)	7.47	14300	0.83	0.76	22.07	0.83		-122
Are measurements consistent with previous?					NA			

Sample Time 1329 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC): 7.03 Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 28460

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

WD (Well Depth - from database) ft btoc (59)

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 ____

Three Casing Volumes = ____

Initial DTW / Before Removal		If Transducer: Approx. 5 min After Reinstallation		Time of Removal 1249
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1337
1245	7.03	1346	7.23	

Comments: ____

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

Sampling Event 2007-GMP-136-Q3
Date 10/02/07
Page 1 of 1

Well/Sample Number MW-27-085-136 **QC Sample ID** NA QC Sample Time

Purge Start Time 1404 Purge Method 2" Grundfos Ded. Pump NO

Flow Cell (Y) N Min. Purge Volume (gal)/(L) 37 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	1407	6	7.21	16595	2	0.29	19.48	9.77	10.79	-47.3	
8.10	1410	12	7.15	16617	1	0.26	20.32	9.85	10.89	-49.2	
8.00	1413	18	7.09	16782	1	0.38	20.62	9.88	10.91	-48.3	
8.00	1416	24	7.08	16784	0	0.47	20.65	9.89	10.91	-50.3	
8.00	1419	30	7.08	16787	0	0.38	20.67	9.89	10.91	-51.6	
8.00	1423	38	7.08	16793	8	0.32	20.68	9.89	10.92	-53.2	

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 Stablize prior to sampling?	yes	yes	yes	yes	NA	yes	yes	yes	
Previous Field measurement (9/5/2007)	6.91	18000	2.2	0.52	23.11	1.06		-36.9	
Are measurements consistent with previous?					NA				

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

Comments: _____

Initial Depth to Water (ft BTOC): 7.00 Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 28460

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 _____

Three Casing Volumes = _____

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 1349
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1440
1348	7.00	1445	7.23	
Comments:				

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 Dan C Cody, James Field Conditions Sunny, Hot+

Sampling Event 2007-GMP-136-Q3
Date 10-4-07
Page 1 of 1

Well/Sample Number MW-28-025-136 **QC Sample ID** NA QC Sample Time None

Purge Start Time 0950 RF2 Purge Method ~~Bailer~~ Ded. Pump No

Flow Cell: (Y) / N Min. Purge Volume (gal)/(L) 5 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
12.25	0952	1	7.21	1403	50.0	1.15	23.20	0.70	0.911	-17.0	
12.26	0954	2	7.19	1400	16.1	0.66	23.42	0.70	0.910	-30.9	
12.25	0956	3	7.18	1399	13.6	0.58	23.53	0.70	0.909	-36.8	
12.30	0958	4	7.17	1398	9.3	0.52	23.60	0.70	0.909	-42.9	
12.33	1000	5	7.07	1395	3.4	0.48	23.42	0.70	0.907	-51.8	
12.35	1002	6	7.15	1395	4.1	0.47	23.41	0.70	0906	-56.9	
12.37	1004	7	7.17	1394	6.3	0.52	23.40	0.70	0.906	-60.5	
			STABLE								

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 Stablize prior to sampling?	✓	✓	✓	✓	NA	✓	✓	✓
Previous Field measurement (10/11/2006)	7.05	1860	3.24	1.54	24.13	0.09		-111
Are measurements consistent with previous?					NA			

Sample Time 1005 Sample Location: pump tubing X well port ___ spigot ___ bailer ___ other ___

Comments: Not able to take DTW with transducer in well

Initial Depth to Water (ft BTOC): 11.93 (After transducer removal) Measure Point: (Well TOC) Steel Casing WATER LEVEL METER SERIAL NUMBER: 28308

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

WD (Well Depth - from database) ft btoc (21.13)

SWH (Standing Water Height) = WD-Initial Depth 9.2

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

One Casing Volume = D*SWH 1.56

Three Casing Volumes = 4.69

Initial DTW / Before Removal		If Transducer: Approx. 5 min After Reinstallation		Time of Removal 0919
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1021
✓	N/A	—	N/A	

Comments:

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

Odor: (none), sulphur, organic, other

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

Topock Sampling Log

Project Name PGE Topock GMP
Job Number 345631.MP.02.GM
Field Team 1 Dan C Cody James Field Conditions Sunny, Hot

Sampling Event 2007-GMP-136-Q3
Date 10-4-07
Page 1 of 1

Well/Sample Number MW-28-090-136
QC Sample ID NA
QC Sample Time None
Purge Start Time 0828
Purge Method RF2 Ded. Pump No
Flow Cell (Y) / N
Min. Purge Volume (gal)/(L) 44 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
13.70	0830	4	7.16	6956	0.2	0.31	19.11	3.83	4.516	-70.5	
13.71	0835	14	7.22	7793	0.38	0.27	19.78	4.36	5.111	-93.9	
13.71	0840	24	7.26	8031	0.22	0.26	19.88	4.55	5.184	-107.4	
13.72	0845	34	7.28	8026	0.25	0.28	19.83	4.48	5.242	-115.1	
13.72	0850	44	7.29	8091	0.40	0.34	19.85	4.48	5.235	-121.0	
13.72	0855	54	"	"	"	"	"	"	"	-123.4	
										Stable	
				STABLE							
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 Stablize prior to sampling?							NA				
Previous Field measurement (5/4/2007)			7.36	7492	1	0.18	20.17			-156	
Are measurements consistent with previous?							NA				

Sample Time 0855 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC): 12.74
Field measured confirmation of Well Depth (ft btoc): —
WD (Well Depth - from database) ft btoc (98.36)
SWH (Standing Water Height) = WD-Initial Depth 85.62
D (Volume as per diameter) (2") = 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 14.5
Three Casing Volumes = 43.7

Measure Point: Well (TOC) Steel Casing
WATER LEVEL METER SERIAL NUMBER: 28308

Initial DTW / Before Removal		Approx. 10 min After Reinstallation		If Transducer	
Time	Initial DTW	Time	Final DTW	Time of Removal	0820
0819	12.74	0917	12.70	Time of Reinstallation	0907

Comments:

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 Dan C Cody, James
Field Conditions Sunny, 90's, breezy

Sampling Event 2007-GMP-136-Q3
Date 10-4-07
Page 1 of 1

Well/Sample Number MW-29-136
QC Sample ID NA
QC Sample Time None
Purge Start Time 1050
Purge Method RFL
Ded. Pump No
Flow Cell: Y / N
Min. Purge Volume (gal)/(L) 6
Purge Rate (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
31.45	1052	1	7.00	6657	30.8	2.77	25.31	3.47	4.092	-86.9	
31.44	1054	2	7.06	5292	15.4	1.47	25.67	2.83	3.41	-89.2	
31.62	1056	3	7.03	5287	12.5	1.04	25.90	2.80	3.38	-91.1	
32.01	1058	4	7.08	4551	7.3	0.81	25.55	2.32	2.81	-100.0	
32.34	1100	5	7.12	3930	6.1	0.71	25.33	2.06	2.53	-105.6	
32.61	1102	6	7.13	3730	5.3	0.57	25.32	1.94	2.39	-108.2	
32.74	1104	7	7.16	3405	4.9	0.53	25.30	1.77	2.19	-112.1	
32.77	1106	8	✓	3260	✓	✓	✓	✓	✓	✓	
32.86	1108	9		3185	—	—	STABLE	—	—	—	
32.93	1110	10	+/- 0.1 pH units	3172 +/- 3% STABLE	+/- 10% NTU units when >10 NTUs	+/- 0.3 mg/L	NA	NA	NA	+/- 10 mV	
Parameter Stabilization Criteria			✓	✓	✓	✓	NA			✓	
Did Parameters Stablize prior to sampling?											
Previous Field measurement (10/13/2006)			7.14	4770	380	5.26	25.18	0.25	—	-56	
Are measurements consistent with previous?							NA				

Sample Time 1112 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____
Comments: ____

Initial Depth to Water (ft BTOC): 29.92
Field measured confirmation of Well Depth (ft btoc): —
WD (Well Depth - from database) ft btoc (41.52)
SWH (Standing Water Height) = WD-Initial Depth 11.6
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 1.97
Three Casing Volumes = 5.91

Measure Point: Well TOC Steel Casing
WATER LEVEL METER SERIAL NUMBER: 28308

Initial DTW / Before Removal		If Transducer: Approx. 5 min After Reinstallation		
Time	Initial DTW	Time	Final DTW	Time of Removal No Transducer
	N/A		N/A	Time of Reinstallation
Comments:				

Color: clear, grey, yellow, brown, black, cloudy, green
Odor: none, sulphur, organic, other
Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Topock Sampling Log

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

Sampling Event 2007-GMP-136-Q3
Date 10/8/07
Page 1 of 1

Well/Sample Number MW-30-030-136
QC Sample ID NA
QC Sample Time NA
Purge Start Time 11:10
Purge Method ~~GrundFos~~ Temp. AH-Ded. Pump NO
Flow Cell (Y) / N
Min. Purge Volume (gal) / (L) 10.68
Purge Rate (gpm) / (mLpm) 1

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity ppt	TDS g/L	Eh/ORP mv	Comments (See description below
14.50	1117	1	6.85	42880	968	0.26	26.64	27.54	27.88	-79.4	
14.52	1113	2	6.88	42862	338	0.22	26.58	27.52	27.84	-87.3	
14.33	1114	3	6.90	42832	111	0.21	26.56	27.49	27.82	-94.0	
14.35	1116	4	6.91	42805	44	0.25	26.52	27.81	27.81	-93.9	
14.35	1116	5	6.92	42756	27	0.28	26.51	27.44	27.78	-94.6	
14.37	1118	7	6.93	42720	19	0.45	26.51	27.42	27.77	-93.9	
14.45	1119	8	6.93	42717	11	0.54	26.52	27.42	27.76	-94.7	
14.55	1120	9	6.93	42716	10	0.50	26.51	27.42	27.76	-95.6	
14.55	1121	10	6.93	42690	6	0.45	26.51	27.40	27.75	-96.9	
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 Stablize prior to sampling?			Yes	Yes	Yes	Yes	NA	Yes	Yes	Yes	
Previous Field measurement (10/10/2006)			6.91	56500	10.7	1.39	27.42	3.78		-129	
Are measurements consistent with previous?			Yes	lower	Yes	lower	NA	NA	NA	higher	

Sample Time 1123 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____
Comments: Pump decon'd before use. Pump off @ 11:26. Final DTW 13.88

Initial Depth to Water (ft BTOC): 13.80
Field measured confirmation of Well Depth (ft btoc): ____
WD (Well Depth - from database) ft btoc (26.9)
SWH (Standing Water Height) = WD-Initial Depth 13.1
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 2.23
Three Casing Volumes = 6.68

Measure Point: Well (TOC) Steel Casing
WATER LEVEL METER SERIAL NUMBER: PGE 2005-01A

Initial DTW / Before Removal		If Transducer: Approx. 5 min After Reinstallation	
Time	Initial DTW	Time	Final DTW
1100	13.80		

If Transducer: Time of Removal ____ Time of Reinstallation ____
No transducer
Comments:

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, mostly clear, calm, low 70s

Sampling Event 2007-GMP-136-Q3
Date 10/4/07
Page 1 of 1

Well/Sample Number MW-31-060-136
QC Sample ID NA
QC Sample Time N/A

Purge Start Time ~~8:58~~ A.H. 9:00
Purge Method CD
Ded. Pump Yes

Flow Cell: Y / N
Min. Purge Volume (gal)/(L) 43.6
Purge Rate (gpm)/(mLpm) 10 tested it

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity ~~mS/cm~~ µS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below
—	9:01	10	6.47	2857	4.	6.35	28.16	1.50	1.891	127.3	
44.52	9:02	20	7.44	2954	6	6.21	28.21	1.53	1.928	118.6	
44.53	9:03	30	7.45	2988	A.H. 7.5	6.19	28.24	1.55	1.947	113.8	
44.71	9:04	40	7.47	A.H. 3012	4	6.15	28.27	1.56	1.56	106.6	
44.69	9:05	50	7.47	3023	4	6.15	28.28	1.57	1.968	101.6	
44.51	9:06	60	7.47	3065	6	6.05	28.31	1.57	1.974	95.5	
44.69	9:07	70	7.48	3036	5	6.10	28.26	1.57	1.974	94.4	

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 Stablize prior to sampling?	Y	Y	Y	Y	NA	Y		Y	
Previous Field measurement (3/12/2007)	7.49	2650	1.9	5.29	28.51	0.1		93	
Are measurements consistent with previous?	Y	higher	Y	Y	NA	higher		Y	

Sample Time ~~9:05~~ A.H. 9:08 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____
Comments: Replaced plug

Initial Depth to Water (ft BTOC): 41.96
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 (64)
SWH (Standing Water Height) = WD-Initial Depth 22.04
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (4 in)
One Casing Volume = D*SWH 14.5
Three Casing Volumes = 43.63

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal N/A
Time	Initial DTW	Time	Final DTW	Time of Reinstallation
8:37	41.96	N/A		

Comments:

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 90°. Sunny, wind from SE ≈ 5 mph

Sampling Event 2007-GMP-136-Q3
Date 10/1/07
Page 1 of 1

Well/Sample Number MW-31-135-136
QC Sample ID NA
QC Sample Time N/A
Purge Start Time 1426
Purge Method Grundfo
Ded. Pump No
Flow Cell (Y) N
Min. Purge Volume (gal)/(L) 47
Purge 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
44.92	1430	12	7.62	8.163	1	0.76	28.90	4.52	5.360	35.1	
44.93	1434	24	7.70	9.297	1	0.84	28.99	5.26	6.153	21.7	
44.93	1438	36	7.73	9.712	8	0.80	29.00	5.43	6.314	17.9	
44.92	1442 +4	48	7.73	9.797	6	0.81	29.00 A.H.	5.49	6.357	16.3	
44.93	1446	60	7.91	9.851	27	0.80	29.01	5.52	6.414	22.1	
44.95	1450	72	7.68	9.907	28	0.77	29.01	5.54	6.438	32 A.H. 29.5	
44.95	1454	84	7.93	9.938	18	0.77	29.01	5.56	6.462	19.2	
44.94	1458 +4	96	7.75	9.967	11	0.77	29.02	5.56	6.482	11.3	
44.95	1503 +5	108	7.74	9.999	9	0.75	29.02	5.60	6.499	14.4	
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 Stablize prior to sampling?			Y	Y		Y	NA	Y		Y	
Previous Field measurement (5/1/2007)			7.79	9550	26.7	2.78	29.3	0.5		-3	
Are measurements consistent with previous?			Y	Y	lower	lower	NA	higher		higher	

Sample Time 15:08 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____
Comments: ____

Initial Depth to Water (ft BTOC): 43.98
Field measured confirmation of Well Depth (ft btoc): —
WD (Well Depth - from database) ft btoc (135.45)
SWH (Standing Water Height) = WD-Initial Depth 91.47
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 15.5
Three Casing Volumes = 47

Measure Point: (Well TOC) Steel Casing WATER LEVEL METER SERIAL NUMBER: PGE 2005-01A

Initial DTW / Before Removal		If Transducer: Approx. 5 min After Reinstallation		
Time	Initial DTW	Time	Final DTW	Time of Removal 14:20 / Time of Reinstallation 15:12
14:20	43.98	15:17	44.10	

Comments:

Color: (clear), grey, yellow, brown, black, cloudy, green
Odor: (none), sulphur, organic, other
Solids: (Trace), Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

W

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

Sampling Event 2007-GMP-136-Q3
Date 10/01/07
Page 1 of 1

Well/Sample Number MW-32-020-136 **QC Sample ID** NA QC Sample Time

Purge Start Time 1320 Purge Method 2" Grundfos Ded. Pump yes

Flow Cell (Y) / N Min. Purge Volume (gal)/(L) 6.5 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 ppt %	TDS g/L	Eh/ORP mv	Comments (See description below
8.34	1322	3	6.59	51761	48	0.92	29.69	33.92	33.54	-65.1	
8.46	1325	6.5	6.60	50951	99	—	29.50	—	—	—	
8.50	1329	13.5	6.61	50698	125	1.81	29.45	33.15	32.97	-81.0	
8.54	1331	16.5	6.61	50551	45	1.67	29.42	33.02	32.83	-87.6	
8.99	1333	19.5	6.61	50505	34	1.24	29.39	32.98	32.81	-92.0	
8.99	1335	22.5	6.61	50384	62	0.96	29.39	32.92	32.75	-95.5	
9.01	1337	25.5	6.62	50338	55	0.67	29.37	32.86	32.71	-98.4	
8.99	1339	28.5	6.62	50256	35	0.52	29.36	32.80	32.67	-101.7	
8.99	1341	31.5	6.63	50134	25	0.32	29.34	32.75	32.61	-105.1	
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 Stablize prior to sampling?			yes	yes	no	no	NA	yes	yes	yes	
Previous Field measurement (4/30/2007)			6.6	54900	13	4.6	24.6	2.2		-165	
Are measurements consistent with previous?			Yes	no	no	no	NA	no	N/A	no	

Sample Time 1346 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC): 6.78 Measure Point: (Well TOC) Steel Casing WATER LEVEL METER SERIAL NUMBER: 28308

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

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

SWH (Standing Water Height) = WD-Initial Depth 12.82

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

One Casing Volume = D*SWH 2.18

Three Casing Volumes = 6.5

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal N/A
Time	Initial DTW	Time	Final DTW	Time of Reinstallation N/A
1256	6.78	1358	6.80	

Comments: did not remove transducer

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

Sampling Event 2007-GMP-136-Q3
Date 10/01/07
Page 1 of 1

Well/Sample Number MW-32-035-136 **QC Sample ID** NA QC Sample Time

Purge Start Time 1420 Purge Method 2" Grundfos Ded. Pump yes

Flow Cell: Y / N Min. Purge Volume (gal)/(L) 59.5 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 % ppt	TDS g/L	Eh/ORP mv	Comments (See description below
9.49	1425	10	7.08	17532	14	0.23	25.12	10.37	11.49	-135.6	
9.51	1430	20	7.00	19799	46	0.39	24.98	11.79	12.87	-132.6	
9.61	1435	30	7.03	19748	20	0.26	24.96	11.75	12.83	-135.3	
9.59	1440	40	7.01	19690	12	0.19	24.95	11.72	12.80	-137.1	
9.61	1445	50	7.01	19642	9	0.17	24.95	11.68	12.77	-139.6	
9.54	1450	60	7.01	19607	7	0.18	24.93	11.65	12.73	-141.4	

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 Stablize prior to sampling?	yes	yes	yes	yes	NA	yes	yes	yes	
Previous Field measurement (4/30/2007)	6.94	23500	1.3	3.82	25.78	1.4		-158	
Are measurements consistent with previous?	yes	no	yes	no	NA	no	N/A	yes	

Sample Time 1455 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC): 7.11

Field measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc (37.15)

SWH (Standing Water Height) = WD-Initial Depth 30.04

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

One Casing Volume = D*SWH 19.8

Three Casing Volumes = 59.5

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 28308

Initial DTW / Before Removal		If Transducer: Approx. 5 min After Reinstallation		Time of Removal N/A
Time	Initial DTW	Time	Final DTW	Time of Reinstallation N/A
1409	7.11	1305	7.23	

Comments: did not remove transducer

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

Odor: none, sulphur, organic, other

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

Topock Sampling Log

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

Sampling Event 2007-GMP-136-Q3
Date 10-5-07
Page 1 of 1

Well/Sample Number MW-33-040-136 **QC Sample ID** NA QC Sample Time

Purge Start Time 7:15 Purge Method Grumphus Ded. Pump no

Flow Cell (Y) N Min. Purge Volume (gal)/(L) 5 Purge Rate (gpm)/(mLpm) .5

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity ~~%~~ ppt	TDS g/L	Eh/ORP mv	Comments (See description below
—	0716	0.5	7.58	8955	183	0.95	26.81	4.90	5.26	133.0	
38.05	0718	1.5	7.75	8210	52	0.64	26.97	4.53	5.28	114.8	
38.15	0720	2.5	7.78	7954	82	0.62	27.19	4.35	5.12	109.2	
	0721	well	dewatered @	3 gals.							
32.30	1100	—	8.06	6383	197	1.20	26.63	3.97	4.45	-130.2	
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 Stablize prior to sampling?							NA				
Previous Field measurement (5/2/2007)			8.18	20200	28.6	0.55	29.4	1.1		-16	
Are measurements consistent with previous?							NA				

Sample Time 1100 Sample Location: pump tubing ____ well port ____ spigot ____ bailer X other ____

Comments: ____

Initial Depth to Water (ft BTOC): 32.21

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

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

SWH (Standing Water Height) = WD-Initial Depth 9.63

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

One Casing Volume = D*SWH 1.637

Three Casing Volumes = 4.9

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 28460

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 7:02
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1107
7:00	32.21	1113	32.51	

Comments:

Color: clear, grey, yellow, brown, black, cloudy, green **Odor:** none, sulphur, organic, other **Solids:** Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Topock Sampling Log

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

Sampling Event 2007-GMP-136-Q3
Date 10/05/07
Page 1 of 1

Well/Sample Number MW-33-090-136 **QC Sample ID** NA QC Sample Time

Purge Start Time 0947 Purge Method 2" Grundfos Ded. Pump no

Flow Cell: Y / N Min. Purge Volume (gal)/(L) 111 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 ppt	TDS g/L	Eh/ORP mv	Comments (See description below
32.76	0957	20	7.54	~~2~~ 9428	1	0.22	26.48	5.28	6.14	-240.6	* increased flow rate to 3gpm@1000
32.90	1008	50	7.53	9607	1	0.17	26.90	5.38	6.24	-256.2	
32.91	1016	65	7.53	9638	3	0.14	26.85	5.40	6.26	~~2~~ 106.4	
32.90	1021	80	7.53	9666	1	0.14	26.91	5.41	6.28	136.7	
32.94	1026	95	7.53	9684	1	0.14	26.91	5.42	6.29	197.4	
32.98	1031	110	7.53	9707	1	0.15	26.91	5.44	6.31	202.6	
32.90	1036	125	7.53	9719	1	0.14	26.91	5.45	6.31	206.2	
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?			yes	yes	yes	yes	NA	NA	NA	yes	
Previous Field measurement (5/2/2007)			7.35	16000	0.58	0	27.05	0.9	NA	18	
Are measurements consistent with previous?			yes	no	yes	yes	NA	NA	NA	no	

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

Comments: stopped purge from 1010 to 1013 to transfer to empty purge tank

Initial Depth to Water (ft BTOC): 32.50 Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 28460

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

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

SWH (Standing Water Height) = WD-Initial Depth 55.78

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

One Casing Volume = D*SWH 36.8

Three Casing Volumes = 110.4

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 0935
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1048
0933	32.50	1053	32.57	

Comments:

Color: clear, grey, yellow, brown, black, cloudy, green **Odor:** none, sulphur, organic, other **Solids:** Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Topock Sampling Log

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

Sampling Event 2007-GMP-136-Q3
Date 10-05-07
Page 1 of 1

Well/Sample Number MW-33-210-136 **QC Sample ID** NA QC Sample Time

Purge Start Time 0819 Purge Method 2" Grundfos Ded. Pump ? Red Flow (no) (Temp pump lowered)

Flow Cell: (Y) / N Min. Purge Volume (gal)/(L) 98 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 ~~ppt~~ PPT	TDS g/L	Eh/ORP mv	Comments (See description below
34.00	0824	15	7.27	18133	15	0.18	27.06	10.69	11.79	-4.9	
34.02	0829	30	7.31	18145	7	0.19	27.36	10.69	11.80	-19.0	
34.02	0834	45	7.31	18143	2	0.17	27.54	10.69	11.79	-19.8	
34.02	0839	60	7.32	18143	2	0.19	27.56	10.69	11.79	-20.5	
34.03	0846	75	7.34	18137	3	0.20	27.60	10.68	11.79	-23.1	
34.03	0851	90	7.31	18135	2	0.21	27.51	10.69	11.79	-26.4	
34.05	0856	105	7.32	18138	1	0.19	27.59	10.68	11.78	-27.4	
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?			Yes	Yes	Yes	Yes	NA	NA	NA	Yes	
Previous Field measurement (5/2/2007)			7.19	23700	0.75	0.17	27.72	1.4	NA	-52	
Are measurements consistent with previous?			Yes	Yes	Yes	Yes	NA	NA	NA	Yes	

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

Comments: Stop purge from 0840 to 0842 to transfer between purge tanks

Initial Depth to Water (ft BTOC): 32.74

Field measured confirmation of Well Depth (ft btoc):

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

SWH (Standing Water Height) = WD-Initial Depth 190.26

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

One Casing Volume = D*SWH 32.34

Three Casing Volumes = 97.03

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 29460

Initial DTW / Before Removal		If Transducer: Approx. 5 min After Reinstallation		
Time	Initial DTW	Time	Final DTW	Time of Removal NA / Time of Reinstallation NA
7:30	32.74	0915	32.82	

Comments:

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

Sampling Event 2007-GMP-136-Q3
Date 10/03/07
Page 1 of 1

Well/Sample Number MW-34-055-136 **QC Sample ID** NA QC Sample Time

Purge Start Time 0905 Purge Method Redi-Flo Ded. Pump yes

Flow Cell: (Y) / N Min. Purge Volume (gal)/(L) 100.2 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
6.21	0915	20	8.29	1123	1	0.31	18.45	0.56	0.730	-198.4	
6.23	0925	40	8.18	1117	1	0.31	18.46	0.56	0.726	-220.8	
6.23	0935	60	8.22	1117	0	0.33	18.45	0.56	0.726	-219.6	
6.23	0945	80	8.23	1116	0	0.31	18.44	0.56	0.726	-212.3	
6.20	0955	100	8.22	1116	1	0.35	18.41	0.56	0.725	-207.2	
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 Stablize prior to sampling?			yes	yes	yes	yes	NA	yes	yes	yes	
Previous Field measurement (10/4/2006)			7.24		1.26	2.17	20.03	0.2		-178	
Are measurements consistent with previous?							NA				

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

Comments: ____

Initial Depth to Water (ft BTOC): 5.99 Measure Point: (Well TOC) Steel Casing WATER LEVEL METER SERIAL NUMBER: 28460

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

WD (Well Depth - from database) ft btoc (56.6)

SWH (Standing Water Height) = WD-Initial Depth 50.6

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

One Casing Volume = D*SWH 33.4

Three Casing Volumes = 100.2

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

Comments:

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

Sampling Event 2007-GMP-136-Q3
Date 10/03/07
Page 1 of 1

Well/Sample Number MW-34-080-136 **QC Sample ID** NA QC Sample Time

Purge Start Time 1056 Purge Method 2" Grundfos Ded. Pump no

Flow Cell (Y) N Min. Purge Volume (gal)/(L) 154 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
8.30	1106	30	7.68	6737	1	0.25	18.72	3.71	4.373	-49.4	
8.41	1116	60	7.68	8387	0	0.39	19.61	4.69	5.459	-49.5	
8.71	1126	90	7.59	8419	1	0.32	19.60	4.70	5.473	-52.9	
8.71	1136	120	7.64	8427	0	0.23	19.62	4.71	5.484	-57.8	
8.92	1146	150	7.63	8443	1	0.22	19.62	4.72	5.490	-63.0	

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 Stablize prior to sampling?	Y	Y	Y	Y	NA	Y	Y	Y	
Previous Field measurement (9/6/2007)	7.21	9600	2.2	0.24	21.82	0.54		-23.3	
Are measurements consistent with previous?					NA				

Sample Time 1152 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC): 6.71

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

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

SWH (Standing Water Height) = WD-Initial Depth 77.59

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

One Casing Volume = D*SWH 51.21

Three Casing Volumes = 153.63

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 28460

Initial DTW / Before Removal		Approx. 5 min After Reinstallation		If Transducer	
Time	Initial DTW	Time	Final DTW	Time of Removal	10:48
1048	6.71	1234	6.95	Time of Reinstallation	12:17

Comments:

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

Sampling Event 2007-GMP-136-Q3
Date 10/03/07
Page 1 of 1

Well/Sample Number MW-34-100-136 **QC Sample ID** MW-93-136 QC Sample Time
Purge Start Time 1250 Purge Method Redi-Flo Ded. Pump yes
Flow Cell: Y / N Min. Purge Volume (gal)/(L) 56 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
8.15	1255	10	7.98	13840	1	0.24	20.51	8.00	8.983	-38.2	
8.29	1300	20	7.72	13989	0	0.22	21.02	8.12	9.120	-37.4	
8.29	1305	30	7.69	14050	1	0.21	21.10	8.10	9.029	-43.1	
8.25	1310	40	7.73	13941	1	0.24	21.11	8.08	9.074	-44.7	
8.25	1315	50	7.71	14086	0	0.25	21.15	8.12	9.095	-46.3	
8.25	1320	60	7.72	14026	1	0.23	21.14	8.11	9.098	-50.6	
			+/- 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 Stablize prior to sampling?			Y	Y	Y	Y	NA	Y	Y	Y	
Previous Field measurement (9/6/2007)			7.54	17400	2.2	0.34	22.46	1.02		111.9	
Are measurements consistent with previous?							NA				

Sample Time 1325 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC): 7.45
Field measured confirmation of Well Depth (ft btoc): ____
WD (Well Depth - from database) ft btoc (117)
SWH (Standing Water Height) = WD-Initial Depth 109.26
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 18.57
Three Casing Volumes = 55.7

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 28460

Initial DTW / Before Removal		Approx. 5 min After Reinstallation		If Transducer	
Time	Initial DTW	Time	Final DTW	Time of Removal	
	7.45		7.57	Time of Reinstallation	

Comments:

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 Cloudy 75°, Wind S, 15 mph

Sampling Event 2007-GMP-136-Q3
Date 10/1/07
Page ____ of ____

Well/Sample Number MW-35-060-136
QC Sample ID MW-97-136
QC Sample Time ~~N/A.~~ A.H. 12:00

Purge Start Time ~~12:32~~ 12:35:41
Purge Method Grundfos 14.2
Ded. Pump No
Min. Purge Volume (gal)/(L) ~~2 gpm~~ A.H.
Purge Rate (gpm)/(mLpm) 1 2 gpm A.H.
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
~~28.94~~ 28.94	~~12:32~~ 12:41	3	7.24	7.631	12	0.74	27.21	4.20	4.962	69.2	
28.94	~~12:38~~ 12:41	6	7.25	7.579	15	0.71	27.28	4.17	4.919	62.4	
28.94	1244	9	7.26	7.529	10	0.75	27.29	4.14	4.857	58.8	
28.94	1247	12	7.26	7.486	5	0.80	27.27	4.10	4.854	54.4	
28.95	~~1250~~ 1250	15	7.27	7.431	4	0.80	27.27	4.08	4.830	52.2	
28.95	1253										

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 Stablize prior to sampling?	Y	Y	Y	Y	NA	Y		Y
Previous Field measurement (3/8/2007)	6.22	5660	2	0.78	29.8	0.3		176
Are measurements consistent with previous?	higher	higher	Y	Y	NA	higher		lower

1259

Sample Time 12:56 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____
Comments: Slowed rate from 2 to 1 gpm because of camera crew and new MIST.

Initial Depth to Water (ft BTOC): 28.94
Field measured confirmation of Well Depth (ft btoc): —
WD (Well Depth - from database) ft btoc (56.8)
SWH (Standing Water Height) = WD-Initial Depth 27.86
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 4.73
Three Casing Volumes = 14.2

Measure Point: (Well TOC) Steel Casing transducer top A.H.
WATER LEVEL METER SERIAL NUMBER: PGE 2005-01 A

Initial DTW / Before Removal		Approx. 5 min After Reinstallation		If Transducer	
Time	Initial DTW	Time	Final DTW	Time of Removal	12:22
12:20	28.94	13:11	~~28.77~~ 28.97 A.H.	Time of Reinstallation	13:04

Comments:

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 partly overcast, 75°, wind, breezy gusts

Sampling Event 2007-GMP-136-Q3
Date 10/1/07
Page ____ of ____

Well/Sample Number MW-35-135-136
QC Sample ID NA
QC Sample Time NA
Purge Start Time 13:31
Purge Method Grundfos Ded. Pump NO
Flow Cell: (Y) / N
Min. Purge Volume (gal)/(L) 69 Purge 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
29.51	1335	12	7.60	9.557	4	0.76	26.96	5.35	6.213	29.8	
29.51	1339	24	7.62	9.678	1	0.64	27.06	5.42	6.287	39.9	
29.51	1343	36	7.66	9.543	2	0.60	27.09	5.33	6.200	40.2	
29.51	1347	48	7.66	9.487	1	0.60	27.08	5.30	6.164	39.4	
29.51	1351	60	7.67	9.472	1	0.61	27.08	5.29	6.155	38.3	
29.51	~~1355~~ 1353	67 A.H.	7.67	9.472	1	0.60	27.09	5.29	6.156	37.6	
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 Stablize prior to sampling?			Y	Y	Y	Y	NA	Y		Y	
Previous Field measurement (5/4/2007)			7.48		0.1	2.15	27.2	1.4		28	
Are measurements consistent with previous?			Y		Y	lower	NA	higher		higher	

Sample Time 13:55 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC): 28.59
Field measured confirmation of Well Depth (ft btoc): ____
WD (Well Depth - from database) ft btoc (158.7)
SWH (Standing Water Height) = WD-Initial Depth 130.31
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 22.15
Three Casing Volumes = 66.5

Measure Point: (Well TOC) Steel Casing A.H. transducer top

WATER LEVEL METER SERIAL NUMBER: PGE 2005-01 A

Initial DTW / Before Removal		Approx. 5 min After Reinstallation		If Transducer
Time	Initial DTW	Time	Final DTW	Time of Removal A.H. 15:25
13:23	28.59	14:05	28.61	Time of Reinstallation ~~14:00~~ 13:59

Comments: ____

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

Sampling Event 2007-GMP-136-Q3
Date 10/03/07
Page 1 of 1

Well/Sample Number MW-36-020-136
QC Sample ID NA
QC Sample Time ~~1400~~ PM

Purge Start Time 1340
Purge Method peristaltic pump Ded. Pump no
Flow Cell: Y / N
Min. Purge Volume (gal)/(L) 1.3 Purge Rate (gpm)/(mLpm) 0.15

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity % ppt	TDS g/L	Eh/ORP mv	Comments (See description below
14.02	1342	0.3	7.37	26983	18	2.60	25.50	16.50	17.41	-204.9	
13.97	1344	0.6	7.36	26607	33	1.23	25.35	16.16	17.18	-207.9	
13.91	1346	0.9	7.35	26300	22	0.90	25.31	16.03	17.03	-204.7	
13.88	1348	1.2	7.35	26071	15	0.83	25.24	15.89	16.92	-208.0	
13.84	1350	1.5	7.34	25972	11	0.69	25.25	15.83	16.85	-209.7	
13.79	1352	1.8	7.34	25910	10	0.60	25.20	15.75	16.79	-212.1	
13.74	1354	2.1	7.34	25792	5	0.62	25.19	15.67	16.72	-215.4	
13.74	1356	2.4	7.35	25659	4	0.70	25.17	15.65	16.68	-216.3	
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 Stablize prior to sampling?			yes	yes	yes	yes	NA	NA			
Previous Field measurement (10/2/2006)			7.19	24000	6.3	1.84	25.27	1.47		-177	
Are measurements consistent with previous?			yes	yes	yes	no	NA				

Sample Time 1400 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: pump off @ 1405 + total purge : 2.6 gals.

Initial Depth to Water (ft BTOC): 12.67
Field measured confirmation of Well Depth (ft btoc):
WD (Well Depth - from database) ft btoc (22.7)
SWH (Standing Water Height) = WD-Initial Depth 10.03
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (1 in)
One Casing Volume = D*SWH 0.41
Three Casing Volumes = 1.23

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 28308

Initial DTW / Before Removal		Approx. 5 min After Reinstallation		If Transducer	
Time	Initial DTW	Time	Final DTW	Time of Removal	1321
1324	12.67	1415	12.70	Time of Reinstallation	1410

Comments:

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

Sampling Event 2007-GMP-136-Q3
Date 10/03/07
Page 1 of 1

Well/Sample Number MW-36-040-136 **QC Sample ID** NA QC Sample Time

Purge Start Time ~~1449~~ pm 1450 Purge Method peristaltic pump Ded. Pump no

Flow Cell Y / N Min. Purge Volume (gal)/(L) 3.4 Purge Rate (gpm)/(mLpm) 0.25

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity % ppt	TDS g/L	Eh/ORP mv	Comments (See description below
—	1452	0.5	7.79	7387	3	0.77	24.51	4.53	5.49	-141.7	
—	1454	1.0	7.73	8827	6	0.44	23.97	4.97	5.79	-211.7	
—	1456	1.5	7.74	8955	5	0.35	23.86	5.02	5.83	-237.2	
—	1458	2.0	7.73	8987	7	0.32	23.79	5.04	5.85	-242.3	
—	1500	2.5	7.72	9023	5	0.31	23.71	5.04	5.86	-245.9	
—	1502	3.0	7.71	9025	4	0.30	23.69	5.06	5.88	-247.3	
—	1504	3.5	7.70	9051	2	0.29	23.67	5.06	5.88	-249.1	
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 Stablize prior to sampling?			yes	yes	yes	yes	NA	NA	NA	yes	
Previous Field measurement (10/5/2006)			7.3	16000	2.01	1.37	23.94	0.94	NA	-194	
Are measurements consistent with previous?			yes	no	yes	no	NA	no	NA	yes	

Sample Time 1506 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: unable to lower water level meter with tubing in well
stop purge: 1508 total volume 4.0 gals.

Initial Depth to Water (ft BTOC): 15.59' Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 28308

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

WD (Well Depth - from database) ft btoc (42.75)

SWH (Standing Water Height) = WD-Initial Depth 27.16

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

One Casing Volume = D*SWH 1.1

Three Casing Volumes = 3.3

Initial DTW / Before Removal		If Transducer: Approx. 5 min After Reinstallation		
Time	Initial DTW	Time	Final DTW	Time of Removal 1430
1433	15.59	1514	15.59	Time of Reinstallation 1511

Comments:

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, Breezy, 90°F

Sampling Event 2007-GMP-136-Q3
Date 10/4/07
Page 1 of

Well/Sample Number MW-37D-136
QC Sample ID NA
QC Sample Time
Purge Start Time 1410 stop 1440
Purge Method Grundfos
Ded. Pump
Min. Purge Volume (gal)/(L) 100
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. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below
31.02	1410	0	7.66	5.39	.81	7.05	36.60	.29	3.6	102	
31.04	1414	20	7.60	20.7	0.32	3.26	29.63	1.24	13	96	
31.05	1417	35	7.60	18.6	0.27	3.17	30.03	1.17	13	93	
31.12	1420	50	7.60	19.2	0.29	5.60	30.01	1.15	12	91	Generator stop/Restart
31.14	1423	65	7.59	19.0	0.30	3.27	30.38	1.14	12	91	
31.14	1425	80	7.59	19.0	0.38	2.98	30.55	1.13	12	91	
	1428	95	7.59	18.8		2.38	30.61	1.12	12	91	Generator stop/Restart
	~~1429~~	~~100~~									
31.00	1437	110	7.60	19.1	1.15	216	30.70	1.14	12	95	
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 Stablize prior to sampling?							NA				
Previous Field measurement (5/3/2007)			7.75	16600	0.1	3.91	30	1		41	
Are measurements consistent with previous?							NA				

Sample Time 1435 Sample Location: pump tubing ✓ well port ____ spigot ____ bailer ____ other ____

Comments: Generator keeps stopping/Restarting - Will collect samples after 100 GALS Purged (3x Vol) and collect Parameters after sample collection Turbidity

Initial Depth to Water (ft BTOC): 30.64
Field measured confirmation of Well Depth (ft btoc):
WD (Well Depth - from database) ft btoc (226.72)
SWH (Standing Water Height) = WD-Initial Depth 196
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 33
Three Casing Volumes = 100

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

Comments:

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 | **Sampling Event** 2007-GMP-136-Q3
Job Number 345631.MP.02.GM | **Date** 10/4/07
Field Team 1 | Field Conditions Sunny, Breezy, 98°F | Page 1 of 1

Well/Sample Number MW-37S-136 | **QC Sample ID** MW-94-136 | QC Sample Time
Purge Start Time 1319 pump off 1338 | Purge Method Grundfos | Ded. Pump
Flow Cell (Y) / N | Min. Purge Volume (gal)/(L) 30 | Purge Rate (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
30.50	1319	0	7.62	1710	.32	6.61	36.86	1.04	12	105	
30.70	1322	6	7.71	9.0	0.61	5.76	31.47	0.27	3.3	88	
30.80	1324	10	7.61	4.74	1.32	5.71	29.81	0.24	3.1	86	
30.60	1326	14	7.56	4.75	0.23	2.86	29.86	0.24	3.6	81	
30.56	1328	18	7.55	4.78	0.47	2.65	30.01	0.28	3.5	77	
30.55	1330	22	7.55	4.79	0.27	2.64	29.93	0.28	3.4	74	
30.57	1333	26	7.55	4.78	0.41	2.62	30.03	0.28	3.4	71	
30.58	1334	30	7.55	4.72	0.22	2.60	29.93	0.28	3.4	70	
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 Stablize prior to sampling?			Y	Y	Y	Y	NA	Y		Y	
Previous Field measurement (3/7/2007)			7.66	4940	0.3	2.6	29	0.3		109	
Are measurements consistent with previous?			Y	Y	Y	Y	NA	Y		N	

Sample Time 1337 Sample Location: pump tubing ✓ well port ____ spigot ____ bailer ____ other ____
Comments: 1337

Initial Depth to Water (ft BTOC): 30.46
Field measured confirmation of Well Depth (ft btoc): ____
WD (Well Depth - from database) ft btoc (87.03)
SWH (Standing Water Height) = WD-Initial Depth 56.57
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 9.26
Three Casing Volumes = 30

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:

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	**Sampling Event**	2007-GMP-136-Q3
Job Number	345631.MP.02.GM	Date	10-08-07
Field Team	1	Page	1 of 1
Field Conditions	Sunny, ~85°, NW wind 3 mph		

Well/Sample Number MW-39-~~070~~ 040 CY -136 QC Sample ID NA QC Sample Time NA

Purge Start Time 1212 Purge Method Peristaltic Ded. Pump NO

Flow Cell (Y) / N Min. Purge Volume (gal)/(L) ~~7.04~~ CY 3.5 Purge Rate (gpm)/(mLpm) .14

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
ND	1215	0.5	6.86	15.8	32	0.04	25.93	0.93	10	-170	
probe	1219	1.0	6.96	15.8	8	0.00	25.84	0.93	10	-173	*D.O. readings may be
is too	1223	1.5	7.00	15.6	4	0.00	25.82	0.92	10	-175	incorrect on Horiba
large	1227	2.0	7.03	15.4	4	0.00	25.77	0.91	10	-178	
|	1230	2.5	7.05	15.3	3	0.00	25.78	0.89	10	-180	
|	1234	3.0	7.06	15.1	2	0.00	25.77	0.88	10	-181	
|	1238	3.5	7.07	14.9	1	0.00	25.76	0.87	10	-181	
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 Stablize prior to sampling?			Yes	Yes	Yes	Yes	NA	Yes	Yes	Yes	
Previous Field measurement (6/12/2007)			7.21	7377	4	0.5	25.63	0.406		70.4	
Are measurements consistent with previous?			lower	higher	Yes	lower	NA	higher	NA	lower	

Sample Time 1240 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: Pump off 12:45, 4.0 total purge

Initial Depth to Water (ft BTOC): ~~14.45~~ CY 14.00 Measure Point: Well (TOC) Steel Casing WATER LEVEL METER SERIAL NUMBER: PG&E 2005-01A

Field measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc CY ~~(71.69)~~ 42.1

SWH (Standing Water Height) = WD-Initial Depth ~~57.24~~ CY 28.1

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

One Casing Volume = D*SWH ~~2.35~~ CY 1.15

Three Casing Volumes = ~~7.04~~ CY 3.5

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 1149
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1250
11:51	~~14.45~~	1249	14.09	
Comments:	14.00			

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, 85°, calm

Sampling Event 2007-GMP-136-Q3
Date 10-08-07
Page 1 of 1

Well/Sample Number MW-39-050-136 **QC Sample ID** NA QC Sample Time NA
Purge Start Time 1322 Purge Method Peristaltic Ded. Pump No
Flow Cell (Y) N Min. Purge Volume (gal)/(L) 5 Purge Rate (gpm)/(mLpm) 0.14

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
ND	1328	1	7.63	3.78	1	0.00	25.72	0.19	2.5	-111	* D.O. reading may be
probe	1335	2	7.58	3.83	1	0.00	25.72	0.20	2.5	-100	incorrect on Horiba
is	1342	3	7.57	3.83	1	0.00	25.76	0.20	2.5	-95	
too	1350	4	7.57	3.82	1	0.00	25.62	0.19	2.5	-91	
large	1356	5	7.56	3.78	1	0.00	25.67	0.19	2.5	-90	

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 Stablize prior to sampling?		Yes	Yes	Yes	Yes	NA	Yes	Yes	Yes	
Previous Field measurement	(10/5/2006)	7.19	11200	3.46	1.38	25.79	0.63		-77	
Are measurements consistent with previous?		higher	lower	lower	*	NA	lower	NA	lower	

Sample Time 1400 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC): 14.07
Field measured confirmation of Well Depth (ft btoc): ____
WD (Well Depth - from database) ft btoc (54.6)
SWH (Standing Water Height) = WD-Initial Depth 40.53
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (1 in)
One Casing Volume = D*SWH 1.66
Three Casing Volumes = 4.99

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: P6:E2005 01A

Initial DTW / Before Removal		If Transducer: Approx. 5 min After Reinstallation		Time of Removal 1313
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1406
1314	14.07	1405	14.13	

Comments: ____

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, 85°, calm

Sampling Event 2007-GMP-136-Q3
Date 10-08-07
Page 1 of 1

Well/Sample Number MW-39-060-136
QC Sample ID NA
QC Sample Time NA
Purge Start Time 1442
Purge Method Peristaltic Ded. Pump NO
Flow Cell (Y) / N
Min. Purge Volume (gal)/(L) 6.36 Purge Rate (gpm)/(mLpm) .17

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity ppt	TDS g/L	Eh/ORP mv	Comments (See description below
ND	1448	1	7.52	5124	1	0.20	25.48	2.76	3.3	-74.7	
probe too large	1454	2	7.49	5197	1	0.19	25.46	2.79	3.3	-60.4	
	1500	3	7.48	5193	1	0.18	25.46	2.79	3.3	-51.7	
	1506	4	7.47	5185	1	0.15	25.46	2.78	3.3	-47.9	
	1512	5	7.48	5227	1	0.14	25.41	2.81	3.3	-52.9	
	1517	6	7.50	5218	1	0.13	25.39	2.80	3.3	-74.7	
	1520	6.5	7.51	5213	1	0.11	25.44	2.80	3.3	-81.3	
	1523	7.0	7.51	5211	1	0.11	25.44	2.80	3.3	-82.9	
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 Stablize prior to sampling?			Yes	Yes	Yes	Yes	NA	Yes	Yes	Yes	
Previous Field measurement (10/5/2006)			7.14	11300	2.91	1.24	25.74	0.64		-54	
Are measurements consistent with previous?			higher	lower	lower	lower	NA	higher	NA	lower	

Sample Time 1525 Sample Location: pump tubing X well port _____ spigot _____ bailer _____ other _____
Comments: EB-100807 Sample time 15:40
Pump off 1528. Total purge volume 8 gallons.

Initial Depth to Water (ft BTOC): 14.44
Field measured confirmation of Well Depth (ft btoc): _____
WD (Well Depth - from database) ft btoc (66.3)
SWH (Standing Water Height) = WD-Initial Depth 51.86
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (1 in)
One Casing Volume = D*SWH 2.12
Three Casing Volumes = 6.36

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: PGE 2005 01A

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 1436
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1532
1437	14.44	1531	14.50	

Comments:

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, clear, 85, calm NW 3 mph
Sampling Event 2007-GMP-136-Q3
Date 10/8/07
Page 1 of 1

Well/Sample Number MW-39-~~030~~ 070 CM-136
QC Sample ID NA
QC Sample Time NA
Purge Start Time 12:04
Purge Method Peristaltic
Ded. Pump NO
Flow Cell (Y) N
Min. Purge Volume (gal)/(L) A.H. 3.5 7.04 Purge Rate (gpm)/(mLpm) ~~0.13 - 0.14~~ A.H. 0.14

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity ~~µ~~ mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below
NA	12:08	0.5	7.54	3863	4	3.4	25.69	2.03	2.503	-76.0	
	12:15	2	7.50	3766	2	2.5	25.45	1.98	2.452	-58.4	
	12:23	3	7.31	5721	1	.23	25.45	3.12	3.757	-21.0	
	12:33	4	7.28	6169	1	0.19	25.36	3.35	4.010	+2.7	
	12:40	5	7.28	6187	1	0.17	25.36	3.36	4.021	9.4	
probe 3	12:46	6	7.27	6188	1	0.16	25.31	3.36	4.023	16.0	
too large	12:54	7.04	7.27	6159	1	0.15	25.28	3.35	4.004	19.4	
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 Stablize prior to sampling?			Y		Y	Y	NA	Y		Y	
Previous Field measurement (5/3/2007)			7.21		1.9	2.01	25.49	1.4		-195	
Are measurements consistent with previous?			Y			~~hi~~ lower	NA	higher		higher	

Sample Time 12:55 Sample Location: pump tubing (X) well port ____ spigot ____ bailer ____ other ____
Comments: Pump off 12:59, ≈ 8 gal. total purge

Initial Depth to Water (ft BTOC): A.H. ~~14.00~~ 14.45
Field measured confirmation of Well Depth (ft btoc): —
WD (Well Depth - from database) ft btoc A.H. ~~(72.4)~~ (71.69)
SWH (Standing Water Height) = WD-Initial Depth A.H. ~~28+~~ 57.2
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (1 in)
One Casing Volume = D*SWH A.H. ~~1.15~~ 2.35
Three Casing Volumes = A.H. ~~3.5~~ 7.04

Measure Point: (Well TOC) Steel Casing
WATER LEVEL METER SERIAL NUMBER: PGE-2005-01A

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 1150
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 13:03
11:52	14.00	13:02	14.62	

Comments:

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, 85°, calm

Sampling Event 2007-GMP-136-Q3
Date 10-08-07
Page 1 of 1

Well/Sample Number MW-39-080-136
QC Sample ID NA
QC Sample Time N/A
Purge Start Time 1322
Purge Method Peristaltic Ded. Pump No
Flow Cell (Y) N
Min. Purge Volume (gal)/(L) 8.4 Purge Rate (gpm)/(mLpm) 0.13

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity uS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity ppt	TDS g/L	Eh/ORP mv	Comments (See description below
NA	1328	1	6.94	~~3.78~~ 10471	1	~~0.68~~ 0.19	25.46	5.91	6.8	-37.7	
	1335	2	6.94	10474	1	0.22	25.45	5.91	~~6.68~~ A.H.	-12.5	
	1342	3	6.89	11888	1	0.18	25.48	6.80	7.6	+5.7	
	1351	4	6.88	12864	1	0.17	25.47	7.38	~~8.4~~	-3.8	
	1357	5	6.89	13054	0	0.17	25.52	7.51	8.5	-13.8	
probe is	1404	6	6.88	13266	1	~~0.08~~ 0.16	25.50	7.63	8.6	-7.2	
too large	1410	7	6.87	13319	1	0.15	25.46	7.66	8.7	-7.1	
	1421	8.5	6.87	13529	1	0.14	25.49	7.79	8.7	-9.7	
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 Stablize prior to sampling?							NA				
Previous Field measurement (9/6/2007)			6.84	13000	1.9	0.13	26.11	0.75		-44.6	
Are measurements consistent with previous?							NA				

Sample Time 1425 Sample Location: pump tubing ~~X~~ well port ____ spigot ____ bailer ____ other ____
Comments: Pump off 1426. Total purge 9.5 gal

Initial Depth to Water (ft BTOC): 14.59
Field measured confirmation of Well Depth (ft btoc): ____
WD (Well Depth - from database) ft btoc (82.55)
SWH (Standing Water Height) = WD-Initial Depth 67.96
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (1 in)
One Casing Volume = D*SWH 2.8
Three Casing Volumes = 8.4

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: PGE 2005 01A

Initial DTW / Before Removal		If Transducer: Approx. 5 min After Reinstallation		Time of Removal 13:12
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 14:29
1313	14.59	14:29	14.81	

Comments:

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, Calm, 78°F

Sampling Event 2007-GMP-136-Q3
Date 10/4/07
Page 1 of 1

Well/Sample Number MW-40D-136
QC Sample ID NA
QC Sample Time
Purge Start Time 0854 stop: 0917
Purge Method Grunfos Ded. Pump
Flow Cell: Y / N
Min. Purge Volume (gal)/(L) 80
Purge Rate (gpm)/(mLpm) 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
110.75	0854	0	7.52	2.45	8	7.64	31.49	1.24	~~10~~ 15	110	
110.76	0857	12	7.28	21.0	1	6.73	30.64	1.24	13	67	
111.06	0900	24	7.31	20.8	1	0.07	31.31	1.24	13	45	
111.07	0903	36	7.32	20.0	1	0.00	31.20	1.19	13	39	
111.08	0906	48	7.33	19.0	1	0.00	31.35	1.12	12	37	
111.08	0909	60	7.35	17.8	1	0.00	31.53	1.06	12	37	
111.05	0912	72	7.36	17.7	1	0.00	31.54	1.04	11	37	
111.08	0914	80	7.35	17.7	1	0.00	31.66	1.01	11	37	

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 Stablize prior to sampling?	Y	Y	Y	Y	NA			Y
Previous Field measurement (5/4/2007)	7.39		0.4	1.99	31.48			21
Are measurements consistent with previous?	Y	–	Y	N	NA			N

Sample Time 0916 Sample Location: pump tubing ✓ well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC): 110.24
Field measured confirmation of Well Depth (ft btoc): ____
WD (Well Depth - from database) ft btoc (266)
SWH (Standing Water Height) = WD-Initial Depth 155.76
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 26.5
Three Casing Volumes = 80

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

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

Comments:

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, Calm, 75°F

Sampling Event 2007-GMP-136-Q3
Date 10/4/07
Page 1 of

Well/Sample Number MW-40S-136
QC Sample ID NA
QC Sample Time
Purge Start Time 0518
Purge Method Grundfos
Ded. Pump
Flow Cell (Y) / N
Min. Purge Volume (gal)/(L) 13
Purge Rate (gpm)/(mLpm) 1

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
109.72	0819	0	5.79	2.58	>1000	7.69	29.24	0.16	1.8	123	
109.68	0821	2	6.47	2.52	106	7.12	29.72	0.15	1.5	108	
109.68	0823	4	6.67	2.49	74	7.10	29.90	0.12	1.6	105	
109.69	0825	6	6.88	2.44	42	6.96	30.48	0.12	1.6	95	
109.68	0827	8	6.97	2.42	28	6.97	31.30	0.12	1.6	89	
109.69	0829	10	7.17	2.40	19	6.84	31.86	0.12	1.6	84	
109.69	0831	12	7.18	2.41	15	6.92	32.19	0.11	1.6	80	
109.69	0833	14	7.19	2.39	12	6.95	32.25	0.11	1.5	77	
109.68	0835	16	7.18	2.38	10	6.99	32.30	0.11	1.5	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 Stablize prior to sampling?			Y	Y	Y	Y	NA	Y		Y	
Previous Field measurement (10/5/2006)			7.52	2680	5.4	7.32	32.32	0.1		92	
Are measurements consistent with previous?			N	Y	N	N	NA	Y		Y	

Sample Time 0838 Sample Location: pump tubing ✓ well port spigot bailer other

Comments:

Initial Depth to Water (ft BTOC): 109.64'
Field measured confirmation of Well Depth (ft btoc):
WD (Well Depth - from database) ft btoc (134)
SWH (Standing Water Height) = WD-Initial Depth 24.36
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 4
Three Casing Volumes = 13

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:

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, Slight Breeze, 90°F

Sampling Event 2007-GMP-136-Q3
Date 10/3/07
Page 1 of 1

Well/Sample Number MW-41D-136
QC Sample ID NA
QC Sample Time
Purge Start Time 1258 Stop 1334
Purge Method Grundfos Ded. Pump
Flow Cell: (Y) N
Min. Purge Volume (gal)/(L) 147 Purge Rate (gpm)/(mLpm) 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
25.04	1309	0	5.79	9.23	1	4.30	31.13			-175	
25.00	1306	25	7.17	20.5	1	0.02	29.40			-222	
24.97	1311	50	7.44	20.4	1	0.00	30.55			-211	
24.96	1316	75	7.50	20.6	2	0.00	30.86			-166	
24.96	1321	100	7.52	20.5	1	0.00	30.91			-163	
24.96	1326	125	7.54	20.5	1	0.00	30.97			-167	
24.96	1331	150	7.54	20.4	1	0.00	30.99			-168	

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 Stablize prior to sampling?		Y	Y	Y	Y	NA			Y	
Previous Field measurement	(3/7/2007)	7.69	25400	0.3	0.25	30.25	1.6		-81	
Are measurements consistent with previous?		Y	Y	Y	N	NA			N	

Sample Time 1333 Sample Location: pump tubing ✓ well port ____ spigot ____ bailer ____ other ____
Comments: No Lock on well

Initial Depth to Water (ft BTOC): 23.95
Field measured confirmation of Well Depth (ft btoc):
WD (Well Depth - from database) ft btoc (313)
SWH (Standing Water Height) = WD-Initial Depth 289
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 49
Three Casing Volumes = 147

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:

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, Calm, 85°F

Sampling Event 2007-GMP-136-Q3
Date 10/3/07
Page 1 of 1

Well/Sample Number MW-41M-136 **QC Sample ID** NA QC Sample Time

Purge Start Time 1119 Stop 1143 Purge Method 2" Grundfos Ded. Pump

Flow Cell: (Y) / N Min. Purge Volume (gal)/(L) 86 Purge Rate (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
24.02	1122	0	7.72	9.40	3	4.16	30.62			117	
24.04	1125	15	7.39	16.0	1	3.47	29.10			83	
24.03	1128	30	7.37	15.4	1	2.50	29.36			79	
24.02	1131	45	7.36	15.9	1	1.97	29.50			78	
24.02	1134	60	7.36	15.6	1	0.47	29.45			81	
24.02	1137	75	7.38	15.8	1	0.43	29.67			77	
24.02	1140	90	7.37	15.1	1	0.45	29.78			74	
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 Stablize prior to sampling?			Y	Y	Y	Y	NA			Y	
Previous Field measurement (3/8/2007)			7.57	18000	0.3	0.5	29.5	1.1		104	
Are measurements consistent with previous?			Y	N	Y	Y	NA			N	

Sample Time 1143 Sample Location: pump tubing ✓ well port _____ spigot _____ bailer _____ other _____

Comments: _____

Initial Depth to Water (ft BTOC): 23.80
Field measured confirmation of Well Depth (ft btoc): _____
WD (Well Depth - from database) ft btoc (192.4)
SWH (Standing Water Height) = WD-Initial Depth 168.4
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 29
Three Casing Volumes = 86

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:

Color: (Clear), grey, yellow, brown, black, cloudy, green **Odor:** (none), sulphur, organic, other **Solids:** (Trace), Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Topock Sampling Log

Project Name PGE Topock GMP
Job Number 345631.MP.02.GM
Field Team 1
Field Conditions Sunny, Slight Breeze 85°F

Sampling Event 2007-GMP-136-Q3
Date 10/3/07
Page 1 of 1

Well/Sample Number MW-41S-136
QC Sample ID ~~MW~~ MW95-136
Purge Start Time 1200
Purge Method Grundfos
QC Sample Time 1214
Ded. Pump
Flow Cell: Y / N
Min. Purge Volume (gal)/(L) 19.5
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
24.10	1202	0	7.46	18.4	1	5.52	31.80			116	
24.12	1204	4	7.73	5.32	1	4.60	29.27			83	
24.13	1206	8	7.70	5.15	1	3.02	29.25			80	
24.14	1208	12	7.69	5.13	1	1.46	29.28			76	
24.13	1210	16	7.69	5.14	1	1.44	29.31			74	
24.13	1212	20	7.69	5.13	1	1.45	29.30			72	

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 Stablize prior to sampling?	Y	Y	Y	Y	NA			Y
Previous Field measurement (3/8/2007)	7.78	5090	3.8	1.77	28.58	0.3		108
Are measurements consistent with previous?	Y	Y	N	Y	NA			N

Sample Time 1215 Sample Location: pump tubing ✓ well port ____ spigot ____ bailer ____ other ____

Comments:

Initial Depth to Water (ft BTOC): 24.03'
Field measured confirmation of Well Depth (ft btoc):
WD (Well Depth - from database) ft btoc (61.58)
SWH (Standing Water Height) = WD-Initial Depth 37.55
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 6.5
Three Casing Volumes = 19.5

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	

Comments:

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

Sampling Event 2007-GMP-136-Q3
Date 10-04-07
Page 1 of 1

Well/Sample Number MW-42-030-136 **QC Sample ID** NA QC Sample Time

Purge Start Time 1422 Purge Method 2" Grundfos Ded. Pump No

Flow Cell (Y) / N Min. Purge Volume (gal)/(L) 12 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 % ppt	TDS g/L	Eh/ORP mv	Comments (See description below
10.47	1425	6	7.48	22011	6	0.16	25.64	13.07	14.12	-128.6	
10.45	1426	8	7.47	21602	4	0.14	25.57	12.79	13.87	-128.4	
10.48	1427	10	7.47	21279	3	0.13	25.54	12.73	13.81	-129.3	
10.48	1428	12	7.46	21193	3	0.13	25.53	12.66	13.73	-128.7	
10.51	1429	14	7.46	21073	3	0.12	25.49	12.57	13.66	-130.0	

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 Stablize prior to sampling?	yes	yes	yes	yes	NA	NA	NA	yes
Previous Field measurement (3/7/2007)	7.6	14400	7	0	27.2	0.8	NA	-109
Are measurements consistent with previous?	yes	no	yes	yes	NA	NA	NA	yes

Sample Time 1435 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: *Initial DTW measured from top of transducer cap.
Final DTW "

Initial Depth to Water (ft BTOC): 10.02 * 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 (32)

SWH (Standing Water Height) = WD-Initial Depth 21.98

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

One Casing Volume = D*SWH 3.736

Three Casing Volumes = 11.21

Initial DTW / Before Removal		If Transducer: Approx. 5 min After Reinstallation		
Time	Initial DTW	Time	Final DTW	Time of Removal 1413
14:11	10.02	1446	10.05	Time of Reinstallation 1441
Comments:				

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 95°F

Sampling Event 2007-GMP-136-Q3
Date 10/04/07
Page 1 of 1

Well/Sample Number MW-42-055-136 **QC Sample ID** NA QC Sample Time

Purge Start Time ~~pm~~ 1330 Purge Method 2" Grundfos Ded. Pump no

Flow Cell: Y / N Min. Purge Volume (gal)/(L) 24 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 ~~%~~ ppt	TDS g/L	Eh/ORP mv	Comments (See description below
10.26	1332	4	7.35	13779	1	0.19	24.27	7.96	8.96	-158.1	
10.23	1334	8	7.44	13819	1	0.16	24.26	7.99	8.99	-140.2	
10.23	1336	12	7.52	13837	2	0.13	24.26	8.00	9.00	-136.5	
10.25	1338	16	7.50	13880	1	0.14	24.24	8.02	9.02	-120.7	
10.30	1340	20	7.48	13907	4	0.12	24.23	8.04	9.04	-125.4	
10.31	1342	24	7.47	13950	1	0.12	24.22	8.07	9.07	-129.9	
10.31	1344	28	7.46	13972	1	0.12	24.20	8.08	9.08	-128.2	
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 Stablize prior to sampling?			yes	yes	yes	yes	NA	NA	NA	yes	
Previous Field measurement (5/1/2007)			7.16	14900	0.69	1.49	24.79	0.9	NA	-139	
Are measurements consistent with previous?			no	yes	yes	no	NA	NA	NA	yes	

Sample Time 1348 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: * Intial DTW taken from top of transducer cap

Initial Depth to Water (ft BTOC): 9.75 * Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 28460

Field measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc (56)

SWH (Standing Water Height) = WD-Initial Depth 46.25

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

One Casing Volume = D*SWH 7.9

Three Casing Volumes = 23.6

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 1315
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1400
1313	9.75	1405	9.91	
Comments:				

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

Odor: none, sulphur, organic, other

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

Topock Sampling Log

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

Sampling Event 2007-GMP-136-Q3
Date 10/03/07
Page 1 of 1

Well/Sample Number MW-42-065-136 **QC Sample ID** NA QC Sample Time
Purge Start Time 1438 Purge Method 2" Grundfos Ded. Pump NO
Flow Cell (Y) / N Min. Purge Volume (gal)/(L) 36 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
9.95	1441	9	7.11	12656	0	0.27	24.08	7.28	8.282	-102.6	
9.95	1444	18	7.06	12801	0	0.32	24.07	7.36	8.339	-91.4	
9.95	1447	27	6.96	12441	0	0.62	24.06	7.13	8.054	-81.9	
9.95	1450	36	6.95	12290	0	0.40	24.05	7.00	7.952	-80.7	
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 Stablize prior to sampling?											
Previous Field measurement (5/1/2007)			6.87	15800	1.47	7.7	NA 24.54	0.9		-60	
Are measurements consistent with previous?							NA				

Sample Time 1500 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____
Comments: ____

Initial Depth to Water (ft BTOC): 9.46
Field measured confirmation of Well Depth (ft btoc): ____
WD (Well Depth - from database) ft btoc (80)
SWH (Standing Water Height) = WD-Initial Depth 70.54
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 11.99
Three Casing Volumes = ____

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 28460

Initial DTW / Before Removal		Approx. 5 min After Reinstallation		If Transducer	
Time	Initial DTW	Time	Final DTW	Time of Removal	1419
1418	9.46	1516 1521	9.42	Time of Reinstallation	1516

Comments:

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

Sampling Event 2007-GMP-136-Q3
Date 10/02/07
Page 1 of 1

Well/Sample Number MW-43-025-136 **QC Sample ID** NA QC Sample Time

Purge Start Time 11:35 Purge Method Grundfos Ded. Pump

Flow Cell (Y) / N Min. Purge Volume (gal) / (L) 10 Purge Rate (gpm) / (mLpm) 1

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
8.00	1138	3	7.52	1237	2	0.40	21.55	0.62	0.804	-159.6	
8.00	1141	6	7.51	1231	1	0.36	21.55	0.61	0.799	-162.4	
8.00	1144	9	7.50	1227	1	0.30	21.51	0.61	0.797	-164.8	
8.00	1147	12	7.50	1226	1	0.32	21.52	0.61	0.797	-166.3	

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 Stablize prior to sampling?	Y	Y	Y	Y	NA			Y	
Previous Field measurement (3/6/2007)	7.98	6410	7	0	23.5	0.3		-168	
Are measurements consistent with previous?		N	Y	N	NA	N		Y	

Sample Time 1150 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC): 7.75 Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 28460

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

WD (Well Depth - from database) ft btoc (27)

SWH (Standing Water Height) = WD-Initial Depth 19.25

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

One Casing Volume = D*SWH 3.27

Three Casing Volumes = 9.9

Initial DTW / Before Removal		If Transducer: Approx. 5 min After Reinstallation		
Time	Initial DTW	Time	Final DTW	Time of Removal 11:28 / Time of Reinstallation 12:02
11:28	7.75	1209	8.10	

Comments:

Color: clear, grey, yellow, brown, black, cloudy, green **Odor:** none, sulphur, organic, other **Solids:** Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Topock Sampling Log

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

Sampling Event 2007-GMP-136-Q3
Date 10-02-07
Page 1 of 1

Well/Sample Number MW-43-075-136 **QC Sample ID** NA QC Sample Time

Purge Start Time 10:48 Purge Method Ded. Pump Rad flow

Flow Cell (Y) / N Min. Purge Volume (gal)/(L) 35.2 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
8.32	1052	8	7.58	13235	1	0.25	21.11	7.70	8.689	-147.7	
8.43	1056	16	7.50	13546	2	0.24	21.20	7.84	8.817	-144.7	
8.43	1100	24	7.54	13598	0	0.24	21.22	7.87	8.838	-145.4	
8.47	1104	32	7.54	13593	1	0.26	21.22	7.87	8.836	-145.8	
8.47	1108	40	7.54	13587	1	0.28	21.22	7.86	8.828	-146.8	

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 Stablize prior to sampling?		yes	yes	yes	yes	NA	yes	yes	yes	
Previous Field measurement	(4/30/2007)	7.75	12000	0.36	0	21.3	0.7		-213	
Are measurements consistent with previous?						NA				

Sample Time 1112 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC): 8.01

Field measured confirmation of Well Depth (ft btoc):

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

SWH (Standing Water Height) = WD-Initial Depth 68.99

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

One Casing Volume = D*SWH 11.73

Three Casing Volumes = 35.2

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 28460

Initial DTW / Before Removal		If Transducer		
Time	Initial DTW	Approx. 5 min After Reinstallation Time	Final DTW	Time of Removal / Time of Reinstallation
10:40	8.01	11:20	8.12	

Comments:

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

Odor: none, sulphur, organic, other

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

Topock Sampling Log

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

Sampling Event 2007-GMP-136-Q3
Date 10/02/07
Page 1 of 1

Well/Sample Number MW-43-090-136 **QC Sample ID** NA QC Sample Time

Purge Start Time 0929 Purge Method 2" Grundfos Ded. Pump NO

Flow Cell (Y) / N Min. Purge Volume (ga)/(L) 48 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
8.94	0934	10	6.91	15817	78	0.33	20.92	9.27	10.28	-63.8	
8.99	0939	20	6.83	18345	3	1.16	21.42	11.03	12.09	-64.6	
8.96	0944	30	6.82	18686	20	0.68	21.49	11.10	12.14	-70.6	
8.98	0949	40	6.81	18782	3	0.54	21.49	11.17	12.21	-73.6	
9.04	0954	50	6.81	18809	2	0.47	21.50	11.18	12.23	-77.0	
9.00	0959	60	6.79	18809	1	0.36	21.51	11.18	12.22	-78.8	

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 Stablize prior to sampling?		yes	yes	yes	yes	NA			yes	
Previous Field measurement	(4/30/2007)	6.65	14000	0.83	1.42	21.23	0.8		-150	
Are measurements consistent with previous?						NA				

Sample Time 1002 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC): 7.98

Field measured confirmation of Well Depth (ft btoc): ~~94.02~~ DM

WD (Well Depth - from database) ft btoc (102)

SWH (Standing Water Height) = WD-Initial Depth 94.02

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

One Casing Volume = D*SWH 15.98

Three Casing Volumes = 48.0

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 28460

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 0904
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 10:23
0902	7.98	~~10:22~~ 10:25	~~8.28~~ 8.31	
Comments:				

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 90°F

Sampling Event 2007-GMP-136-Q3
Date 10/04/07
Page 1 of 1

Well/Sample Number MW-44-070-136 **QC Sample ID** NA QC Sample Time

Purge Start Time 11:45 Purge Method 2" Grndfos Ded. Pump NO

Flow Cell (Y) / N Min. Purge Volume (gal)/(L) 27 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 ‰ ppt	TDS g/L	Eh/ORP mv	Comments (See description below
21.45	1148	4.5	7.48	4261	40	0.13	21.23	2.24	2.76	-278.4	
21.45	1151	9	7.50	4520	4	0.12	21.23	2.49	2.92	-302.6	
21.52	1154	13.5	7.47	4726	3	0.12	21.16	2.53	3.07	-337.5	
21.52	1157	18	7.46	4772	2	0.11	21.14	2.56	3.10	-349.9	
21.61	1200	22.5	7.47	4790	3	0.15	21.14	2.57	3.11	-369.9	
21.64	1203	27	7.48	4805	5	0.17	21.09	2.59	3.13	-392.2	
21.58	1206	31.5	7.47	4814	1	0.15	21.09	2.58	3.12	-398.8	
21.59	1209	36	7.47	4816	2	0.18	21.08	2.59	3.13	-404.2	
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 Stablize prior to sampling?			yes	yes	yes	yes	NA	NA	NA	yes	
Previous Field measurement (5/3/2007)			7.19	13400	1.3	2.39	22.46	0.8	NA	-150	
Are measurements consistent with previous?			no	no	yes	no	NA	NO	NA	no	

Sample Time 1215 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC): 17.48
Field measured confirmation of Well Depth (ft btoc): ____
WD (Well Depth - from database) ft btoc (70)
SWH (Standing Water Height) = WD-Initial Depth 52.52
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 8.93
Three Casing Volumes = 26.8

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 28460

Initial DTW / Before Removal		If Transducer: Approx. 5 min After Reinstallation		
Time	Initial DTW	Time	Final DTW	Time of Removal 1135 / Time of Reinstallation 1224
1134	17.48	1230	17.62	

Comments:

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 87°F

Sampling Event 2007-GMP-136-Q3
Date 10/04/07
Page 1 of 1

Well/Sample Number MW-44-115-136 **QC Sample ID** MW-99-136 QC Sample Time 1125

Purge Start Time 1045 Purge Method 2" Grundfos Ded. Pump yes

Flow Cell: Y / N Min. Purge Volume (gal)/(L) 49 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 ~~%~~ ppt	TDS g/L	Eh/ORP mv	Comments (See description below
20.28	1048	9	7.95	12914	1	0.15	21.98	7.24	8.19	-116.4	
20.21	1051	18	7.86	12577	2	0.12	23.16	7.21	8.17	-104.7	
20.24	1054	27	7.88	12563	2	0.13	23.26	7.21	8.16	-94.5	
20.24	1057	36	7.89	12548	1	0.14	23.27	7.20	8.15	-81.0	
20.15	1100	45	7.88	12539	0.3	0.13	23.30	7.19	8.15	-78.6	
20.23	1103	54	7.87	12528	0.6	0.11	23.31	7.19	8.14	-72.6	
20.29	1106	63	7.88	12519	3	~~0.00~~ 0.13	23.37	7.18	8.13	-72.2	

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 Stablize prior to sampling?	yes	yes	yes		NA				
Previous Field measurement (9/5/2007)	7.72	13300	2	0.15	23.35	0.77		3.9	
Are measurements consistent with previous?	Yes	yes	yes		NA				

Sample Time 1110 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC): 18.03

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

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

SWH (Standing Water Height) = WD-Initial Depth 95.47

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

One Casing Volume = D*SWH 16.23

Three Casing Volumes = 48.7

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 28460

Initial DTW / Before Removal		If Transducer: Approx. 5 min After Reinstallation		Time of Removal NA
Time	Initial DTW	Time	Final DTW	Time of Reinstallation NA
1025	18.03	11:27	17.71	

Comments: did not remove transducer

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

Odor: none, sulphur, organic, other

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

Topock Sampling Log

Project Name PGE Topock GMP
Job Number 345631.MP.02.GM
Field Team 1 Field Conditions Sunny 86°F

Sampling Event 2007-GMP-136-Q3
Date 10/04/07
Page 1 of 1

Well/Sample Number MW-44-125-136 **QC Sample ID** NA QC Sample Time

Purge Start Time 0838 Purge Method 2" Grundfos Ded. Pump NO

Flow Cell (Y) N Min. Purge Volume (gal)/(L) 57 Purge Rate (gpm)/(mLpm) 1.0

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity % ppt	TDS g/L	Eh/ORP mv	Comments (See description below
28.21	0848	10	7.48	4517	16	0.62	22.06	2.41	2.94	26.3	
28.21	0858	20	7.53	4552	8	0.71	22.68	2.44	2.97	20.5	
31.10	0908	30	7.63	8572	4	0.24	23.22	4.93	5.72	26.3	
32.87	0918	40	7.66	8327	5	0.27	23.20	4.90	5.68	19.4	
34.61	0928	50	7.75	11255	4	0.16	23.67	6.42	7.33	-6.2	
35.32	0938	60	7.80	11468	4	0.12	23.67	6.59	7.51	-12.6	
35.38	0943	65	7.83	11692	4	0.11	23.75	6.74	7.70	-12.9	
35.38	0948	68	7.85	11953	5	0.13	23.79	6.84	7.77	-13.7	
35.42	0953	71	7.90	12049	3	0.10	23.82	6.90	7.82	-15.2	
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 Stablize prior to sampling?			yes	yes	yes	yes	NA	NA	NA	yes	
Previous Field measurement (9/4/2007)			7.68	11200	2.5	0.12	24.01	0.65	NA	-70	
Are measurements consistent with previous?			yes	yes	yes	yes	NA	NA	NA	no	

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

Comments: slowed purge rate to 0.75 gpm @ 0952

Initial Depth to Water (ft BTOC): 17.51

Field measured confirmation of Well Depth (ft btoc):

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

SWH (Standing Water Height) = WD-Initial Depth 111.29

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

One Casing Volume = D*SWH 18.9

Three Casing Volumes = 56.8

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 28460

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal 0826
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 1010
0824	17.51	1016	18.12	

Comments:

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

Odor: none, sulphur, organic, other

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

Topock Sampling Log

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

Sampling Event 2007-GMP-136-Q3
Date 10/5/07
Page 1 of 1

Well/Sample Number MW-46-175-136
QC Sample ID NA
QC Sample Time N/A
Purge Start Time 7:29
Purge Method Grundfos
Ded. Pump Yes
Flow Cell (Y) / N
Min. Purge Volume (gal)/(L) 78.5
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
30.81	742	19.6	8.25	AH ~~8~~ 16208	2	0.11	23.3	9.5	10.54	-104.0	
30.81	755	39	8.31	16384	2	0.08	24.19	9.6	10.65	-109.3	0803 shut off, out of gas
30.85	0829 ~~0808~~ AH	58.5	8.31	16416	3	0.07	23.02	9.63	10.67	-79.5	0824 restart
30.85	0834 ~~0842~~	~~78.5~~ 66 AH	8.32	16405	2	0.06	23.91	9.62	10.66	-87.9	
30.85	0842	78.5	8.31	16408	2	0.06	24.26	9.61	10.66	-92.9	
30.85	0845	83	8.30	16397	2	0.07	24.43	9.61	10.66	-97.8	
30.85	08:48	87.5	8.30	16392	2	0.05	24.44	9.60	10.66	-95.7	0850 shut off wait for filter

3 min intervals

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 Stablize prior to sampling?							NA				
Previous Field measurement (9/4/2007)			8.37	16800	1.9	0.14	24.65	0.98		-188.1	
Are measurements consistent with previous?							NA				

Sample Time 0854 Sample Location: pump tubing X well port spigot bailer other
Comments:

Initial Depth to Water (ft BTOC): 27.81
Field measured confirmation of Well Depth (ft btoc): ——
WD (Well Depth - from database) ft btoc (181.8)
SWH (Standing Water Height) = WD-Initial Depth 153.99
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 26.2
Three Casing Volumes = 78.5

Measure Point: (Well TOC) Steel Casing WATER LEVEL METER SERIAL NUMBER: PGE-2005-01A

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		
Time	Initial DTW	Time	Final DTW	Time of Removal N/A
7:02	27.81			Time of Reinstallation Dedicated, don't pull transducer

Comments:

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	**Sampling Event**	2007-GMP-136-Q3
Job Number	345631.MP.02.GM	Date	10/5/07
Field Team	1	Page	of
Field Conditions	Sunny, clear, 70's, Southerly wind 10mph		

Well/Sample Number MW-46-205-136 **QC Sample ID** NA QC Sample Time N/A

Purge Start Time 0910 Purge Method Grundfos Ded. Pump No

Flow Cell Y (circled) / N Min. Purge Volume (gal)/(L) 100 Purge Rate (gpm) (circled) /(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
31.90	0940	~~34~~ 25	8.01	19758	4	0.07	22.56	11.81	12.87	22.8	
31.73	~~0952~~ ~~1002~~ 10:05	50	8.24	20050	2	0.06	24.60	11.96	13.14	-1.4	~~gen. died for about 30 sec.~~
31.71	~~1019~~	75	8.26	20065	4	0.05	24.90	11.96	13.04	-7.4	
31.71	10:08	100	8.21	20057	2	0.06	25.07	11.95	13.03	+1.6	

13

		pH	Conductivity	Turbidity	Diss. Oxygen	Temp.	Salinity	TDS	Eh/ORP	
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 Stablize prior to sampling?						NA				
Previous Field measurement	(5/4/2007)	8.2	20373	0	0.13	25.62	1.2		-131	
Are measurements consistent with previous?						NA				

Sample Time 10:20 Sample Location: pump tubing X well port spigot bailer other

Comments: Shut off 19:17:45; to offload; restart 9:35:35. Sulfuric odor @ beginning of purge.
EB-1005-07-2 @ 1046

Initial Depth to Water (ft BTOC): 28.25

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 (224.67)

SWH (Standing Water Height) = WD-Initial Depth 196.42

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

One Casing Volume = D*SWH 33.

Three Casing Volumes = 100.

Initial DTW / Before Removal		If Transducer			
		Approx. 5 min After Reinstallation		Time of Removal	9:05
Time	Initial DTW	Time	Final DTW	Time of Reinstallation	10:29
0905	28.25	10:35	28.25		
Comments:					

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

Odor: none (circled), sulphur, organic, other

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

Topock Sampling Log

Project Name PGE Topock GMP
Job Number 345631.MP.02.GM
Field Team 1 Field Conditions sunny, mid 90s, calm

Sampling Event 2007-GMP-136-Q3
Date 10/4/07
Page 1 of 2 see BACK of page

Well/Sample Number MW-47-055-136 **QC Sample ID** NA QC Sample Time NA

Purge Start Time 10:30 Purge Method _____ Ded. Pump _____

Flow Cell (Y) / N Min. Purge Volume (gal)/(L) 13.5 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
29.02	10:31	2	7.66	38 33	>1000 E3	2.67	28.00	2.00	2.477	21.8	highly turbid
29.02	10:32	4	7.61	3778	465	2.66	27.96	1.98	2.451	37.5	
29.02	10:33	6	7.60	3767	124	2.64	27.97	1.98	2.449	43.0	
29.02	10:34	8	7.59	3777	75	2.63	27.94	1.99	2.460	46.2	
29.02	10:35	10	7.58	3799	64	2.60	27.97	2.00	2.477	47.3	
29.02	10:36	12	7.57	3819	31	2.58	27.97	2.01	2.487	48.5	
29.02	10:37	14	7.56	3837	18	2.55	27.99	2.02	2.499	49.7	
29.02	10:38	16	7.56	3850	15	2.53	27.99	2.02	2.500	50.1	
29.02	10:39	18	7.55	3862	13	2.53	28.01	2.03	2.507	50.4	
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 Stablize prior to sampling?							NA				
Previous Field measurement (5/4/2007)			7.55	4294	14.5	2.28	27.6	0.2		111.6	
Are measurements consistent with previous?							NA				

Sample Time 10:43 Sample Location: pump tubing X well port _____ spigot _____ bailer _____ other _____

Comments: _____

Initial Depth to Water (ft BTOC): 28.62

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

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

SWH (Standing Water Height) = WD-Initial Depth 26.38

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

One Casing Volume = D*SWH 4.5

Three Casing Volumes = 13.5

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 10:25
Time	Initial DTW	Time	Final DTW	Time of Reinstallation

Comments:

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

Odor: (none), sulphur, organic, other

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

Topock Sampling Log

Project Name PGE Topock GMP
Job Number 345631.MP.02.GM
Field Team 1
Field Conditions sunny, clear, 84, calm

Sampling Event 2007-GMP-136-Q3
Date 10/4/07
Page 1 of 1

Well/Sample Number MW-47-115-136
QC Sample ID NA
QC Sample Time N/A
Purge Start Time 9:41
Purge Method Grundfos Ded. Pump No
Flow Cell: Y / N
Min. Purge Volume (gal)/(L) 44 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
30.00	9:48	11	7.55	13392	20	0.35	28.46	7.68	8.701	69.4	
30.00	9:55	22	7.59	13100	8	0.18	28.55	7.49	8.510	66.2	
29.98	10:03	33	7.59	13025	4	0.14	28.57	7.59	8.465	64.7	
29.98	10:10	44	7.59	13021	5	0.16	28.7	7.45	8.463	63.4	

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 Stablize prior to sampling?		Y	Y	Y	Y	NA	Y	-	Y
Previous Field measurement	(5/4/2007)	7.64	13776	0.2	0.2	28.18	0.7		125.5
Are measurements consistent with previous?		Y	Y	Y	Y	NA	higher		lower

Sample Time 10:12 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____
Comments: Collect EQ-100407-2 10:23

Initial Depth to Water (ft BTOC): 28.91
Field measured confirmation of Well Depth (ft btoc): —
WD (Well Depth - from database) ft btoc (115)
SWH (Standing Water Height) = WD-Initial Depth 86.09
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 14.6
Three Casing Volumes = 43.9

Measure Point: Well TOC Steel Casing
WATER LEVEL METER SERIAL NUMBER: PGE-2005-01A

Initial DTW / Before Removal		Approx. 5 min After Reinstallation		If Transducer	
Time	Initial DTW	Time	Final DTW	Time of Removal	9:33
09:26	28.91	10:23	29.00	Time of Reinstallation	9:18

Comments:

Color: clear, grey, yellow, brown, black, cloudy, green
Odor none, sulphur, organic, other
Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Howard → lock

Topock Sampling Log

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

Sampling Event 2007-GMP-136-Q3
Date 10/3/07 – ~~10~~ 10/4/07
Page 1 of 1

Well/Sample Number MW-48-136
QC Sample ID NA
QC Sample Time N/A
Purge Start Time 1534
Purge Method Ground fo
Ded. Pump No
Flow Cell: (Y) / N
Min. Purge Volume (gal)/(L) fill dry
Purge Rate (gpm)/(mLpm) .05 1

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
26.40	15:35	2 1	6.97	15185	8	1.18	34.35	8.69	9.829	-24.6	
30.62	15:36	2	6.98	15104	13	2.99	35.03	8.66	9.808	21.3	
34.30	15:37	3	7.04	~~15~~ 03969	16	5.48	33.00	0.43	96544	22.8	
38.24	15:38	4	6.73	~~+35~~ 14799	7	9.16	31.43	9.55	10.88	43.5	
43.40	15:39	5	6.84	17298	5	2.19	30.25	10.18	11.31	31.2	
~~64.48~~ 50.9 AM	15:40	6	6.88	17462	4	0.66	29.81	10.23	11.36	27.2	changed parameter time to every 2 min
92.02	15:42	8	6.89	17491	4	0.52	29.74	10.24	11.37	23.3	
103.92	15:44	10	6.88	17494	4	0.52	29.87	10.24	11.37	21.6	
	15:45										
											Well dry 10/4/07 93.19
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 Stablize prior to sampling?			Y	Y	Y	Y	NA	Y		Y	There is ≈1 gal in well, will purge. PURGED well after sample 10/4/07
Previous Field measurement (4/30/2007)			8.74	20900	18.9	3.97	31.91	1.3		20	
Are measurements consistent with previous?			lower	lower	lower	lower	NA	higher		Y	

Sample Time 1319 10/4/07 Sample Location: pump tubing ____ well port ____ spigot ____ bailer X other ____
Comments: Screen: 124 - 134

Initial Depth to Water (ft BTOC): 29.71
Field measured confirmation of Well Depth (ft btoc): —
WD (Well Depth - from database) ft btoc (138)
SWH (Standing Water Height) = WD-Initial Depth 108.29
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 18.4
Three Casing Volumes = 55.2

Measure Point: Well TOC / Steel Casing
WATER LEVEL METER SERIAL NUMBER: PGE-2005-01A

Initial DTW / Before Removal		Approx. 5 min After Reinstallation	
Time	Initial DTW	Time	Final DTW
1523	29.71	10/3 15:53	11360

Comments: 10/4

If Transducer

	10/3/07	10/4/07
Time of Removal	1525	1315
Time of Reinstallation	1548	1321

Color: clear, grey, yellow, brown, black, cloudy, green
Odor: none, sulphur, organic, other
Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Topock Sampling Log

Project Name PGE Topock GMP
Job Number 345631.MP.02.GM
Field Team 1
Field Conditions Sunny, Slight Breeze, 85°F

Sampling Event 2007-GMP-136-Q3
Date 10/4/07
Page 1 of

Well/Sample Number MW-50-095-136
QC Sample ID NA
QC Sample Time
Purge Start Time 1031 Stop 1049
Purge Method Quintos Ded. Pump
Flow Cell: (Y) / N
Min. Purge Volume (gal)/(L) 28 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
41.62	1032	Ø	7.58	~~249~~ 13.8	0.63	5.70	30.73	0126	3.5	100	
41.62	1034	4	7.52	4.75	0.47	6.80	29.31	0.25	3.1	85	
41.63	1036	8	7.59	4.87	1.70	5.21	29.43	0.27	3.3	79	
41.62	1038	12	7.68	5.38	0.69	2.15	29.50	0.28	3.5	74	
41.63	1040	16	7.67	5.40	0.48	$.90	29.52	0.28	3.5	71	
41.62	1042	20	7.68	5.36	0.76	2.03	29.55	0.28	3.5	69	
41.63	1044	24	7.68	5.31	0.74	1.90	29.55	0.28	3.4	68	
41.63	1046	28	7.68	5.32	0.52	1.95	29.56	0.28	3.4	68	
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 Stablize prior to sampling?			Y	Y	Y	Y	NA	Y		Y	
Previous Field measurement (5/2/2007)			7.79	3390	1.3	31.4	29	0.3		134.7	
Are measurements consistent with previous?			T	V	V	V	NA	T		V	

Sample Time 1048 Sample Location: pump tubing ✓ well port spigot bailer other
Comments:

Initial Depth to Water (ft BTOC): 41.22'
Field measured confirmation of Well Depth (ft btoc):
WD (Well Depth - from database) ft btoc (96.45)
SWH (Standing Water Height) = WD-Initial Depth 55.23
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 9.4
Three Casing Volumes = 28

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	Approx. 5 min After Reinstallation Final DTW	Time of Removal 1023 / Time of Reinstallation 1051
1019	41.22'	1056	41.23'	

Comments:

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 Winds W 84°

Sampling Event 2007-GMP-136-Q3
Date 10/4/07
Page 1 of

Well/Sample Number MW-50-200-136 **QC Sample ID** NA QC Sample Time
Purge Start Time 0953 Purge Method Grunfos Ded. Pump
Flow Cell: (Y) N Min. Purge Volume (gal)/(L) 84 Purge Rate (gpm)/(mLpm) 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
48.42	0953	0	7.46	20.1	4	6.82	30.94			105	Slightly Green
48.90	0956	15	7.23	26.8	1	4.98	29.23	1.66	18	97	
49.02	0959	30	7.19	27.3	1	4.67	29.57	1.68	18	90	
49.06	1002	45	7.21	26.0	1	4.25	29.73	1.54	17	86	
~~48.44~~ 49.10	1005	60	7.40	24.3	1	4.26	30.01	1.48	16	71	
49.11	1008	75	7.43	24.4	0.36	4.33	30.05	1.45	15	69	
49.13	1010	85	7.45	24.1	0.34	4.32	30.09	1.47	16	70	

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 Stablize prior to sampling?	Y	X	Y	Y	NA	X		Y	
Previous Field measurement (4/30/2007)	7.72	23700	2	4.75	31.27	1.4		65	
Are measurements consistent with previous?	N	Y	Y	N	NA	Y		Y	

Sample Time 1013 Sample Location: pump tubing ✓ well port ____ spigot ____ bailer ____ other ____
Comments: ____

Initial Depth to Water (ft BTOC): 41.79'
Field measured confirmation of Well Depth (ft btoc): ____
WD (Well Depth - from database) ft btoc (204.5)
SWH (Standing Water Height) = WD-Initial Depth 162.7
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 28
Three Casing Volumes = 84

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

Initial DTW / Before Removal		If Transducer: Approx. 5 min After Reinstallation		
Time	Initial DTW	Time	Final DTW	Time of Removal 0941 / Time of Reinstallation 1016
0938	41.79'	1021	41.83'	

Comments: 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

Topock Sampling Log

Project Name PGE Topock GMP
Job Number 345631.MP.02.GM
Field Team 1 Field Conditions Sunny, Breezy, 75°F

Sampling Event 2007-GMP-136-Q3
Date 10/5/07
Page 1 of 1

Well/Sample Number MW-51-136 **QC Sample ID** NA QC Sample Time

Purge Start Time 0715 stop 754 Purge Method Grundfos Ded. Pump

Flow Cell (Y) N Min. Purge Volume (gal)/(L) 132 Purge Rate (gpm)/(mLpm) 4 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
49.38	0715	0	7.18	10.74	1.09	1.32	28.52	6.04	6.97	189.3	
51.61	0720	20	7.15	10.71	0.53	0.91	29.41	6.03	6.96	164.7	
52.14	0725	40	7.14	10.71	0.58	0.85	29.50	6.03	6.96	155.8	
52.20	0730	60	7.27	11.42	0.03	0.92	29.55	6.45	7.41	150.3	
52.20	0735	80	7.30	11.05	0.45	1.38	29.57	6.21	7.15	145.1	
52.23	0740	100	7.29	10.81	0.55	1.80	29.58	6.08	7.02	141.5	
52.23	0745	120	7.30	10.68	0.43	2.02	29.59	6.00	6.94	134.1	
52.23	0748	132	7.30	10.63	0.30	2.10	29.58	5.97	6.89	130.6	
52.23	0751	144	7.30	10.60	0.26	2.17	29.59	5.94	6.870	127.4	
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 Stablize prior to sampling?			Y	Y	Y	Y	NA	Y		Y	
Previous Field measurement (5/1/2007)			7.4	10300	0.3	3.65	30	0.6		94	
Are measurements consistent with previous?			Y	Y	Y	N	NA	N		N	

Sample Time 753 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): ____

WD (Well Depth - from database) ft btoc (113.25)

SWH (Standing Water Height) = WD-Initial Depth 66.87'

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

One Casing Volume = D*SWH 44

Three Casing Volumes = 132

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 0703
Time	Initial DTW	Time	Final DTW	Time of Reinstallation 0758
0700	46.38'	0803	46.42'	

Comments:

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

Odor: (none), sulphur, organic, other

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

Topock Sampling Log

Project Name PGE Topock GMP
Job Number 345631.MP.02.GM
Field Team 1
Field Conditions Sunny, Slight Breeze, 60°F

Sampling Event 2007-GMP-136-Q3
Date 10/5/07
Page 1 of

Well/Sample Number OW-03D-136
QC Sample ID NA
QC Sample Time
Purge Start Time 1014 stop 1038
Purge Method Grundfos Ded. Pump
Flow Cell: Y / N
Min. Purge Volume (gal)/(L) 68 Purge Rate (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
102.36	1015	0	7.66	8.17	1	1.10	29.31			97	
102.29	1018	15	7.61	8.60	1	0.04	29.8			79	D.O reading may
102.24	1021	30	7.60	7.97	1	0.00	30.3			63	be inaccurate
102.37	1024	45	7.60	7.64	1	0.00	30.3			56	Dropped to zero after
102.37	1027	60	7.62	7.59	1	0.07	30.7			41	initial read
102.38	1030	75	7.61	7.53	1	0.00	30.7			36	
102.43	1033	90	7.60	7.52	1	0.00	30.7			34	

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 Stablize prior to sampling?	Y	Y	Y		NA			Y	
Previous Field measurement (3/9/2007)	7.92	7950	0.8	0.42	30.81	0.4		76	
Are measurements consistent with previous?	N	N	Y		NA			N	

Sample Time 1036 Sample Location: pump tubing ✓ well port spigot bailer other
Comments:

Initial Depth to Water (ft BTOC): 101.43
Field measured confirmation of Well Depth (ft btoc):
WD (Well Depth - from database) ft btoc (274)
SWH (Standing Water Height) = WD-Initial Depth 172.6
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 29.3
Three Casing Volumes = 88

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

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

Comments:

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, Calm, 76°F

Sampling Event 2007-GMP-136-Q3
Date 10/3/07
Page 1 of

Well/Sample Number OW-03M-136 **QC Sample ID** NA QC Sample Time

Purge Start Time 0914 stop @ 0942 Purge Method Grundfos Ded. Pump

Flow Cell: Y / N Min. Purge Volume (gal)/(L) 51 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
101.74	0917	0	7.59	4.66	4	6.73	29.18			109	
101.87	0921	9	7.79	5.63	2	0.47	30.0			56	
101.87	0924	18	7.83	5.37	1	0.41	30.1			47	
101.86	0927	27	7.84	5.20	1	0.37	30.4			38	
101.87	0931	36	7.84	5.03	1	0.33	30.4			32	
101.86	0934	45	7.84	4.91	1	0.27	30.5			29	
101.86	0936	51	7.84	4.81	1	0.26	30.5			27	
101.87	0937	54	7.85	4.78	1	0.26	30.5			26	
101.87	0938	57	7.85	4.77	1	0.26	30.5			25	
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 Stablize prior to sampling?			Y	Y	Y	Y	NA			Y	
Previous Field measurement (5/1/2007)			7.69	4940	0.1	3.64	30.17	0.3		109	
Are measurements consistent with previous?			N	Y	Y	N	NA			N	

Sample Time 0941 Sample Location: pump tubing ✓ well port ____ spigot ____ bailer ____ other ____

Comments:

Initial Depth to Water (ft BTOC): 101.63

Field measured confirmation of Well Depth (ft btoc):

WD (Well Depth - from database) ft btoc (202)

SWH (Standing Water Height) = WD-Initial Depth 100.37

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

One Casing Volume = D*SWH 17

Three Casing Volumes = 51

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:

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, 75°F, calm

Sampling Event 2007-GMP-136-Q3
Date 10/3/07
Page 1 of

Well/Sample Number OW-03S-136
QC Sample ID NA
QC Sample Time
Purge Start Time 0831 stop 0851
Purge Method Grundfos Ded. Pump
Flow Cell: Y N
Min. Purge Volume (gal)/(L) 9 Purge Rate (gpm)/(mLpm) 1

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
	0831	0	5.82	2.04	208	7.56	28.4			147	
101.74	0836	5	6.65	1.97	39	6.61	29.6			117	
101.75	0837	7	6.97	1.89	12	6.92	29.8			91	
101.75	0840	9	7.13	1.86	11	6.75	29.9			74	
101.73	0841	11	7.25	1.80	8	7.10	29.9			53	
101.73	0842	12	7.33	1.76	4	6.70	29.9			39	
101.73	0843	13	7.37	1.73	4	7.13	30.0			34	
101.74	0845	15	7.41	1.69	4	7.04	30.0			32	
101.75	0846	16	7.41	1.66	2	6.98	30.0			34	
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 Stablize prior to sampling?			Y	Y	Y	Y	NA			Y	
Previous Field measurement (4/30/2007)			7.6	2230	3.3	7.75	30.4	0.1		32	
Are measurements consistent with previous?			Y	N	Y	N	NA			Y	

Sample Time 0850 Sample Location: pump tubing ✓ well port spigot bailer other
Comments:

Initial Depth to Water (ft BTOC): 101.60'
Field measured confirmation of Well Depth (ft btoc):
WD (Well Depth - from database) ft btoc (118)
SWH (Standing Water Height) = WD-Initial Depth 16.4
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (2 in)
One Casing Volume = D*SWH 2.8
Three Casing Volumes = 9

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:				

Color: clear, grey, yellow, brown, black, cloudy, green
Odor: none, sulphur, organic, other
Solids: Trace, Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

Topock Sampling Log

Project Name PGE Topock GMP
Job Number 345631.MP.02.GM
Field Team 1 Field Conditions Sunny, ~~clear~~ slightly cloudy, 95

Sampling Event 2007-GMP-136-Q3
Date 10/11/07
Page 1 of

Well/Sample Number TW-01-136 **QC Sample ID** NA QC Sample Time NA

Purge Start Time 13:51 Purge Method CD pump Ded. Pump Yes

Flow Cell: (Y) / N Min. Purge Volume (gal)/(L) ~~200~~ 237 A.H. Purge Rate (gpm)/(mLpm) 5

Water Level	Time	Vol. Purged gallons / liters	pH	Conductivity mS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity ~~%~~ ppt	TDS g/L	Eh/ORP mv	Comments (See description below
164.35	1401	~~40~~ 50 A.H	7.21	7.738	1.0	4.47	29.74	4.25	5.033	56.3	
164.40	1411	~~80~~ 100 A.H.	7.22	7.571	0.8	4.59	29.71	4.14	4.910	49.6	
164.40	421	150	7.22	7.357	0.6	4.81	29.73	4.01	4.776	52.9	stopped purge @ ~~1429~~ 1423 A.H. to switch hoses restart 1448
164.41	1456	200	7.22	7.347	0.6	4.47	29.77	4.01	4.765	58.3	
164.43	~~1504~~ 1500	~~240~~ 220	7.21	7.347	0.9	5.17	29.74	4.04	4.808	60.0	
164.41	1504	240	7.21	7.329	0.5	5.02	29.74	4.01	4.761	62.5	
164.40	1506	250	7.21	7.311	0.4	~~4.70~~ 4.87 A.H	29.75	4.00	4.758	61.6	

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 Stablize prior to sampling?		Y	Y	Y	Y	NA	Y	Y	Y	
Previous Field measurement	(10/11/2005)	7.3	7120	4.3	4.9	30.39	0.4		148	
Are measurements consistent with previous?		Y	Y	lower	Y	NA			lower	

Sample Time NA 1510 Sample Location: pump tubing X well port ____ spigot ____ bailer ____ other ____

Comments: Small leak from faucet, but it is on spill containment, leak stopped. Put a splitter on spigot mouth. purged 1 gallon thru it before taking samples. Rate less because of hoses constrictions.

Initial Depth to Water (ft BTOC): 164

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

WD (Well Depth - from database) ft btoc (240.2)

SWH (Standing Water Height) = WD-Initial Depth 75.87

D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (5 in) 1.02

One Casing Volume = D*SWH 77.4

Three Casing Volumes = 232

Measure Point: Well TOC Steel Casing WATER LEVEL METER SERIAL NUMBER: 26437

Initial DTW / Before Removal		If Transducer: Approx. 5 min After Reinstallation		
Time	Initial DTW	Time	Final DTW	Time of Removal NA
rr: sent	1356 164.33			Time of Reinstallation ____

Comments:

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

Sampling Event 2007-GMP-136-Q3
Date
Page ____ of ____

Well/Sample Number TW-02S-136 **QC Sample ID** NA QC Sample Time

Purge Start Time Purge Method Ded. Pump

Flow Cell: Y / N Min. Purge Volume (gal)/(L) Purge Rate (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
–	1445	–	7.74	4834	11.5	4.81	33.66	2.56	3.149	9.3	
				Water already running							

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 Stablize prior to sampling?						NA				
Previous Field measurement	(10/4/2006)	7.6	3470	3.87	6.7	28.95	0.18		224	
Are measurements consistent with previous?						NA				

Sample Time 1450 Sample Location: pump tubing ____ well port ____ spigot X bailer ____ other ____

Comments:

Initial Depth to Water (ft BTOC):
Field measured confirmation of Well Depth (ft btoc):
WD (Well Depth - from database) ft btoc (102.05)
SWH (Standing Water Height) = WD-Initial Depth
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (6 in)
One Casing Volume = D*SWH
Three Casing Volumes =

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:

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 Dan C Matt R Field Conditions Sunny, Hott 100°

Sampling Event 2007-GMP-136-Q3
Date 10-4-07
Page 1 of 1

Well/Sample Number TW-02D-136 **QC Sample ID** NA QC Sample Time —

Purge Start Time — Purge Method — Ded. Pump

Flow Cell: Y / N Min. Purge Volume (gal)/(L) Purge Rate (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
-	1435	-	7.40	6968	1.2	1.26	36.86	3.75	4.52	18.1	
				Water already Running							

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 Stablize prior to sampling?						NA				
Previous Field measurement	(10/4/2006)	7.38	11900	1.15	4.91	29.06	0.68		162	
Are measurements consistent with previous?						NA				

Sample Time 1440 Sample Location: pump tubing ____ well port ____ spigot X bailer ____ other ____

Comments: ____

Initial Depth to Water (ft BTOC): ____

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

WD (Well Depth - from database) ft btoc (150) ____

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

D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (6 in) ____

One Casing Volume = D*SWH ____

Three Casing Volumes = ____

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:

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

Odor: none, sulphur, organic, other

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

Topock Sampling Log

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

Sampling Event 2007-GMP-136-Q3
Date 10/3/07
Page 1 of 1

Well/Sample Number TW-04-136
QC Sample ID MW-98-136
QC Sample Time 12:30
Purge Start Time ~~8:34~~ 8:47 restart 9:14
Purge Method
Ded. Pump No
Flow Cell: Y / N
Min. Purge Volume (gal)/(L) 447
Purge Rate (gpm)/(mLpm) 3

Water Level	Time	Vol. Purged gallons / liters	pH	Specific Conductivity ~~mS/cm~~ µS/cm	Turbidity NTU	Diss. Oxygen mg/L	Temp. oC	Salinity %	TDS g/L	Eh/ORP mv	Comments (See description below
	9:42 ~~9:24~~ ~~9:26~~			20457							
30.77		~~117~~ 111	7.28	1.899 A.H.	2	0.23	30.16	11.19	12.34	87.5	
30.78	10:19	~~234~~ 222	7.55	20591	1	0.09	30.51	12.22	13.38	60.0	
30.81	10:56	~~351~~ 333	7.53	20375	3	0.07	30.61	12.08	13.24	46.6	
30.72	11:28	354	7.54	20328	1	0.09	30.36	12.05	13.21	~~45.7~~ ~~15.8~~ A.H.	
30.75	11:38	384 ~~375~~ A.H. 414	7.53	20307	1	0.08	30.40	12.04	13.20	21.6	
30.75	11:48	~~396~~ A.H.	7.53	20290	2	0.08	30.47	12.03	13.19	22.3	
30.75	11:58	448	7.53	20271	1 ~~1.3~~ A.H.	0.07	30.50	12.01	13.17	21.6	
	12:04	466	+/- 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 Stablize prior to sampling?			Y	Y	Y	Y	NA	Y		Y	
Previous Field measurement (3/7/2007)			7.72	25800	0.4	0.28	29.11	1.6		37	
Are measurements consistent with previous?			Y	lower ~~Y~~	Y	Y	NA	~~higher~~ ~~1.3~~ A.H.		lower	

Sample Time 12:00 Sample Location: pump tubing ____ well port ____ spigot ____ bailer ____ other ____

Comments: Pump off 8:56, small spill, most contained, scooped up mud. Non-incident (called in though) New pumps from Blaine-Tech arrive 10:22. Shut off 10:54; emptied tanks @ IM-3. Restart 11:21

Initial Depth to Water (ft BTOC): 29.37
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 (255)
SWH (Standing Water Height) = WD-Initial Depth 225.63
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (4 in)
One Casing Volume = D*SWH 148.9
Three Casing Volumes = 446.7

Initial DTW / Before Removal		If Transducer		
		Approx. 5 min After Reinstallation		Time of Removal N/A
Time	Initial DTW	Time	Final DTW	Time of Reinstallation
8:39	A.H. 8 29.37			

Comments:

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, 97°F, Slight breeze

Sampling Event 2007-GMP-136-Q3
Date 10/4/07
Page 1 of

Well/Sample Number TW-05-136
QC Sample ID NA
QC Sample Time
Purge Start Time 1147 stop 1236
Purge Method Grundfos Ded. Pump
Flow Cell: Y / N
Min. Purge Volume (gal)/(L) 220 Purge Rate (gpm)/(mLpm) 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
41.45	1147	0	7.72	5.96	0.59	7.29	35.26	0.33	4.1	93	
41.50	1153	30	7.38	15.2	0.34	6.32	29.51	0.88	1.0	91	
41.67	1159	60	7.32	13.9	0.53	5.14	29.49	0.81	9	83	
41.73	1205	90	7.59	16.4	0.39	0.43	29.67	0.96	11	66	
41.77	1211	120	7.73	16.5	0.32	0.42	29.74	0.98	11	60	
41.72	1217	150	7.70	16.6	0.70	0.42	29.76	1.01	11	58	
41.72	1223	180	7.69	16.5	0.28	0.43	29.80	1.00	11	57	
41.72	1229	210	7.69	16.6	0.27	0.43	29.84	1.00	11	56	
41.72	1231	220	7.69	16.8	0.52	0.40	29.75	1.00	11	53	
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 Stablize prior to sampling?			Y	Y	Y	Y	NA	Y		Y	
Previous Field measurement (10/9/2006)			7.79	15800	0.44	1.12	29.9	0.93		60	
Are measurements consistent with previous?			Y	N	Y	N	NA	Y		Y	

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

Initial Depth to Water (ft BTOC): 41.15
Field measured confirmation of Well Depth (ft btoc):
WD (Well Depth - from database) ft btoc (152.5)
SWH (Standing Water Height) = WD-Initial Depth 111
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (4 in)
One Casing Volume = D*SWH 73.3
Three Casing Volumes = 220

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

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

Comments:

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 Dan C, Matt A Field Conditions Sunny, 100

Sampling Event 2007-GMP-136-Q3
Date 10-4-07
Page 1 of 1

Well/Sample Number PM-03-136 **QC Sample ID** NA QC Sample Time —
Purge Start Time None Purge Method — Ded. Pump —
Flow Cell: Y / N Min. Purge Volume (gal)/(L) — Purge Rate (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
—	1345	—	7.26	3247	60.6	1.80	31.91	1.67	2.106	57.3	
—	1348	—	7.58	2925	47.4	1.35	30.29	1.51	1.901	-95.6	
—	1351	—	7.54	2617	26.1	1.89	29.94	1.34	1.69	-119.0	
—	1354	—	7.47	2292	26.2	2.38	29.43	1.17	1.49	-110.0	
—	1357	—	7.63	2215	13.2	2.32	29.55	1.13	1.44	-105	
—	1400	—	7.56	2168	10.0	2.92	29.50	1.10	1.40	-96.0	
—	1403	—	7.76	2003	9.0	2.62	30.16	1.01	1.302	-92.8	
—	1406	—	7.75	1983	6.7	2.86	29.60	1.00	1.288	-92.4	
					STABLE						
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 Stablize prior to sampling?			✓	—	—	✓	NA	✓	—	✓	
Previous Field measurement (5/2/2007)			8.09	287	1	3.03	30.5	0.1		14	
Are measurements consistent with previous?							NA				

Sample Time 1410 Sample Location: pump tubing ____ well port ____ spigot X bailer ____ other ____
Comments: ____

Initial Depth to Water (ft BTOC): ____
Field measured confirmation of Well Depth (ft btoc): ____
WD (Well Depth - from database) ft btoc (252)
SWH (Standing Water Height) = WD-Initial Depth ____
D (Volume as per diameter) 2"= 0.17, 4"= 0.66, 1"=0.041 (8 in)
One Casing Volume = D*SWH ____
Three Casing Volumes = ____

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

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

Comments:

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

Sampling Event 2007-GMP-136-Q3
Date 10-4-07
Page ____ of ____

Well/Sample Number PM-04-136 **QC Sample ID** NA QC Sample Time —

Purge Start Time — Purge Method — Ded. Pump —

Flow Cell: Y / N Min. Purge Volume (gal)/(L) ____ Purge Rate (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
	~~1410~~ 1415		7.97	1748	1.0	3.84	30.02	0.88	1.137	-62.2	
				Water Running							
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 Stablize prior to sampling?							NA				
Previous Field measurement (7/18/2007)			7.47	2160	2.7	2.39	30.1	0.1		7	
Are measurements consistent with previous?							NA				

Sample Time ~~1415~~ Sample Location: pump tubing ____ well port ____ spigot X bailer ____ other ____

Comments: ~~1410~~ 1420

Initial Depth to Water (ft BTOC): ____
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*SWH ____
Three Casing Volumes = ____

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:				

Color: (clear), grey, yellow, brown, black, cloudy, green **Odor:** (none), sulphur, organic, other **Solids:** (Trace), Small Qu, Med Qu, Large Qu, Particulate, Silt, Sand

(TUE) OCT 2 2007 9:45/ST. 9:45/No. 6800000874 P 2

Rec'd 10/02/07
970011

970011

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-425-Q2]
136-Q3

COC Number
TURNAROUND TIME 10 Days
DATE 10/1/07 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 [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) Sm 4500HB	TDS (160.1) Sm 2540C	Anions (300) Br,Cl,SO4,NO3	Total Organic Carbon (415.2)	Diss Metals (6010B) Field Filtered Chromium					NUMBER OF CONTAINERS	COMMENTS
-1	MW-35-060-136	10/1/07	1258	GW			X	X	X	X										
-2	MW-35-135-136		1355				X	X	X	X										
-3	MW-31-135-136		1305				X	Y	Y	Y										
-4	MW-32-020-136		1346				X	X	X	X	X	X								
-5	MW-32-035-136		1455				X	X	X	X	X	X								
-6																				

MW-97-136

For Sample Conditions
See Form Attached

ALERT!!
Level III QC

CHAIN OF CUSTODY SIGNATURE RECORD

Signature	Printed Name	Company/Agency	Date/Time
Signature (Relinquished) [signature]	Matt Riguier	E2	10/1/07 1548
Signature (Received) [signature]	Al Bocxxx	TLI	10/1/07 3:57 pm
Signature (Relinquished) [signature]	Al Boxxx	TLI	10/1/07 9:50
Signature (Received) [signature]	David S	TLI	10/1/07 2150
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

FROM

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-136-Q3]

970060

COC Number

TURNAROUND TIME 10 Days

DATE 10-2-07 PAGE 1 OF 2

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	

SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Cr6 (7196A) Lab Filtered	Cr6 (7199) Lab Filtered	Total Metals (200.7) Chromium Unfiltered	Diss Metals (6010B) Field Filtered Chromium	Specific Conductance (120.1)	PH (SM4500HB)	TDS (SM2540C)	Anions (300) Bromide Chloride Sulfate Nitrate	NUMBER OF CONTAINERS	COMMENTS
MW-10-136	10/2/2007	13:29	Groundwater		x			x	x	x			1	
MW-13-136	10/2/2007	14:27	Groundwater			x		x	x	x			1	
MW-14-136	10/2/2007	12:55	Groundwater			x		x	x	x			1	
MW-15-136	10/2/2007	8:55	Groundwater			x		x	x	x			1	
MW-16-136	10/2/2007	10:43	Groundwater							x			1	
MW-16-136	10/2/2007	10:43	Groundwater			x		x	x				1	
MW-18-136	10/2/2007	12:13	Groundwater			x		x	x	x			1	
MW-25-136	10/2/2007	14:35	Groundwater		x			x	x	x	x	x	1	

Rec'd 10/02/07
Lab.# 970060

pH=2

For Sample Conditions See Form Attached

pH=2

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished) Shawn P. Duffy	Shawn Duffy	CH2M HILL	10/2/07 1605
Signature (Received) Rafael Davila	Rafael	T+I	10-2-07 16:05
Signature (Relinquished)			
Signature (Received) Shabunina	Shabunina	TH	10/2/07 21:00
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

FROM

970060

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-136-Q3]

COC Number

TURNAROUND TIME 10 Days

DATE 10-2-07 PAGE 2 OF 2

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	

SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Cr6 (7196A) Lab Filtered	Cr6 (7199) Lab Filtered	Total Metals (200.7) Chromium Unfiltered	Diss Metals (6010B) Field Filtered Chromium	Specific Conductance (120.1)	PH (SM4500HB)	TDS (SM2540C)	Anions (300) Bromide Chloride Sulfate Nitrate	NUMBER OF CONTAINERS	COMMENTS
MW-26-136	10/2/2007	12:00	Groundwater		x			x	x	x	x	x		
MW-27-020-136	10/2/2007	15:20	Groundwater			x		x	x	x	x	x		
MW-27-060-136	10/2/2007	13:29	Groundwater			x		x	x	x				
MW-27-085-136	10/2/2007	14:25	Groundwater			x		x	x	x				
MW-43-025-136	10/2/2007	11:50	Groundwater			x		x	x	x				
MW-43-075-136	10/2/2007	11:11	Groundwater			x		x	x	x				
MW-43-090-136	10/2/2007	10:02	Groundwater			x		x	x	x				
MW-91-136	10/2/2007	14:00	Groundwater		x			x	x	x	x	x		

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished)	Printed Name Shawn Duffy	Company/ Agency CH2M HILL	Date/ Time 10/2/07 1605	
Signature (Received) Rafael Davila	Printed Name Rafael	Company/ Agency T.L.I	Date/ Time 10-2-07 16:05	
Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time	
Signature (Received) Shabecoff	Printed Name Shabecoff	Company/ Agency TLI	Date/ Time 10/2/07	
Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time 21:00	
Signature (Received)	Printed Name	Company/ Agency	Date/ Time	

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

970098

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-136-Q3]

COC Number

TURNAROUND TIME 3 Days

DATE 10/3/07 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	

SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Cr6 (7196A) Lab Filtered	Cr6 (7199)	Cr6 (7199) Lab Filtered	Total Metals (200.7) Chromium Unfiltered	Diss Metals (6010B) Field Filtered Chromium	Specific Conductance (120.1)	PH (SM4500HB)	TDS (SM2540C)	Anions (300) Bromide Chloride Sulfate Nitrate	NUMBER OF CONTAINERS	COMMENTS
MW-34-100-136	10/3/2007	13:25	Groundwater				X		X						pH=2
														TOTAL NUMBER OF CONTAINERS	

ALERT !!!
Level III QC

For Sample Conditions See Form Attached

RUSH

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished)	Printed Name Matt Bruger	Company/ Agency E2	Date/ Time 10/3/07 1600
Signature (Received) BONIFACIO DAYAG	Printed Name Bonifacio Dayag	Company/ Agency TLI	Date/ Time 10-3-07 1600
Signature (Relinquished) Bonifacio Dayag	Printed Name B. DAYAG	Company/ Agency TLI	Date/ Time 10-3-07 2100
Signature (Received)	Printed Name David S	Company/ Agency TLI	Date/ Time 10/3/07 2100
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:

970095

SE2N

Rec'd 10/03/07
Lab.# 970095

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-136-Q3]

ALERT II
Level III QC

COC Number

TURNAROUND TIME 10 Days

DATE 10/3/07 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	

	SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Cr6 (7196A) Lab Filtered	Cr6 (7199)	Cr6 (7199) Lab Filtered	Total Metals (200.7) Chromium Unfiltered	Diss Metals (6010B) Field Filtered Chromium	Specific Conductance (120.1)	PH (SM4500HB)	TDS (SM2540C)	Anions (300) Bromide Chloride Sulfate Nitrate	NUMBER OF CONTAINERS	COMMENTS
1	EB-100307-1	10/3/07 ~~1/1/1950~~	1430	Groundwater			X									pH=2
2	EB-100307-2A	10/3/07 ~~1/1/1950~~	215	Groundwater			X									pH=2
3	MW-17-136	10/3/2007	14:16	Groundwater				X		X	X	X				pH=2
4	MW-34-055-136	10/3/2007	10:00	Groundwater				X		X(2)	X	X	X	X		pH=2
5	MW-34-080-136	10/3/2007	11:52	Groundwater				X		X(2)	X	X	X	X		pH=2
6	MW-34-100-136	10/3/2007	13:25	Groundwater						X	X	X	X	X		pH=2
7	MW-36-020-136	10/3/2007	14:00	Groundwater				X								
8	MW-36-020-136	10/3/2007	14:29	Groundwater						X	X	X				pH=2

For Sample Conditions See Form Attached

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Matt Thrasher	E2	10/3/07 1600
Signature (Received) BONIFACIO DAYAG	BONIFACIO DAYAG	TLI	10-3-07 1600
Signature (Relinquished) Bonifacio Dayag	B. DAYAG	TLI	10-3-07 2100
Signature (Received)	David S	TLI	10/3/07 2100
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

970095

Rec'd 10/03/07
Lab.# 970095

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-136-Q3]

COC Number

TURNAROUND TIME 10 Days

DATE 10/3/07 PAGE 2 OF 3

ALERT !! Level III QC

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	

	SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Cr6 (7196A) Lab Filtered	Cr6 (7199)	Cr6 (7199) Lab Filtered	Total Metals (200.7) Chromium Unfiltered	Diss Metals (6010B) Field Filtered Chromium	Specific Conductance (120.1)	PH (SM4500HB)	TDS (SM2540C)	Anions (300) Bromide Chloride Sulfate Nitrate	NUMBER OF CONTAINERS	COMMENTS
9	MW-36-040-136	10/3/2007	15:06	Groundwater				x		x	x	x				pH=2
10	MW-41D-136	10/3/2007	13:33	Groundwater				x		x	x	x				pH=2
11	MW-41M-136	10/3/2007	11:42	Groundwater				x		x	x	x				pH=2
12	MW-41S-136	10/3/2007	12:14	Groundwater							x					
13	MW-41S-136	10/3/2007	12:15	Groundwater				x		x		x				pH=2
14	MW-42-065-136	10/3/2007	15:00	Groundwater				x		x	x	x				pH=2
15	MW-93-136	10/3/2007	13:25	Groundwater				x		x	x	x	x	x		pH=2
16	MW-95-136	10/3/2007	12:15	Groundwater				x		x	x	x				pH=2

For Sample Conditions See Form Attached

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Matt Kruger	E2	10/3/07 1600
Signature (Received)	Bonifacio Dayag	TLI	10-3-07 1600
Signature (Relinquished)	Bonifacio Dayag	TLI	10-3-07 2100
Signature (Received)	David S	TLI	10/3/07 2100
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

(THU) OCT 4 2007 10:51/ST. 10:47/No. 6800000909 P 10

FROM

970095

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-136-Q3]

Rec'd 10/03/07
Lab.# 970095

COC Number
TURNAROUND TIME 10 Days
DATE 10/3/07 PAGE 3 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

	SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Cr6 (7198A) Lab Filtered	Cr6 (7199)	Cr6 (7199) Lab Filtered	Total Metals (200.7) Chromium Unfiltered	Diss Metals (6010B) Field Filtered Chromium	Specific Conductance (120.1)	PH (SM4500H+B)	TDS (SM2540C)	Anions (300) Bromide Chloride Sulfate Nitrate	NUMBER OF CONTAINERS	COMMENTS
17	MW-98-136	10/3/2007	12:30	Groundwater				x		x	x	x				pH=2
18	OW-03D-136	10/3/2007	10:36	Groundwater				x		x	x	x				pH=2
19	OW-03M-136	10/3/2007	9:41	Groundwater				x		x	x	x				pH=2
20	OW-03S-136	10/3/2007	8:50	Groundwater				x		x	x	x				pH=2
21	TW-04-136	10/3/2007	12:00	Groundwater				x		x	x	x				pH=2
																TOTAL NUMBER OF CONTAINERS

ALERT!
Level III QC

For Sample Conditions
See Form Attached

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Matt Rayis	E2	10/3/07 1600
Signature (Received)	Bonifacio Dayag	TLI	10-3-07 1600
Signature (Relinquished)	Bonifacio Dayag	TLI	10-3-07 2100
Signature (Received)	David S	TLI	10/3/07 2100
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

Advanced Technology Laboratories
3151 W.Post Road, Las Vegas, NV 89118
(702) 307-2659 FAX: (702) 307-2691

CHAIN OF CUSTODY RECORD

[2007-GMP-136-Q3]

COC Number

TURNAROUND TIME 10 Days

DATE 10/3/07 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

SAMPLE I.D.	DATE	TIME	DESCRIPTION	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 B	Diss Metals (7470A) Field Filtered	Alkalinity (SM2320B)	NUMBER OF CONTAINERS	COMMENTS
MW-32-020-136	10/1/2007	13:46	Groundwater	X				X		
MW-32-035-136	10/1/2007	14:55	Groundwater	X				X		
MW-91-136	10/2/07	1700		MS SPD	X	X		X		
MW-34-100-136	10/3/07	1325		X				X		
MW-95-136	10/3/07	1325		X				X		

TOTAL NUMBER OF CONTAINERS

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Shawn Duffy	CH2M H.ill	10/3/07 1550
Signature (Received)	MARLON GARTIN	ATL	10/3/07 1624
Signature (Relinquished)	MARLON GARTIN	ATL	10/3/07 1830
Signature (Received)	JOSE TENORIO	ATL-LV	10/3/07 0630 PM
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ 1.9 C

CUSTODY SEALED YES ☐ NO ☑

SPECIAL REQUIREMENTS:

N001206

Advanced Technology Laboratories
3151 W.Post Road, Las Vegas, NV 89118
(702) 307-2659 FAX: (702) 307-2691

[2007-GMP-136-Q3]

COC Number

TURNAROUND TIME 10 Days

DATE 10/3/07 PAGE 1 OF 2

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

SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (7199) Lab Filtered	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 B	Diss Metals (7470A) Field Filtered	Alkalinity (SM2320B)	NUMBER OF CONTAINERS	COMMENTS
MW-10-136	10/2/2007	13:29	Groundwater			X		X	NO 3rd		Please hold
MW-25-136	10/2/2007	14:35	Groundwater				X	X	X		Title 22 metal
MW-26-136	10/2/2007	12:00	Groundwater		X				X		all non-Title 22
MW-27-020-136	10/2/2007	15:20	Groundwater		X				X		are okay to
MW-34-055-136	10/3/2007	10:00	Groundwater				X	X	X		analyze.
MW-34-080-136	10/3/2007	11:52	Groundwater				X	X	X		
MW-34-080-136-A	10/3/2007	11:52	Groundwater	X							
MW-34-100-136-A	10/3/2007	13:25	Groundwater	X							

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Shawn Duffy	CH2M HILL	10/3/07 1550
Signature (Received)	MARLON CARTIN	ATL	10/3/07 1624
Signature (Relinquished)	MARLON CARTIN	ATL	10/3/07 1630
Signature (Received)	JOSE TENORIO	ATL-LV	10/3/07 @ 630 PM
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☑ WARM ☐ 1.8°C #

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

970140

Rec'd 10/04/07
Lab# 970140

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-136-Q3]

COC Number

TURNAROUND TIME 10 Days

DATE _____ PAGE 1 OF 4

ALERT Level II QC

For Sample Conditions See Form Attached

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 _____

	SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Cr6 (7196A) Lab Filtered	Cr6 (7199)	Cr6 (7199) Field Filtered	Cr6 (7199) Lab Filtered	Total Metals (200.7) Chromium Unfiltered	Diss Metals (6010B) Field Filtered Chromium	Specific Conductance (120.1)	PH (SM4500HB)	TDS (SM2540C)	Anions (300) Bromide Chloride Sulfate Nitrate				NUMBER OF CONTAINERS	COMMENTS
-1	EB-100407	10/4/2007	8:15	Groundwater			x													
-2	EB-100407-1	10/4/2007	15:00	Groundwater			x				No sample									
-3	EB-100407-2	10/4/2007	15:10	Groundwater			x													
-4	EB-100407-3	10/4/2007	10:23	Groundwater			x													
-5	MW-09-136	10/4/2007	12:32	Groundwater		x					x	x	x							pH=2
-6	MW-12-136	10/4/2007	14:00	Groundwater		x					x	x	x							pH=2
-7	MW-21-136	10/4/2007	14:20	Groundwater					x		x	x	x							pH=2
-8	MW-23-136	10/4/2007	8:05	Groundwater					x		x	x	x							pH=2

CHAIN OF CUSTODY SIGNATURE RECORD

Signature (Relinquished)	Printed Name Dan Cady	Company/ Agency CH2M Hill	Date/ Time 10-4-07 1600		
Signature (Received)	Printed Name Holliday	Company/ Agency TLI	Date/ Time 10-4-07 1600		
Signature (Relinquished)	Printed Name	Company/ Agency	Date/ Time		
Signature (Received)	Printed Name David S	Company/ Agency TLI	Date/ Time 10/4/07 2130		
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:

(FRI) OCT 5 2007 13:32/ST. 13:31/No. 6800000921 P 2

FROM

970140

Rec'd 10/04/07
Lab.# 970140

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-136-Q3]

ALERT! Level III QC

COC Number

TURNAROUND TIME 10 Days

DATE _____ PAGE 2 OF 4

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	

For Sample Conditions See Form Attached

	SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Cr6 (7196A) Lab Filtered	Cr6 (7199)	Cr6 (7199) Field Filtered	Cr6 (7199) Lab Filtered	Total Metals (200.7) Chromium Unfiltered	Diss Metals (6010B) Field Filtered Chromium	Specific Conductance (120.1)	PH (SM4500HB)	TDS (SM2540C)	Anions (300) Bromide Chloride Sulfate Nitrate					NUMBER OF CONTAINERS	COMMENTS
9	MW-24BR-136	10/4/2007	7:52	Groundwater					x		x	x	x								pH=2
10	MW-28-025-136	10/4/2007	10:05	Groundwater					x		x	x	x	x	x						pH=2
11	MW-28-090-136	10/4/2007	8:55	Groundwater					x		x	x		x							pH=2
12	MW-29-136	10/4/2007	11:12	Groundwater					x		x	x	x								pH=2
13	MW-31-060-136	10/4/2007	9:08	Groundwater		x					x	x	x	x	x						pH=2
14	MW-42-030-136	10/4/2007	14:35	Groundwater					x		x	x	x								pH=2
15	MW-42-055-136	10/4/2007	13:48	Groundwater					x		x	x	x								pH=2
16	MW-44-070-136	10/4/2007	12:15	Groundwater					x		x	x	x								pH=2

CHAIN OF CUSTODY SIGNATURE RECORD

	Signature	Printed Name	Company/ Agency	Date/ Time
Relinquished		Dan Cady	CH2M Hill	10-4-07 1600
Received		K Balito	TLI	10-4-07 1600
Relinquished				
Received		David S	TLI	10/4/07 2130
Relinquished				
Received				

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

970140

Rec'd 10/04/07
Lab.# 970140

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-136-Q3]

COC Number

TURNAROUND TIME 10 Days

DATE _____ PAGE 3 OF 4

ALERT !!
Level III QC
For Sample Conditions See Form Attached

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 _____

	SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Cr6 (7196A) Lab Filtered	Cr6 (7199)	Cr6 (7199) Field Filtered	Cr6 (7199) Lab Filtered	Total Metals (200.7) Chromium Unfiltered	Diss Metals (6010B) Field Filtered Chromium	Specific Conductance (120.1)	PH (SM4500H+B)	TDS (SM2540C)	Anions (300) Bromide Chloride Sulfate Nitrate					NUMBER OF CONTAINERS	COMMENTS
17	MW-44-115-136	10/4/2007	11:10	Groundwater					x		x	x	x								pH=2
18	MW-44-125-136	10/4/2007	10:00	Groundwater					x		x	x	x								pH=2
19	MW-47-055-136	10/4/2007	10:43	Groundwater					x		x	x	x								pH=2
20	MW-47-115-136	10/4/2007	10:12	Groundwater					x		x	x	x								pH=2
21	MW-48-136	10/4/2007	13:19	Groundwater					x		x	x	x								pH=2
22	MW-90-136	10/4/2007	13:40	Groundwater		x					x	x	x								pH=2
23	MW-99-136	10/4/2007	11:10	Groundwater					x		x	x	x								pH=2
24	PM-03-136	10/4/2007	14:10	Groundwater	x					x		x	x								pH=2

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Dan Cidy	CH2M HILL	10-4-07 1600
Signature (Received)	Hipolito	TLI	10-4-07 1600
Signature (Relinquished)			
Signature (Received)	Davids	TLI	10/4/07 2130
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

FROM (FRI) OCT 5 2007 13:33/ST. 13:31/No. 6800000921 P 4

970140

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-136-Q3]

Rec'd 10/04/07
Lab.# 970140

COC Number
TURNAROUND TIME 10 Days
DATE _____ PAGE 4 OF 4

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 _____

	SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Cr6 (7196A) Lab Filtered	Cr6 (7199)	Cr6 (7199) Field Filtered	Cr6 (7199) Lab Filtered	Total Metals (200.7) Chromium Unfiltered	Diss Metals (6010B) Field Filtered Chromium	Specific Conductance (120.1)	PH (SM4500H-B)	TDS (SM2540C)	Anions (300) Bromide Chloride Sulfate Nitrate				NUMBER OF CONTAINERS	COMMENTS
25	PM-04-136	10/4/2007	14:20	Groundwater	x					x		x	x							pH>2
26	TW-02D-136	10/4/2007	14:40	Groundwater		x					x	x	x							pH>2
27	TW-02S-136	10/4/2007	14:50	Groundwater		x					x	x	x							pH=2
																				TOTAL NUMBER OF CONTAINERS

ALERT II
Level III QC

For Sample Conditions
See Form Attached

CHAIN OF CUSTODY SIGNATURE RECORD

		Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Dan Cichy	Dan Cichy	CH2M Hill	10-4-07 1600
Signature (Received)	Hipolito	Hipolito	TLI	10-4-07 1600
Signature (Relinquished)				
Signature (Received)		David S	TLI	10/4/07 2130
Signature (Relinquished)				
Signature (Received)				

SAMPLE CONDITIONS
RECEIVED COOL ☐ WARM ☐ °F
CUSTODY SEALED YES ☐ NO ☐
SPECIAL REQUIREMENTS:

FROM (FRI) OCT 5 2007 13:33/ST. 13:31/No. 6800000921 P 5

TRUESDAIL LABORATORIES, INC.
14201 FRANKLIN AVENUE · TUSTIN, CA 92780-7008
(714) 730-6239 · FAX (714) 730-6462
www.truesdail.com

CHAIN OF CUSTODY RECORD

970141

☐ TURNAROUND TIME _____

DATE 10/4/07 PAGE 1 OF 1

COMPANY E2

PROJECT NAME PG & Topock

PHONE (530 229-3303 FAX _____

ADDRESS 155 Grand Ave. Ste 1000
Oakland CA 94612

P.O. NUMBER _____

SAMPLERS (SIGNATURE) _____

Rec'd 10/04/07
Lab.# 970141

	SAMPLE I.D.	DATE	TIME	DESCRIPTION	METHODS: 7196	7199	SW 6010B Cr	Specific Conductivity	pH	NUMBER OF CONTAINERS	COMMENTS
-1	MW-40S-136	10/4/07	8:38	Groundwater		X	X	X	X		pH=2
-2	MW-40D-136	10/4/07	9:16	Groundwater		X	X	X	X		pH=2
-3	MW-50-200-136	10/4/07	10:13	Groundwater	X		X	X	X		pH=2
-4	MW-50-095-136	10/4/07	10:48	Groundwater	X		X	X	X		pH=2
-5	TW-05-136	10/4/07	12:35	" "		X	X	X	X		pH=2
-6	MW-37S-136	10/4/07	13:37	" "		X	X	X	X		pH=2
-7	MW-94-136	10/4/07	13:37	" "		X	X	X	X		pH=2
-8	MW-37D-136	10/4/07	14:35	" "	X		X	X	X		pH=2
				" "							

For Sample Conditions See Form Attached

TOTAL NUMBER OF CONTAINERS

CHAIN OF CUSTODY SIGNATURE RECORD

	Signature	Printed Name	Company/ Agency	Date/ Time
Relinquished				
Received				
Relinquished				
Received	X	David S	TLI	10/4/07 2130
Relinquished				
Received				
Relinquished				
Received				

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ _____ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

FROM

970170

Rec'd 10/05/07
Lab.# 970170

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-136-Q3]

COC Number
TURNAROUND TIME 10 Days
DATE 10-5-07 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

	SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Cr6 (7196A) Lab Filtered	Cr6 (7199)	Cr6 (7199) Lab Filtered	Total Metals (200.7) Chromium Unfiltered	Diss Metals (6010B) Field Filtered Chromium	Specific Conductance (120.1)	PH (SM4500HB)	TDS (SM2540C)	Anions (300) Bromide Chloride Sulfate Nitrate	NUMBER OF CONTAINERS	COMMENTS
-1	EB-100507-1	10/5/2007	9:30	Groundwater			x									
-2	EB-100507-2	10/5/2007	10:46	Groundwater			x									
-3	EB-100507-3	10/5/2007	11:30	Groundwater			x									
-4	MW-19-136	10/5/2007	10:03	Groundwater		x				x	x	x				pH= 2
-5	MW-20-130-136	10/5/2007	9:12	Groundwater		x				x	x	x	x	x		pH= 2
-6	MW-33-090-136	10/5/2007	10:40	Groundwater				x		x	x	x	x			pH= 2
-7	MW-33-210-136	10/5/2007	9:00	Groundwater				x		x	x	x	x			pH= 2
-8	MW-46-175-136	10/5/2007	8:54	Groundwater				x		x	x	x				pH= 2

For Sample Conditions See Form Attached

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished) Shawn T. Duffy	Shawn Duffy	CH2M HILL	10-5-07 12:00
Signature (Received) Bonifacio Dayag	Bonifacio Dayag	TLI	10-5-07 1335
Signature (Relinquished) Bonifacio Dayag	Bonifacio Dayag	TLI	10-5-07 1900
Signature (Received)	David S	TLI	10/5/07 1900
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS
RECEIVED COOL ☐ WARM ☐ °F
CUSTODY SEALED YES ☐ NO ☐
SPECIAL REQUIREMENTS:

970170

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-136-Q3]

Rec'd 10/05/07
Lab.# 970170

COC Number
TURNAROUND TIME 10 Days
DATE 10-5-07 PAGE 2 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	

SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Cr6 (7196A) Lab Filtered	Cr6 (7199)	Cr6 (7199) Lab Filtered	Total Metals (200.7) Chromium Unfiltered	Diss Metals (6010B) Field Filtered Chromium	Specific Conductance (120.1)	PH (SM4500HB)	TDS (SM2540C)	Anions (300) Bromide Chloride Sulfate Nitrate	NUMBER OF CONTAINERS	COMMENTS
-9 MW-46-205-136	10/5/2007	10:20	Groundwater				x		x	x	x				pH = 2
-10 MW-51-136	10/5/2007	7:53	Groundwater		x				x	x	x				pH = 2
-11 MW-33040-136	10/5/2007	11:00	Groundwater				X		X	X	X			pH=2	TOTAL NUMBER OF CONTAINERS

For Sample Conditions
See Form Attached

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished) John F. Duffy	Shawn Duffy	CH2M HILL	10-5-07 12:00
Signature (Received) Bonifacio Dayag	BONIFACIO DAYAG	TLI	10-5-07 1335
Signature (Relinquished) Bonifacio Dayag	BONIFACIO DAYAG	TLI	10-5-07 1900
Signature (Received)	David S	TLI	10/5/07 1900
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

N001229

Advanced Technology Laboratories
3151 W.Post Road, Las Vegas, NV 89118
(702) 307-2659 FAX: (702) 307-2691

CHAIN OF CUSTODY RECORD

[2007-GMP-136-Q3]

COC Number

TURNAROUND TIME 10 Days

DATE 10-11-07 PAGE 1 OF 2

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) Simon M. Hinkley

SAMPLE I.D.	DATE	TIME	DESCRIPTION	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 B	Diss Metals (7470A) Field Filtered	Alkalinity (SM2320B)	NUMBER OF CONTAINERS	COMMENTS
MW-20-130-136	10/5/07	0912	GW			X	X	X	2	Hold T22
MW-31-060-136	10/4/07	0908	GW	X				X	2	
MW-28-025-136	10/4/07	1005	GW	X				X	2	
MW-37D-136	10/4/07	1435	GW		X		X	X	1	Hold T22
MW-12-136	10/4/07	1406	GW		X		X		1	
MW-90-136	10/4/07	1340	GW		X		X		1	
MW-20-100-136	10/10/07	1510	GW		X			X	2	
MW-20-070-136	10/11/07	0748	GW		X		X	X	2	

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Barry Collom	CH2M Hill	10-11-07 1700
Signature (Received)	MARION CARTIN	ATL-LV	10/11/07 1730
Signature (Relinquished)	MARION CARTIN	ATL-LV	10/11/07 @ 8:30PM
Signature (Received)	JOE TENDRIO	ATL-LV	10/11/07 @830PM
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☑ WARM ☐ 4.8°C °F

CUSTODY SEALED YES ☐ NO ☑

SPECIAL REQUIREMENTS:

10/11/07

970207 Rec'd 10/08/07
Lab.# 970207

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-136-Q3]

COC Number

TURNAROUND TIME 10 Days

DATE 5/8/07 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. Hinckley

COMMENTS: Revised by Sean Lanlon per Shawn Duffy on 10/11/07.

	SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Cr6 (7196A) Lab Filtered	Cr6 (7199) Lab Filtered	Total Metals (200.7) Chromium Unfiltered	Diss Metals (6010B) Field Filtered Chromium	Specific Conductance (120.1)	PH (SM4500HB)	TDS (SM2540C)	Anions (300) Bromide Chloride Sulfate Nitrate	Anions (300) Chloride, Sulfate, Nitrate	Alkalinity (SM) 2320B	Diss Metals (6010B) Fe, Mn	Diss Metals (6010B) Fe, Al, Ca, Mg, Na		NUMBER OF CONTAINERS	COMMENTS
-1	MW-30-30-136	10/8/07	1123	GW			X		X	X	X	X	X			X			3	pH = 7
-2	MW-39-040-136	10/8/07	1240	GW			X		X	X	X			X	X		X		3	pH = 2
-3	MW-39-070-136	10/8/07	1255	GW			X		X	X	X			X	X		X		3	pH = 2
-4	MW-39-050-136	10/8/07	1400	GW			X		X	X	X			X	X		X		3	pH = 2
-5	MW-39-080-136	10/8/07	1425	GW			X		X	X	X			X	X		X		3	pH = 2
-6	MW-39-060-136	10/8/07	1525	GW			X		X	X	X			X	X		X		3	pH = 2
-7	EB-100807	10/8/07	1540	Water		[scribbled out]	X												1	

For Sample Conditions See Form Attached

CHAIN OF CUSTODY SIGNATURE RECORD

Signature	Printed Name	Company/Agency	Date/Time
Signature (Relinquished) Aurora Hinckley	Aurora Hinckley	E2	10/8/07 1550
Signature (Received) Al Bozeeley	Al Bozeeley	TLI	10/8/07 1550
Signature (Relinquished) Al Bozeeley	Al Bozeeley	TLI	10/8/07 21:45
Signature (Received)	David S	TLI	10/8/07 2145
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:

075

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-136-Q3]

970261

COC Number

TURNAROUND TIME 10 Days

DATE 10/9/07 PAGE 1 OF 1

Rec'd 10/09/07

970261

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]

COMMENTS: Revised by Sean London per Shawn Duffy on 10/11/07.

	SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Cr6 (7196A) Lab Filtered	Cr6 (7199) Lab Filtered	Total Metals (200.7) Chromium Unfiltered	Diss Metals (6010B) Field Filtered Chromium	Specific Conductance (120.1)	PH (SM4500HB)	TDS (SM2540C)	Anions (300) ~~Bromide~~ Chloride Sulfate Nitrate	Alkalinity (SM2320B)	Diss Metals (6010B) Fe, Mg, Ca, Mg, Na				NUMBER OF CONTAINERS	COMMENTS
-1	MW-49-365-136	10/9/07	0950	GW			X		X	X	X		X	X	X				3	
-2	MW-49-275-136	10/9/07	1138	GW			X		X	X	X		X	X	X				3	
-3	MW-96-136	10/9/07	1230	GW			X		X	X	X	X	X	X	X				3	
-4	MW-33-150-136	10/9/07	1315	GW			X		X	X	X	X	X	X	X				3	
-5	MW-36-070-136	10/9/07	1455 ~~1355~~	GW			X		X	X	X		X	X	X				3	
-6	MW-36-090-136	10/9/07	1505	GW			X		X	X	X		X	X	X				3	
-7	EB-100907	10/9/07	1215	Water			X												1	

CHAIN OF CUSTODY SIGNATURE RECORD

Signature		Printed Name		Company/Agency		Date/Time	
Signature (Relinquished)	[signature]	Printed Name	Susan M. Hinckley	Company/Agency	E2	Date/Time	10/9/07 1540
Signature (Received)	Rafael Davila	Printed Name	Rafael	Company/Agency	T-L	Date/Time	10-9-07 1540
Signature (Relinquished)		Printed Name		Company/Agency		Date/Time	
Signature (Received)	Shabuning	Printed Name	Shabuning	Company/Agency	TLI	Date/Time	10/9/07 20:00
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

067

Level III QC

970300

Rec'd 10/10/07
Lab.# 970300

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-136-Q3]

COC Number

TURNAROUND TIME 10 Days

DATE 10/10/07 PAGE 1 OF 1

For Sample Conditions See Form Attached

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

	SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Cr6 (7196A) Lab Filtered	Cr6 (7199) Lab Filtered	Total Metals (200.7) Chromium Unfiltered	Diss Metals (6010B) Field Filtered Chromium	Specific Conductance (120.1)	PH (SM4500HB)	TDS (SM2540C)	Anions (300) Fluoride Chloride Sulfate Nitrate	Anions (300) Bromide; Chloride Sulfate, nitrate	Alkalinity (SM 23200)	Diss Metals (6010B) Ca Mg Na Fe Mn	Diss Metals (6010B) Ca Mg Na Fe Mn	NUMBER OF CONTAINERS	COMMENTS
-1	MW-22-136	10/10/07	0850	GW			X		X	X	X		X		X	X			3	pH=2
-2	MW-39-100-136	10/10/07	0953	GW		X	X		X	X	X		X		X	X			3	pH=2
-3	EB-101007	10/10/07	10:20	Water			X		X										1	
-4	MW-36-050-136	10-10-07	1133	GW			X		X	X	X		X		X	X			3	pH=2
-5	MW-36-100-136	10-10-07	1125	GW		X			X	X	X		X		X	X			3	pH=2
-6	MW-49-135-136	10-10-07	1345	GW			X		X	X	X		X		X	X			3	pH=2
-7	MW-20-100-136	10-10-07	1510	GW		X			X	X	X	X		X			X		3	pH=2

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Barry Collom	Chain Hill	10-10-07 1530
Signature (Received) Bonifacio Dayag	BONIFACIO DAYAG	TLI	10-10-07 1335
Signature (Relinquished) Bonifacio Dayag	B. DAYAG	TLI	10-10-07 2000
Signature (Received)	David S	TLI	10/10/07 2000
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

070

970340

ALERT !! Level III QC

Rec'd 10/10/07
Lab.# 970340

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

For Sample Conditions See Form Attached

CHAIN OF CUSTODY RECORD

[2007-GMP-136-Q3]

COC Number ---
TURNAROUND TIME 10 Days
DATE 10/11/07 PAGE 1 OF 2

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) Chromium Unfiltered	Diss Metals (6010B) Field Filtered Chromium	Specific Conductance (120.1)	PH (SM4500HB)	TDS (SM2540C)	Anions (300) ~~Bromide~~ Chloride Sulfate Nitrate	Anions (300) Bromide ~~Chloride~~ Sulfate Nitrate	SM 4500NH3	Alkalinity	Metals - Na, Ca, Mg, Fe, Mn FF		NUMBER OF CONTAINERS	COMMENTS
-1	MW-20-70-136	10/11/07	7:48	GW		X	[scribbled]		X	X	X	X		X		X	X		3	pH = 2
-2	EB-101107	10/11/07	8:10	W			X												1	
-3	~~mw-53D-100407~~	~~10/11/07~~	~~1000~~	~~GW~~			X		X	X	X		X		X	X	X		4	pH = 2
-4	~~mw-90-100407~~	~~10/11/07~~	~~0900~~	~~GW~~			X		X	X	X		X	[scribbled]	X	X	X		4	pH = 2
-5	~~mw-53M-100407~~	~~10/11/07~~	~~1030~~	~~GW~~			X		X	X	X		X		X	X	X		4	pH = 2
-6	~~MW-52M-100407~~	~~10/11/07~~	~~1155~~	~~GW~~			X		X	X	X		X	[scribbled]	X	X	X		4	pH = 2
-7	~~MW-52D-100407~~	~~10/11/07~~	~~1208~~	~~GW~~			X		X	X	X		X		X	X	X		4	pH = 2
-8	~~MW 52S-100407~~	~~10/11/07~~	~~1305~~	~~GW~~			X		X	X	X		X		X	X	X		4	pH = 2

SPD 10/13/07

CHAIN OF CUSTODY SIGNATURE RECORD

Signature	Printed Name	Company/Agency	Date/Time
Signature (Relinquished) [signature]	Barry Collins	CH2M Hill	10-11-07 1550
Signature (Received) [signature]	H. Polito	TLI	10-11-07 1550
Signature (Relinquished) [signature]	H. Polito	TLI	10-11-07 2145
Signature (Received) [signature]	David S	TLI	10/11/07 2145
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ ____ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS: Please report crossed out samples on a seperate SDG. See attached COC.

4

970340

Rec'd 10/10/07
Lab.# 970340

CHAIN OF CUSTODY RECORD

[2007-GMP-136-Q3]

COC Number

TURNAROUND TIME 10 Days

DATE 10/11/07 PAGE 2 OF 2

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

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) Jessica M. Hinckley

SAMPLE I.D.	DATE	TIME	DESCRIPTION	Cr6 (218.6) Lab Filtered	Cr6 (7196A) Lab Filtered	Cr6 (7199) Lab Filtered	Total Metals (200.7) Chromium Unfiltered	Diss Metals (6010B) Field Filtered Chromium	Specific Conductance (120.1)	PH (SM4500HB)	TDS (SM2540C)	Anions (300) Bromide Chloride Sulfate Nitrate	Alkalinity	Metals - Na Ca Mg Fe Mn (F)	NUMBER OF CONTAINERS	COMMENTS
-9 TW-01-136	10/11/07	1510	GW	X			X	X	X		X	X	X		3	pH = 2

ALERT !!
Level III QC

For Sample Conditions
See Form Attached

CHAIN OF CUSTODY SIGNATURE RECORD

	Printed Name	Company/ Agency	Date/ Time
Signature (Relinquished)	Barry Colon	CH2M HILL	10-11-07 1550
Signature (Received)	[illegible]	TLI	10-11-07 15:50
Signature (Relinquished)	[illegible]	TLI	21:45
Signature (Received)	David S	TLI	10/11/07 2145
Signature (Relinquished)			
Signature (Received)			

SAMPLE CONDITIONS

RECEIVED COOL ☐ WARM ☐ °F

CUSTODY SEALED YES ☐ NO ☐

SPECIAL REQUIREMENTS:

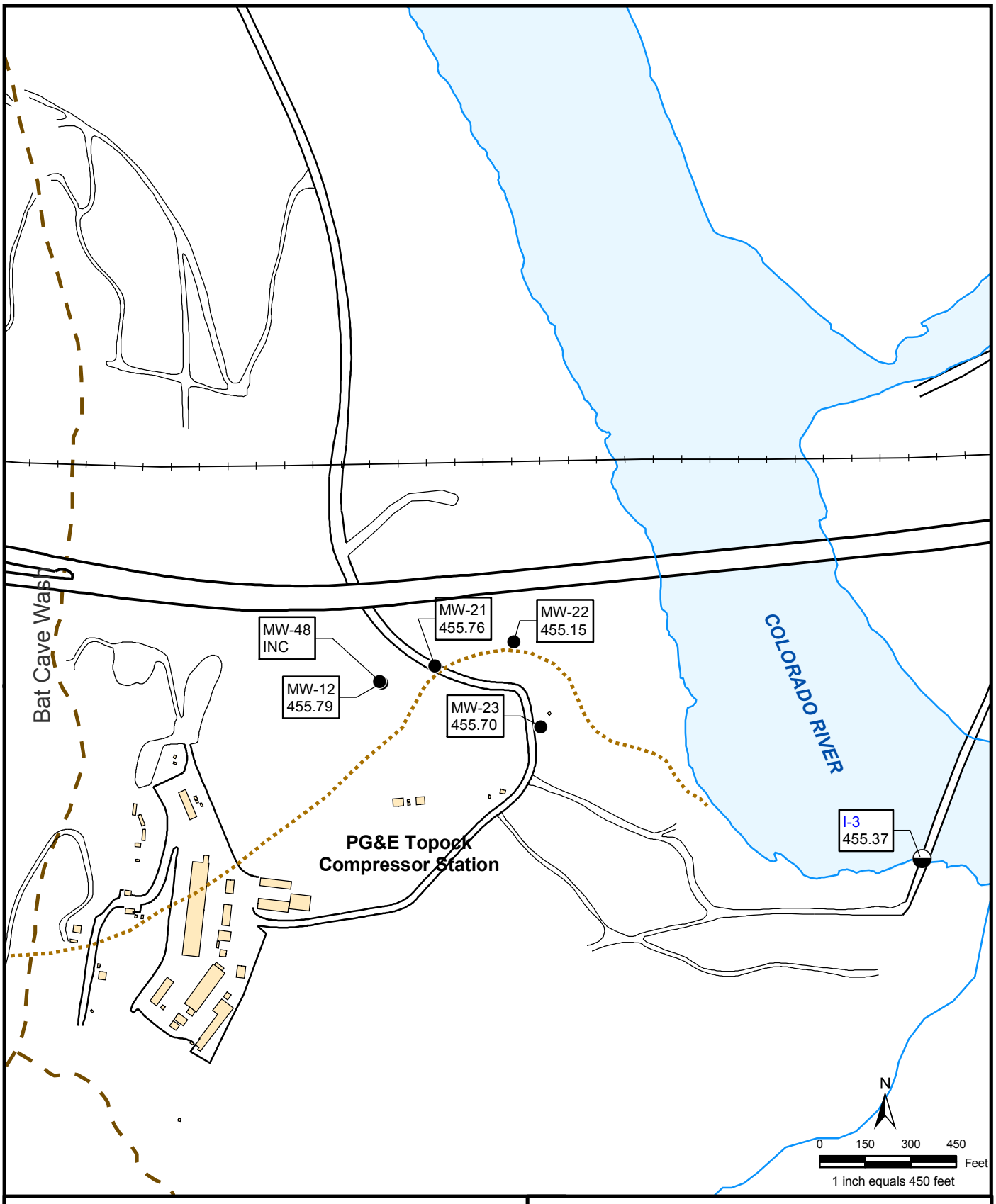
Attachment 2

Water Levels from Selected Wells in the Vicinity of Bedrock Well MW-23

Water Levels from Selected Wells in the Vicinity of Bedrock Well MW-23

During the August 15, 2007 Consultative Workgroup meeting, DTSC requested long term transducer monitoring at MW-23 and the surrounding area. CH2M HILL is monitoring groundwater levels at wells near MW-23 on a monthly basis for the remainder of 2007. This Attachment 2 includes a summary of water level data from selected wells in the vicinity of MW-23. Figures 1 through 3 presents three maps showing monthly average groundwater elevations for September, October, and November 1-27, 2007. Figure 4 presents a hydrograph of water levels along with the river level for the entire period from September through late November 2007.

Note that well MW-48 is not shown because the water levels in this well were affected by several episodes of pumping in conjunction with groundwater sample collection for bedrock aquifer testing during this time period. Water levels in MW-48 require about two weeks to recover after the well is pumped and therefore most of the data from MW-48 during this period was not representative of ambient water levels. The period of missing data from MW-12 beginning in late September is due to failure of the transducer in this well; that transducer was replaced in October 2007. PG&E will continue water level monitoring in this group of wells as directed by DTSC.



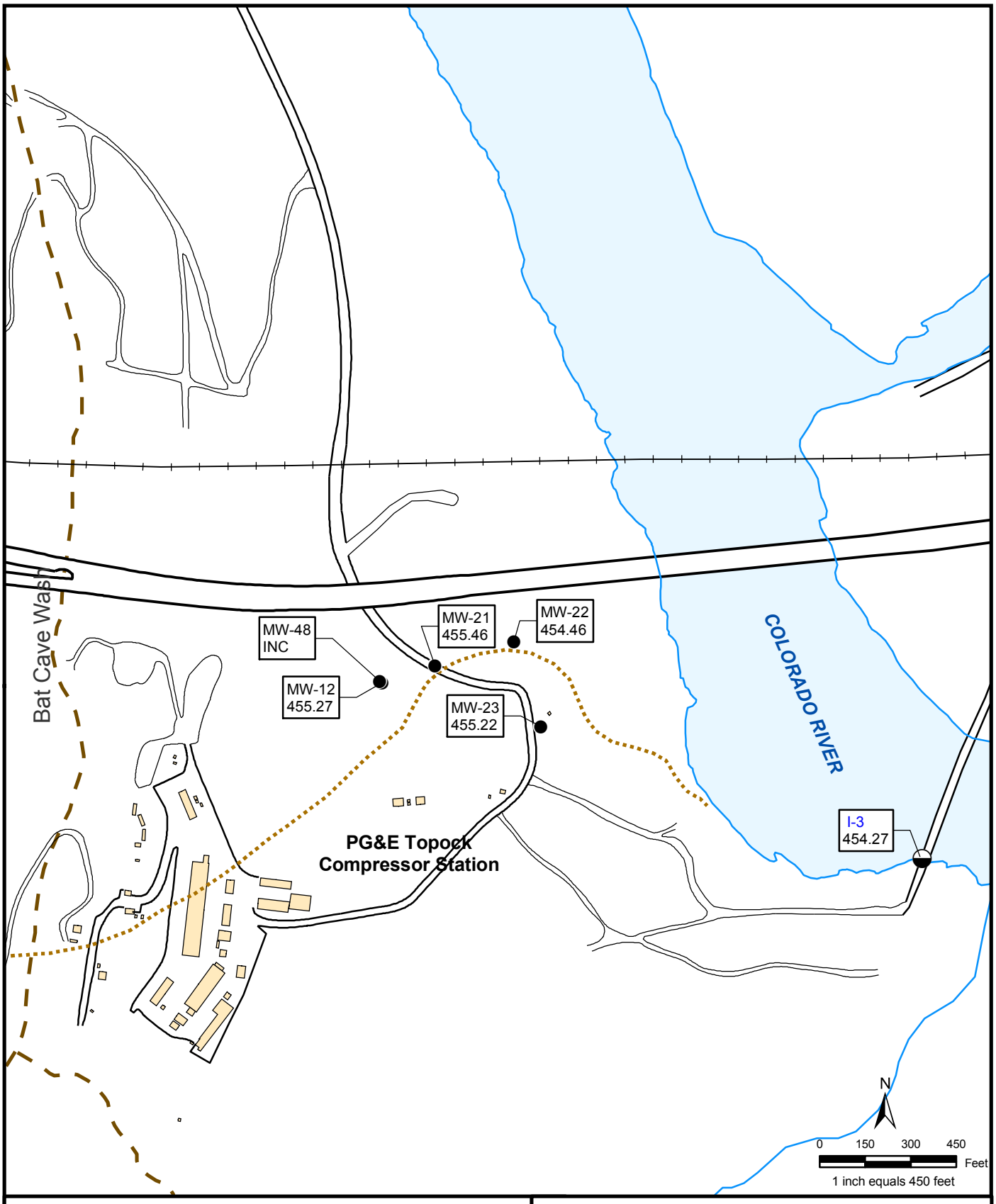
- **MW-22** 455.85 — Average Groundwater Elevation at Monitoring Station (ft AMSL)
- **MW-22** (455.85) — Average Groundwater Elevation at Monitoring Station (ft AMSL) Not Used for Contouring
- **I-3** 455.13 — River Elevation (ft AMSL) Interpolated Average
- Approximate Bedrock Contact at 455 ft AMSL
- Monitoring Well
- River Station
- **INC** — Data incomplete or unavailable over reporting period

FIGURE 1
AVERAGE GROUNDWATER ELEVATIONS AT MW-23 AND ADJACENT WELLS SEPTEMBER 2007

PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CH2MHILL

\\ZINFANDEL\PROJ\PACIFICGASELECTRICCO\TOPOCKPROGRAM\GIS\MAPFILES\2007\TOPOCK_INDEPENDENT_DELIV_SEPT.MXD TOPOCK_INDEPENDENT_DELIV_SEPT 12/26/2007 13:04:46



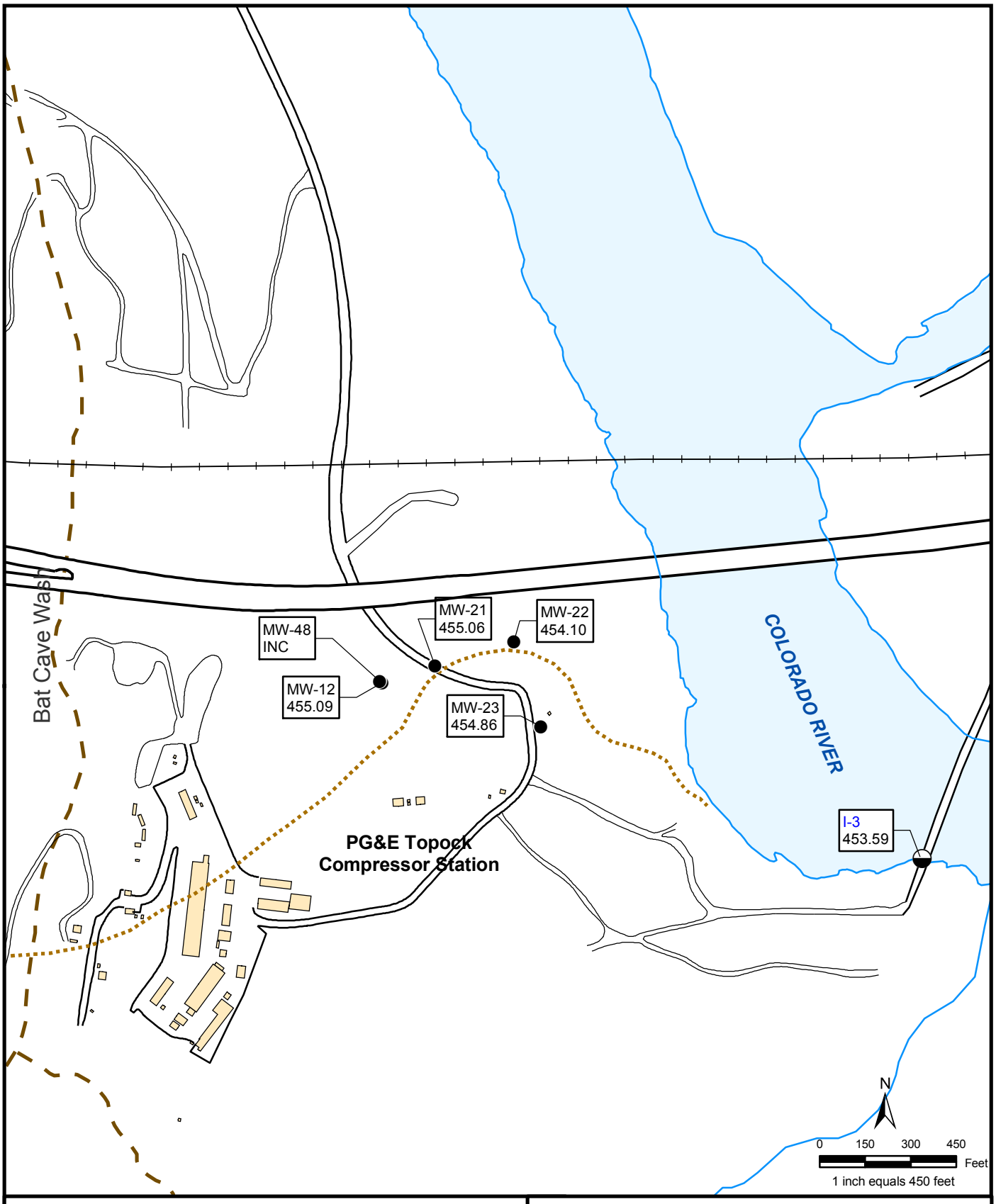
- **MW-22** 455.85 — Average Groundwater Elevation at Monitoring Station (ft AMSL)
- **MW-22** (455.85) — Average Groundwater Elevation at Monitoring Station (ft AMSL) Not Used for Contouring
- **I-3** 455.13 — River Elevation (ft AMSL) Interpolated Average
- Approximate Bedrock Contact at 455 ft AMSL
- Monitoring Well
- River Station
- **INC** — Data incomplete or unavailable over reporting period

FIGURE 2
AVERAGE GROUNDWATER ELEVATIONS AT MW-23 AND ADJACENT WELLS OCTOBER 2007

PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CH2MHILL

\\ZINFANDEL\PROJ\PACIFICGASELECTRICCO\TOPOCKPROGRAM\GIS\MAPFILES\2007\TOPOCK_INDEPENDENT_DELIV_OCT.MXD TOPOCK_INDEPENDENT_DELIV_OCT 12/26/2007 13:06:53



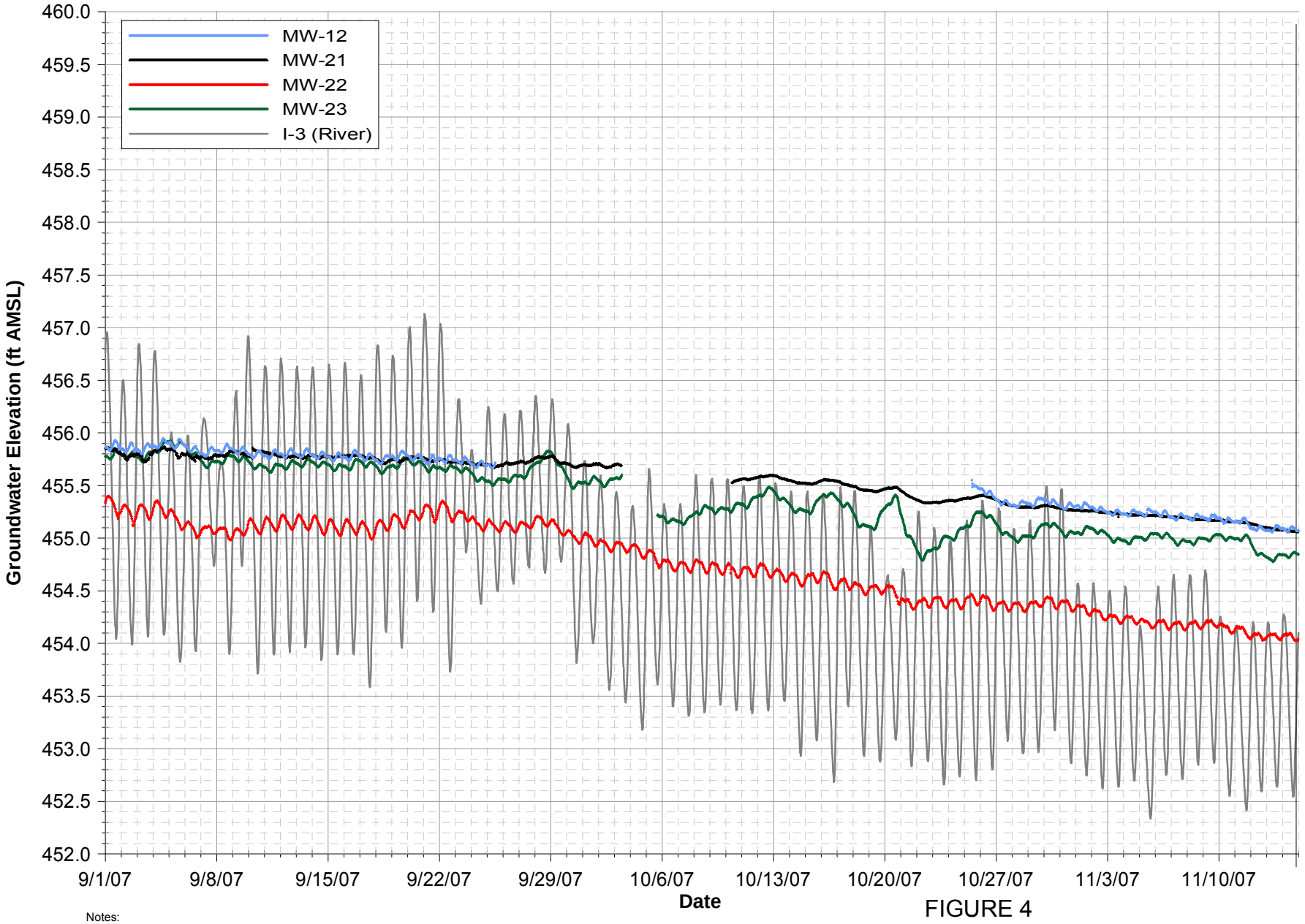
- **MW-22** 455.85 — Average Groundwater Elevation at Monitoring Station (ft AMSL)
- **MW-22** (455.85) — Average Groundwater Elevation at Monitoring Station (ft AMSL) Not Used for Contouring
- **I-3** 455.13 — River Elevation (ft AMSL) Interpolated Average
- Approximate Bedrock Contact at 455 ft AMSL
- Monitoring Well
- River Station
- **INC** — Data incomplete or unavailable over reporting period

FIGURE 3
AVERAGE GROUNDWATER ELEVATIONS AT MW-23 AND ADJACENT WELLS NOVEMBER 1 - 27, 2007

PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CH2MHILL

\\ZINFANDEL\PROJ\PACIFICGASELECTRICCO\TOPOCKPROGRAM\GIS\MAPFILES\2007\TOPOCK_INDEPENDENT_DELIV_NOV.MXD TOPOCK_INDEPENDENT_DELIV_NOV 12/26/2007 13:05:13



Notes:
Data subject to review.
MW-12 data unavailable 9/25-10/25/2007.
MW-21 data unavailable 10/3-10/10/2007.

MW-23 data unavailable 10/3-10/5/2007.

FIGURE 4
MW-12, MW-21, MW-22, MW-23
HYDROGRAPHS AND RIVER LEVELS
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CH2MHILL