

Yvonne J. Meeks

Topock Project Manager Chromium Remediation Project Office Gas Transmission & Distribution 6588 Ontario Road San Luis Obispo, CA 93405

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

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

June 20, 2007

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

Subject: May 2007 Performance Monitoring Report

Geonne Meks

Interim Measures Performance Monitoring Program PG&E Topock Compressor Station, Needles, California

Dear Mr. Yue:

Enclosed is the *Performance Monitoring Report for May 2007* for PG&E's Interim Measures (IM) performance monitoring program for the Topock project. This report presents the May 2007 performance monitoring results for the IM and summarizes the operations and performance evaluation for the May 2007 reporting period.

The quarterly performance monitoring report is prepared and submitted in conformance with the IM reporting requirements described in Enclosure A of the Department of Toxic Substances Control's letter dated February 14, 2005.

Please contact me at (805) 546-5243 if you have any questions on the performance monitoring report.

Sincerely,

Enclosure

Performance Monitoring Report for May 2007

Interim Measures Performance Monitoring Program PG&E Topock Compressor Station Needles, California

Prepared for

California Department of Toxic Substances Control

on behalf of

Pacific Gas and Electric Company

June 20, 2007



Performance Monitoring Report for May 2007

Interim Measures Performance Monitoring Program

PG&E Topock Compressor Station Needles, California

Prepared for

California Department of Toxic Substances Control

on behalf of Pacific Gas and Electric Company

June 20, 2007

This report was prepared under the supervision of a California Certified Engineering Geologist

RERED GEO OF B/31/08 C ON No. CEG 1977 CERTIFIED ENGINEERING GEOLOGIST TO OF CALIFORNIA

Paul Bertucci, C.E.G. No. 1977 Project Hydrogeologist

Contents

Acro	nyms and Abbreviationsiv
1.0	Introduction1-1
2.0	Extraction System Operations 2-1
3.0	Chromium Sampling Results
4.0	Hydraulic Gradient Results4-1
5.0	Status of Operation and Monitoring 5-1
6.0	References6-1
Table	es
2-1 2-2 4-1	Pumping Rate and Extracted Volume for IM System through May 2007 Analytical Results for Extraction Wells, December 2006 through May 2007 Predicted and Actual Monthly Average Davis Dam Discharge and Colorado River Elevation at I-3
4-2	Calculated Hydraulic Gradients for Well Pairs, May 2007
Figur	res
1-1	Locations of IM No. 3 Groundwater Extraction, Conveyance, and Treatment Facilities
1-2 3-1 3-2 4-1 4-2 4-3 4-4	Locations of Wells and Cross Sections Used for IM Performance Monitoring Maximum Cr(VI) Concentrations in Alluvial Aquifer, May 2007 Cr(VI) Concentrations, Floodplain Cross-section B, May 2007 Average Groundwater Elevations, Shallow Wells, and River Elevations, May 2007 Average Groundwater Elevations, Mid-depth Wells, May 2007 Average Groundwater Elevations, Deep Wells, May 2007 Average Groundwater Elevations for Wells on Floodplain Cross-section A, May 2007
Appe	endices
A B C	Extraction System Operations Log for Reporting Period Chromium Sampling Results for Monitoring Wells in Floodplain Area Hydraulic Monitoring Data for Reporting Period

BAO\071710003

Acronyms and Abbreviations

μg/L micrograms per liter (essentially the same as parts per billion [ppb])

cfs cubic feet per second

Cr(T) total chromium

Cr(VI) hexavalent chromium

DTSC California Department of Toxic Substances Control

gpm gallons per minute

IM Interim Measure

PG&E Pacific Gas and Electric Company

PMP Performance Monitoring Program

TDS total dissolved solids

USBR United States Bureau of Reclamation

BAO\071710003

1.0 Introduction

Pacific Gas and Electric Company (PG&E) is implementing an Interim Measure (IM) to address chromium concentrations in groundwater at the Topock Compressor Station near Needles, California. The IM consists of groundwater extraction for hydraulic control of the plume boundaries in the Colorado River floodplain and management of extracted groundwater. Collectively, the groundwater extraction, treatment, and injection systems are referred to as Interim Measure Number 3 (IM No. 3). Currently, the IM No. 3 facilities include a groundwater extraction system (four extraction wells: TW-2D, TW-3D, TW-2S, and PE-1), conveyance piping, a groundwater treatment plant, and an injection well field for the discharge of the treated groundwater. Figure 1-1 shows the location of the IM No. 3 extraction, conveyance, treatment, and injection facilities.

In a letter dated February 14, 2005, the California Department of Toxic Substances Control (DTSC) established the criteria for evaluating the performance of the IM. As defined by DTSC, the performance standard for this IM is to "establish and maintain a net landward hydraulic gradient, both horizontally and vertically, that ensures that hexavalent chromium [Cr(VI)] concentrations at or greater than 20 micrograms per liter [μ g/L] in the floodplain are contained for removal and treatment" (DTSC 2005). The DTSC directive also defined the monitoring and reporting requirements for the IM. A draft *Performance Monitoring Plan for Interim Measures in the Floodplain Area* (CH2M HILL 2005) was submitted to DTSC on April 15, 2005 (herein referred to as the Performance Monitoring Plan). The site monitoring, data evaluation, reporting, and response actions required under the February 2005 DTSC directive are collectively referred to as the IM Performance Monitoring Program for the floodplain area.

This monthly report has been prepared in compliance with DTSC's requirements and documents the monitoring activities and performance evaluation of the IM hydraulic containment system for the period from May 1 through May 31, 2007. The results and status of IM performance monitoring during June 2007 will be reported in the next monthly performance monitoring report July 20, 2007.

Figure 1-2 shows the locations of wells used for IM extraction, performance monitoring, and hydraulic gradient measurements. The performance monitoring wells that were in service/active during May 2007 are defined as:

- Floodplain Wells (monitoring wells on the Colorado River floodplain): MW-22, MW-27 cluster (three), MW-28 cluster (two), MW-29, MW-30 cluster (two), MW-32 cluster (two), MW-33 cluster (four), MW-34 cluster (three), MW-36 cluster (six), MW-39 cluster (six), MW-42 cluster (three), MW-43 cluster (three), MW-44 cluster (three), MW-45, MW-46 cluster (two), MW-49 cluster (three).
- Intermediate Wells (monitoring wells located immediately north, west, and southwest of the floodplain): MW-12, MW-19, MW-20 cluster (three), MW-21, MW-26, MW-31 cluster (two), MW-35 cluster (two), MW-47 cluster (two), MW-50 cluster (two), and MW-51.

BAO\071710003 1-1

• **Interior Wells** (monitoring wells located upgradient of IM pumping): MW-10 and MW-25.

Three extraction wells (TW-2D, TW-3D and TW-2S) are located on the MW-20 bench (Figure 1-1). In March 2005, extraction well PE-1 was installed on the floodplain approximately 450 feet east of extraction well TW-2D (Figure 1-1). Construction of the conveyance piping and power supply to well PE-1 was completed in January. Testing and commissioning of well PE-1 began on January 25, 2006, with full-time operation of the well beginning on January 26, 2006. Currently, both TW-3D and PE-1 are in full-time operation.

The wells screened in the unconsolidated alluvial fan and fluvial deposits that comprise the Alluvial Aquifer have been separated into three depth intervals to present groundwater quality and groundwater level data. The depth intervals of the Alluvial Aquifer — designated upper, middle, and lower — are based on grouping the monitoring wells screened at common elevations and do not represent distinct hydrostratigraphic units or separate aquifer zones. The subdivision of the aquifer into three depth intervals is an appropriate construct for presenting and evaluating groundwater quality data in the floodplain. The three-interval concept is also useful for presenting and evaluating lateral gradients, while minimizing effects of vertical gradients and observing the influence of pumping from partially-penetrating wells. It should be noted, however, that these divisions do not correspond to any distinct lithostratigraphic layers within the aquifer. The floodplain aquifer is considered to be hydraulically undivided.

BAO\071710003 1-2

2.0 Extraction System Operations

Pumping data for the IM groundwater extraction system for the period May 1 through May 31, 2007 are shown in Table 2-1. During the reporting period, extraction wells TW-3D and PE-1 operated at a combined target pump rate of 135 gallons per minute (gpm), excluding periods of planned and unplanned downtime.

The May 2007 monthly average pumping rate was 135.5 gpm. A total of 6,051,672 gallons of groundwater was extracted and treated by the IM No. 3 treatment plant during May 2007. The IM No. 3 facility also treated approximately 9,730 gallons of water generated from the groundwater monitoring program and 4,800 gallons of water generated from injection well re-development during May 2007. In addition, 12,900 gallons produced during the start up of the IM No. 3 treatment plant after the one-week shutdown for annual maintenance were treated during May 2007. The operational run time for the IM extraction system was greater than 99 percent during this reporting period. An operations log for the extraction system during May 2007, including downtime, is included in Appendix A.

The concentrate (i.e., brine) from the reverse osmosis system was shipped offsite with shipping papers as a Resource Conservation and Recovery Act non-hazardous waste and transported to Liquid Environmental Solutions in Phoenix, Arizona for treatment and disposal. Two containers of solids from the IM No. 3 facility were transported offsite during May 2007 to Chemical Waste Management Kettleman Hills.

Daily inspections included general facility inspections, process control monitoring, and site security monitoring. Daily logs with documentation of inspections are maintained onsite.

Table 2-2 summarizes the analytical results of groundwater samples collected from the extraction well system during the May reporting period and prior months.

BAO\071710003 2-1

3.0 Chromium Sampling Results

During May 2007, the groundwater monitoring wells in the floodplain area were sampled for Cr(VI), total chromium [Cr(T)], and field water quality parameters under the current monthly and biweekly schedules, in accordance with the approved groundwater monitoring plan and DTSC directives. Refer to PG&E's Topock *Groundwater and Surface Water Monitoring Report, First Quarter 2007* (CH2M HILL 2007a) and DTSC (2006) for the prior and current sampling plan and frequencies for groundwater wells in the performance monitoring area.

Table B-1 in Appendix B presents the groundwater sampling results for Cr(VI) and Cr(T), as well as groundwater elevation and selected field water quality parameters for monitoring wells in the floodplain area during May 2007 and the previous months. Table B-2 (Appendix B) presents the groundwater sampling data for the other wells monitored in the Performance Monitoring Program area during May 2007 and the previous months.

Figure 3-1 presents the Cr(VI) results distribution for May 2007, in plan view, for the groundwater wells monitoring the upper, middle, and lower depth intervals of the Alluvial Aquifer in the floodplain area. Interpretations of Cr(VI) contours at each depth interval are also provided on this figure. The actual locations of contours beyond well data points are not certain but are inferred using available site investigation and monitoring data (bedrock structure, hydraulic gradients, observed distribution of geochemically-reducing conditions, and Cr(VI) concentration gradients). The aquifer depth intervals, well screens, and May 2007 Cr(VI) sampling results and interpreted contours are also shown on Figure 3-1 in a vertical cross-section extending east-west across the floodplain. The California drinking water standard for Cr(T) is $50 \, \mu g/L$.

Figure 3-2 presents the May 2007 Cr(VI) results for additional floodplain monitoring wells on a cross-section oriented parallel to the Colorado River (see Figure 1-2 for locations of the cross-sections). For ongoing IM performance evaluation, Cr(VI) concentration trend graphs and hydrographs for key floodplain monitoring wells (MW-33-90, MW-34-100, and MW-36-100) are presented in Appendix B.

BAO\071710003 3-1

4.0 Hydraulic Gradient Results

During the reporting period, water levels were recorded at intervals of 30 minutes with pressure transducers in 62 wells and two river monitoring stations (I-3 and RRB). The data are typically continuous, with only short interruptions for sampling or maintenance. The location of the wells monitored are shown on Figure 1-2 and listed in Section 1.0.

The monthly average and the minimum and maximum daily average groundwater and river elevations have been calculated from the pressure transducer data for the May reporting period and are summarized in Appendix C. Due to summer heat field conditions, data collection was conducted on four days, starting May 30, 2007 (1 day before month end). Hence, groundwater elevation data collected May 1 through May 30, 2007 were used for gradient evaluation for this reporting period.

Due to the variation in groundwater salinity at the site, the water level measurements need to be adjusted (density-corrected) to equivalent freshwater hydraulic heads prior to calculating groundwater elevations and gradients (Fetter 1994). The methods and procedures used for adjusting the performance monitoring water level data for salinity and temperature differences are described in the Performance Monitoring Plan. Groundwater elevation hydrographs (for May 2007) for all wells with transducers are included in Appendix C. The elevation of the Colorado River measured at the river gauge (I-3, Figure 1-2) during May 2007 is also shown on the hydrographs.

The May 2007 hydraulic data and groundwater gradient maps for the upper, middle, and lower depth intervals are shown on Figures 4-1, 4-2, and 4-3, respectively. The groundwater elevations for all depth intervals of the Alluvial Aquifer indicate strong landward hydraulic gradients within the IM No. 3 capture zone throughout the floodplain. To the west of the TW-3D and PE-1 pumping area, the hydraulic gradient in the upper depth interval is easterly and consistent with the regional gradient outside of the floodplain area. Note that several monitoring wells are significantly deeper than other wells in the lower aquifer zone. Due to vertical gradients present at the Topock site, water levels in deeper wells tend to be higher than water levels in shallower wells. Consequently, some of the wells with screen intervals significantly deeper than most of the lower zone wells exhibit water levels that are not contoured in the plan view on Figure 4-3.

The landward gradients measured during May 2007 were greater than gradients measured in April 2007, due to high river levels over the reporting period and a full month of pumping (April 2007 averages included one-week of extraction system downtime, CH2M HILL 2007b). The May 2007 average monthly groundwater elevations are presented and contoured in cross-section on Figure 4-4 (cross-section location shown on Figure 1-2). The groundwater elevation contours on this cross-section show the strong downward and landward hydraulic gradients produced by the combined pumping from IM extraction wells TW-3D and PE-1.

Table 4-1 summarizes the estimated and actual dam discharges and river elevations since April 2004. The actual Davis Dam average discharge for May 2007 of 16,199 cubic feet per

BAO\071710003 4-1

second (cfs) was less than the United States Bureau of Reclamation (USBR) projected discharge of 16,800 cfs for the current reporting period. As a result, the actual Colorado River elevation at I-3 (monthly average) was 0.1 feet less than the level predicted during the previous month by using the multiple regression method with USBR projections for the May reporting period.

Table 4-2 summarizes gradients measured between the three designated well pairs (MW-31-135/MW-33-150, MW-20-130/MW-34-80, and MW-20-130/MW-42-65) during May 2007. Pumping from extraction well PE-1 began on January 26, 2006. Since that time, the central well pair has been affected by PE-1 pumping. Pumping at well PE-1 would tend to lower the water level in well MW-34-80 and decrease the apparent gradient in the central well pair. Nevertheless, average gradients in the three well pairs were landward at magnitudes that were two to more than four times the target value of 0.001 feet per foot (0.0024, 0.0042, and 0.0045, respectively). The landward gradients measured in May were greater than the average gradients for these well pairs in April 2007 due to high river levels and consistent pumping operations over the reporting period.

BAO\071710003 4-2

5.0 Status of Operation and Monitoring

Reporting of the IM extraction and monitoring activities will continue as described in the Performance Monitoring Plan. The next monthly monitoring report for the June 2007 reporting period will be submitted by July 20, 2007.

Per DTSC direction, PG&E will continue to operate both TW-3D and PE-1 at a target combined pumping rate of 135 gpm during June 2007, except for periods when planned and unplanned downtime occurs. Treated groundwater will be discharged into the IM No. 3 injection wells in accordance with Waste Discharge Requirements Order No. R7-2006-0060. Brine generated as a byproduct of the treatment process will continue to be transported offsite.

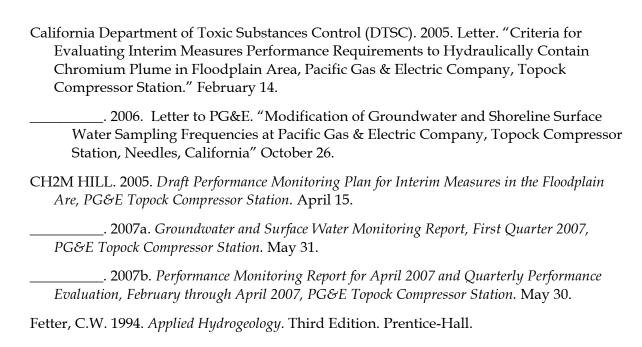
PG&E will continue to balance the pumping rates between wells TW-3D and PE-1 to maintain the target pumping rate and maintain appropriate hydraulic gradients across the Alluvial Aquifer. If, at any time, hydraulic data indicate that well PE-1 pumping has the potential to draw higher concentrations of chromium away from the capture zone of well TW-3D, PG&E will request authorization from DTSC to increase the pumping rate at TW-3D and decrease the rate at well PE-1. Extraction well TW-2D will continue serve as a backup extraction well to TW-3D and PE-1.

Current USBR projections show that the average Davis Dam release for June 2007 (16,000 cfs) will decrease slightly compared to May 2007 (16,199 cfs) (Table 4-1). Based on June 7, 2007 USBR projections, it is anticipated that the Colorado River level at the I-3 gauge location during June 2007 will be similar (0.1 ft lower) compared to the average river level in May 2007.

With the initiation of pumping from PE-1 (late January 2006) and expansion of the IM monitoring well network, new gradient control well pairs will be defined by DTSC to account for the more complex gradient caused by pumping at both TW-3D and PE-1. Modifications and updates to the IM performance monitoring program will be incorporated pending DTSC approval and direction.

BAO\071710003 5-1

6.0 References



BAO\071710003 6-1



TABLE 2-1 Pumping Rate and Extracted Volume for IM System through May 2007 Interim Measures Performance Monitoring PG&E Topock Compressor Station

	May 2007	Project To Date ^b			
Extraction Well	Average Pumping Rate ^c (gpm)	Volume Pumped (gal)	Cumulative Volume Pumped (gal)		
TW-2S	0	0	994,438		
TW-2D	0	0	53,015,001		
TW-3D	102.4	4,572,112	72,985,318		
PE-1	33.1	1,479,560	23,750,214		
Total	135.5	6,051,672	150,744,971		
	Volume Pumped from the	ne MW-20 Well Cluster	1,527,724		
	Total	Volume Pumped ^b (gal)	152,272,695		
	Total \	Total Volume Pumped (ac-ft)			

gpm: gallons per minute.

gal: gallons. ac-ft: acre-feet.

^a Pumping results during the monthly period are based on readings collected between May 1, 2007 at 12:00 a.m. and May 31, 2007 at 11:59 p.m. (31 days).

^b Interim Measure groundwater extraction at the Topock site was initiated in March 2004.

^cThe "Average Pumping Rate" is the overall average during the reporting period, including system downtime based on flow meter readings.

TABLE 2-2
Analytical Results for Extraction Wells, December 2006 through May 2007
Interim Measures Performance Monitoring
PG&E Topock Compressor Station

Well ID	Sample Date	Dissolved Total Chromium mg/L	Hexavalent Chromium mg/L	Total Dissolved Solids mg/L
TW-3D	06-Dec-06	2.09	2.50	5420
TW-3D	10-Jan-07	2.58	2.44	5520
TW-3D	06-Feb-07	2.31	2.40	5780
TW-3D	07-Mar-07	2.50	2.42	6040
* TW-3D/PE-1	04-Apr-07	1.25	1.63	5310
* TW-3D/PE-1	02-May-07	1.38	1.69	5480
PE-1	06-Dec-06	0.0858	0.0972	5650
PE-1	10-Jan-07	0.103	0.0889	5320
PE-1	06-Feb-07	0.0895	0.0808	5440
PE-1	07-Mar-07	0.091	0.0847	5500

NOTES:

mg/L = concentration in milligrams per liter

Analytical results from inactive extraction wells are presented in Table B-2.

Groundwater samples from active extraction wells are taken at sample taps in Valve Vault 1 on the MW-20 Bench.

^{*} Well specific samples were not collected in April and May 2007. Results are presented from samples that were obtained from a sample point (SC-100B) on the influent conveyance system at the IM3 treatment system. These samples were unfiltered.

TABLE 4-1Predicted and Actual Monthly Average Davis Dam Discharge and Colorado River Elevation at I-3
Interim Measures Performance Monitoring
PG&E Topock Compressor Station

	Davi	Davis Dam Release Colorado River Elevation at						
Month	Projected (cfs)	Actual (cfs)	Difference (cfs)	Predicted (ft AMSL)	Actual (ft AMSL)	Difference (feet)		
April 2004	17,400	17,354	-46	456.4	456.2	-0.2		
May 2004	17,100	16,788	-312	456.3	456.3	-0.1		
June 2004	15,800	16,869	1,069	455.8	456.6	0.7		
July 2004	14,000	14,951	951	455.2	455.9	0.7		
August 2004	12,100	12,000	-100	454.5	454.9	0.4		
September 2004	11,200	10,979	-221	454.2	454.6	0.4		
October 2004	8,600	7,538	-1,062	453.2	453.5	0.3		
November 2004	9,500	8,075	-1,425	453.6	453.4	-0.2		
December 2004	6,200	8,090	1,890	452.4	453.3	0.9		
January 2005	8,800	4,900	-3,900	453.4	452.4	-1.0		
February 2005	8,000	4,820	-3,180	453.1	452.6	-0.5		
March 2005	15,600	7,110	-8,490	455.8	452.9	-2.9		
April 2005	16,700	16,306	-394	455.9	456.0	0.1		
May 2005	16,700	15,579	-1,121	456.2	456.1	-0.1		
June 2005	14,600	15,223	623	455.8	456.1	0.3		
July 2005	15,400	15,612	212	456.0	456.0	0.0		
August 2005	11,700	11,544	-156	454.6	454.8	0.2		
September 2005	12,400	12,335	-65	454.6	NA	NA		
October 2005	12,300	11,201	-1,099	454.5	454.3	-0.2		
November 2005	10,900	10,216	-684	454.3	454.3	0		
December 2005	6,900	6,745	-155	452.8	452.7	-0.1		
January 2006	8,400	9,166	766	453.2	453.6	0.4		
February 2006	11,100	10,790	-310	454.1	454.1	0.1		
March 2006	13,000	12,429	-571	454.7	454.8	0.2		
April 2006	16,600	18,300	1700	456.0	456.1	0.0		
May 2006	15,500	16,818	1318	456.0	456.3	0.3		
June 2006	16,100	17,547	1447	456.2	456.4	0.2		
July 2006	14,700	15,171	-471	455.7	455.8	0.1		
August 2006	12,900	12,871	29	454.9	455.1	0.1		
September 2006	12,100	12,409	-309	454.7	454.7	0.0		
October 2006	11,400	11,150	250	454.1	454.4	0.3		
November 2006	8,300	8,222	78	452.9	453.3	0.4		
December 2006	8,100	8,823	-723	453.0	453.4	0.4		
January 2007	8,600	8,796	-196	453.2	453.6	0.4		
February 2007	9,800	11,680	-1,880	453.6	454.3	0.7		
March 2007	14,300	14,554	-254	455.1	455.6	0.5		
April 2007	17,300	16,818	482	456.4	456.4	0.0		
May 2007	16,800	16,199	601	456.5	456.4	-0.1		
June 2007	16,000	-,		456.3				

NOTES:

- 1) Predicted Colorado River elevations (river levels) at I-3 are based upon BOR projections for Davis Dam releases and Lake Havasu elevations from the preceding month, using a multiple regression between historical dam releases and measured river levels at I-3 (updated monthly). This data is reported monthly by the US Department of Interior, at http://www.usbr.gov/lc/region/g4000/24mo.pdf
- 2) Listed projections for April 2004 through July 2004 are from April 2004, and the remainder were from the beginning of each respective month.
- 3) The difference in I-3 elevation is the difference between the I-3 elevation predicted, and the actual elevation measured at I-3. The main source of this difference is differences between BOR projections and actual dam releases/Havasu reservoir levels, rather than the multiple regression error.
- 4) NA = I-3 transducer data unavailable for month of September 2005 due to damage by debris.
- 5) I-3 elevation for the month of October 2006 limited to average of data from 10/4/2006 through 10/31/2006.
- 6) cfs = cubic feet per second; ft AMSL = feet above mean sea level

TABLE 4-2Calculated Hydraulic Gradients for Well Pairs, May 2007
Interim Measures Performance Monitoring
PG&E Topock Compressor Station

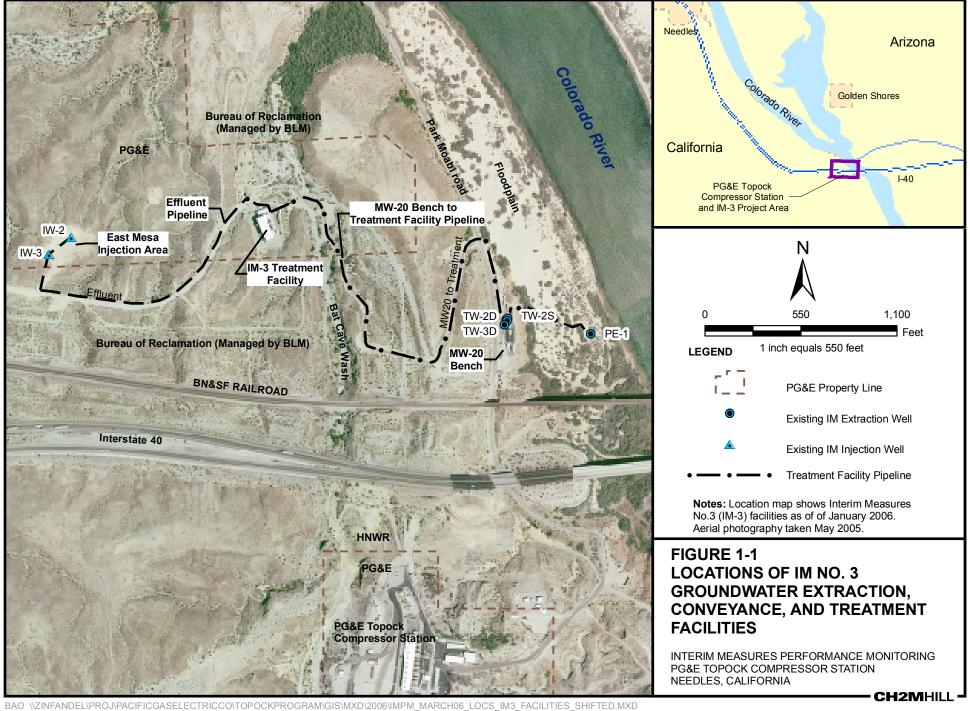
Well Pair ¹	Reporting Period	Mean Landward Hydraulic Gradient ² (feet/foot)	Measurement Interval 2007
Northern Gradient Pair			
MW-31-135 / MW-33-150	May	0.0024	May 1 through May 30
Central Gradient Pair			
MW-20-130 / MW-34-80	May	0.0042	May 1 through May 30
Southern Gradient Pair			
MW-20-130 / MW-42-65	May	0.0045	May 1 through May 30

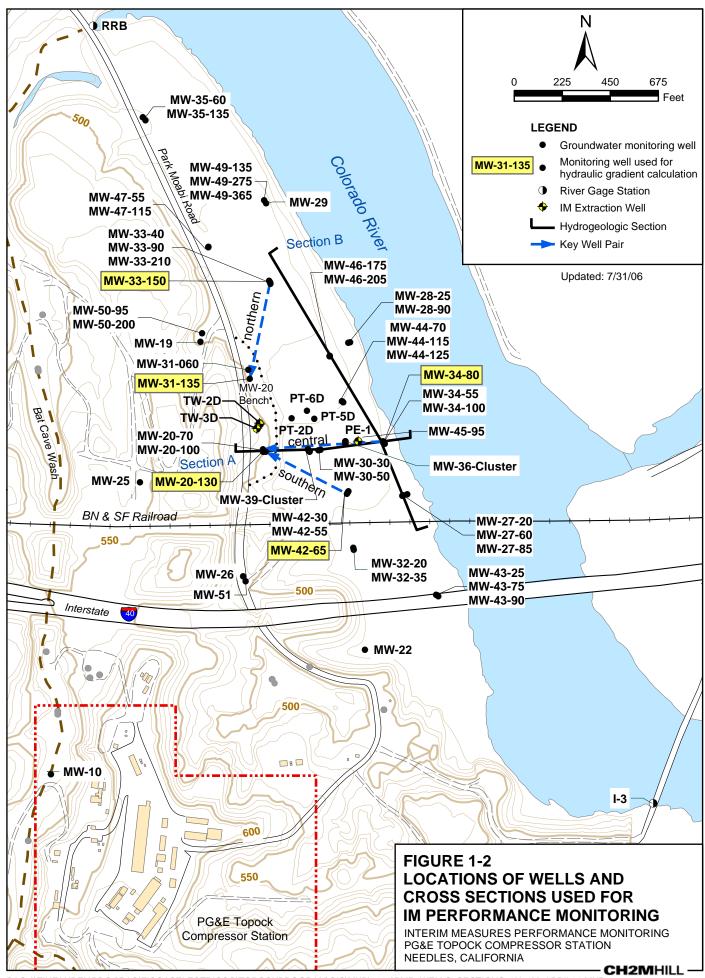
NOTES:

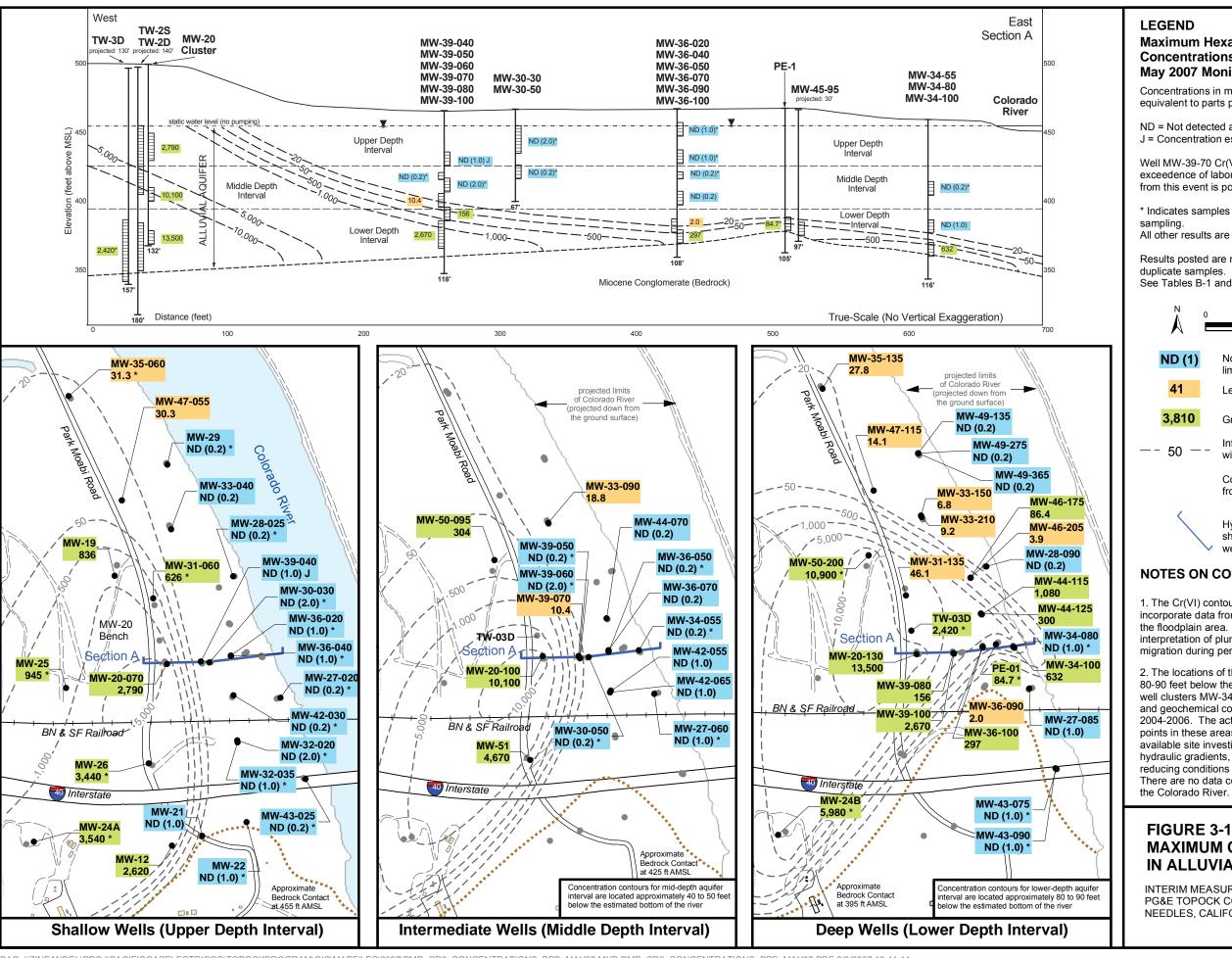
¹ Refer to Figure 1-2 for location of well pairs

² For IM pumping, the target landward gradient for the selected well pairs is 0.001 feet/foot Data collection for May reporting period began on May 30, 2007, so averages for May do not include data from May 31st.









Maximum Hexavalent Chromium [Cr(VI)] Concentrations in Groundwater, May 2007 Monitoring

Concentrations in micrograms per liter (µg/L) equivalent to parts per billion (ppb)

ND = Not detected at listed reporting limit

J = Concentration estimated by laboratory or data validation

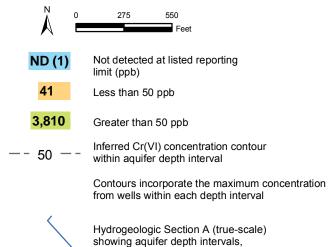
Well MW-39-70 Cr(VI) results for May 2007 were rejected due to exceedence of laboratory holding time. As a result, the Cr(T) result from this event is posted. This well was resampled on June 12, 2007.

* Indicates samples from March and April 2007 or October 2006

All other results are from the May 2007 quarterly sampling event.

Results posted are maximum concentrations from primary and duplicate samples.

See Tables B-1 and B-2 for sampling data and other results.



NOTES ON CONTOUR MAPS

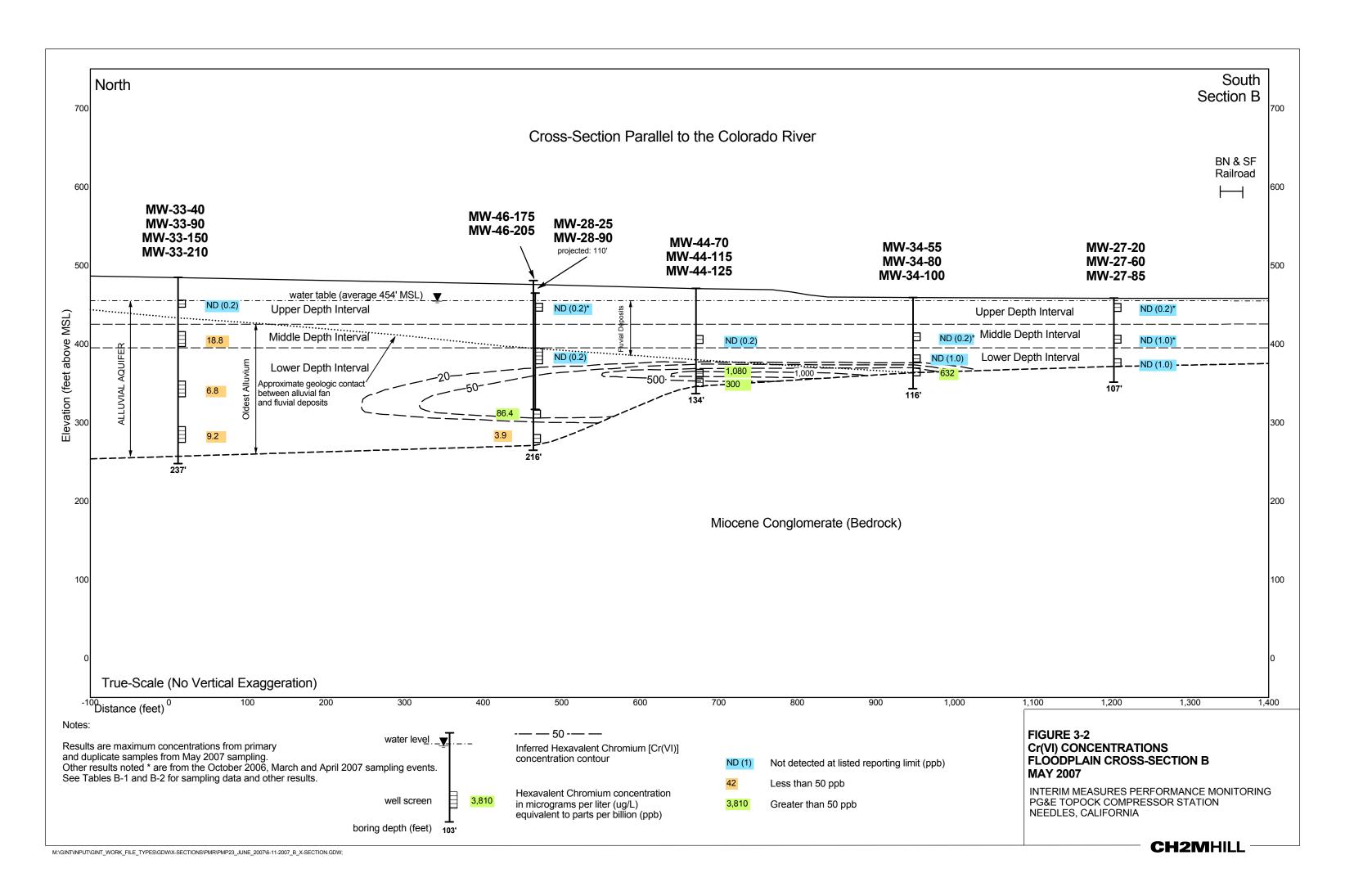
1. The Cr(VI) contour maps for 2006-2007 performance monitoring incorporate data from new wells and water quality data trends for the floodplain area. The contour maps provide additional interpretation of plume limits and do not reflect plume migration during performance monitoring

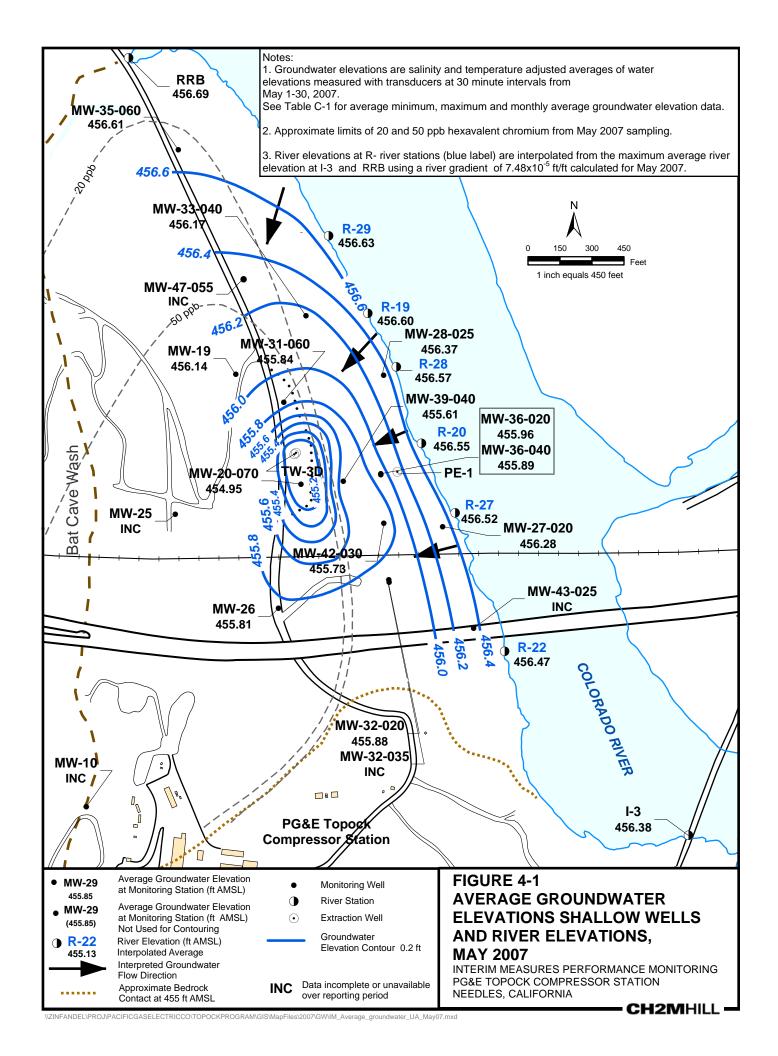
well screens, and Cr(VI) sampling results.

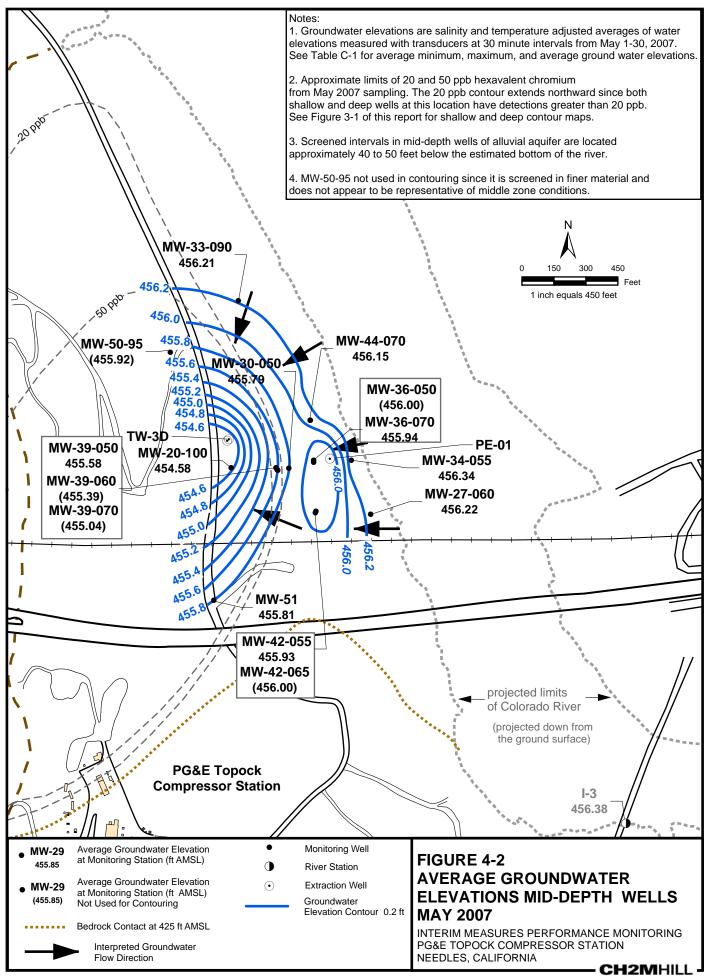
2. The locations of the Cr(VI) contours shown for depths 80-90 feet below the Colorardo River (east and southeast of well clusters MW-34) are estimated based on hydrogeologic and geochemical conditions documented in site investigations 2004-2006. The actual locations of contours beyond well control points in these areas are not certain, but are inferred using available site investigation and monitoring data (bedrock structure. hydraulic gradients, observed distribution of geochemically reducing conditions and Cr(VI) concentration gradients). There are no data confirming the existence of Cr(VI) under the Colorado River.

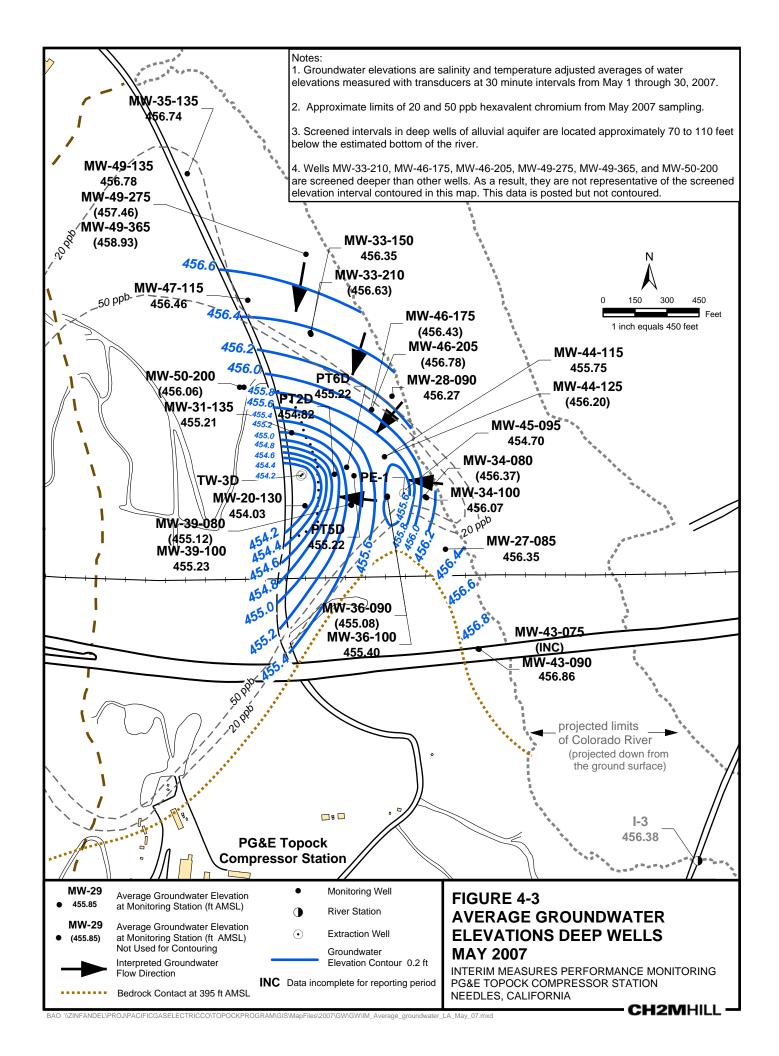
MAXIMUM CR(VI) CONCENTRATIONS IN ALLUVIAL AQUIFER, MAY 2007

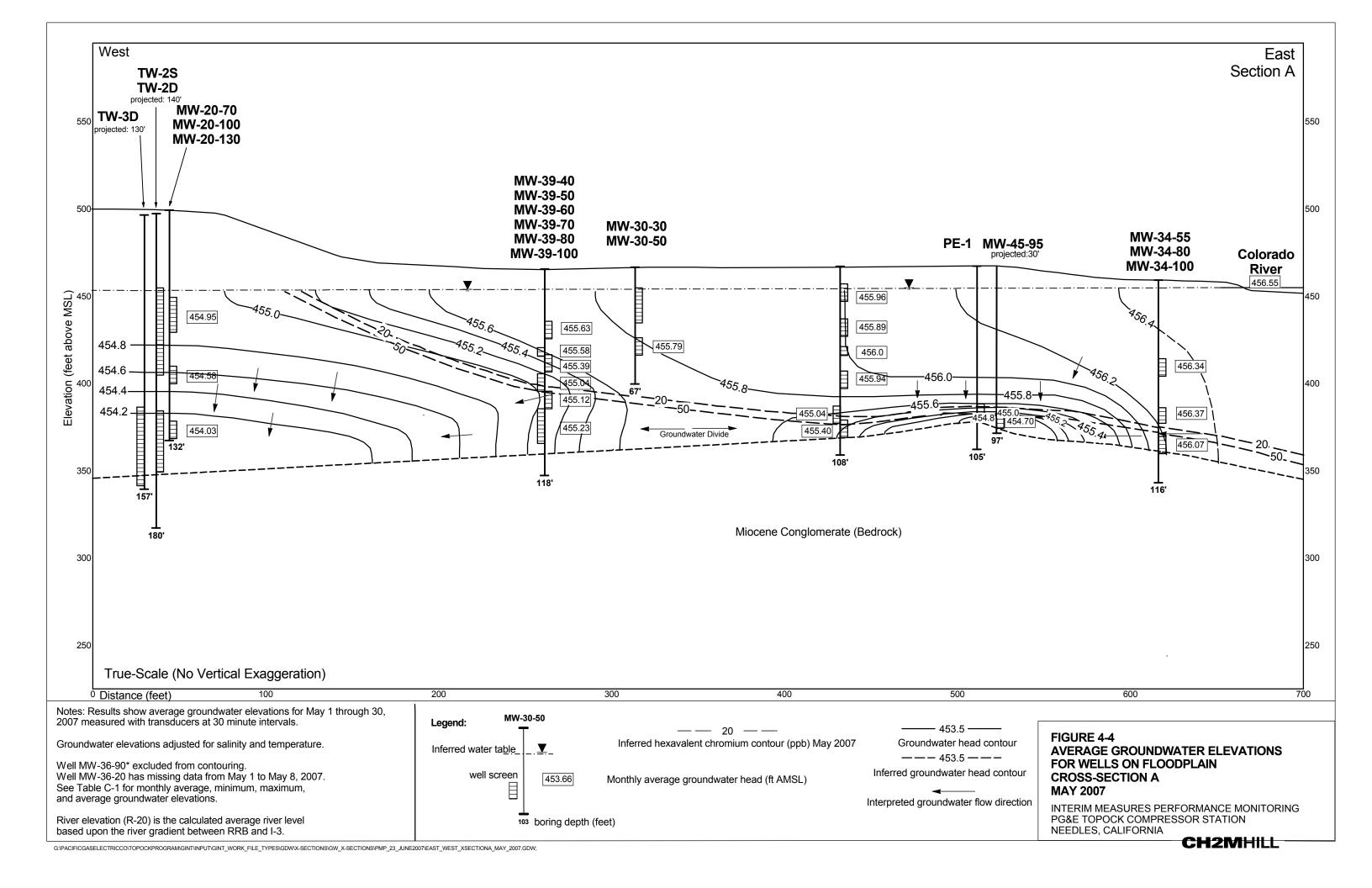
INTERIM MEASURES PERFORMANCE MONITORING PG&E TOPOCK COMPRESSOR STATION NEEDLES, CALIFORNIA











Appendix A
Extraction System Operations Log for
Reporting Period

Appendix A Extraction System Operations Log for May 2007 PG&E Topock Interim Measures Performance Monitoring Program

During May 2007, extraction wells TW-3D and PE-1 operated at a target pump rate of at 135 gallons per minute (gpm) excluding periods of planned and unplanned downtime. The operational run time for the IM groundwater extraction system (combined or individual pumping) was over 99 percent during the May 2007 reporting period.

The IM No. 3 facility treated approximately 6,051,672 gallons of extracted groundwater during May 2007. The IM No. 3 facility also treated approximately 9,730 gallons of water generated from the groundwater monitoring program; and approximately 4,800 gallons of water from Injection Well Development activities during May 2007. In addition, the IM No. 3 facility treated approximately 12,900 gallons of water during May that was produced during the IM No. 3 facility re-start activities, after the scheduled April 2007 maintenance shut-down. Two containers of solids (approximately 12 cubic yards each) were removed from the IM No. 3 facility during May 2007, and taken to an offsite facility.

Periods of planned and unplanned extraction system down time (that together resulted in less than 1 percent downtime during May 2007) are summarized below. The times shown are in Pacific Standard Time (PST) to be consistent with other data collected (e.g., water level data) at the site.

- May 1, 2007 (planned): The extraction well system was temporarily offline from 2:12 pm until 2:27 pm to collect a sample from TW-2D. Extraction system downtime was 15 minutes.
- May 2-3, 2007 (unplanned): The extraction well system was temporarily offline from 11:39 pm until 12:10 am due to a temporary power imbalance from the City of Needles power system. Extraction system downtime was 31 minutes.
- May 4, 2007 (unplanned): The extraction well system was temporarily offline from 3:16 pm until 3:28 pm due to a power imbalance from the City of Needles power system. The extraction system was transferred to generator power. Extraction system downtime was 12 minutes.
- May 5, 2007 (unplanned): The extraction well system was temporarily offline from 8:02 am until 8:12 am to monitor incoming City of Needles power. The extraction system was returned to generator power after the downtime. Extraction system downtime was 10 minutes.
- May 7, 2007 (unplanned): The extraction well system was temporarily offline from 1:03 am until 1:15 am to return facility operations to City of Needles power. Extraction system downtime was 12 minutes.
- May 16, 2007 (planned): The extraction well system was temporarily offline from 1:11 pm until 1:17 pm while changing microfilter module operation. Extraction system downtime was 6 minutes.

• May 22-23, 2007 (unplanned): The extraction well system was temporarily offline from 11:47 pm until 12:02 am to clean a flow switch (FSL-201). Extraction system downtime was 15 minutes.

Appendix B
Chromium Sampling Results for Monitoring
Wells in Floodplain Area

TABLE B-1
Groundwater Sampling Results for Floodplain Monitoring Wells, May 2006 through May 2007
Interim Measures Performance Monitoring
PG&E Topock Compressor Station

	Sample Date		Dissolved	Sel	ected Field	d Parameters	Groundwate Elevations at S	
		Hexavalent Chromium µg/L	Total Chromium µg/L	ORP mV	Dissolved Oxygen mg/L	d Specific Conductance µS/cm	Groundwater Elevation salinity-adjusted feet MSL	River Elevation Downstream I-3 Station
Shallow Wel	Is							
MW-27-020	01-May-06	ND (0.2)	ND (1.0)		2.5	1,510	455.4	454.7
	03-Oct-06	ND (0.2)	ND (1.0)	-176	0.5	1,240	455.0	М
MW-28-025	05-May-06	ND (0.2)	ND (1.0)	-126	0.8	1,260	456.3	455.8
	11-Oct-06	ND (0.2)	ND (1.0)	-111	1.5	1,860	454.4	453.7
MW-29	05-May-06	ND (0.2)	ND (1.0)	-128	1.3	4,430	456.0	455.4
=0	13-Oct-06	ND (0.2)	ND (1.0)	-56	5.3	4,770	454.9	455.0
MW-30-030	02-May-06	ND (2.0)	ND (1.0)	-104	2.4	54,600	455.3	455.7
10100-30-030	10-Oct-06	ND (2.0)	ND (1.0) ND (1.0)	-104	1.4	54,600 56,500	455.3 454.3	453. <i>1</i> 453.6
MW-32-020	04-May-06	ND (1.0)	ND (1.0)	-120	0.4	25,500	455.5	454.9
	02-Oct-06	ND (5.0)	ND (1.0)	-122	0.9	59,800	454.5	M
	11-Dec-06	ND (2.0)	ND (1.0)	-110	1.8	61,300	453.8	455.4
	06-Mar-07 30-Apr-07	ND (2.0)	ND (1.0)	-84	0.1	39,700	454.5 456.0	454.7 456.0
	'	ND (2.0)	ND (1.0)	-165	4.6	34,900		
MW-32-035	04-May-06	ND (1.0)	ND (1.0)	-171	0.3	16,500	455.7	455.1
	02-Oct-06	ND (1.0)	ND (1.0)	-162	0.7	20,000	454.5	M
	11-Dec-06	ND (1.0)	ND (1.0)	-149	1.5	23,700	454.2	455.4
	06-Mar-07	ND (1.0)	ND (1.0)	-66	0.0	14,800	454.7	454.7
	30-Apr-07	ND (1.0)	ND (1.0)	-158	3.8	23,500	456.0	456.0
MW-33-040	04-May-06	ND (0.2)	ND (1.0) LF	12	5.3	4,580	455.5	454.8
	06-Oct-06	ND (0.2)	ND (1.0)	167		6,710	455.2	455.0
	14-Dec-06	ND (0.2)	1.20	31	2.8	7,080	454.0	453.2
	06-Mar-07	ND (0.2)	ND (1.0)		1.7	27,000	454.9	454.7
	02-May-07	ND (0.2)	ND (1.0)	-16	0.6	20,200	456.5	456.5
MW-36-020	01-May-06	ND (1.0)	ND (1.0)	-180	5.3	20,100	455.6	456.0
	02-Oct-06	ND (1.0)	ND (1.0)	-177	1.8	24,000	454.6	М
MW-36-040	01-May-06	ND (1.0)	ND (1.0)	-179	5.1	13,500	455.3	455.0
	05-Oct-06	ND (1.0)	ND (1.0)	-194	1.4	16,000	454.2	455.0
MW-39-040	02-May-06	ND (1.0)	ND (1.0)	-188	0.1	8,150	455.7	456.4
10100-33-040	05-Oct-06	ND (0.2)	ND (1.0)	-198	1.4	12,500	454.1	454.0
	14-Dec-06	ND (1.0)	ND (1.0)	-174	1.7	13,200	453.4	453.1
	05-Mar-07	ND (1.0)	ND (1.0)	-55		8,770	454.5	455.1
	03-May-07	ND (1.0) J	ND (1.0)	-195	2.0	23,400	456.2	456.8
NAV 40 000								
MW-42-030	02-May-06	ND (1.0)	ND (1.0)	-160	2.3	18,500	455.3	455.2
	03-Oct-06	ND (1.0) ND (0.2)	ND (1.0)	-160 -100	0.9	19,700 14,400	454.4 454.2	M 454.5
	07-Mar-07	<u> </u>	ND (1.0)	-109	0.0	14,400	454.2	
MW-43-025	04-May-06	ND (0.2)	ND (1.0)	-176	0.4	1,280	456.2	455.4
	02-Oct-06	ND (0.2)	ND (1.0)	-172	0.6	1,310	454.8	M
	06-Mar-07	ND (0.2)	ND (1.0)	-168	0.0	6,410	455.0	454.8
Middle-Dept	h Wells							
MW-27-060	01-May-06	ND (1.0)	ND (1.0)	-140	1.0	12,100	455.7	455.1

TABLE B-1
Groundwater Sampling Results for Floodplain Monitoring Wells, May 2006 through May 2007
Interim Measures Performance Monitoring
PG&E Topock Compressor Station

	Sample Date		Dissolved	Sel	ected Field	l Parameters	Groundwate Elevations at S	
		Hexavalent Chromium µg/L	Total Chromium µg/L	ORP mV		d Specific Conductance μS/cm	Groundwater Elevation salinity-adjusted feet MSL	River Elevation Downstream I-3 Station
Middle-Dept	h Wells							
MW-27-060	03-Oct-06	ND (1.0)	ND (1.0)	-122	0.8	14,300	455.0	М
MW-30-050	02-May-06	ND (1.0)	ND (1.0)	-102	2.8	14,300	455.5	456.1
	11-Oct-06	ND (0.2)	ND (1.0)	-113	0.8	8,280	454.4	454.6
	11-Oct-06 FD	ND (0.2)	ND (1.0)	FD	FD	FD	FD	FD
MW-33-090	03-May-06	16.1	16.4	-44	0.4	10,400	455.4	454.7
	03-May-06 FD	19.3	15.3	FD	FD	FD	FD	FD
	06-Oct-06	17.3	20.9	110	0.9	12,500	455.2	454.5
	15-Dec-06	17.8 J	13.8	110	1.7	14,600	453.8	453.6
	15-Dec-06 FD	2.30 R	13.5	FD	FD	FD	FD	FD
	12-Mar-07	17.1	18.0	97	0.4	11,600	454.9	454.5
	02-May-07	18.8	16.8	18	0.0	16,000	456.4	456.2
MW-34-055	-		ND (1.0)	-117			456.2	456.0
10100-34-055	03-May-06 04-Oct-06	ND (0.2)	` '		0.3	7,580		
		ND (0.2)	ND (1.0)	-178	2.2	3,080	455.0	453.9
MW-36-050	01-May-06	ND (0.2)	ND (1.0)	-162	3.6	6,810	454.8	454.7
	05-Oct-06	ND (0.2)	ND (1.0)	-165	1.4	4,200	454.9	455.1
MW-36-070	01-May-06	ND (1.0)	ND (1.0)	-130	4.6	8,180	455.6	455.4
	13-Jun-06	ND (0.2) J	ND (1.0)			7,840	456.0	455.9
	11-Jul-06	ND (1.0)	ND (1.0)	-108	0.6	7,320	455.3	454.8
	09-Aug-06	ND (0.2)	ND (1.0)	-149	0.7	6,920	455.2	455.4
	07-Sep-06	ND (0.2)	ND (1.0)	-105	1.7	5,930	455.0	455.5
	02-Oct-06	ND (0.2)	ND (1.0)	-122	1.4	5,220	454.5	M
	14-Dec-06	ND (0.2)	ND (1.0) LF	-112	1.8	3,440	453.2	453.3
	07-Mar-07	ND (0.2)	ND (1.0)	-128	0.5	3,000	454.6	454.5
	01-May-07	ND (0.2)	ND (1.0)	-144	1.7	2,530	455.6	455.2
MW-39-050	02-May-06	ND (1.0)	ND (1.0)	-45	0.2	9,380	455.3	455.3
	05-Oct-06	ND (0.2)	ND (1.0)	-77	1.4	11,200	454.2	454.2
MW-39-060	02-May-06	1.10	1.40	-39	0.2	12,000	455.1	454.8
	05-Oct-06	ND (1.0)	ND (1.0)	-54	1.2	11,300	454.1	454.5
	05-Oct-06 FD	ND (2.0)	ND (1.0)	FD	FD	FD	FD	FD
MW 20 070		137	123			11,200	454.9	
MW-39-070	02-May-06 14-Jun-06	137 107 J	94.6	31 197	0.2 0.0	10,300	454.9 455.8	455.7 457.0
	12-Jul-06	77.0 J	94.6 66.7	74	0.9	9,570	455.6 455.0	457.0 456.4
	10-Aug-06	89.6	86.2	67	0.6	9,370	454.6	456.0
	07-Sep-06	155	153	21	1.7	9,760	454.9	454.7
	07-Sep-06 05-Oct-06	112	103	-1	1.7	12,200	454.9 453.6	454.7 453.9
	14-Dec-06	101	94.0	2	1.8	8,190	453.8	453.2
	05-Mar-07	35.0	37.2	219		8,310	453.6	455.1
	03-May-07	10.1 R	10.4	-18	2.1	16,700	455.5	456.6
NAVA 40 055	,							
MW-42-055	02-May-06	ND (1.0)	ND (1.0)	-138	2.2	21,400	456.1	455.0
	03-Oct-06	ND (1.0)	ND (1.0)	-126	0.8	19,100 16,500	454.4 453.7	M 452.2
	14-Dec-06	ND (2.0)	ND (1.0)	-132	0.5	16,500	453.7	453.3

TABLE B-1
Groundwater Sampling Results for Floodplain Monitoring Wells, May 2006 through May 2007
Interim Measures Performance Monitoring
PG&E Topock Compressor Station

	Sample Date		Dissolved	Sel	ected Field	Parameters	Groundwate Elevations at S	
		Hexavalent Chromium µg/L		ORP mV	Dissolved Oxygen (mg/L	Specific Conductance µS/cm	Groundwater Elevation salinity-adjusted feet MSL	River Elevation Downstream I-3 Station
Middle-Dept	h Wells							
MW-42-055	07-Mar-07	ND (0.2)	ND (1.0)	-62	0.0	17,700	454.4	454.5
	07-Mar-07 FD	ND (0.2)	ND (1.0)	FD	FD	FD	FD	FD
	01-May-07	ND (1.0)	ND (1.0)	-139	1.5	14,900	456.0	455.6
MW-42-065	02-May-06	ND (1.0)	ND (1.0)	-76	2.2	25,400	455.3	454.6
	03-Oct-06	ND (1.0)	ND (1.0)	-50	0.7	20,400	454.4	М
	14-Dec-06	ND (2.0)	ND (1.0)	-42	0.6	18,300	453.8	453.4
	07-Mar-07	ND (0.2)	ND (1.0)		0.0	18,500	454.4	454.5
	01-May-07	ND (1.0)	ND (1.0)	-60	7.7	15,800	456.3	455.7
MW-44-070	04-May-06	ND (1.0)	ND (1.0)	-156	4.5	10,000	455.6	455.3
	13-Jun-06	ND (1.0)	ND (1.0)	-131	4.3	12,200	456.3	456.1
	13-Jun-06 FD	ND (1.0)	ND (1.0)	FD	FD	FD	FD	FD
	15-Jun-06	ND (1.0)	ND (1.0)	-118	5.4	14,900	456.4	456.8
	04-Oct-06	ND (1.0)	ND (1.0)	-181	2.3	8,910	454.0	453.8
	14-Dec-06	ND (1.0)	ND (1.0)	-129	1.7	6,730	453.6	453.6
	09-Mar-07	ND (1.0)	ND (1.0)	-144	0.0	8,700	454.8	455.1
	03-May-07	ND (0.2)	ND (1.0)	-150	2.4	13,400	456.0	455.5
Deep Wells								
MW-27-085	01-May-06	ND (1.0)	ND (1.0)	-104	0.9	18,300	455.3	454.7
	14-Jun-06	ND (1.0)	ND (1.0)	-98	3.3	22,400	456.5	456.3
	12-Jul-06	ND (2.0)	ND (1.0)	-71	2.2	21,400	456.4	456.8
	08-Aug-06	ND (1.0)	ND (1.0)	-33	2.7	22,900	454.9	456.2
	06-Sep-06	ND (1.0)	ND (1.0)	-87	2.4	23,200	454.8	454.4
	13-Oct-06	ND (1.0)	ND (1.0)	-78	1.1	24,100	454.0	454.2
	16-Nov-06	ND (1.0)	ND (1.0)	-87	1.2	23,400	453.1	452.8
	11-Dec-06	ND (1.0)	ND (1.0)	-82	1.3	26,700	455.0	455.8
	10-Jan-07	ND (1.0)	4.40	-61	0.3	18,640	453.6	453.7
	06-Feb-07	ND (1.0)	ND (1.0)	-47	0.1	23,100	453.6	453.5
	07-Mar-07	ND (0.2)	ND (1.0)	-80	0.2		454.8	454.5
	03-Apr-07	ND (1.0)	ND (1.0)	-97	2.2	23,100	455.7	455.7
	01-May-07	ND (1.0)	1.00	-69	0.4	20,800	456.9	456.4
MW-28-090	05-May-06	ND (1.0)	ND (1.0)	-150	0.8	8,690	456.0	456.2
	15-Jun-06	ND (1.0)	ND (1.0)	-153	3.9	7,980	456.5	456.5
	13-Jul-06	ND (1.0) J	ND (1.0)	-150	1.6		456.7	457.1
	11-Aug-06	ND (0.2)	ND (1.0)	-159	0.6	12,300	456.1	456.5
	08-Sep-06	ND (0.2)	ND (1.0)	-133	3.2	7,830	454.3	454.1
	13-Oct-06	ND (0.2)	ND (1.0)	-156	1.0	9,700	454.8	454.9
	14-Dec-06	ND (1.0)	ND (1.0)	-160	0.3	7,590	453.7	453.7
	08-Mar-07	ND (1.0)	ND (1.0)	-154	4.1	6,910	454.7	454.7
	04-May-07	ND (0.2)	ND (1.0)	-156	0.2	7,492	456.9	456.8
MW-33-150	03-May-06	6.60	5.50	-23	1.0	17,100	455.5	454.5
	16-Jun-06	5.50	5.40	38	2.8	21,300	456.7	457.1
	13-Jul-06	7.40 J	6.70	-14	1.1	22,400	456.3	456.5

TABLE B-1
Groundwater Sampling Results for Floodplain Monitoring Wells, May 2006 through May 2007
Interim Measures Performance Monitoring
PG&E Topock Compressor Station

	Sample Date		Dissolved	Sel	ected Field	Parameters	Groundwate Elevations at S	
		Hexavalent Chromium µg/L	Total Chromium µg/L	ORP mV	Dissolved Oxygen (mg/L	Specific Conductance µS/cm	Groundwater Elevation salinity-adjusted feet MSL	River Elevation Downstream I-3 Station
Deep Wells								
MW-33-150	11-Aug-06	9.30	8.10	-19	1.8	20,200	456.1	456.4
	08-Sep-06	7.40	4.10	28	1.8	17,900	454.9	454.3
	06-Oct-06	7.70	5.70	15	0.9	20,500	454.9	454.0
	13-Dec-06	10.8	9.80	-5	0.4	17,500	454.1	453.8
	06-Mar-07	6.90	7.00	37	0.0		455.0	454.7
	02-May-07	6.80	6.10	-65	0.9	31,200	456.2	456.0
MW-33-210	05-May-06	10.0	8.80	34	0.4	20,100	456.5	456.5
	16-Jun-06	9.20	8.30	-27	2.9	23,600	456.8	456.9
	13-Jul-06	10.0 J	7.50	36	2.2	27,100	456.7	456.8
	08-Aug-06	9.80	8.70	70	3.1	23,900	455.8	454.8
	08-Sep-06	9.20	4.90	59	1.7	21,000	455.4	454.4
	06-Oct-06	10.2	10.0	28	0.9	24,000	455.4	454.2
	11-Dec-06	11.1	8.00	157	1.2	27,600	455.1	455.9
	05-Mar-07	11.2	11.0	-2	0.3		455.7	455.0
	02-May-07	9.20	9.30	-52	0.2	23,700	456.6	456.0
MW-34-080	03-May-06	ND (1.0)	ND (1.0)	-68	0.2	13,800	456.4	455.3
1000	14-Jun-06	ND (1.0)	ND (1.0)	-99	2.7	15,600	457.0	456.8
	12-Jul-06	ND (1.0)	ND (1.0)	-75	1.6	14,800	456.3	456.3
	08-Aug-06	ND (1.0)	ND (1.0)	-33	0.6	16,200	455.6	455.4
	06-Sep-06	ND (1.0)	ND (1.0)	-84	0.9	16,000	454.9	454.7
	04-Oct-06	ND (1.0)	ND (1.0)	-111	2.1	14,400	453.7	453.9
	16-Nov-06	ND (1.0)	ND (1.0)	-86	1.1	13,200	453.0	452.6
	12-Dec-06	ND (1.0)	ND (1.0)	-23	0.3	15,000	454.5	454.6
	09-Jan-07	ND (1.0)	3.20	-36	0.3	14,300	453.5	453.6
	05-Feb-07	ND (1.0)	ND (1.0)	-51	0.2	10,300	453.6	453.5
	05-Mar-07	ND (1.0)	ND (1.0)	-54	0.2	24,800	455.2	455.1
	02-Apr-07	ND (0.2)	ND (1.0)	-89	0.0	10,800	455.7	455.0
	30-Apr-07	ND (1.0)	1.10	-121	0.1	9,000	456.2	456.0
MW-34-100	· ·	900	946	-10	0.3	18,200	455.3	454.8
10100-34-100	03-May-06 03-May-06 FD	920	946	FD	FD	FD	455.5 FD	454.6 FD
	17-May-06	935	1180	44	3.1	23,800	455.5	455.2
	17-May-06 FD	930	1190	FD	FD	23,800 FD	435.3 FD	455.2 FD
	31-May-06	960	929	104	3.1	16,100	456.7	456.3
	14-Jun-06	922	839	-2	3.2	20,800	456.6	456.6
	14-Jun-06 FD	921	864	FD	FD	20,000 FD	430.0 FD	430.0 FD
	28-Jun-06	976	1130	132	5.0	21,800	456.3	456.6
	12-Jul-06	823 J	851	27	1.5	19,300	456.1	456.6
	12-Jul-06 12-Jul-06 FD	828 J	864	FD	FD	19,300 FD	456.1 FD	456.6 FD
	26-Jul-06	859	955	36	2.2		456.3	456.7
	08-Aug-06	889	982	64	0.5	20,600	455.6	456.7 455.9
	28-Aug-06	922	945	69	1.3	28,900	453.8 453.8	453.9 453.6
	06-Sep-06	922 844	963	117	1.9	22,500	453.8 454.9	453.6 454.9
	06-Sep-06 FD	797	907	FD	FD	22,500 FD	454.9 FD	454.9 FD

TABLE B-1
Groundwater Sampling Results for Floodplain Monitoring Wells, May 2006 through May 2007
Interim Measures Performance Monitoring
PG&E Topock Compressor Station

			Dissolved	Sel	ected Field	Parameters	Groundwate Elevations at S	
	Sample Date	Hexavalent Chromium µg/L	Total Chromium µg/L	ORP mV	Dissolved Oxygen (mg/L	Specific Conductance µS/cm	Groundwater Elevation salinity-adjusted feet MSL	River Elevation Downstream I-3 Station
Deep Wells								
MW-34-100	20-Sep-06	872	984	181	1.5	19,600	454.2	М
	04-Oct-06	910	889	0	2.0	20,700	454.5	453.9
	18-Oct-06	815	920	52	8.0	21,700	453.9	453.9
	01-Nov-06	832	752	33	1.6	20,200	453.9	453.5
	16-Nov-06	777	801	146	1.4	20,500	452.9	453.0
	30-Nov-06	744	712	115	0.9	21,900	452.4	452.2
	12-Dec-06	851	625 J	-16	0.3	21,000	454.1	454.5
	28-Dec-06	723	603	115		16,760	453.2	452.7
	09-Jan-07	797	830	52	0.2		453.2	453.6
	24-Jan-07	832	817	129	0.3	17,700	453.4	453.3
	05-Feb-07	780	646	-28	0.2	26,800	453.3	453.5
	05-Feb-07 FD	764	634	FD	FD	FD	FD	FD
	21-Feb-07	804	895	37	0.2	39,100	454.5	454.6
	07-Mar-07	806	788	71	0.2	37,800	454.5	454.6
	21-Mar-07	724	642	67	0.0	20,000	455.0	455.5
	02-Apr-07	749	786	9	0.0	22,800	455.1	455.1
	02-Apr-07 FD	720	800	FD	FD	FD	FD	FD
	18-Apr-07	687	641	114	0.0	18,100	456.2	456.4
	30-Apr-07	626	590	22	2.1	12,400	456.0	456.0
	30-Apr-07 FD	632	599	FD	FD	FD	FD	FD
	16-May-07	588	573	55	1.5	38,400	456.3	456.2
	30-May-07	597	656	76	1.9	33,500	456.4	456.2
MW-36-090	01-May-06	22.8	18.3	24	4.4	11,400	454.1	454.6
	13-Jun-06	10.9	9.00			10,300	455.4	456.4
	11-Jul-06	12.2	11.1	-34	0.8	14,000	454.2	455.3
	09-Aug-06	9.00	8.20	-96	0.8	9,190	454.7	455.9
	07-Sep-06	8.80	7.70	-55	1.7	8,400	454.7	455.4
	02-Oct-06	9.00	8.50	-20	1.0	8,270	453.6	М
	02-Oct-06 FD	8.90	10.8	FD	FD	FD	FD	FD
	15-Nov-06	ND (1.0)	2.40	-64	1.0	11,700	452.4	453.6
	14-Dec-06	3.80 J	5.80 J	-39	1.7	7,250	453.6	453.4
	14-Dec-06 FD	4.00	3.00 J	FD	FD	FD	FD	FD
	10-Jan-07	6.00	9.70	-83	0.2	7,743	452.4	453.7
	05-Feb-07	5.40	4.90	-28	0.2	10,100	452.4	453.5
	07-Mar-07	3.10	3.70	28	0.4	7,470	453.7	454.5
	03-Apr-07	2.90	3.20	-17	2.2	6,970	454.8	455.5
	02-May-07	2.00	1.80	-35	0.0	7,580	455.8	457.0
	02-May-07 FD	1.90	1.80	FD	FD	FD	FD	FD
MW-36-100	02-May-06	532	517	23	2.7	21,900	454.5	454.8
	15-Jun-06	496 J	465	7	3.6	18,200	455.5	456.2
	13-Jul-06	528	497	37	1.0	19,600	455.8	457.5
	09-Aug-06	551	474	67	1.6	14,600	455.1	456.3
	08-Sep-06	556	561	-10	2.6	16,200	453.5	454.0
	11-Oct-06	556	629	17	0.9	16,500	453.8	453.8

TABLE B-1
Groundwater Sampling Results for Floodplain Monitoring Wells, May 2006 through May 2007
Interim Measures Performance Monitoring
PG&E Topock Compressor Station

			Dissolved	Sel	ected Field	Parameters	Groundwate Elevations at S	
	Sample Date	Hexavalent Chromium µg/L	Total Chromium µg/L	ORP mV	Dissolved Oxygen (mg/L	Specific Conductance µS/cm	Groundwater Elevation salinity-adjusted feet MSL	River Elevation Downstream I-3 Station
Deep Wells								
MW-36-100	14-Nov-06	657	764	13	1.0	17,900	452.6	453.1
	11-Dec-06	586	513	-64	1.1	21,700	453.8	455.7
	10-Jan-07	571	554	-55	0.3	20,300	452.8	453.7
	05-Feb-07	538	474	-66	0.2	23,800	452.7	453.5
	08-Mar-07	436	454	-62	3.7	15,700	453.8	454.7
	02-Apr-07	366	378	-58	0.0	16,600	454.4	455.3
	02-May-07	297	348	-51	0.0	16,100	455.8	456.8
MW-39-080	02-May-06	1410	1450	61	0.2	14,900	454.9	455.0
	14-Jun-06	1000 J	934	184	0.0	15,100	455.9	456.8
	12-Jul-06	830 J	750	69	1.1	14,600	455.2	456.8
	10-Aug-06	481	447	78	0.6	15,800	454.5	455.4
	07-Sep-06	1160	1160	47	1.6	17,500	455.2	454.5
	05-Oct-06	580	594	76	1.2	19,500	454.3	454.3
	15-Nov-06	339	422	52	0.9	17,600	452.7	453.5
	14-Dec-06	326	272	44	1.7	17,300	453.9	453.2
	10-Jan-07	302	292		0.2	13,900	452.7	453.7
	08-Feb-07	286	247	105	0.3	24,600	452.1	452.3
	05-Mar-07	151	144	269		10,800	453.9	455.0
	04-Apr-07	112	126	157	0.0	13,400	455.3	456.8
	03-May-07	156	146	59	1.9	25,300	455.5	456.5
MW-39-100	02-May-06	3680	3480	67	3.5		454.6	454.7
	14-Jun-06	3270	3250	79	3.4	23,100	455.9	455.7
	13-Jul-06	3790	3470	80	1.5	26,200	455.7	457.4
	10-Aug-06	3230	3440	141	1.6	23,000	455.0	456.0
	10-Aug-06 FD	3170	3410	FD	FD	FD	FD	FD
	08-Sep-06	3290	3780	46	2.8	20,700	453.8	453.9
	11-Oct-06	3370	3500	87	1.2	23,100	454.5	454.4
	15-Nov-06	2850	3190	96	2.5	23,000	453.0	453.2
	15-Nov-06 FD	2960	3060	FD	FD	FD	FD	FD
	12-Dec-06	3820	3350	95	0.4	24,200	453.6	454.5
	10-Jan-07	2930	2560	75	0.5	19,570	452.9	453.7
	08-Feb-07	2880	2400	74	0.3		452.4	452.3
	12-Mar-07	2850	2770	139	0.7	20,800	455.1	454.5
	04-Apr-07	3190	2990	170	2.7	25,000	455.5	456.9
	03-May-07	2670	2920	102	1.9		455.6	456.1
MW-43-075	04-May-06	ND (1.0)	ND (1.0)	-167	0.3	15,400	456.7	456.1
	02-Oct-06	ND (1.0)	ND (1.0)	-128	1.2	17,900	454.3	М
	12-Dec-06	ND (1.0)	ND (1.0)	-109	1.2	17,400	454.7	454.7
	06-Mar-07	ND (1.0)	ND (1.0)	-151	0.0		455.4	454.9
	30-Apr-07	ND (1.0)	ND (1.0)	-213	0.0	12,000	457.0	456.4
MW-43-090	04-May-06	ND (1.0)	ND (1.0)	-124	0.4	22,400	456.7	455.9
	02-Oct-06	ND (1.0)	ND (1.0)	-108	0.4	23,600	455.3	M
	12-Dec-06	ND (1.0)	ND (1.0)	-85	0.5	25,200	454.9	454.7

Refer to table footnotes for data qualifier explanation.

TABLE B-1
Groundwater Sampling Results for Floodplain Monitoring Wells, May 2006 through May 2007
Interim Measures Performance Monitoring
PG&E Topock Compressor Station

_			Dissolved	Sel	ected Field	Parameters	Groundwater and River Elevations at Sampling Time	
	Sample Date	Hexavalent Chromium µg/L	Total Chromium µg/L	ORP mV	Dissolved Oxygen (mg/L	Specific Conductance µS/cm	Groundwater Elevation salinity-adjusted feet MSL	River Elevation Downstream I-3 Station
Deep Wells								
MW-43-090	06-Mar-07	ND (1.0)	ND (1.0)	-97	0.0	37,300	455.7	455.0
	30-Apr-07	ND (1.0)	ND (1.0)	-150	1.4	14,000	457.3	456.2
MW-44-115	04-May-06	1710	1870	-21	4.9	17,300	455.1	454.8
	10-May-06	1490	1550	7	2.2	22,700	455.1	454.7
	17-May-06	1560	1880	-10	1.9	19,600	455.7	456.1
	31-May-06	1610	1580	-11	0.2	13,100	455.2	455.5
	31-May-06 FD	1610	1600	FD	FD	FD	FD	FD
	13-Jun-06	1420	1350	-26	3.3	17,700	455.7	455.9
	28-Jun-06	1600	1830	-37	4.0	16,800	455.7	456.5
	12-Jul-06	1700 J	1430	14	1.2	17,300	455.4	455.9
	26-Jul-06	1290	1530	-31	0.6		455.6	455.9
	09-Aug-06	1230	1460 LF	63	2.9	17,700	455.1	455.3
	23-Aug-06	1370	1440	93	0.6	16,800	454.8	455.0
	07-Sep-06	1380	1340	139	1.7	15,600	454.9	455.5
	21-Sep-06	911	1180	57	2.7	14,600	454.5	М
	05-Oct-06	1300	1310	3	2.9	18,400	454.7	454.4
	18-Oct-06	1250	1380	23	0.8	18,300	454.1	454.5
	15-Nov-06	1210	1480	19	1.5	14,000	453.1	453.5
	12-Dec-06	1310	1090	116	0.6	18,300	453.8	454.4
	09-Jan-07	1140	1260	-34	0.2	20,400	453.1	453.6
	06-Feb-07	1140	1020	-53	0.2	25,200	453.1	453.5
	09-Mar-07	1210	1340 LF	-33	0.1		454.4	455.1
	09-Mar-07 FD	1200	1340	FD	FD	FD	FD	FD
	02-Apr-07	1210	1420	-2	0.0	18,100	454.8	455.2
	04-May-07	1080	1190	-61	0.2	13,366	456.2	456.5
MW-44-125	04-May-06	584	592	-144	4.4	17,200	456.1	455.4
10100-44-125	10-May-06	634 J	667	-96	2.2	23,000	455.8	454.9
	17-May-06	612	740	-103	1.7	19,700	456.3	456.1
	31-May-06	413	398	-95	0.4	13,600	455.9	455.6
	28-Jun-06			-186	4.3	13,000	456.2	456.5
	11-Jul-06	373	395	-16	0.7	12,100	455.4	455.1
	11-Jul-06 FD	365	335	FD	FD	FD	FD	FD
	26-Jul-06	155	177	-140	1.9		456.1	455.9
	26-Jul-06 FD	157	180	FD	FD	FD	FD	+55.5 FD
	09-Aug-06	218	227 LF	-93	0.6	16,800	455.7	455.7
	28-Aug-06	468	486	-188	1.1	17,700	454.7	454.2
	28-Aug-06 FD	462	540	FD	FD	FD	FD	454.2 FD
	07-Sep-06	314	297	-39	4.1	14,600	455.1	455.2
	07-Sep-06 FD	314	297 275	FD	FD	14,600 FD	455.1 FD	455.2 FD
	-	224	275 262		0.4	16,700	453.9	M
	20-Sep-06 FD	224	262	-130 FD	FD	FD	453.9 FD	FD
	20-Sep-06 FD 05-Oct-06	226 284	280	-97	2.6	18,000	455.1	454.5
	18-Oct-06	304	327			18,900	453.1 454.7	
	18-Oct-06 FD	304	327 272	-112 FD	0.8 FD	18,900 FD	454.7 FD	454.6 FD

Refer to table footnotes for data qualifier explanation.

TABLE B-1
Groundwater Sampling Results for Floodplain Monitoring Wells, May 2006 through May 2007
Interim Measures Performance Monitoring
PG&E Topock Compressor Station

Deep Wells MW-44-125	5-Nov-06 3-Dec-06 9-Jan-07 9-Jan-07 FD	Hexavalent Chromium µg/L	Dissolved Total Chromium µg/L	ORP mV	Dissolved Oxygen (Groundwater	River
MW-44-125 15-N 13-E 09-J 09-J 09-J 09-J 09-M 03-A 03-N 04-N 18-N 15-J 30-J 27-J 09-A 09-A 25-A 07-S 21-S 05-C 05-C 18-C 15-N 13-E 10-J 08-F 08-N 03-A 04-N 03-A 04-N	3-Dec-06 9-Jan-07 9-Jan-07 FD	320			mg/L	βonductance μS/cm	Elevation salinity-adjusted feet MSL	Elevation Downstream I-3 Station
13-E 09-J 09-J 09-J 09-J 09-S 09-M 03-A 03-M 03-M 03-M MW-45-095a 13-J 04-M MW-46-175 04-M 18-M 31-M 15-J 30-J 27-J 09-A 09-A 25-A 07-S 21-S 05-C 05-C 18-C 15-M 13-E 10-J 08-F 08-M 03-A 04-M	3-Dec-06 9-Jan-07 9-Jan-07 FD	320						
09-J 09-J 09-J 06-F 09-M 03-A 03-M 03-M MW-45-095a 13-J 04-M 18-M 31-M 15-J 30-J 27-J 09-A 09-A 25-A 07-S 21-S 05-C 05-C 18-C 15-N 13-E 10-J 08-F 08-M 03-A 04-M	9-Jan-07 9-Jan-07 FD		363	-119	1.3	14,200	453.6	453.7
09-J 06-F 09-M 03-A 03-M 03-M MW-45-095a 13-J 04-M MW-46-175 04-M 18-M 31-M 15-J 30-J 27-J 09-A 09-A 25-A 07-S 21-S 05-C 05-C 05-C 05-C 18-C 15-M 13-E 10-J 08-F 08-M 03-A 04-M	9-Jan-07 FD	300	321	-67	0.8	14,200	454.1	454.3
06-F 09-N 03-A 03-N 03-N 03-N 04-N MW-45-095a 13-J 04-N 18-N 31-N 15-J 30-J 27-J 09-A 09-A 25-A 07-S 21-S 05-C 05-C 18-C 15-N 13-E 10-J 08-F 08-N 03-A 04-N		285	285	-92	0.2	22,700	453.4	453.6
09-M 03-A 03-M 03-M MW-45-095a 13-J 04-M 18-M 31-M 15-J 30-J 27-J 09-A 25-A 07-S 21-S 05-C 05-C 15-M 13-E 10-J 08-F 08-M		284	268	FD	FD	FD	FD	FD
03-A 03-N 03-N 03-N 04-N MW-45-095a 13-J 04-N 18-N 31-N 15-J 30-J 27-J 09-A 09-A 25-A 07-S 21-S 05-C 05-C 18-C 15-N 13-E 10-J 08-F 08-N 03-A	6-Feb-07	213	190	-85	0.2	12,900	453.3	453.5
03-M 03-M 03-M MW-45-095a 13-J 04-M 18-M 31-M 15-J 30-J 27-J 09-A 09-A 25-A 07-S 21-S 05-C 05-C 15-N 13-E 10-J 08-F 08-M	9-Mar-07	258	287	-70	0.0	19,100	454.9	455.1
03-M MW-45-095a 13-J 04-M MW-46-175 04-M 18-M 31-M 15-J 30-J 30-J 27-J 09-A 09-A 25-A 07-S 21-S 05-C 05-C 18-C 15-N 13-E 10-J 08-F 08-N 03-A 04-M	3-Apr-07	296	272	-118	2.1	15,700	456.2	455.8
MW-45-095a 13-J 04-N MW-46-175 04-N 18-N 31-N 15-J 30-J 27-J 09-A 09-A 25-A 07-S 21-S 05-C 05-C 18-C 15-N 13-E 10-J 08-F 08-N 03-A 04-N	3-May-07	254	326	-76	1.9	25,000	455.9	455.2
04-M MW-46-175 04-M 18-M 31-M 15-J 30-J 30-J 27-J 09-A 09-A 25-A 07-S 21-S 05-C 18-C 15-N 13-E 10-J 08-F 08-M 03-A 04-M	3-May-07 FD	300	309	FD	FD	FD	FD	FD
MW-46-175 04-N 18-N 31-N 30-J 30-J 27-J 09-A 09-A 25-A 07-S 21-S 05-C 18-C 15-N 13-E 10-J 08-F 08-N 03-A	3-Jul-06	197	202	45	1.4	22,200	454.5	456.1
18-M 31-M 15-J 30-J 12-J 27-J 09-A 25-A 07-S 21-S 05-C 05-C 18-C 15-M 13-E 10-J 08-F 08-M	4-May-07	169	140	-84	0.3	10,337	455.2	456.7
18-M 31-M 15-J 30-J 30-J 12-J 27-J 09-A 25-A 07-S 21-S 05-C 15-M 13-E 10-J 08-F 08-M	4-May-06	222	237	-27	4.8	20,800	455.5	454.7
31-N 15-J 30-J 30-J 12-J 27-J 09-A 25-A 07-S 21-S 05-C 05-C 15-N 13-E 10-J 08-F 08-N	8-May-06	227	268	-17	2.6	20,500	455.8	454.8
15-J 30-J 30-J 12-J 27-J 09-A 09-A 25-A 07-S 21-S 05-C 05-C 18-C 15-N 13-E 10-J 08-F 08-N	1-May-06	139 J	169	37	1.2	15,900	455.9	455.3
30-J 30-J 12-J 27-J 09-A 09-A 25-A 07-S 21-S 05-C 15-N 13-E 10-J 08-F 08-N	5-Jun-06	233	211	-16	3.2	19,900	456.8	456.9
30-J 12-J 27-J 09-A 09-A 25-A 07-S 21-S 05-C 15-N 13-E 10-J 08-F 08-N	0-Jun-06	112	160	56	6.2	21,800	456.4	456.0
12-J 27-J 09-A 09-A 25-A 07-S 21-S 05-C 18-C 15-N 13-E 10-J 08-F 08-N	0-Jun-06 FD	111	164	FD	FD	FD	FD	FD
27-J 09-A 09-A 25-A 07-S 21-S 05-C 18-C 15-N 13-E 10-J 08-F 08-A 03-A	2-Jul-06	135 J	85.8	38	1.5	19,500	456.4	455.6
09-A 09-A 25-A 07-S 21-S 05-C 18-C 15-N 13-E 10-J 08-F 08-A	7-Jul-06	174	206	16	0.7		456.4	456.6
09-A 25-A 07-S 21-S 05-C 05-C 18-C 15-N 13-E 10-J 08-F 08-A	9-Aug-06	210	186	65	0.7	21,900	455.6	454.8
25- <i>A</i> 07-\$ 21-\$ 05-0 18-0 15-N 13-E 10-J 08-F 08-N	9-Aug-06 FD	223	214	FD	FD	FD	FD	FD
07-5 21-5 05-0 18-0 15-N 13-E 10-J 08-F 08-N	5-Aug-06	137	136	-24	1.1	19,800	455.4	454.9
21-5 05-0 05-0 18-0 15-N 13-E 10-J 08-F 08-N	7-Sep-06	183	170	90	2.2	26,400	455.2	454.7
05-0 05-0 18-0 15-N 13-E 10-J 08-F 08-N 03-A	1-Sep-06	190	244	43	2.3	18,300	455.5	M
05-0 18-0 15-N 13-E 10-J 08-N 03- <i>A</i> 04-N	5-Oct-06	194	192	0	2.8	22,200	454.8	453.9
18-0 15-N 13-E 10-J 08-F 08-N 03- <i>F</i>	5-Oct-06 FD	195	187	FD	FD	FD	FD	FD
15-N 13-E 10-J 08-F 08-N 03- <i>F</i> 04-N	8-Oct-06	204	253	15	0.9	21,900	454.7	454.0
13-E 10-J 08-F 08-N 03- <i>F</i> 04-N	5-Nov-06	163	147	-118	1.1	17,100	453.8	453.1
10-J 08-F 08-N 03-A 04-N	3-Dec-06	187	174	-33	0.3	17,700	454.3	453.9
08-F 08-N 03- <i>F</i> 04-N	0-Jan-07	138	133	-160	0.1	17,450	453.9	453.7
08-N 03- <i>F</i> 04-N	8-Feb-07	130	108	-91	0.3	19,100	453.4	452.4
03-A 04-N	8-Mar-07	153	147	222	0.0	14,100	455.1	455.0
04-N	3-Apr-07	113	95.8	-135	2.0	20,700	455.7	455.5
	3-Арг-07 4-Мау-07	86.4	114	-137	0.2	16,514	456.6	456.4
	*	ND (1.0)						
	4-May-06 5-Jun-06	ND (1.0) ND (1.0)	ND (1.0) 1.80	-177 -147	4.6 2.9	25,900 24,100	455.9 457.1	454.8 457.2
	3-Jul-06 3-Jul-06	ND (1.0) ND (1.0)	3.50		1.0	24,100	457.1 456.9	457.2 457.4
	0-Aug-06	ND (1.0) ND (1.0)	3.50 ND (1.0)	-152 -88	1.3	24,900	456.9 456.2	457.4 455.4
	7-Sep-06	2.00	2.30	-oo -37	1.6	26,000	455.7	455.4 454.5
	-	2.00						
	5-Oct-06		2.30	-96	2.4	27,500	455.2	453.9 454.0
	3-Dec-06	3.20	3.00	10 150	1.0	21,000	454.8	454.0 454.9
08-N 04-N	8-Mar-07	4.00 3.90	5.40 3.10	159 -131	0.0 0.1	18,100 20,373	455.5 456.7	454.8 456.4

Refer to table footnotes for data qualifier explanation.

TABLE B-1
Groundwater Sampling Results for Floodplain Monitoring Wells, May 2006 through May 2007
Interim Measures Performance Monitoring

PG&E Topock Compressor Station

			Dissolved	Sel	ected Field	Parameters	Groundwate Elevations at S	
	Sample Date	Hexavalent Chromium µg/L	Total Chromium µg/L	ORP mV	Dissolved Oxygen (mg/L	Specific Conductance µS/cm	Groundwater Elevation salinity-adjusted feet MSL	River Elevation Downstream I-3 Station
Deep Wells								
MW-49-135	18-May-06	ND (1.0)	ND (1.0)	-178	2.3	17,100	456.7	455.8
	12-Oct-06	ND (1.0)	ND (1.0)	-200	1.9	21,200	455.4	453.9
	15-Dec-06	ND (1.0)	ND (1.0)	-157	0.3	27,700	454.6	453.3
	09-Mar-07	ND (1.0)	ND (1.0)	-173	0.3	30,500	455.4	455.5
	04-May-07	ND (0.2)	ND (1.0)	-144	0.4	13,491	457.4	457.3
MW-49-275	18-May-06	ND (1.0)	ND (1.0)	-214	2.2	26,700	457.0	455.1
	12-Oct-06	ND (1.0)	ND (1.0)	-252	1.8	31,100	456.1	453.5
	15-Dec-06	ND (1.0)	ND (1.0)	-213	1.7	30,000	455.4	453.4
	09-Mar-07	ND (1.0)	ND (1.0)	-228	0.2	37,700	456.3	455.2
	04-May-07	ND (0.2)	ND (1.0)	-190	0.2	23,656	457.8	457.4
MW-49-365	16-May-06	ND (2.0)	ND (1.0)	-192	1.8	44,900	458.7	455.5
	12-Oct-06	ND (2.0)	ND (1.0)	-275	1.4	47,700	457.6	453.0
	15-Dec-06	ND (2.0)	1.10	-172	1.7	44,400	457.0	453.2
	09-Mar-07	ND (2.0)	ND (1.0)	-237	0.0	42,800	458.0	455.4
	04-May-07	ND (0.2)	ND (1.0)	-184	0.1	37,373	459.2	456.9

NOTES:

ND = not detected at listed reporting limit (RL)

FD = field duplicate

LF = lab filtered

J = concentration or RL estimated by laboratory or data validation

T = data from the downhole transducers to fill groundwater elevation data gaps at some locations

MSL = mean sea level

(---) = data not collected, available, rejected, or field instrumentation malfunctioned

 $\mu g/L = micrograms per liter$

mV = oxidation-reduction potential (ORP)

 $\mu S/cm = microSiemens per centimeter$

M = I-3 Transducer damaged

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

May 2007 results from MW-39-070 were rejected due to the sample exceeding holding time limits. This well was re-sampled on June 12,2007.

Beginning in July 2005, samples analyzed for total chromium by EPA Method 6010B or 6020 were filtered and preserved in the field after sample collection, as per DTSC's June 30, 2005 letter.

The RLs for certain hexavalent chromium results from Method 7199 analyses have been elevated above the standard RL of $0.2~\mu g/L$ due to required sample dilution to accommodate matrix interferences.

Groundwater and river elevations in feet above mean sea level (MSL) rounded to 0.1 foot. River elevations from presssure transducer record at I-3.

TABLE B-2
Groundwater Sampling Results for Other Monitoring Wells in PMP Area, May 2006 through May 2007
Interim Measures Performance Monitoring
PG&E Topock Compressor Station

			Dissolved	Selected Field Parameters			
Well ID	Sample Date	Hexavalent Chromium µg/L	Total Chromium µg/L	ORP mV	Dissolved Oxygen mg/L	Specific Conductance µS/cm	
Shallow Wells							
MW-12	01-May-06	1250	1280			3840	
	04-Oct-06	1740	1790	128	5.22	6510	
	13-Dec-06	2050	1880	155	6.20	4660	
	06-Mar-07	2630	2440	117	6.67	4940	
	03-May-07	2620	2880	115	7.28	5600	
MW-19	02-May-06	1130	1120	38.0	3.30	2450	
10100-15	02-Oct-06	970	1300	44.0		2450	
	15-Dec-06	1070 J	1090	76.0	6.64	2360	
	06-Mar-07	1040	1030	95.0	7.03	2280	
	02-May-07	836	777	109	7.05	2560	
MW-20-070	05-May-06	4100	4440	97.0	7.21	3050	
	03-Oct-06	3290	3390	117	7.47	3460	
	03-Oct-06 FD	3410	3330	FD	FD	FD	
	13-Dec-06	3430	3120	203	7.93	2890	
	14-Mar-07	2820	2720	152	8.37	2260	
	03-May-07	2790	3050	151	8.68	3210	
MW-21	02-May-06	ND (1.0)	ND (1.0)	-77		11500	
	03-Oct-06	ND (1.0)	ND (1.0)	-67	6.90	15900	
	13-Dec-06	ND (1.0)	ND (1.0)	-68	1.22	13000	
	09-Mar-07	ND (1.0)	ND (1.0) LF	11.0	2.04	19700	
	01-May-07	ND (1.0)	1.40	187	3.20	12300	
MW-22	03-May-06	ND (1.0) J	ND (1.0)	-88	4.14	34200	
	13-Oct-06	ND (1.0)	ND (1.0)	-105	0.97	42200	
	08-Mar-07	ND (1.0)	ND (1.0)	-99	0.25	51300	
MW-24A	03-Oct-06	4300	4260	101	2.87	3910	
	14-Dec-06	3310	4250	76.0	0.33		
	06-Mar-07	3540	3600	142	0.99	3230	
MW-25	02 May 06				7.72		
IVIVV-25	03-May-06 03-May-06 FD	1390	1310	98.0 FD	7.72 FD	2110 FD	
	03-May-06 FD 03-Oct-06	1280 1140	1310 1150	81.0	6.88	1720	
	03-Oct-06 06-Mar-07	945	951	120	6.84	1350	
	04-May-07	945	951	103	6.85	1520	
MW-26	01-May-06	3210	3110			3290	
IVI V V - Z U	03-Oct-06	3590	3850	 104		4140	
	12-Mar-07	3440	3540	90.0	4.84	3590	
NAVA 24 222							
MW-31-060	01-May-06	952	959		 7 77	2740	
	05-Oct-06 12-Mar-07	773 626	849 638	82.0 93.0	7.77 5.29	3440	
						2650	
MW-35-060	01-May-06	25.7	26.4	-37		6770	
	12-Oct-06	28.6	29.1	112	1.26	12200	
	08-Mar-07 08-Mar-07 FD	31.3 30.8	35.1 32.7	176 FD	0.78 FD	5660 FD	
MW-47-055	16-May-06	24.0	27.3	22.0	2.89	4430	

TABLE B-2
Groundwater Sampling Results for Other Monitoring Wells in PMP Area, May 2006 through May 2007
Interim Measures Performance Monitoring
PG&E Topock Compressor Station

			Dissolved	Selected Field Parameters				
Well ID	Sample Date	Hexavalent Chromium µg/L	Total Chromium µg/L	ORP mV	Dissolved Oxygen mg/L	Specific Conductance µS/cm		
MW-47-055	10-Oct-06	56.9	56.8	6.00	2.83	5300		
	14-Dec-06	61.2	82.0	28.0	2.19	3970		
	06-Mar-07	54.6	53.0	55.0	3.09	9400		
	04-May-07	30.3	31.6	112	2.28	4290		
TW-02S	03-May-06	2400	2600	80.0	6.75	3150		
	04-Oct-06	1920	2130	224	6.70	3470		
liddle-Depth W	/ells		Į.					
MW-20-100	05-May-06	10400	12100	98.0	5.20	3760		
	03-Oct-06	9520	10300	106	3.46	4340		
	13-Dec-06	9610	9220 J	188	2.19	5200		
	13-Dec-06 FD	9400	11500 J	FD	FD	FD		
	14-Mar-07	9470	9270	153	3.01	2820		
	03-May-07	10100	9820	137	3.14	3980		
	03-May-07 FD	10000	10500	FD	5.14 FD	FD		
MW-50-095	09-May-06	199	194	30.0	3.00	5480		
	24-May-06	218	221	50.0	3.42			
	10-Oct-06	278	277	24.0	2.85	7120		
	12-Dec-06	273	262	112	2.40	4590		
	07-Mar-07	274	372	108	2.99	5060		
	02-May-07	304	264	135	31.4	3390		
MW-51	12-May-06	4370	4630	92.0	2.51	12100		
	30-May-06	4130	4530	17.0	1.53	10600		
	06-Oct-06	4560	4590	119	3.79	13800		
	12-Dec-06	4620	5360	129	3.07	10800		
	06-Mar-07	4690	5090	252	2.48			
	01-May-07	4670	5120	94.0	3.65	10300		
eep Wells								
MW-20-130	05-May-06	12000	13700	97.0	2.21	12400		
	18-Oct-06	11600	16400	78.0	2.68	19500		
	13-Dec-06	12000	10500	181	0.80			
	13-Dec-06 FD	11800	10700	FD	FD	FD		
	08-Mar-07	12800	11900	91.0	1.11			
	08-Mar-07 FD	14400	12100	FD	FD	FD		
	03-May-07	13400	16200	183	2.07	14700		
	03-May-07 FD	13500	14800	FD	FD	FD		
MW-24B	03-Oct-06	6120	5830	85.0	2.72	18700		
	14-Dec-06	5520	5060	4.00	0.51			
	05-Mar-07	5980	6100	10.0	1.40	16400		
MW-31-135	09-May-06	154	146 LF	82.0	2.75	15900		
	05-Oct-06	85.7	81.7	65.0	2.91	13600		
	08-Mar-07	51.0	55.2	142	0.60	8730		
	08-Mar-07 FD	52.0	54.2	FD	FD	FD		
MW-35-135	02-May-06	21.0	20.7	0.00	2.70	13000		
	12-Oct-06	35.4	34.6	113	1.20	14400		

TABLE B-2
Groundwater Sampling Results for Other Monitoring Wells in PMP Area, May 2006 through May 2007
Interim Measures Performance Monitoring
PG&E Topock Compressor Station

	Sample Date		Dissolved	Se	Selected Field Parameters			
Well ID		Hexavalent Chromium µg/L	Total Chromium µg/L	ORP mV	Dissolved Oxygen mg/L	Specific Conductance µS/cm		
MW-35-135	12-Oct-06 FD	34.0	30.8	FD	FD	FD		
	08-Mar-07	32.0	39.2	218	0.22	8580		
	04-May-07	27.2	26.2	28.0	2.15			
	04-May-07 FD	27.8	25.2	FD	FD	FD		
MW-47-115	16-May-06	1.40	5.10	-67	1.93	18400		
	10-Oct-06	ND (3.5)	6.90	-80	1.13	16800		
	14-Dec-06	7.90	6.10	-25	0.36	14800		
	06-Mar-07	10.6	10.8	-34	0.33			
	04-May-07	14.1	13.0	126	0.20	13800		
MW-50-200	09-May-06	7750	7360	-11	1.91	20200		
	24-May-06	5810	5910	60.0	4.11	37000		
	10-Oct-06	9660	11800	93.0	2.99	28100		
	12-Dec-06	10100	9250	123	3.17	20600		
	07-Mar-07	12300	14600	114	3.22	25600		
	30-Apr-07	10900	12100	65.0	4.75	23700		
TW-02D	03-May-06	1120	1120	82.0	6.10	8490		
	04-Oct-06	872	910	162	4.91	11900		
TW-04	18-May-06	1.00	6.40	-97	0.56	15600		
	05-Jun-06	ND (1.0)	4.10	-131	0.00	18300		
	09-Oct-06	28.5	26.6	12.0	1.11	24700		
	07-Mar-07	35.2	31.1	37.0	0.28	25800		
	07-Mar-07 FD	35.5	36.9	FD	FD	FD		
TW-05	10-May-06	1.10 J	1.30	-161	0.60	15100		
	01-Jun-06	ND (1.0) J	ND (1.0)	17.0	1.51	10600		
	09-Oct-06	3.60	3.20	60.0	1.12	15800		

NOTES:

Analytical results are validated.

ND = not detected at listed reporting limit (RL)

FD = field duplicate

LF = lab filtered

(---) = data not collected, available, or field instrumentation malfunctioned

 $\mu g/L = \ micrograms \ per \ liter$

mg/L = milligrams per liter

mV = oxidation-reduction potential (ORP)

 $\mu S/cm = microSiemens per centimeter$

PMP = Interim Measure Performance Monitoring Program

Samples analyzed for total chromium by EPA Method 6010B or 6020 were filtered and preserved in the field after sample collection, as per DTSC's June 30, 2005 letter.

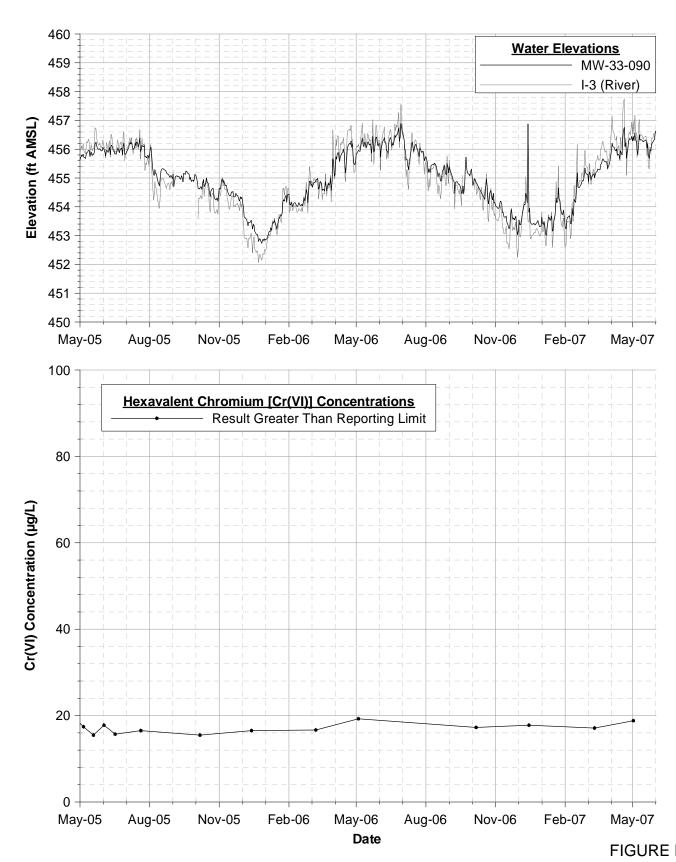


FIGURE B-1 MW-33-90 CR(VI) CONCENTRATION & HYDROGRAPH - 5/1/2005 - 5/2/2007

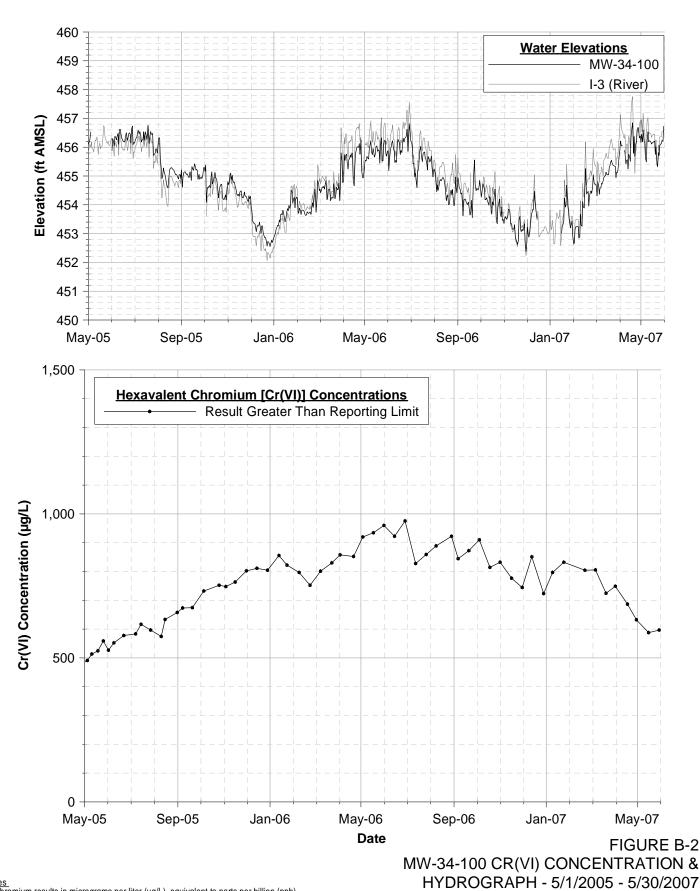
Notes

1. Chromium results in micrograms per liter (µg/L), equivalent to parts per billion (ppb).

2. Results plotted are maximum concentrations from primary and duplicate samples; see Table B-1 for complete results.

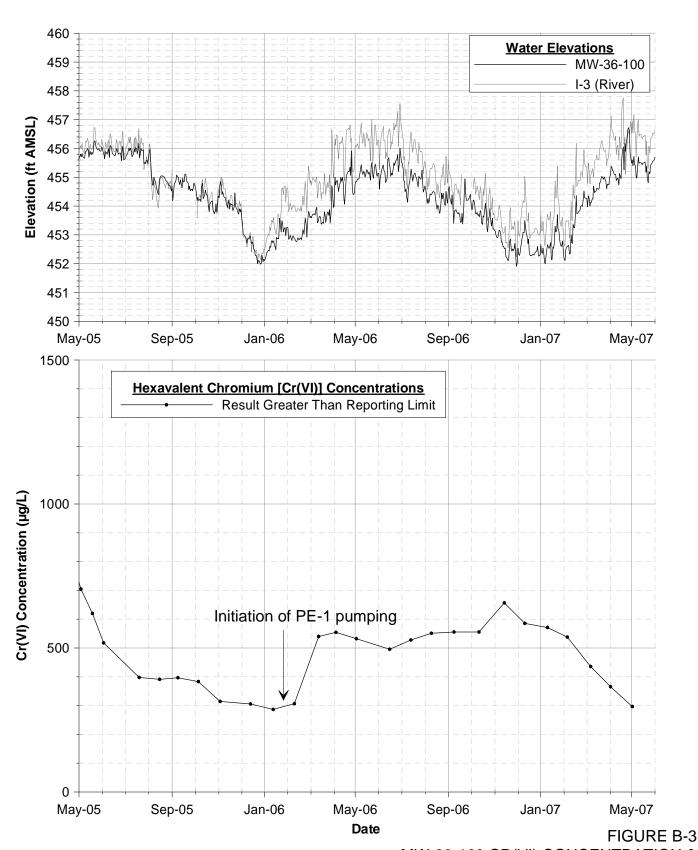
3. I-3 data is unavailable from 9/18/2006 through 10/4/2006.

INTERIM MEASURES PERFORMANCE MONITORING PG&E TOPOCK COMPRESSOR STATION NEEDLES, CALIFORNIA



Notes
1. Chromium results in micrograms per liter (µg/L), equivalent to parts per billion (ppb).
2. No groundwater elevation data available during May 2005 due to transducer malfunction.
3. Results plotted are maximum concentrations from primary and duplicate samples; see Table B-1 for complete results.
4. I-3 data is unavailable from 9/18/2006 through 10/4/2006.

INTERIM MEASURES PERFORMANCE MONITORING PG&E TOPOCK COMPRESSOR STATION NEEDLES, CALIFORNIA



MW-36-100 CR(VI) CONCENTRATION & HYDROGRAPH - 5/1/2005 - 5/2/2007

Notes
1. Chromium results in micrograms per liter (µg/L), equivalent to parts per billion (ppb).
2. Results plotted are maximum concentrations from primary and duplicate samples; see Table B-1 for complete results.
3. I-3 data is unavailable from 9/18/2006 through 10/4/2006.

INTERIM MEASURES PERFORMANCE MONITORING PG&E TOPOCK COMPRESSOR STATION NEEDLES, CALIFORNIA

