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February 2, 2004

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Subject: Fourth Quarter 2003 Groundwater and Surface Water Monitoring Report
Corrective Action Consent Agreement for Bat Cave Wash Area
PG&E Topock Compressor Station, Needles, California

Dear Mr. Yue:

This letter transmits the Fourth Quarter 2003 groundwater and surface water monitoring report for the Topock project. The monitoring event was conducted by PG&E during December 8-12, 2003 and included monitoring and sampling of 35 groundwater wells and six locations along the Colorado River. The monitoring activity was conducted in accordance with PG&E's *Sampling and Analysis Plan for September 2003 Quarterly Groundwater Monitoring*, dated September 4, 2003.

If you have any questions on the groundwater and surface water monitoring report, please call me at (925) 974-4081.

Sincerely,

for Linda Gonsalves
Senior Project Manager
Environmental Services

Enclosures:

Groundwater and Surface Water Monitoring Report, Fourth Quarter 2003

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Groundwater and Surface Water Monitoring Report Fourth Quarter 2003

Pacific Gas and Electric Company
Topock Compressor Station
Needles, California

February 2, 2004

This report presents the results of the Fourth Quarter 2003 groundwater and surface water monitoring conducted at Pacific Gas and Electric Company's (PG&E) Topock Compressor Station during December 2003. The Topock groundwater and surface water monitoring program (GMP) is part of a RCRA Facility Investigation (RFI) being performed under a Corrective Action Consent Agreement (CACA) issued by the California Department of Toxic Substances Control (DTSC) in 1996 for the Topock site (EPA ID No. CAT080011729). The Topock Compressor Station is located in eastern San Bernardino County, 15 miles southeast of the city of Needles, California.

1.0 BACKGROUND

Under the current 2003 GMP, a total of 35 groundwater wells and six surface water stations are monitored and sampled on a quarterly schedule. Three additional wells are monitored and sampled every two years (December events). Figure 1 shows the locations of the PG&E Topock Compressor Station and the groundwater wells and surface water stations in the GMP.

The quarterly groundwater and surface water monitoring activities were initiated in 1998 as a continuation of the RFI groundwater investigations. The wells and surface water monitoring locations are sampled quarterly for the site constituents of concern (COCs) defined in the 1996 CACA. The site COCs are hexavalent chromium [Cr(VI)], total chromium [Cr(T)], copper, nickel, zinc, electrical conductivity, and pH. Groundwater/surface water elevation data and field water quality data are measured during the quarterly monitoring events.

2.0 DECEMBER 2003 MONITORING ACTIVITY

Summary of Monitoring and Sampling

The Fourth Quarter 2003 monitoring event was conducted December 8 through 12, 2003. The monitoring and sampling activities were performed in accordance with PG&E's *Sampling and Analysis Plan for September 2003 Quarterly Groundwater Monitoring*, dated September 4, 2003 (PG&E, 2003b). The following locations were sampled during the Fourth Quarter 2003 event (see Figure 1):

- 34 groundwater monitoring wells, including the seven new monitoring wells installed by PG&E in March and June 2003,
- One active water supply well (Park Moabi well)
- Two inactive industrial water supply wells (PGE-6, PGE-7),
- One former water injection well (PGE-8), and
- Six surface water stations along the Colorado River, defined in the RFI Report (E&E, 2000).

One groundwater monitoring well (MW-33-90) scheduled for sampling was not sampled during the December 2003 monitoring event due to inoperative well pump. A replacement pump will be installed in this well during the next scheduled monitoring in January 2004. The specific methods, procedures, and field documentation of the GMP sampling, and water level and field water quality monitoring are described in the September 2003 Sampling Plan (PG&E, 2003b).

Sampling and Analyses

All water samples for site COC analyses were collected in containers provided by the laboratory and were labeled and packaged according to standard sampling procedures. Duplicate samples were collected from wells MW-13, MW-24A, and MW-30-50 to assess field sampling and analytical procedures. The samples were stored in a cooler at 4 degrees Celsius and transported to Truesdail Laboratories, Inc. (Tustin, California), a state-certified laboratory, under chain-of-custody documentation.

In accordance with the September 2003 Sampling Plan, Cr(VI) was analyzed in the water samples using two analytical methods:

- Method SW 7196A for samples collected from monitoring wells where prior monitoring has detected Cr(VI) concentrations above 0.010 milligrams per liter (mg/L). The minimum reporting limit (RL) for Method 7196A for undiluted samples is 0.010 mg/L.
- Method SW 7199 for all surface water samples and all groundwater samples collected from monitoring wells where prior monitoring has not detected Cr(VI) concentrations above 0.010 mg/L. The minimum RL for Cr(VI) using Method 7199 is 0.0002 mg/L for undiluted samples.

Dissolved Cr(T) was analyzed using Method SW 6020A (RL of 0.0011 mg/L for undiluted samples) and Method SW 6010B (RL of 0.001 mg/L for undiluted samples).

3.0 DECEMBER 2003 MONITORING RESULTS

Groundwater Analyses

Table 1 presents the results of site COC analyses from the December 2003 event and historical data during the past year of monitoring. The maximum Cr(T) and Cr(VI) concentrations detected were 15.9 mg/L and 9.87 mg/L, respectively, in the groundwater samples from well MW-20-70, consistent with prior monitoring. For wells in the river floodplain area, Cr(T) and Cr(VI) were detected in the groundwater samples from one of the

eleven monitoring wells sampled (well MW-34-80) at concentrations of 0.0452 and 0.0377 mg/L, respectively. Cr(VI) had not been detected in the prior June–November 2003 groundwater sampling at well MW-34-80 (Table 1). At well MW-30-50, Cr(T) was detected in the December sampling at a concentration of 0.0081 mg/L and Cr(VI) was not detected (detection limit of 0.0002 mg/L).

Surface Water Analyses

Table 2 presents the results of site COC analyses from the December 2003 event and historical data during the past year of monitoring. During December 2003 sampling, Cr(T) and Cr(VI) were not detected at or above the RLs of 0.001 mg/L and 0.0002 mg/L, respectively, in any of the water samples collected from the six GMP monitoring locations (Figure 1).

Presentation of Hexavalent Chromium Sampling Results

The Cr(VI) results distribution of December 2003 sampling of the GMP monitoring wells and surface water locations are presented in Figure 2. Also shown on Figure 2 is the approximate outline of Cr(VI) in groundwater greater than 0.050 mg/L (the California drinking water standard for total chromium) based on the December 2003 sampling event.

Analytical Data Quality Review

The laboratory analytical data generated from the December 2003 sampling were independently reviewed to assess data quality and identify deviations from analytical requirements. The zinc and Cr(T) results for one field duplicate sample (MW-30-50) were qualified as estimated concentrations (J qualifier) due to the results exceeding relative percent difference criteria. No other analytical deficiencies were identified and none of the results were qualified as unusable. The analytical data for the December 2003 sampling event are considered usable for the intended purpose of monitoring groundwater and surface water conditions at the site.

Water Level Measurements

Table 3 lists the water level measurements collected during the Fourth Quarter 2003 water level survey of the groundwater wells and the three surface water gauging stations in the GMP and prior monitoring event. The site-wide water level measurements were conducted on December 8, 2003, prior to sampling activities. Also listed in Table 3 are water salinity data from field sampling for the monitored wells. Groundwater salinity during this monitoring event ranged from 0 percent (well MW-27) to a maximum of 3.6 percent (well MW-30-30). Because of the density differences in groundwater due to salinity variations, the groundwater elevations measured in the GMP wells have been adjusted, or normalized, to a fresh water standard (see Table 3).

Field Parameter Data

A field parameter meter and flow-through cell were used to measure water quality parameters during well purging and groundwater sampling. The field parameters measured are temperature, pH, electrical conductivity, salinity, oxidation-reduction

potential (ORP), and dissolved oxygen. Table 4 summarizes the field water quality data measured during the December 2003 and prior quarterly monitoring event.

4.0 UPCOMING MONITORING ACTIVITIES

Monthly Well Sampling

In response to direction from DTSC, an additional monitoring activity was incorporated in the ongoing Topock GMP. Since November 2003, PG&E has conducted monthly sampling of selected monitoring wells in the Colorado River floodplain for more frequent monitoring of water quality in this area of the site. The scope and rationale for the proposed monthly well sampling activity is described in a separate sampling plan, which is included as an attachment to the Third Quarter 2003 groundwater monitoring report (PG&E 2003c). The next monthly sampling activities are scheduled for mid-January and mid-February, 2003.

Quarterly Monitoring

The First Quarter 2004 groundwater monitoring event is scheduled for mid-March 2004. The scope of analyses and field data collection will follow the September 2003 Sampling Plan (PG&E, 2003b). The list of wells and surface water locations to be monitored during the First Quarter 2004 event will be consistent with Figure 1 and Attachment A, where applicable. A groundwater monitoring report for the upcoming First Quarter 2004 event will be prepared and submitted approximately six weeks after sampling.

Background Chromium Study

At DTSC's request, PG&E will develop and implement a study to assess background chromium concentrations in groundwater in the Topock study area during the upcoming year 2004. The proposed approach and rationale for the background chromium study is described in a separate technical memorandum, which was included as an attachment to the Third Quarter 2003 groundwater monitoring report (PG&E 2003c). Beginning with the November 2003 monthly monitoring event, PG&E proposes to initiate selected sampling of additional site wells (not in current GMP) for data collection for the proposed background study. As described in Attachment A, additional wells potentially suitable for background water quality sampling will be identified and incorporated in the GMP monitoring events, pending access and availability.

5.0 REFERENCES

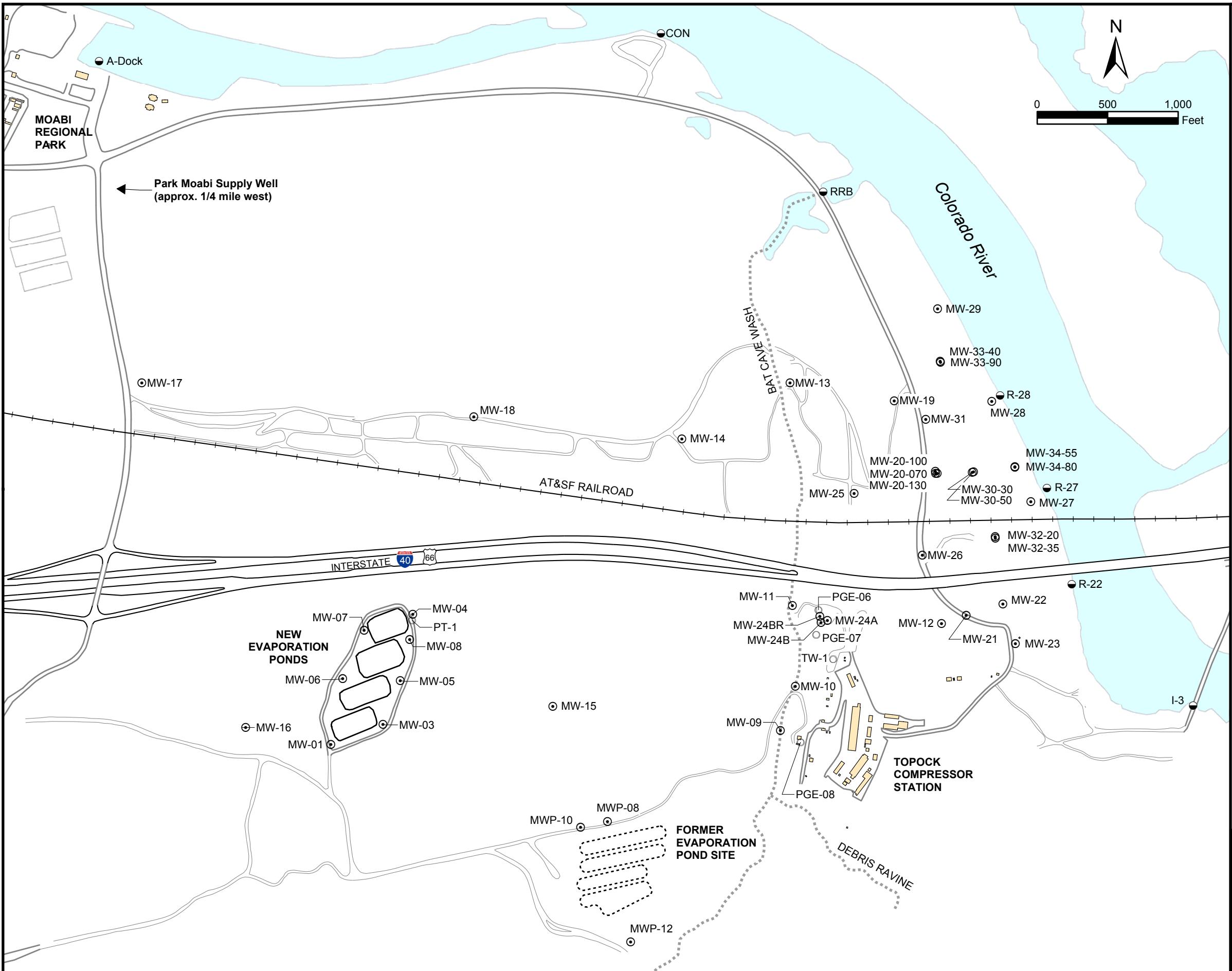
Ecology and Environment, Inc. (E&E), 2000. Draft RCRA Facility Investigation (RFI) Report, Bat Cave Wash Area, PG&E's Topock Compressor Station, April 17.

Pacific Gas and Electric Company, 2003a. Groundwater and Surface Water Monitoring Results, Second Quarter 2003, PG&E Topock Compressor Station, September 31, 2003.

Pacific Gas and Electric Company, 2003b. Sampling and Analysis Plan for September 2003 Quarterly Groundwater Monitoring, PG&E Topock Project, September 4, 2003.

Pacific Gas and Electric Company, 2003c. Groundwater and Surface Water Monitoring Report, Third Quarter 2003, PG&E Topock Compressor Station, October 24, 2003.

Pacific Gas and Electric Company, 2003d. Monthly Well Sampling Report, November 2003, PG&E Topock Compressor Station, December 18, 2003.



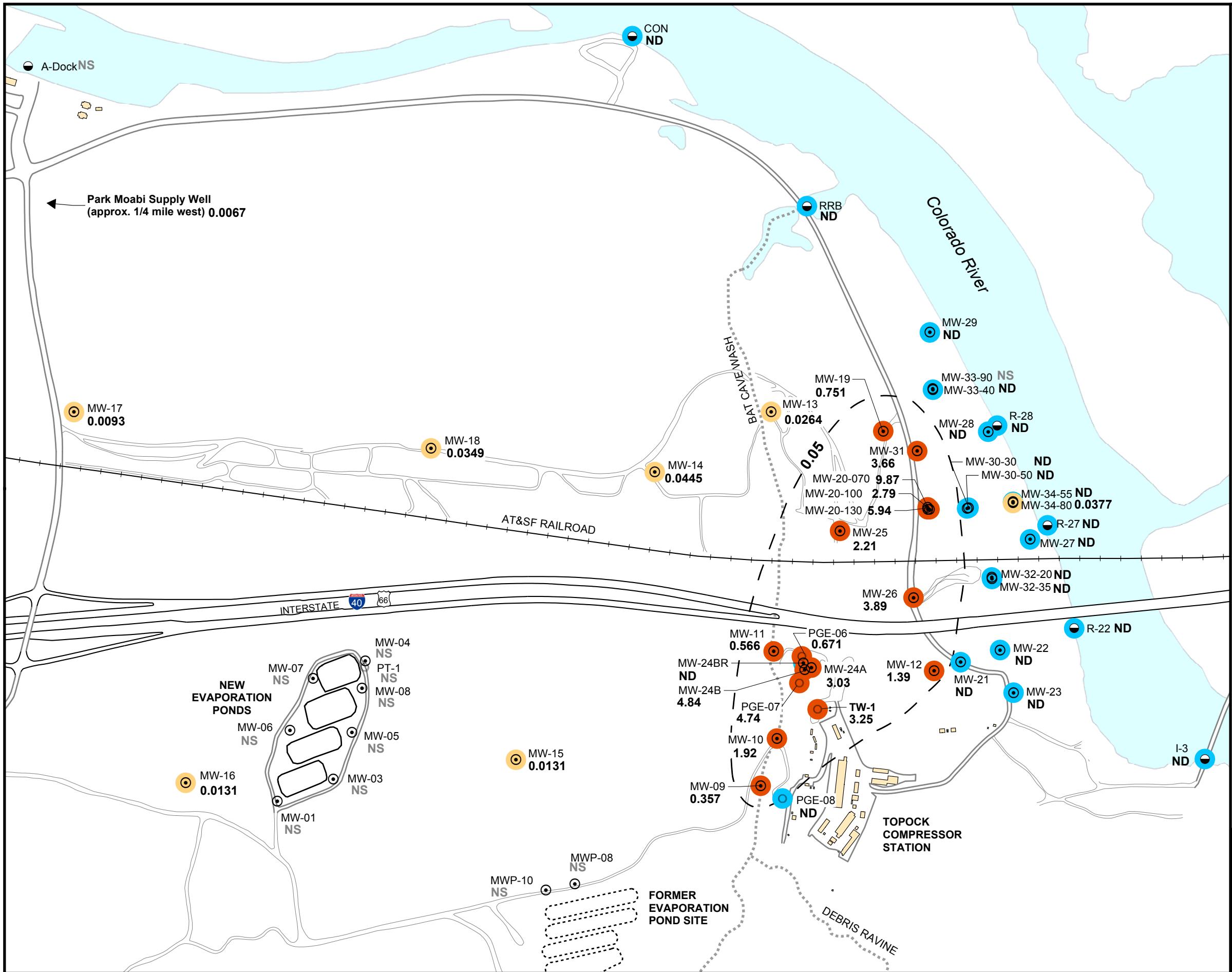


Figure 2
Hexavalent Chromium Sampling Results
December 2003
Groundwater and Surface Water Monitoring

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

Table 1
Groundwater Sampling Results
September 2002 through December 2003
PG&E Topock Groundwater Monitoring Program

LocID	Sample Date	Hexavalent Chromium (mg/L)	Total Chromium (mg/L)	Copper (mg/L)	Nickel (mg/L)	Zinc (mg/L)	Specific Conductance ($\mu\text{S}/\text{cm}$)	pH
MW-09	17-Sep-02	0.36	0.401	ND <0.0555	ND <0.0056	0.248	---	---
	10-Dec-02	0.402	0.428	ND <0.02	ND <0.0278	0.255	---	---
	18-Mar-03	0.368	0.357	0.015	ND <0.0278	0.363	---	---
	12-Jun-03	0.343	0.349	ND <0.01	0.03	0.361	3,690	7.65
	11-Sep-03	0.376	0.34	0.017	ND <0.0261	0.14	3,260	7.49
	12-Dec-03	0.357	0.46	ND <0.01	ND <0.02	0.025	3,490	7.56
MW-10	17-Sep-02	2.07	2.33	ND <0.02	0.014	0.177	---	---
	10-Dec-02	1.93	2.15	ND <0.02	ND <0.0278	0.119 J	---	---
	10-Dec-02 *	1.97	1.79	ND <0.02	ND <0.0278	0.2 J	---	---
	18-Mar-03	1.64	1.47	ND <0.011	ND <0.0278	0.637	---	---
	12-Jun-03	1.65	1.75	ND <0.01	ND <0.0261	0.445	4,280	7.75
	11-Sep-03	1.92	1.75	ND <0.011	ND <0.0261	0.093	3,330	7.6
	12-Dec-03	1.92	4.2	ND <0.01	ND <0.02	0.025	3,260	7.68
MW-11	17-Sep-02	0.408	0.483	ND <0.0278	0.016	0.443 J	---	---
	17-Sep-02 *	0.409	0.467	ND <0.0278	ND <0.0056	0.208 J	---	---
	10-Dec-02	0.584	0.696	ND <0.02	ND <0.0278	0.176	---	---
	18-Mar-03	0.463	0.452	ND <0.011	ND <0.0278	0.329	---	---
	12-Jun-03	0.429	0.453	ND <0.01	0.0203 J	0.399	2,930	7.93
	12-Jun-03 *	0.415	0.435	ND <0.01	ND <0.0261	0.45	2,670	7.62
	11-Sep-03	0.412	0.376	ND <0.011	ND <0.0261	0.063	2,440	7.52
	12-Dec-03	0.566	0.772	ND <0.01	ND <0.02	ND <0.02	2,450	7.51
MW-12	18-Sep-02	1.16	1.31	ND <0.0278	ND <0.0056	0.085	---	---
	11-Dec-02	1.25	1.61	ND <0.02	ND <0.0278	0.069	---	---
	20-Mar-03	1.28	1.1	ND <0.011	ND <0.0278	0.54 J	---	---
	20-Mar-03 *	1.26	1.19	ND <0.011	ND <0.0278	0.284 J	---	---
	11-Jun-03	1.28	1.08	ND <0.01	ND <0.0261	0.121	4,250	8.42
	09-Sep-03	1.31	1.24	ND <0.011	ND <0.0261	ND <0.0261	4,040	8.34
	10-Dec-03	1.39	1.72	ND <0.01	ND <0.02	ND <0.02	4,130	8.39

Table 1
Groundwater Sampling Results
September 2002 through December 2003
PG&E Topock Groundwater Monitoring Program

LocID	Sample Date	Hexavalent Chromium (mg/L)	Total Chromium (mg/L)	Copper (mg/L)	Nickel (mg/L)	Zinc (mg/L)	Specific Conductance ($\mu\text{S}/\text{cm}$)	pH
MW-13	17-Sep-02	0.0183	0.0345	ND <0.02	0.012	0.171	---	---
	10-Dec-02	0.0229	0.029	ND <0.02	ND <0.0278	0.172	---	---
	21-Mar-03	0.0231	0.023	ND <0.011	ND <0.0278	0.345	---	---
	12-Jun-03	0.0159	0.18	ND <0.01	0.168	0.451	2,410	7.88
	12-Sep-03	0.0196	0.0272	ND <0.011	ND <0.0261	0.26 J	2,070	7.6
	12-Sep-03 *	0.0196	0.0184	ND <0.011	ND <0.0261	0.108 J	2,060	7.63
	12-Dec-03	0.024	0.0177	ND <0.01	ND <0.02	0.031	2,070	7.65
	12-Dec-03 *	0.0264	0.0174	---	---	---	2,070	7.64
MW-14	18-Sep-02	0.031	0.0326	ND <0.02	0.022	0.164	---	---
	10-Dec-02	0.049	0.0484	ND <0.02	0.029	0.498	---	---
	21-Mar-03	0.0473	0.0365	ND <0.011	ND <0.0278	0.3 J	---	---
	21-Mar-03 *	0.0484	0.0367	ND <0.011	ND <0.0278	0.105 J	---	---
	12-Jun-03	0.0306	0.0309	ND <0.0104	0.0397 J	0.244	1,720	7.98
	11-Sep-03	0.0473	0.0324	ND <0.011	ND <0.0261	0.045	1,553	7.76
	12-Dec-03	0.0445	0.0293	ND <0.01	ND <0.02	0.036	1,550	7.8
MW-15	10-Dec-02	0.0229	0.0194	ND <0.02	ND <0.0278	0.419	---	---
	18-Mar-03	0.0294	0.0209	ND <0.011	ND <0.0278	0.276	---	---
	12-Jun-03	0.0111	0.013	ND <0.01	ND <0.0261	0.22	1,780	7.85
	11-Sep-03	0.0208	0.0116	ND <0.011	ND <0.0261	0.053	1,273	7.81
	12-Dec-03	0.0131	0.0082	ND <0.01	ND <0.02	0.037	1,380	7.81
MW-16	10-Dec-02	0.0198	0.0234	ND <0.02	ND <0.0278	0.191	---	---
	18-Mar-03	0.0188	0.0248	ND <0.011	ND <0.0278	0.368	---	---
	12-Jun-03	0.0147	0.0135	ND <0.01	ND <0.0261	0.565	1,360	8.06
	11-Sep-03	0.0184	0.0052	0.039	ND <0.0261	0.054	1,145	7.96
	12-Dec-03	0.0131	0.0075	ND <0.01	ND <0.02	0.023	1,190	7.98
MW-17	18-Sep-02	ND <0.01	0.0051	ND <0.02	ND <0.005	0.169	---	---
	11-Sep-03	0.0023	0.002	ND <0.011	ND <0.0261	0.09	1,782	7.71
	05-Nov-03	0.0055	0.008	---	---	---	---	---
	12-Dec-03	0.0093	0.0137	ND <0.01	ND <0.02	0.14	1,800	7.73

Table 1
Groundwater Sampling Results
September 2002 through December 2003
PG&E Topock Groundwater Monitoring Program

LocID	Sample Date	Hexavalent Chromium (mg/L)	Total Chromium (mg/L)	Copper (mg/L)	Nickel (mg/L)	Zinc (mg/L)	Specific Conductance ($\mu\text{S}/\text{cm}$)	pH
MW-18	18-Sep-02	0.029	0.0355	ND <0.02	ND <0.005	0.375 J	---	---
	18-Sep-02 *	0.0323	0.0326	ND <0.02	ND <0.005	0.147 J	---	---
	10-Dec-02	0.0354	0.0418	ND <0.02	ND <0.0278	0.188	---	---
	18-Mar-03	0.0336	0.0432	ND <0.011	ND <0.0278	0.137	---	---
	12-Jun-03	0.0233	0.0312	ND <0.01	ND <0.0261	0.556	1,600	7.87
	11-Sep-03	0.0461	0.0307	ND <0.011	ND <0.0261	0.05	1,272	7.71
	12-Dec-03	0.0349	0.0309	ND <0.01	ND <0.02	0.037	1,270	7.72
MW-19	10-Dec-02	0.761	0.75	ND <0.02	0.0101 J	0.356	---	---
	21-Mar-03	0.748	0.631	ND <0.011	ND <0.0278	0.176	---	---
	11-Jun-03	0.581	0.614	ND <0.01	ND <0.0261	0.398	2,410	7.77
	12-Sep-03	0.725	0.602	ND <0.011	ND <0.0261	0.101	2,350	7.62
	10-Dec-03	0.751	0.639	ND <0.01	ND <0.02	ND <0.02	2,360	7.66
MW-20-070	17-Sep-02	8.24	9.79	ND <0.02	0.014	0.478	---	---
	11-Dec-02	8.76	13.8	ND <0.02	ND <0.0278	0.123	---	---
	20-Mar-03	11.6	10.2	ND <0.011	ND <0.0278	0.217	---	---
	11-Jun-03	11.9	9.23	0.02	ND <0.0261	0.149	3,810	7.62
	09-Sep-03	9.69	10.8	ND <0.011	ND <0.0261	0.0238 J	3,380	7.73
	10-Dec-03	9.87	15.9	ND <0.01	ND <0.02	0.079	3,420	7.66
MW-20-100	17-Sep-02	2.82	3.32	ND <0.02	0.011	0.206 J	---	---
	17-Sep-02 *	2.58	3.22	ND <0.0278	0.013	0.486 J	---	---
	11-Dec-02	3.08	3.87	ND <0.02	ND <0.0278	0.085	---	---
	20-Mar-03	2.91	2.64	ND <0.011	ND <0.0278	0.153	---	---
	11-Jun-03	2.77	2.18	ND <0.01	ND <0.0261	0.144	5,740	7.78
	09-Sep-03	2.74	2.63	ND <0.011	ND <0.0261	0.061	5,470	7.8
	10-Dec-03	2.79	3.17	ND <0.01	ND <0.02	0.233	5,460	7.79
MW-20-130	17-Sep-02	6.62	7.09	ND <0.02	0.032	0.203	---	---
	11-Dec-02	6.1	9.89	ND <0.02	0.0112 J	0.132	---	---
	20-Mar-03	6.3	5.16	ND <0.011	ND <0.0278	0.176	---	---
	11-Jun-03	6.44	5.02	ND <0.01	ND <0.0261	0.131	17,000	7.73
	09-Sep-03	6.08	6.0	ND <0.011	ND <0.0261	ND <0.0261	16,400	7.79
	10-Dec-03	5.94	7.06	ND <0.01	ND <0.02	0.057	16,600	7.76

Table 1
Groundwater Sampling Results
September 2002 through December 2003
PG&E Topock Groundwater Monitoring Program

LocID	Sample Date	Hexavalent Chromium (mg/L)	Total Chromium (mg/L)	Copper (mg/L)	Nickel (mg/L)	Zinc (mg/L)	Specific Conductance ($\mu\text{S}/\text{cm}$)	pH
MW-21	18-Sep-02	ND <0.01	0.0019	ND <0.02	0.017	0.099	---	---
	11-Dec-02	ND <0.01	0.0074	ND <0.02	0.0172 J	0.337	---	---
	21-Mar-03	ND <0.01	0.0106	ND <0.011	0.0264 J	0.364	---	---
	12-Jun-03	ND <0.01	0.0023 J	0.013	0.034	0.456	13,800	7.52
	10-Sep-03	ND <0.0002	ND <0.001	0.039	0.0261 J	0.068	13,220	7.22
	04-Nov-03	ND <0.0002	ND <0.001	---	---	---	---	---
	11-Dec-03	ND <0.0002	0.0033	0.024	0.02	0.287	13,000	7.16
MW-22	19-Sep-02	ND <0.01	0.0139	ND <0.02	0.02	0.119	---	---
	12-Dec-02	ND <0.01	0.0035	ND <0.02	0.0175 J	0.118	---	---
	19-Mar-03	ND <0.01	0.0169	ND <0.011	ND <0.0278	0.16	---	---
	10-Jun-03	ND <0.01	0.005 J	ND <0.01	0.028	0.118	23,200	7.12
	10-Sep-03	ND <0.0002	0.0021	ND <0.011	0.027	0.029	28,600	6.89
	11-Dec-03	ND <0.0002	0.0104	ND <0.01	ND <0.02	0.062	29,200	6.95
MW-23	18-Sep-02	ND <0.01	0.0072	ND <0.02	0.031	0.221	---	---
	11-Dec-02	ND <0.01	0.0095	ND <0.02	0.032	0.817	---	---
	21-Mar-03	ND <0.01	0.0119	ND <0.011	0.03	0.531	---	---
	12-Jun-03	ND <0.01	0.0011 J	ND <0.01	0.035	0.227	20,100	7.43
	10-Sep-03	ND <0.0002	ND <0.001	ND <0.011	0.0248 J	0.037	17,820	7.08
	11-Dec-03	ND <0.0002	0.0033	ND <0.01	ND <0.02	0.049	17,400	7.16
MW-24A	17-Sep-02	3.29	3.49	ND <0.02	ND <0.005	0.308	---	---
	11-Dec-02	3.4	4.1	ND <0.02	ND <0.0278	0.122 J	---	---
	11-Dec-02 *	3.43	4.16	ND <0.02	ND <0.0278	0.0693 J	---	---
	18-Mar-03	2.77	2.61	ND <0.011	ND <0.0278	0.62	---	---
	12-Jun-03	2.64 J	2.51	ND <0.01	ND <0.0261	0.326	4,030	7.85
	11-Sep-03	2.97	2.62	0.015	0.0225 J	0.034	3,430	7.66
	11-Sep-03 *	3.06	2.74	ND <0.011	ND <0.0261	0.05	3,360	7.74
	10-Dec-03	2.99	3.32	ND <0.01	ND <0.02	0.064	3,350	7.74
	10-Dec-03 *	3.03	4.08	---	---	---	3,310	7.74
MW-24B	10-Dec-02	4.62	5.38	ND <0.02	ND <0.0278	0.3	---	---
	18-Mar-03	4.9	4.65	ND <0.011	ND <0.0278	0.468	---	---
	12-Jun-03	4.79	5.57	ND <0.01	0.031	0.307	14,500	7.94
	11-Sep-03	4.76	4.32	ND <0.011	ND <0.0261	0.029	12,950	7.97
	10-Dec-03	4.84	6.05	ND <0.01	ND <0.02	0.044	12,700	7.99

Table 1
Groundwater Sampling Results
September 2002 through December 2003
PG&E Topock Groundwater Monitoring Program

LocID	Sample Date	Hexavalent Chromium (mg/L)	Total Chromium (mg/L)	Copper (mg/L)	Nickel (mg/L)	Zinc (mg/L)	Specific Conductance ($\mu\text{S}/\text{cm}$)	pH
MW-24BR	18-Sep-02	ND <0.01	0.0035	ND <0.02	0.006	0.152	---	---
	12-Dec-02	ND <0.01	0.0034	ND <0.02	ND <0.0278	0.066	---	---
	19-Mar-03	ND <0.01	0.016	ND <0.011	ND <0.0278	0.111	---	---
	13-Jun-03	ND <0.01	0.0029 J	ND <0.01	ND <0.0261	0.126	14,500	8.29
	12-Sep-03	ND <0.0002	0.0036 J	ND <0.011	ND <0.0261	0.072	14,000	8.59
	11-Dec-03	ND <0.0002	0.0046	ND <0.01	ND <0.02	ND <0.02	14,000	8.6
MW-25	17-Sep-02	2.56	2.79	ND <0.0278	0.021	0.145	---	---
	10-Dec-02	2.43	3.22	ND <0.02	ND <0.0278	0.167	---	---
	21-Mar-03	2.53	2.13	ND <0.011	ND <0.0278	0.325	---	---
	12-Jun-03	2.44	2.72	ND <0.01	ND <0.0261	0.334 J	2,180	7.94
	12-Jun-03 *	2.48	3.41	ND <0.01	ND <0.0261	0.555 J	2,020	7.82
	12-Sep-03	2.35	2.08	ND <0.011	ND <0.0261	0.077	1,660	7.58
	12-Dec-03	2.21	3.22	ND <0.01	ND <0.02	0.025	1,660	7.62
MW-26	18-Sep-02	3.72	3.11	ND <0.0278	0.018	0.218	---	---
	11-Dec-02	3.86	5.02	ND <0.02	ND <0.0278	0.144	---	---
	20-Mar-03	3.28	2.75	ND <0.011	ND <0.0278	0.514	---	---
	20-Mar-03 *	3.28	2.79	ND <0.011	ND <0.0278	0.356	---	---
	11-Jun-03	3.68	3.11	ND <0.01	ND <0.0261	0.081	3,620	7.77
	09-Sep-03	3.51	3.34	ND <0.011	ND <0.0261	0.0242 J	3,460	7.49
	10-Dec-03	3.89	5.0	ND <0.01	ND <0.02	0.436	3,570	7.67
MW-27	19-Sep-02	ND <0.01	ND <0.0011	ND <0.02	ND <0.005	0.164	---	---
	12-Dec-02	ND <0.01	0.0056	ND <0.02	ND <0.0278	0.213	---	---
	19-Mar-03	ND <0.01	0.0115	ND <0.011	ND <0.0278	0.105	---	---
	10-Jun-03	ND <0.01	0.0105	ND <0.01	ND <0.0261	0.285	958	7.64
	10-Sep-03	ND <0.0002	ND <0.001	ND <0.011	ND <0.0261	0.0227 J	958	7.6
	04-Nov-03	ND <0.0002	ND <0.001	---	---	---	---	---
	11-Dec-03	ND <0.0002	0.001	ND <0.01	ND <0.02	ND <0.02	978	7.7

Table 1
Groundwater Sampling Results
September 2002 through December 2003
PG&E Topock Groundwater Monitoring Program

LocID	Sample Date	Hexavalent Chromium (mg/L)	Total Chromium (mg/L)	Copper (mg/L)	Nickel (mg/L)	Zinc (mg/L)	Specific Conductance ($\mu\text{S}/\text{cm}$)	pH
MW-28	19-Sep-02	ND <0.01	0.0036	ND <0.02	ND <0.005	0.097	---	---
	12-Dec-02	ND <0.01	0.0039	ND <0.02	ND <0.0278	0.124	---	---
	20-Mar-03	ND <0.01	0.0121	ND <0.011	ND <0.0278	0.286	---	---
	10-Jun-03	ND <0.01	0.012	ND <0.01	ND <0.0261	0.055	1,820	7.56
	10-Sep-03	ND <0.0002	ND <0.001	ND <0.011	ND <0.0261	0.039 J	1,290	7.56
	10-Sep-03 *	ND <0.0002	ND <0.001	0.011	0.026	0.124	1,290	7.54
	04-Nov-03	ND <0.0002	ND <0.001	---	---	---	---	---
	11-Dec-03	ND <0.0002	ND <0.001	ND <0.01	ND <0.02	0.057	1,330	7.58
MW-29	19-Sep-02	ND <0.01	0.0076	ND <0.02	0.02	0.125	---	---
	11-Dec-02	ND <0.01	0.0125	ND <0.02	0.0128 J	0.145	---	---
	20-Mar-03	ND <0.01	0.0193	ND <0.011	ND <0.0278	0.356	---	---
	11-Jun-03	ND <0.01	0.0033 J	ND <0.01	ND <0.0261	0.101	5,030	7.39
	10-Sep-03	ND <0.0002	ND <0.001	ND <0.011	ND <0.0261	0.0232 J	3,960	7.28
	11-Dec-03	ND <0.0002	ND <0.001	0.016	ND <0.02	0.055	5,880	7.28
MW-30-30	19-Sep-02	ND <0.01	ND <0.0011	ND <0.02	0.007	0.042	---	---
	12-Dec-02	ND <0.01	0.0035	ND <0.02	0.035	0.096	---	---
	20-Mar-03	ND <0.01	0.0264	ND <0.011	0.0235 J	0.597	---	---
	10-Jun-03	ND <0.01	0.0061	ND <0.01	0.04	0.11	35,300	7.06
	10-Sep-03	ND <0.0002	0.0016	ND <0.011	0.04	0.07	51,300	6.97
	04-Nov-03	ND <0.0002	ND <0.001	---	---	---	---	---
	11-Dec-03	ND <0.0002	0.0053	ND <0.01	ND <0.02	ND <0.02	48,300	7.06
MW-30-50	19-Mar-03	3.4	3.14	ND <0.011	ND <0.0278	0.092	---	---
	20-Mar-03	3.76	3.34	---	---	---	---	---
	10-Jun-03	2.71	2.6	ND <0.01	ND <0.0261	0.0736 J	9,330	7.58
	10-Jun-03 *	2.77	2.72	ND <0.01	ND <0.0261	0.146 J	9,140	7.46
	10-Sep-03	0.0906	0.175	0.039	ND <0.0261	0.365	9,240	7.24
	04-Nov-03	ND <0.0002	ND <0.001	---	---	---	---	---
	04-Nov-03 *	ND <0.0002	ND <0.001	---	---	---	---	---
	12-Dec-03	ND <0.0002	0.0081 J	ND <0.01	ND <0.02	0.0467 J	3,160	7.68
	12-Dec-03 *	ND <0.0002	0.0049 J	---	---	---	3,140	7.84

Table 1
Groundwater Sampling Results
September 2002 through December 2003
PG&E Topock Groundwater Monitoring Program

LocID	Sample Date	Hexavalent Chromium (mg/L)	Total Chromium (mg/L)	Copper (mg/L)	Nickel (mg/L)	Zinc (mg/L)	Specific Conductance ($\mu\text{S}/\text{cm}$)	pH
MW-31	17-Sep-02	3.64	5.06	ND <0.0278	ND <0.0056	0.262	---	---
	11-Dec-02	3.88	5.62	ND <0.02	ND <0.0278	0.274	---	---
	21-Mar-03	4.0	3.45	ND <0.011	ND <0.0278	0.211	---	---
	11-Jun-03	3.57	3.16	ND <0.01	ND <0.0261	0.149	3,150	7.7
	09-Sep-03	3.55	3.46	ND <0.011	ND <0.0261	0.0248 J	2,960	7.72
	10-Dec-03	3.66	5.01	ND <0.01	ND <0.02	0.021	2,980	7.68
MW-32-20	19-Mar-03	ND <0.01	0.013	ND <0.011	ND <0.0278	0.066	---	---
	20-Mar-03	ND <0.01	0.0115	---	---	---	---	---
	10-Jun-03	ND <0.01	0.0031 J	0.01	ND <0.0261	0.086	6,510	6.95
	10-Sep-03	ND <0.0002	ND <0.001	ND <0.011	ND <0.0261	0.036	6,610	6.78
	04-Nov-03	ND <0.0002	ND <0.001	---	---	---	---	---
	11-Dec-03	ND <0.0002	0.0058	ND <0.01	ND <0.02	0.081	11,500	7.03
MW-32-35	19-Mar-03	ND <0.01	0.0135	ND <0.011	ND <0.0278	0.297	---	---
	20-Mar-03	ND <0.01	0.0131	---	---	---	---	---
	10-Jun-03	ND <0.01	0.0038 J	ND <0.01	ND <0.0261	0.329	7,540	7.31
	10-Sep-03	ND <0.0002	ND <0.001	ND <0.011	ND <0.0261	0.04	6,930	7.2
	04-Nov-03	ND <0.0002	ND <0.001	---	---	---	---	---
	11-Dec-03	ND <0.0002	0.002	ND <0.01	ND <0.02	0.381	6,560	7.26
MW-33-40	19-Mar-03	ND <0.01	0.0155	ND <0.011	ND <0.0278	0.089	---	---
	20-Mar-03	ND <0.01	0.0147	---	---	---	---	---
	11-Jun-03	ND <0.01	0.0034 J	ND <0.01	ND <0.0261	0.171	4,190	8.62
	10-Sep-03	ND <0.0002	ND <0.001	0.019	ND <0.0261	ND <0.0261	14,880	7.84
	04-Nov-03	ND <0.0002	ND <0.001	---	---	---	---	---
	11-Dec-03	ND <0.0002	0.0035	ND <0.01	ND <0.02	0.033	14,200	7.73
MW-34-55	16-Jun-03	ND <0.01	0.0038 J	ND <0.01	0.0223 J	0.074	10,300	7.38
	17-Jun-03	ND <0.01	0.0041 J	ND <0.01	0.0204 J	0.163	11,000	7.51
	10-Sep-03	ND <0.0002	0.0017	ND <0.011	ND <0.0261	0.035	7,050	7.44
	04-Nov-03	ND <0.0002	ND <0.001	---	---	---	---	---
	12-Dec-03	ND <0.0002	0.0018	ND <0.01	ND <0.02	0.038	2,840	7.52
MW-34-80	16-Jun-03	ND <0.01	0.0087	ND <0.01	ND <0.0261	0.069	13,800	7.49
	17-Jun-03	ND <0.01	0.0032 J	ND <0.01	0.0222 J	0.085	14,800	7.57
	10-Sep-03	ND <0.0002	ND <0.001	ND <0.011	ND <0.0261	0.079	13,380	7.47
	04-Nov-03	ND <0.0002	ND <0.001	---	---	---	---	---
	11-Dec-03	0.0377	0.0452	ND <0.01	ND <0.02	0.035	14,100	7.72

Table 1
Groundwater Sampling Results
September 2002 through December 2003
PG&E Topock Groundwater Monitoring Program

LocID	Sample Date	Hexavalent Chromium (mg/L)	Total Chromium (mg/L)	Copper (mg/L)	Nickel (mg/L)	Zinc (mg/L)	Specific Conductance ($\mu\text{S}/\text{cm}$)	pH
PGE-06	09-Sep-03	0.304	0.354	ND <0.011	ND <0.0261	0.027	4,130	7.98
	09-Dec-03	0.671	0.776	ND <0.01	ND <0.02	0.092	4,220	7.71
TW-01	16-Dec-03	3.25	4.32	---	---	---	5,770	7.37

NOTES:

1. milligrams per liter (mg/L)
2. microSiemens per centimeter ($\mu\text{S}/\text{cm}$)
3. ND = not detected at listed reporting limit, J = estimated concentration (result below reporting limit or qualified result from data validation).
4. Hexavalent chromium analysis methods: SW 7196A (reporting limit 0.010 mg/L) and SW 7199 (reporting limit 0.0002 mg/L)
5. Other analysis methods: total chromium (dissolved concentrations, Methods SW 6020A and SW 6010B), copper, nickel, zinc (dissolved concentrations, SW 6020A), specific conductance (SW 9050), pH (SW 9040).
6. (---) = data not collected or not available.
7. * = duplicate sample
8. The September 2003 total chromium (dissolved) results for samples: MW-16, MW-17, MW-21, MW-22, MW-23, MW-27, MW-28 (and MW-28 duplicate sample), MW-29, MW-30-30, MW-32-20, MW-32-35, MW-33-40, MW-34-55, and MW-34-80 are from laboratory re-analyses using Method SW 6010B.

Table 2
Surface Water Sampling Results
September 2002 through December 2003
PG&E Topock Groundwater Monitoring Program

Sample Location	Sample Date	Hexavalent Chromium (mg/L)	Total Chromium (mg/L)	Copper (mg/L)	Nickel (mg/L)	Zinc (mg/L)	Specific Conductance (uS/cm)	pH
CON	18-Sep-02	ND <0.01	0.004	ND <0.02	ND <0.005	0.308	---	---
	12-Dec-02	ND <0.01	0.0073	ND <0.02	ND <0.0278	0.174	---	---
	20-Mar-03	ND <0.01	0.0133	ND <0.011	ND <0.0278	0.245	---	---
	11-Jun-03	ND <0.01	0.003 J	ND <0.01	ND <0.0261	0.127	988	8.31
	08-Sep-03	ND <0.0002	ND <0.001	ND <0.011	ND <0.0261	0.0631	930	8.10
	08-Dec-03	ND <0.0002	ND <0.001	ND <0.01	ND <0.02	0.0401	977	8.31
I-3	18-Sep-02	ND <0.01	0.0044	ND <0.02	ND <0.005	0.096	---	---
	12-Dec-02	ND <0.01	0.0057	ND <0.02	ND <0.0278	0.0847	---	---
	19-Mar-03	ND <0.01	0.0135	ND <0.011	ND <0.0278	0.063	---	---
	10-Jun-03	ND <0.01	0.0034 J	ND <0.01	ND <0.0261	0.0936	969	8.27
	08-Sep-03	ND <0.0002	ND <0.001	ND <0.011	ND <0.0261	0.158	936	8.11
	08-Dec-03	ND <0.0002	ND <0.001	ND <0.01	ND <0.02	0.0592	984	8.28
R-22	18-Sep-02	ND <0.01	0.0034	0.119	0.0244	0.226	---	---
	12-Dec-02	ND <0.01	0.0067	ND <0.02	ND <0.0278	0.0761	---	---
	19-Mar-03	ND <0.01	0.0125	ND <0.011	ND <0.0278	0.159	---	---
	10-Jun-03	ND <0.01	0.003 J	ND <0.01	ND <0.0261	0.105	1,000	8.31
	10-Sep-03	ND <0.0002	ND <0.001	0.0681	ND <0.0261	0.116	960	8.12
	08-Dec-03	ND <0.0002	ND <0.001	ND <0.01	ND <0.02	0.0664	986	8.30
R-27	18-Sep-02	ND <0.01	0.0038	ND <0.02	ND <0.005	0.343	---	---
	12-Dec-02	ND <0.01	0.007	ND <0.02	ND <0.0278	0.135	---	---
	19-Mar-03	ND <0.01	0.0103	ND <0.011	ND <0.0278	0.114	---	---
	10-Jun-03	ND <0.01	0.0026 J	ND <0.01	ND <0.0261	0.174	952	8.31
	10-Sep-03	ND <0.0002	ND <0.001	ND <0.011	ND <0.0261	0.0906	960	8.17
	08-Dec-03	ND <0.0002	ND <0.001	ND <0.01	ND <0.02	0.0343	994	8.32
R-28	18-Sep-02	ND <0.01	0.0187	ND <0.02	0.03	1.06	---	---
	12-Dec-02	ND <0.01	0.0072	ND <0.02	ND <0.0278	0.11	---	---
	20-Mar-03	ND <0.01	0.0146	ND <0.011	ND <0.0278	0.324	---	---
	10-Jun-03	ND <0.01	0.0055	ND <0.01	ND <0.0261	0.174	963	8.29
	10-Sep-03	ND <0.0002	ND <0.001	ND <0.011	ND <0.0261	ND <0.0261	968	8.32
	08-Dec-03	ND <0.0002	ND <0.001	ND <0.01	ND <0.02	0.0309	998	8.38

Table 2
Surface Water Sampling Results
September 2002 through December 2003
PG&E Topock Groundwater Monitoring Program

Sample Location	Sample Date	Hexavalent Chromium (mg/L)	Total Chromium (mg/L)	Copper (mg/L)	Nickel (mg/L)	Zinc (mg/L)	Specific Conductance (uS/cm)	pH
RRB	18-Sep-02	ND <0.01	0.0179	ND <0.02	0.0216	1.06	---	---
	12-Dec-02	ND <0.01	0.0141	ND <0.02	ND <0.0278	0.172	---	---
	20-Mar-03	ND <0.01	0.013	ND <0.011	ND <0.0278	0.334	---	---
	11-Jun-03	ND <0.01	0.0044 J	ND <0.01	ND <0.0261	0.126	995	8.14
	08-Sep-03	ND <0.0002	ND <0.001	ND <0.011	ND <0.0261	0.178	980	7.82
	08-Dec-03	ND <0.0002	ND <0.001	ND <0.01	ND <0.02	0.0331	1,260	7.86

NOTES:

1. mg/L = milligrams per liter
2. μ S/cm = microSiemens per centimeter
2. ND = not detected at listed reporting limit, J = estimated concentration (result below reporting limit or qualified result from data validation).
3. Hexavalent chromium analysis methods: SW 7196A (reporting limit 0.010 mg/L) and SW 7199 (reporting limit 0.0002 mg/L)
4. Other analysis methods: total chromium (dissolved concentrations re-analyses by Method SW 6010B), copper, nickel, zinc (dissolved concentrations, SW 6020A), specific conductance (SW 9050), pH (SW 9040).
5. (---) = data not collected or not available

Table 3
Water Level Measurements and Elevations
September 2002 through December 2003
PG&E Topock Groundwater Monitoring Program

LocID	Well Depth (feet BGS)	Measuring Point Elevation (feet AMSL)	Monitoring Date & Time		Water Level Measurement (feet BMP)	Salinity Field Measurement (percent)	Groundwater/Water Elevation Adjusted for Salinity
			Date	Time			Adjusted for Salinity (feet AMSL)
Monitoring Wells							
MW-09	88	536.18	16-Sep-02	12:00 PM	79.75	0.20	456.45
	88	536.18	09-Dec-02	12:00 PM	81.00	0.20	455.19
	88	536.18	17-Mar-03	12:00 PM	81.20	0.20	454.99
	88	536.18	09-Jun-03	9:04 AM	79.85	0.20	456.35
	88	536.18	08-Sep-03	10:45 AM	80.15	0.20	456.04
	88	536.18	08-Dec-03	9:47 AM	81.22	0.20	454.97
MW-10	95	530.24	16-Sep-02	12:00 PM	74.00	0.20	456.27
	95	530.24	09-Dec-02	12:00 PM	75.28	0.20	454.99
	95	530.24	17-Mar-03	12:00 PM	75.44	0.20	454.83
	95	530.24	09-Jun-03	9:01 AM	73.95	0.20	456.32
	95	530.24	08-Sep-03	10:42 AM	74.40	0.20	455.87
	95	530.24	08-Dec-03	9:40 AM	75.37	0.20	454.90
MW-11	88	522.19	16-Sep-02	12:00 PM	66.17	0.10	456.04
	88	522.19	09-Dec-02	12:00 PM	67.30	0.10	454.91
	88	522.19	17-Mar-03	12:00 PM	66.90	0.10	455.31
	88	522.19	09-Jun-03	8:57 AM	---	0.10	---
	88	522.19	08-Sep-03	10:38 AM	66.52	0.10	455.69
	88	522.19	08-Dec-03	9:35 AM	67.47	0.10	454.74
MW-12	49	483.57	16-Sep-02	12:00 PM	27.75	0.20	455.85
	49	483.57	09-Dec-02	12:00 PM	29.00	0.20	454.60
	49	483.57	17-Mar-03	12:00 PM	28.95	0.20	454.65
	49	483.57	09-Jun-03	10:11 AM	27.58	0.20	456.02
	49	483.57	08-Sep-03	11:58 AM	28.15	0.20	455.45
	49	483.57	08-Dec-03	10:58 AM	29.00	0.20	454.60
MW-13	50	488.20	16-Sep-02	12:00 PM	32.00	0.10	456.21
	50	488.20	09-Dec-02	12:00 PM	32.35	0.10	455.86
	50	488.20	17-Mar-03	12:00 PM	32.40	0.10	455.81
	50	488.20	09-Jun-03	9:45 AM	32.00	0.10	456.21
	50	488.20	08-Sep-03	11:23 AM	32.33	0.10	455.88
	50	488.20	08-Dec-03	10:36 AM	32.40	0.10	455.81

Table 3
Water Level Measurements and Elevations
September 2002 through December 2003
PG&E Topock Groundwater Monitoring Program

LocID	Well Depth (feet BGS)	Measuring Point Elevation (feet AMSL)	Monitoring Date & Time		Water Level Measurement (feet BMP)	Salinity Field Measurement (percent)	Groundwater/Water Elevation Adjusted for Salinity
			Date	Time			Adjusted for Salinity (feet AMSL)
MW-14	132	570.54	16-Sep-02	12:00 PM	114.75	0.10	455.80
	132	570.54	09-Dec-02	12:00 PM	115.90	0.10	454.65
	132	570.54	17-Mar-03	12:00 PM	115.70	0.10	454.85
	132	570.54	09-Jun-03	9:40 AM	114.40	0.10	456.15
	132	570.54	08-Sep-03	11:15 AM	115.00	0.10	455.55
	132	570.54	08-Dec-03	10:27 AM	115.90	0.10	454.65
MW-15	202	641.09	16-Sep-02	12:00 PM	184.70	0.12	456.41
	202	641.09	09-Dec-02	12:00 PM	186.00	0.10	455.10
	202	641.09	17-Mar-03	12:00 PM	186.25	0.10	454.85
	202	641.09	09-Jun-03	9:14 AM	185.83	0.10	455.27
	202	641.09	08-Sep-03	10:53 AM	184.33	0.10	456.77
	202	641.09	08-Dec-03	9:56 AM	186.23	0.10	454.87
MW-16	218	656.59	16-Sep-02	12:00 PM	199.70	0.10	456.90
	218	656.59	09-Dec-02	12:00 PM	201.10	0.10	455.50
	218	656.59	17-Mar-03	12:00 PM	201.60	0.10	455.00
	218	656.59	09-Jun-03	9:19 AM	200.60	0.10	456.00
	218	656.59	08-Sep-03	11:04 AM	200.43	0.10	456.17
	218	656.59	08-Dec-03	10:05 AM	201.25	0.10	455.35
MW-17	151	588.23	16-Sep-02	12:00 PM	132.68	0.10	455.56
	151	588.23	09-Dec-02	12:00 PM	133.68	0.10	454.56
	151	588.23	09-Jun-03	12:40 PM	132.80	0.10	455.44
	151	588.23	08-Sep-03	1:33 PM	132.95	0.10	455.29
	151	588.23	05-Nov-03	8:43 AM	133.60	0.10	454.64
	151	588.23	08-Dec-03	10:15 AM	133.77	0.10	454.47
MW-18	110	544.52	16-Sep-02	12:00 PM	88.78	0.10	455.76
	110	544.52	09-Dec-02	12:00 PM	89.95	0.10	454.59
	110	544.52	17-Mar-03	12:00 PM	89.80	0.10	454.74
	110	544.52	09-Jun-03	9:03 AM	88.55	0.10	455.99
	110	544.52	08-Sep-03	11:10 AM	88.97	0.10	455.57
	110	544.52	08-Dec-03	10:23 AM	89.95	0.10	454.59

Table 3
Water Level Measurements and Elevations
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LocID	Well Depth (feet BGS)	Measuring Point Elevation (feet AMSL)	Monitoring Date & Time		Water Level Measurement (feet BMP)	Salinity Field Measurement (percent)	Groundwater/Water Elevation
							Adjusted for Salinity (feet AMSL)
MW-19	66	499.11	16-Sep-02	12:00 PM	44.31	0.10	454.82
	66	499.11	09-Dec-02	12:00 PM	45.60	0.10	453.52
	66	499.11	17-Mar-03	12:00 PM	44.52	0.10	454.61
	66	499.11	09-Jun-03	9:48 AM	43.27	0.10	455.86
	66	499.11	08-Sep-03	11:32 AM	44.32	0.10	454.81
	66	499.11	08-Dec-03	10:43 AM	45.18	0.10	453.95
MW-20-070	70	499.67	16-Sep-02	12:00 PM	44.52	0.20	455.19
	70	499.67	09-Dec-02	12:00 PM	45.95	0.20	453.76
	70	499.67	17-Mar-03	12:00 PM	44.83	0.20	454.88
	70	499.67	09-Jun-03	10:02 AM	43.60	0.20	456.11
	70	499.67	06-Aug-03	11:55 AM	44.27	0.20	455.44
	70	499.67	06-Aug-03	11:56 AM	44.27	0.20	455.44
	70	499.67	08-Sep-03	11:37 AM	44.70	0.20	455.01
	70	499.67	08-Dec-03	10:50 AM	44.45	0.20	455.26
MW-20-100	100	500.08	16-Sep-02	12:00 PM	45.15	0.30	455.05
	100	500.08	09-Dec-02	12:00 PM	47.50	0.30	452.69
	100	500.08	17-Mar-03	12:00 PM	45.60	0.30	454.60
	100	500.08	09-Jun-03	10:06 AM	43.95	0.30	456.25
	100	500.08	06-Aug-03	12:10 PM	44.80	0.30	455.40
	100	500.08	08-Sep-03	11:42 AM	45.15	0.30	455.05
	100	500.08	08-Dec-03	10:53 AM	45.93	0.30	454.27
MW-20-130	132	500.20	16-Sep-02	12:00 PM	45.45	1.20	455.49
	132	500.20	09-Dec-02	12:00 PM	46.95	1.20	453.98
	132	500.20	17-Mar-03	12:00 PM	45.27	1.20	455.67
	132	500.20	09-Jun-03	10:04 AM	44.25	1.10	456.64
	132	500.20	17-Jun-03	10:30 AM	44.70	1.10	456.19
	132	500.20	08-Sep-03	11:40 AM	45.55	1.20	455.39
	132	500.20	08-Dec-03	10:57 AM	46.30	1.20	454.64

Table 3
Water Level Measurements and Elevations
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LocID	Well Depth (feet BGS)	Measuring Point Elevation (feet AMSL)	Monitoring Date & Time		Water Level Measurement (feet BMP)	Salinity Field Measurement (percent)	Groundwater/Water Elevation Adjusted for Salinity
			Date	Time			Adjusted for Salinity (feet AMSL)
MW-21	60	504.77	16-Sep-02	12:00 PM	49.30	0.80	455.53
	60	504.77	09-Dec-02	12:00 PM	50.60	0.80	454.22
	60	504.77	17-Mar-03	12:00 PM	50.50	0.90	454.33
	60	504.77	09-Jun-03	10:35 AM	49.00	0.80	455.83
	60	504.77	08-Sep-03	11:52 AM	49.25	0.90	455.59
	60	504.77	03-Nov-03	8:53 AM	49.87	1.00	454.97
	60	504.77	08-Dec-03	10:15 AM	50.65	0.90	454.18
MW-22	11	460.30	06-Aug-02	12:00 PM	4.85	1.86	455.56
	11	460.30	16-Sep-02	12:00 PM	6.03	2.00	454.37
	11	460.30	09-Dec-02	12:00 PM	7.00	2.20	453.39
	11	460.30	17-Mar-03	12:00 PM	5.87	1.80	454.52
	11	460.30	09-Jun-03	10:50 AM	4.75	1.70	455.65
	11	460.30	08-Sep-03	12:42 PM	6.50	2.10	453.90
	11	460.30	08-Dec-03	12:10 PM	6.25	2.10	454.15
MW-23	80	506.53	16-Sep-02	12:00 PM	51.52	1.10	455.25
	80	506.53	09-Dec-02	12:00 PM	52.65	1.30	454.15
	80	506.53	17-Mar-03	12:00 PM	52.20	1.20	454.58
	80	506.53	09-Jun-03	10:17 AM	51.25	1.20	455.54
	80	506.53	08-Sep-03	12:00 PM	51.72	1.20	455.07
	80	506.53	08-Dec-03	11:04 AM	52.63	1.20	454.15
MW-24A	125	566.38	16-Sep-02	12:00 PM	110.68	0.20	455.72
	125	566.38	09-Dec-02	12:00 PM	111.90	0.20	454.50
	125	566.38	17-Mar-03	12:00 PM	112.00	0.20	454.40
	125	566.38	09-Jun-03	8:50 AM	110.60	0.20	455.80
	125	566.38	05-Aug-03	5:45 PM	110.57	0.20	455.83
	125	566.38	06-Aug-03	10:45 AM	110.69	0.20	455.71
	125	566.38	08-Sep-03	10:26 AM	111.02	0.20	455.38
	125	566.38	09-Sep-03	3:34 PM	110.97	0.20	455.43
	125	566.38	09-Sep-03	3:04 PM	110.96	0.20	455.44
	125	566.38	08-Dec-03	9:15 AM	112.00	0.20	454.40

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Water Level Measurements and Elevations
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LocID	Well Depth (feet BGS)	Measuring Point Elevation (feet AMSL)	Monitoring Date & Time		Water Level Measurement (feet BMP)	Salinity Field Measurement (percent)	Groundwater/Water Elevation		
							Adjusted for Salinity (feet AMSL)		
MW-24B	217	564.01	16-Sep-02	12:00 PM	108.40	0.80	456.24		
	217	564.01	09-Dec-02	12:00 PM	109.80	0.90	454.91		
	217	564.01	17-Mar-03	12:00 PM	109.75	0.80	454.88		
	217	564.01	09-Jun-03	8:48 AM	108.35	0.80	456.29		
	217	564.01	05-Aug-03	6:30 PM	108.30	0.80	456.34		
	217	564.01	06-Aug-03	10:45 AM	108.37	0.80	456.27		
	217	564.01	08-Sep-03	10:24 AM	108.82	0.90	455.89		
	217	564.01	09-Sep-03	2:54 PM	108.64	0.90	456.07		
	217	564.01	09-Sep-03	3:06 PM	108.64	0.90	456.07		
	217	564.01	09-Sep-03	3:51 PM	108.66	0.90	456.05		
MW-24BR	440	563.11	16-Sep-02	12:00 PM	107.25	0.90	457.99		
	440	563.11	09-Dec-02	12:00 PM	108.75	1.00	456.72		
	440	563.11	17-Mar-03	12:00 PM	108.45	0.90	456.79		
	440	563.11	09-Jun-03	8:45 AM	106.90	0.90	458.35		
	440	563.11	08-Sep-03	10:15 AM	107.58	0.90	457.66		
	440	563.11	09-Sep-03	3:10 PM	107.60	0.90	457.64		
	440	563.11	09-Sep-03	3:15 PM	107.60	0.90	457.64		
	440	563.11	09-Sep-03	3:56 PM	107.59	0.90	457.65		
	440	563.11	08-Dec-03	9:30 AM	108.30	1.00	457.17		
	MW-25	105	542.34	16-Sep-02	12:00 PM	86.83	0.10	455.52	
		105	542.34	09-Dec-02	12:00 PM	88.10	0.10	454.25	
		105	542.34	17-Mar-03	12:00 PM	87.65	0.10	454.70	
		105	542.34	09-Jun-03	9:50 AM	88.35	0.10	454.00	
		105	542.34	08-Sep-03	11:26 AM	87.00	0.10	455.35	
		105	542.34	08-Dec-03	10:37 AM	87.95	0.10	454.40	
MW-26	72	501.74	16-Sep-02	12:00 PM	46.27	0.20	455.51		
	72	501.74	09-Dec-02	12:00 PM	47.50	0.20	454.28		
	72	501.74	17-Mar-03	12:00 PM	47.10	0.20	454.68		
	72	501.74	09-Jun-03	10:40 AM	45.85	0.20	455.93		
	72	501.74	08-Sep-03	11:47 AM	46.53	0.20	455.25		
	72	501.74	08-Dec-03	10:21 AM	47.40	0.20	454.38		

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Water Level Measurements and Elevations
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LocID	Well Depth (feet BGS)	Measuring Point Elevation (feet AMSL)	Monitoring Date & Time		Water Level Measurement (feet BMP)	Salinity Field Measurement (percent)	Groundwater/Water Elevation
							Adjusted for Salinity (feet AMSL)
MW-27	17	460.09	06-Aug-02	12:00 PM	4.57	0.07	455.53
	17	460.09	16-Sep-02	12:00 PM	5.95	0.10	454.15
	17	460.09	09-Dec-02	12:00 PM	7.26	0.00	452.83
	17	460.09	17-Mar-03	12:00 PM	5.32	0.10	454.78
	17	460.09	09-Jun-03	11:00 AM	3.85	0.00	456.24
	17	460.09	10-Jun-03	9:45 AM	3.71	0.00	456.38
	17	460.09	17-Jun-03	8:30 AM	4.19	0.00	455.90
	17	460.09	05-Aug-03	2:40 PM	4.97	0.00	455.12
	17	460.09	08-Sep-03	12:47 PM	5.75	0.00	454.34
	17	460.09	04-Nov-03	9:40 AM	6.65	0.10	453.45
	17	460.09	08-Dec-03	12:26 PM	6.40	0.00	453.69
MW-28	23	466.32	06-Aug-02	12:00 PM	11.07	0.09	455.26
	23	466.32	16-Sep-02	12:00 PM	12.25	0.10	454.08
	23	466.32	09-Dec-02	12:00 PM	13.40	0.10	452.93
	23	466.32	17-Mar-03	12:00 PM	11.45	0.20	454.89
	23	466.32	09-Jun-03	11:40 AM	10.10	0.10	456.23
	23	466.32	08-Sep-03	1:05 PM	12.00	0.10	454.33
	23	466.32	04-Nov-03	11:29 AM	13.00	0.10	453.33
	23	466.32	08-Dec-03	12:48 PM	12.70	0.10	453.63
MW-29	40	484.73	06-Aug-02	12:00 PM	29.09	0.28	455.67
	40	484.73	16-Sep-02	12:00 PM	29.87	0.10	454.87
	40	484.73	09-Dec-02	12:00 PM	31.20	0.50	453.57
	40	484.73	17-Mar-03	12:00 PM	29.90	0.80	454.90
	40	484.73	09-Jun-03	12:00 PM	28.75	0.30	456.01
	40	484.73	08-Sep-03	1:25 PM	30.00	0.20	454.75
	40	484.73	08-Dec-03	1:00 PM	30.60	0.30	454.15

Table 3
Water Level Measurements and Elevations
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LocID	Well Depth (feet BGS)	Measuring Point Elevation (feet AMSL)	Monitoring Date & Time		Water Level Measurement (feet BMP)	Salinity Field Measurement (percent)	Groundwater/Water Elevation Adjusted for Salinity	
			Date	Time			Adjusted for Salinity (feet AMSL)	
MW-30-30	32	467.64	06-Aug-02	12:00 PM	12.45	3.36	455.70	
	32	467.64	16-Sep-02	12:00 PM	13.20	4.00	455.03	
	32	467.64	09-Dec-02	12:00 PM	14.30	4.00	453.90	
	32	467.64	17-Mar-03	12:00 PM	13.30	2.90	454.77	
	32	467.64	09-Jun-03	11:30 AM	12.00	2.50	456.03	
	32	467.64	05-Aug-03	2:00 PM	12.75	2.50	455.27	
	32	467.64	06-Aug-03	2:00 PM	12.89	2.50	455.12	
	32	467.64	08-Sep-03	12:58 PM	13.30	4.00	454.93	
	32	467.64	10-Sep-03	1:25 PM	13.32	4.00	454.91	
	32	467.64	04-Nov-03	11:14 AM	13.70	4.00	454.52	
MW-30-50	50	468.36	17-Mar-03	12:00 PM	13.55	0.70	455.00	
	50	468.36	09-Jun-03	11:31 AM	12.25	0.60	456.28	
	50	468.36	05-Aug-03	3:20 PM	14.03	0.60	454.49	
	50	468.36	08-Sep-03	1:00 PM	13.97	0.70	454.58	
	50	468.36	10-Sep-03	1:30 PM	14.05	0.70	454.50	
	50	468.36	04-Nov-03	10:55 AM	14.78	0.60	453.74	
	50	468.36	08-Dec-03	12:45 PM	14.73	0.20	453.68	
MW-31	62	496.30	16-Sep-02	12:00 PM	41.35	0.20	454.98	
	62	496.30	09-Dec-02	12:00 PM	42.65	0.20	453.68	
	62	496.30	17-Mar-03	12:00 PM	41.44	0.20	454.89	
	62	496.30	09-Jun-03	9:57 AM	40.20	0.20	456.13	
	62	496.30	08-Sep-03	11:35 AM	41.35	0.20	454.98	
	62	496.30	08-Dec-03	10:45 AM	42.15	0.20	454.18	
MW-32-20	20	461.05	17-Mar-03	12:00 PM	6.50	0.40	454.59	
	20	461.05	09-Jun-03	10:45 AM	5.30	0.40	455.80	
	20	461.05	08-Sep-03	12:38 PM	6.64	0.40	454.45	
	20	461.05	04-Nov-03	9:27 AM	7.25	0.70	453.87	
	20	461.05	08-Dec-03	12:15 PM	7.25	0.70	453.87	
MW-32-35	37	461.21	17-Mar-03	12:00 PM	6.40	0.30	454.88	
	37	461.21	09-Jun-03	10:43 AM	5.03	0.40	456.28	
	37	461.21	08-Sep-03	12:36 PM	6.67	0.40	454.63	
	37	461.21	04-Nov-03	9:10 AM	7.52	0.40	453.78	
	37	461.21	08-Dec-03	12:20 PM	7.40	0.40	453.90	

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Water Level Measurements and Elevations
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LocID	Well Depth (feet BGS)	Measuring Point Elevation (feet AMSL)	Monitoring Date & Time		Water Level Measurement (feet BMP)	Salinity Field Measurement (percent)	Groundwater/Water Elevation Adjusted for Salinity	
							Adjusted for Salinity (feet AMSL)	
MW-33-40	39	486.92	17-Mar-03	12:00 PM	32.20	0.20	454.73	
	39	486.92	09-Jun-03	12:08 PM	30.90	0.20	456.04	
	39	486.92	08-Sep-03	1:10 PM	32.28	1.10	454.72	
	39	486.92	04-Nov-03	1:00 PM	33.13	1.00	453.85	
	39	486.92	08-Dec-03	12:52 PM	33.05	1.00	453.93	
MW-33-90	89	487.08	17-Mar-03	12:00 PM	32.15	0.40	455.10	
	89	487.08	09-Jun-03	12:05 PM	30.95	0.50	456.34	
	89	487.08	08-Sep-03	1:14 PM	32.50	0.50	454.79	
	89	487.08	04-Nov-03	1:14 PM	33.30	0.60	454.03	
	89	487.08	08-Dec-03	12:55 PM	33.25	---	---	
MW-34-55	56	460.45	09-Jun-03	11:12 AM	4.20	0.50	456.44	
	56	460.45	16-Jun-03	1:10 PM	5.45	0.50	455.18	
	56	460.45	05-Aug-03	4:05 PM	6.00	0.50	454.63	
	56	460.45	06-Aug-03	1:40 PM	6.24	0.50	454.39	
	56	460.45	08-Sep-03	12:52 PM	6.17	0.30	454.39	
	56	460.45	04-Nov-03	10:00 AM	6.97	0.40	453.62	
	56	460.45	08-Dec-03	12:30 PM	7.00	0.10	453.49	
MW-34-80	83	460.53	09-Jun-03	11:15 AM	4.30	0.90	456.74	
	83	460.53	16-Jun-03	11:15 AM	5.25	0.80	455.73	
	83	460.53	05-Aug-03	4:20 PM	6.10	0.80	454.87	
	83	460.53	06-Aug-03	1:40 PM	6.27	0.80	454.70	
	83	460.53	08-Sep-03	12:50 PM	6.27	1.00	454.81	
	83	460.53	04-Nov-03	10:20 AM	7.00	1.00	454.07	
	83	460.53	08-Dec-03	12:35 PM	7.07	0.90	453.95	
PGE-06	180	562.99	16-Sep-02	12:00 PM	106.85	0.33	456.31	
	180	562.99	09-Dec-02	12:00 PM	108.10	0.33	455.06	
	180	562.99	17-Mar-03	12:00 PM	108.15	0.33	455.01	
	180	562.99	09-Jun-03	8:25 AM	106.90	0.33	456.26	
	180	562.99	08-Sep-03	10:30 AM	107.20	0.20	455.90	
	180	562.99	08-Dec-03	9:25 AM	108.15	0.30	455.00	
TW-01	269	---	08-Dec-03	2:10 PM	165.55	---	---	

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Water Level Measurements and Elevations
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PG&E Topock Groundwater Monitoring Program

LocID	Well Depth (feet BGS)	Measuring Point Elevation (feet AMSL)	Monitoring Date & Time	Water Level Measurement (feet BMP)	Salinity Field Measurement (percent)	Groundwater/Water Elevation Adjusted for Salinity (feet AMSL)
Surface Water Stations						
A-Dock	0	459.67	06-Aug-02 12:00 PM	5.02	0.00	454.65
	0	459.67	16-Sep-02 12:00 PM	5.05	0.00	454.62
	0	459.67	09-Dec-02 12:00 PM	6.80	0.00	452.87
	0	459.67	17-Mar-03 12:00 PM	4.45	0.00	455.22
	0	459.67	09-Jun-03 12:25 PM	3.50	0.00	456.17
	0	459.67	08-Sep-03 12:23 PM	5.50	0.00	454.17
	0	459.67	08-Dec-03 1:22 PM	6.75	0.00	452.92
I-3	0	459.87	06-Aug-02 12:00 PM	5.70	0.00	454.17
	0	459.87	16-Sep-02 12:00 PM	7.82	0.00	452.05
	0	459.87	09-Dec-02 12:00 PM	7.02	0.00	452.85
	0	459.87	17-Mar-03 12:00 PM	5.40	0.00	454.47
	0	459.87	09-Jun-03 10:26 AM	3.65	0.00	456.22
	0	459.87	10-Jun-03 11:10 AM	4.25	0.00	455.62
	0	459.87	16-Jun-03 3:25 PM	5.53	0.00	454.34
	0	459.87	08-Sep-03 12:06 PM	5.85	0.00	454.02
	0	459.87	09-Sep-03 4:17 PM	6.72	0.00	453.15
	0	459.87	03-Nov-03 3:34 PM	7.60	0.00	452.27
RRB	0	476.18	06-Aug-02 12:00 PM	21.83	0.00	454.35
	0	476.18	16-Sep-02 12:00 PM	21.78	0.00	454.40
	0	476.18	09-Dec-02 12:00 PM	23.40	0.00	452.78
	0	476.18	17-Mar-03 12:00 PM	21.25	0.00	454.93
	0	476.18	09-Jun-03 12:20 PM	20.25	0.00	455.93
	0	476.18	08-Sep-03 12:18 PM	22.10	0.00	454.08
	0	476.18	03-Nov-03 3:42 PM	23.57	0.00	452.61
	0	476.18	08-Dec-03 1:42 PM	23.35	0.00	452.83

NOTES:

1. BGS: below ground surface
2. AMSL: above mean sea level
3. BMP: below well measure point
4. Well depths rounded off to whole foot.
5. (---): data not collected or available.

Table 4
Field Water Quality Measurements
September 2002 through December 2003
PG&E Topock Groundwater Monitoring Program

LocID	Sampling Date	Electrical Conductivity (µS/cm)	Temperature (°C)	pH	ORP (mV)	Dissolved Oxygen (mg/L)
Monitoring Wells						
MW-09	17-Sep-02	4,260	30.5	8.14	8	4.4
	10-Dec-02	3,061	24.9	8.18	136	7.7
	18-Mar-03	3,540	26.9	7.96	65	4.2
	12-Jun-03	3,590	30.2	8.09	67	8.4
	11-Sep-03	3,640	30.5	7.35	77	3.7
	12-Dec-03	3,750	27.4	7.30	55	4.5
MW-10	17-Sep-02	3,580	30.0	8.19	-25	2.3
	10-Dec-02	3,038	27.5	8.29	13	2.6
	18-Mar-03	3,530	28.1	8.18	42	0.8
	12-Jun-03	3,580	29.2	8.16	37	1.1
	11-Sep-03	3,250	29.1	7.46	57	2.3
	12-Dec-03	3,140	28.2	7.48	52	3.3
MW-11	17-Sep-02	2,640	31.9	8.14	-82	6.1
	10-Dec-02	4,020	27.0	8.24	128	4.6
	18-Mar-03	2,430	28.6	8.04	62	8.3
	12-Jun-03	2,520	29.8	8.10	58	6.5
	11-Sep-03	2,560	29.8	7.44	68	5.9
	12-Dec-03	2,350	27.8	7.37	73	4.5
MW-12	18-Sep-02	4,300	28.3	9.06	-128	4.2
	11-Dec-02	4,015	27.6	9.23	-145	6.1
	20-Mar-03	4,300	28.0	9.28	-52	5.0
	11-Jun-03	4,150	28.7	9.19	-10	6.7
	09-Sep-03	4,360	29.3	8.03	187	6.5
	10-Dec-03	4,480	27.8	8.47	-24	7.2
MW-13	17-Sep-02	2,300	27.6	6.63	190	7.4
	10-Dec-02	2,020	27.6	8.31	107	6.7
	21-Mar-03	2,260	26.4	8.29	48	6.4
	12-Jun-03	2,170	29.5	8.17	27	6.4
	13-Sep-03	2,180	28.9	7.55	19	6.9
	12-Dec-03	2,060	27.9	7.53	-13	6.0

Table 4
Field Water Quality Measurements
September 2002 through December 2003
PG&E Topock Groundwater Monitoring Program

LocID	Sampling Date	Electrical Conductivity (uS/cm)	Temperature (°C)	pH	ORP (mV)	Dissolved Oxygen (mg/L)
MW-14	18-Sep-02	1,480	29.6	8.32	-30	7.8
	10-Dec-02	1,035	27.4	8.39	66	8.5
	21-Mar-03	1,700	28.0	8.35	9	7.6
	12-Jun-03	1,630	29.3	8.22	-33	6.0
	11-Sep-03	1,660	29.4	7.62	33	6.1
	12-Dec-03	1,540	28.0	7.61	4	6.7
MW-15	10-Dec-02	1,045	27.8	8.42	112	4.2
	18-Mar-03	1,850	29.1	8.31	11	8.9
	12-Jun-03	1,670	30.5	8.47	47	6.4
	11-Sep-03	1,260	30.5	7.81	20	7.6
	12-Dec-03	1,400	29.2	7.58	10	7.2
MW-16	10-Dec-02	1,031	28.5	8.55	84	2.5
	18-Mar-03	1,210	29.1	8.52	-22	5.0
	12-Jun-03	1,190	30.9	8.50	-28	5.5
	11-Sep-03	1,220	30.6	7.79	-28	3.2
	12-Dec-03	1,200	28.1	1.67	-49	5.6
MW-17	18-Sep-02	1,650	29.9	8.57	-150	4.2
	11-Sep-03	1,840	30.5	7.60	39	2.7
	05-Nov-03	1,920	27.6	7.72	43	4.7
	12-Dec-03	1,730	27.8	7.58	29	6.0
MW-18	18-Sep-02	1,320	29.6	8.32	10	8.0
	10-Dec-02	1,035	27.4	8.39	66	8.5
	18-Mar-03	1,200	27.1	8.26	69	9.9
	12-Jun-03	1,300	30.4	8.28	65	7.4
	11-Sep-03	1,360	29.6	7.62	91	7.8
	12-Dec-03	1,300	27.7	7.58	21	7.8
MW-19	10-Dec-02	2,058	27.4	8.34	108	6.1
	21-Mar-03	2,620	27.8	8.43	56	7.3
	13-Sep-03	2,500	29.0	7.56	64	7.0
	10-Dec-03	2,480	27.4	7.58	81	7.4
MW-20-070	17-Sep-02	3,660	30.0	8.09	137	5.2
	11-Dec-02	3,043	28.2	8.23	41	4.9
	20-Mar-03	4,210	27.8	8.43	40	4.7
	11-Jun-03	3,770	31.4	8.15	62	3.8
	09-Sep-03	3,660	30.6	7.50	113	4.3
	10-Dec-03	3,680	28.5	7.61	82	6.2

Table 4
Field Water Quality Measurements
September 2002 through December 2003
PG&E Topock Groundwater Monitoring Program

LocID	Sampling Date	Electrical Conductivity (uS/cm)	Temperature (°C)	pH	ORP (mV)	Dissolved Oxygen (mg/L)
MW-20-100	17-Sep-02	6,080	30.1	8.30	135	3.0
	11-Dec-02	5,079	27.8	8.44	2	1.5
	20-Mar-03	5,870	29.4	8.50	-20	1.9
	11-Jun-03	5,730	31.4	8.38	31	1.6
	09-Sep-03	6,010	30.4	7.61	95	0.9
	10-Dec-03	15,900	28.3	7.80	53	3.8
MW-20-130	17-Sep-02	20,000	32.1	8.40	102	4.0
	11-Dec-02	19,001	28.9	8.41	1	2.3
	20-Mar-03	19,400	29.2	8.49	17	3.0
	11-Jun-03	19,000	31.1	8.30	34	1.9
	09-Sep-03	20,000	32.1	7.59	110	4.5
	10-Dec-03	19,100	26.5	7.81	48	3.2
MW-21	18-Sep-02	13,000	28.5	7.58	-198	0.3
	11-Dec-02	13,005	26.3	7.70	-176	1.6
	20-Mar-03	15,600	27.3	7.96	-230	0.3
	11-Jun-03	13,900	28.7	7.61	-192	0.1
	09-Sep-03	14,400	30.3	7.13	-69	3.9
	04-Nov-03	16,900	26.1	7.50	219	5.9
	10-Dec-03	15,800	26.4	7.08	-105	3.8
MW-22	18-Sep-02	32,000	30.1	7.05	-143	1.2
	12-Dec-02	34,007	23.2	7.36	-143	0.0
	19-Mar-03	28,900	20.3	7.28	-161	1.4
	10-Jun-03	27,300	24.7	8.15	-156	0.3
	10-Sep-03	33,900	30.8	6.60	-102	1.0
	11-Dec-03	32,600	22.8	6.97	-23	3.3
MW-23	18-Sep-02	18,300	27.8	7.53	-182	1.6
	11-Dec-02	20,008	26.4	7.66	-196	1.0
	20-Mar-03	19,900	27.7	7.94	-148	1.0
	11-Jun-03	19,400	29.1	7.78	-155	0.6
	09-Sep-03	20,700	28.2	7.09	-84	1.8
	11-Dec-03	21,000	26.0	7.42	-198	2.6

Table 4
Field Water Quality Measurements
September 2002 through December 2003
PG&E Topock Groundwater Monitoring Program

LocID	Sampling Date	Electrical Conductivity (uS/cm)	Temperature (°C)	pH	ORP (mV)	Dissolved Oxygen (mg/L)
MW-24A	17-Sep-02	4,290	31.6	8.35	151	5.7
	11-Dec-02	3,046	26.4	7.27	212	3.4
	18-Mar-03	3,650	27.9	8.50	12	3.3
	12-Jun-03	3,850	29.1	8.71	-150	3.5
	11-Sep-03	3,600	29.3	7.79	16	2.9
	10-Dec-03	3,620	28.5	7.86	16	4.7
MW-24B	10-Dec-02	12,400	25.8	8.83	85	1.3
	18-Mar-03	13,700	29.1	8.71	-24	1.5
	12-Jun-03	14,400	31.0	8.65	13	1.9
	11-Sep-03	14,700	31.1	8.28	-41	2.7
	10-Dec-03	15,300	29.4	8.09	-47	2.9
MW-24BR	18-Sep-02	16,900	29.1	8.50	-188	2.2
	11-Dec-02	17,000	30.4	8.52	-302	1.1
	18-Mar-03	15,200	26.3	8.49	-297	0.9
	12-Jun-03	15,800	32.4	8.38	-359	0.1
	11-Sep-03	15,900	32.0	7.81	-294	0.6
	10-Dec-03	16,800	30.5	7.94	-317	2.4
MW-25	17-Sep-02	1,910	29.2	7.85	173	4.6
	10-Dec-02	1,078	28.3	8.24	112	6.3
	19-Mar-03	1,980	28.4	8.24	56	6.6
	12-Jun-03	1,920	30.5	8.07	63	3.5
	13-Sep-03	1,800	29.9	7.48	64	5.0
	12-Dec-03	1,650	28.6	7.63	-39	6.1
MW-26	18-Sep-02	3,590	30.1	8.09	-29	7.2
	11-Dec-02	3,025	28.5	8.11	-40	3.0
	20-Mar-03	3,700	29.0	8.50	-62	6.3
	11-Jun-03	3,480	30.9	8.12	-18	2.9
	09-Sep-03	3,790	31.0	7.25	77	6.4
	10-Dec-03	4,000	26.7	7.42	61	7.4
MW-27	19-Sep-02	1,110	21.7	8.30	-208	1.0
	12-Dec-02	1,004	18.8	8.55	-208	0.0
	19-Mar-03	1,370	18.5	8.34	-182	0.8
	10-Jun-03	980	20.4	9.15	-213	0.1
	10-Sep-03	1,100	21.8	7.57	-183	0.2
	04-Nov-03	1,130	21.0	7.87	-172	3.3
	11-Dec-03	938	19.5	7.72	-177	3.1

Table 4
Field Water Quality Measurements
September 2002 through December 2003
PG&E Topock Groundwater Monitoring Program

LocID	Sampling Date	Electrical Conductivity (uS/cm)	Temperature (°C)	pH	ORP (mV)	Dissolved Oxygen (mg/L)
MW-28	19-Sep-02	1,550	25.1	8.39	-115	1.9
	12-Dec-02	1,069	23.7	8.37	-84	0.2
	20-Mar-03	3,200	23.0	8.41	-143	0.0
	10-Jun-03	1,930	24.4	9.09	-173	0.0
	10-Sep-03	1,430	25.9	7.43	-110	1.0
	04-Nov-03	1,480	25.2	7.87	-106	3.3
	11-Dec-03	1,450	24.0	7.87	-170	3.4
MW-29	19-Sep-02	23,500	24.6	7.95	-210	0.0
	11-Dec-02	7,018	24.5	7.73	-213	0.0
	20-Mar-03	14,300	24.6	7.85	-173	0.0
	11-Jun-03	8,630	24.7	7.63	-255	0.1
	10-Sep-03	5,700	25.2	7.14	-207	0.2
	11-Dec-03	7,180	24.5	7.34	-242	3.0
MW-30-30	19-Sep-02	60,200	27.0	7.37	-138	1.0
	12-Dec-02	61,006	25.7	7.23	-98	0.1
	20-Mar-03	44,100	25.5	7.53	-137	0.1
	10-Jun-03	40,100	28.2	8.43	-153	0.7
	10-Sep-03	62,200	28.7	6.81	-145	0.3
	04-Nov-03	65,600	26.2	7.11	-161	2.0
	11-Dec-03	54,800	25.6	7.04	-130	2.6
MW-30-50	19-Mar-03	9,630	26.1	8.27	-9	0.0
	20-Mar-03	11,700	25.9	8.38	-19	0.0
	10-Jun-03	11,200	26.6	9.48	-201	0.0
	10-Sep-03	11,900	27.4	7.25	-234	0.1
	04-Nov-03	10,300	26.2	7.44	-227	3.1
	12-Dec-03	3,070	25.9	7.42	-324	2.0
MW-31	17-Sep-02	3,350	29.1	8.04	163	7.0
	11-Dec-02	3,033	27.6	8.27	46	5.9
	21-Mar-03	3,320	24.2	8.51	75	8.1
	11-Jun-03	3,150	30.0	8.17	75	7.5
	09-Sep-03	3,280	29.9	7.52	144	6.7
	10-Dec-03	3,220	27.4	7.66	87	6.1

Table 4
Field Water Quality Measurements
September 2002 through December 2003
PG&E Topock Groundwater Monitoring Program

LocID	Sampling Date	Electrical Conductivity (uS/cm)	Temperature (°C)	pH	ORP (mV)	Dissolved Oxygen (mg/L)
MW-32-20	19-Mar-03	6,290	23.4	7.20	-138	0.1
	20-Mar-03	7,000	22.8	7.23	-147	0.0
	10-Jun-03	6,650	25.7	7.65	-144	0.2
	10-Sep-03	7,190	27.8	6.61	-114	0.7
	04-Nov-03	12,000	26.4	7.02	-148	2.9
	11-Dec-03	11,900	24.4	7.05	-118	3.0
MW-32-35	19-Mar-03	6,340	24.5	7.90	-170	0.0
	20-Mar-03	7,210	24.3	7.92	-180	0.0
	10-Jun-03	8,130	24.9	8.53	-283	0.0
	10-Sep-03	7,370	26.1	7.10	-245	0.1
	04-Nov-03	6,940	25.3	7.34	-218	3.0
	11-Dec-03	6,580	24.8	7.29	-254	2.4
MW-33-40	19-Mar-03	3,840	26.5	9.30	-5	1.2
	20-Mar-03	4,250	26.5	9.63	-72	0.3
	11-Jun-03	4,160	27.0	7.59	-267	1.0
	10-Sep-03	18,000	27.8	7.63	-200	0.4
	04-Nov-03	17,000	26.9	7.88	-185	2.9
	11-Dec-03	16,300	26.5	7.80	-258	2.7
MW-34-55	16-Jun-03	11,500	23.2	7.93	-178	0.0
	17-Jun-03	9,040	23.0	7.85	-182	0.0
	10-Sep-03	5,830	24.5	7.50	-319	0.0
	04-Nov-03	7,270	23.1	7.65	-275	2.3
	12-Dec-03	2,770	22.9	6.66	-214	2.8
MW-34-80	16-Jun-03	15,400	23.7	7.80	-194	0.1
	17-Jun-03	13,300	23.3	7.78	-180	0.0
	10-Sep-03	16,000	24.7	7.30	-314	0.0
	04-Nov-03	16,700	23.5	7.84	-215	2.3
	11-Dec-03	15,700	22.9	7.86	-307	1.9
PGE-06	09-Sep-03	4,550	29.6	7.62	-71	0.2
	09-Dec-03	5,020	27.9	7.62	-31	2.5

Table 4
Field Water Quality Measurements
September 2002 through December 2003
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LocID	Sampling Date	Electrical Conductivity (µS/cm)	Temperature (°C)	pH	ORP (mV)	Dissolved Oxygen (mg/L)
Surface Water Stations						
CON	18-Sep-02	804	20.1	8.83	51	11.4
	12-Dec-02	1,009	13.8	9.15	---	---
	20-Mar-03	1,020	14.7	9.72	---	---
	11-Jun-03	887	19.1	8.89	-15	11.2
	08-Sep-03	936	21.9	7.83	186	9.5
	10-Dec-03	969	13.1	8.45	81	9.8
I-3	18-Sep-02	813	19.2	8.60	23	10.8
	12-Dec-02	1,012	13.4	9.25	---	---
	19-Mar-03	804	13.6	5.67	---	---
	10-Jun-03	990	18.4	6.19	235	12.0
	08-Sep-03	977	22.6	8.19	127	12.3
	09-Dec-03	1,110	13.7	8.42	45	10.0
R-22	18-Sep-02	804	22.3	8.75	5	11.1
	12-Dec-02	1,068	14.0	9.32	---	---
	19-Mar-03	900	13.7	9.12	---	---
	10-Jun-03	935	18.8	9.13	74	11.9
	10-Sep-03	1,150	20.1	7.91	56	6.9
	11-Dec-03	1,020	13.2	8.49	41	9.6
R-27	18-Sep-02	803	20.6	8.27	41	11.1
	12-Dec-02	1,003	13.6	9.42	---	---
	19-Mar-03	818	14.3	9.13	---	---
	10-Jun-03	980	21.1	9.88	-73	10.0
	10-Sep-03	1,030	21.2	7.77	-89	5.2
	11-Dec-03	686	13.4	8.30	-65	9.5
R-28	18-Sep-02	804	20.3	8.40	40	10.1
	12-Dec-02	1,012	14.6	9.04	---	---
	19-Mar-03	1,020	14.5	9.02	---	---
	10-Jun-03	980	20.2	9.86	-49	10.7
	10-Sep-03	1,130	21.7	8.06	-130	7.2
	11-Dec-03	936	13.5	8.38	-119	9.5

Table 4
Field Water Quality Measurements
September 2002 through December 2003
PG&E Topock Groundwater Monitoring Program

LocID	Sampling Date	Electrical Conductivity (µS/cm)	Temperature (°C)	pH	ORP (mV)	Dissolved Oxygen (mg/L)
RRB	18-Sep-02	817	23.0	7.88	59	11.3
	12-Dec-02	4,078	14.6	8.69	---	---
	20-Mar-03	1,000	18.1	9.58	---	---
	11-Jun-03	1,040	22.0	8.96	-64	10.6
	08-Sep-03	964	25.5	7.80	143	11.1
	08-Dec-03	1,350	14.3	6.12	163	9.0

NOTES:

1. µS/cm: microSiemens per centimeter
2. ORP: oxidation reduction potential
3. mV: millivolts
4. mg/L: milligrams per liter.
5. All field measurements were collected during groundwater / surface water sampling using a Horiba U-22 water quality meter.