



**Pacific Gas and
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November 15, 2002

Aaron Yue
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Department of Toxic Substances Control, Region 4
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Subject: Groundwater and Surface Water Sampling Results - Third Quarter 2002
Corrective Action Consent Agreement for Bat Cave Wash Area
PG&E Topock Compressor Station, Needles, California
EPA ID No. CAT080011729

Dear Mr. Yue:

This letter transmits the results of the Third Quarter (September 2002) groundwater and surface water monitoring event for the Topock project. During this monitoring event, 23 wells and six locations along the Colorado River were sampled for the site constituents of concern. The results of the groundwater and surface water sampling are presented in Tables 1 and 2, respectively. The sampling locations are shown on the attached Figure 1. We have completed our data review of the sampling results and have determined that the results are usable for monitoring water quality conditions at the site.

If you have any questions, please call me at (925) 974-4081.

Sincerely,

Paul Bottoms for/

Linda Gonsalves
Senior Project Manager
Environmental Services

Attachments

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Table 1
Groundwater Sampling Results - September 2002
Topock Compressor Station

Well Number	Sample Date	Hexavalent Chromium mg/L	Total Chromium mg/L	Copper mg/L	Nickel mg/L	Zinc mg/L	Electrical Conductivity μS/cm	pH
MW-9	17-Sep-2002	0.360	0.401	ND <0.0555	ND <0.0056	0.248	3,500	7.00
MW-10	17-Sep-2002	2.07	2.33	ND <0.02	0.0141	0.177	3,250	7.38
MW-11 duplicate	17-Sep-2002	0.408	0.483	ND <0.0278	0.0157	0.443 J	2,430	7.70
	17-Sep-2002	0.409	0.467	ND <0.0278	ND <0.0056	0.208 J	2,400	7.45
MW-12	18-Sep-2002	1.16	1.31	ND <0.0278	ND <0.0056	0.0845	4,010	8.29
MW-13	17-Sep-2002	0.0183	0.0345	ND <0.02	0.0116	0.171	2,040	7.46
MW-14	18-Sep-2002	0.031	0.0326	ND <0.02	0.0221	0.164	1,590	7.73
MW-15	(see note 3)	---	---	---	---	---	---	---
MW-16	(see note 3)	---	---	---	---	---	---	---
MW-17	18-Sep-2002	ND <0.01	0.005	ND <0.02	ND <0.005	0.169	1,810	7.73
MW-18 duplicate	18-Sep-2002	0.029	0.0355	ND <0.02	ND <0.005	0.375 J	1,270	7.67
	18-Sep-2002	0.0323	0.0326	ND <0.02	ND <0.005	0.147 J	1,260	7.70
MW-19	(see note 3)	---	---	---	---	---	---	---
MW-20-70	17-Sep-2002	8.24	9.79	ND <0.02	0.0137	0.478	3,280	7.62
MW-20-100 duplicate	17-Sep-2002	2.82	3.32	ND <0.02	0.0111	0.206 J	5,500	7.72
	17-Sep-2002	2.58	3.22	ND <0.0278	0.0128	0.486 J	4,510	7.72
MW-20-130	17-Sep-2002	6.62	7.09	ND <0.02	0.0320	0.203	14,520	7.71

Table 1
Groundwater Sampling Results - September 2002
Topock Compressor Station

Well Number	Sample Date	Hexavalent Chromium mg/L	Total Chromium mg/L	Copper mg/L	Nickel mg/L	Zinc mg/L	Electrical Conductivity µS/cm	pH
MW-21	18-Sep-2002	ND <0.01	0.0019	ND <0.02	0.0166	0.099	11,320	7.13
MW-22	19-Sep-2002	ND <0.01	0.0139	ND <0.02	0.0203	0.119	27,690	6.86
MW-23	18-Sep-2002	ND <0.01	0.0072	ND <0.02	0.0308	0.221	16,400	6.95
MW-24A	17-Sep-2002	3.29	3.49	ND <0.02	ND <0.005	0.308	3,270	7.75
MW-24B	(see note 3)	---	---	---	---	---	---	---
MW-24BR	18-Sep-2002	ND <0.01	0.0035	ND <0.02	0.0063	0.152	13,540	8.09
MW-25	17-Sep-2002	2.56	2.79	ND <0.0278	0.0213	0.145	1,700	7.62
MW-26	18-Sep-2002	3.72	3.11	ND <0.0278	0.0183	0.218	3,530	7.44
MW-27	19-Sep-2002	ND <0.01	ND <0.0011	ND <0.02	ND <0.005	0.164	973	7.63
MW-28	19-Sep-2002	ND <0.01	0.0036	ND <0.02	ND <0.005	0.0965	1,299	7.47
MW-29	19-Sep-2002	ND <0.01	0.0076	ND <0.02	0.0199	0.125	2,170	7.36
MW-30	19-Sep-2002	ND <0.01	ND <0.0011	ND <0.02	0.0071	0.042	49,900	6.91
MW-31	17-Sep-2002	3.64	5.06	ND <0.0278	ND <0.0056	0.262	2,880	7.60

NOTES:

1. Table lists the validated analytical results from Third Quarter 2002 monitoring event. Concentrations in milligrams per liter (mg/L)
2. ND = not detected at listed analytical reporting limit, J = qualified result from data validation (result exceeded duplicate sample control limit)
3. (---) denotes not analyzed during Third Quarter sampling.
The well pumps in monitoring wells MW-15, MW-16, MW-19, and MW-24B were not functioning and these wells could not be sampled.
4. Analysis methods: hexavalent chromium (SW 7196A), total chromium, copper, nickel, zinc (dissolved concentrations, SW 6020A) electrical conductivity (SW 9050), pH (SW 9040)

Table 2
Surface Water Sampling Results - September 2002
Topock Compressor Station

Sample Location	Sample Date	Hexavalent Chromium mg/L	Total Chromium mg/L	Copper mg/L	Nickel mg/L	Zinc mg/L	Electrical Conductivity μS/cm	pH
CON	18-Sep-2002	ND <0.01	0.0040	ND <0.02	ND <0.005	0.308	941	8.14
Vernal Pool	18-Sep-2002	ND <0.01	0.0179	ND <0.02	0.0216	1.06	981	7.93
I-3	18-Sep-2002	ND <0.01	0.0044	ND <0.02	ND <0.005	0.096	936	8.09
R-22	18-Sep-2002	ND <0.01	0.0034	0.119	0.0244	0.226	935	8.21
R-27	18-Sep-2002	ND <0.01	0.0038	ND <0.02	ND <0.005	0.343	940	8.17
R-28	18-Sep-2002	ND <0.01	0.0187	ND <0.0555	0.030	1.06	938	8.26

NOTES:

1. Table lists the validated analytical results from Third Quarter 2002 monitoring event. Concentrations in milligrams per liter (mg/L)
2. ND = not detected at listed analytical reporting limit
3. Analysis methods: hexavalent chromium (SW 7196A), total chromium, copper, nickel, zinc (dissolved concentrations, SW 6020A) electrical conductivity (SW 9050), pH (SW 9040)

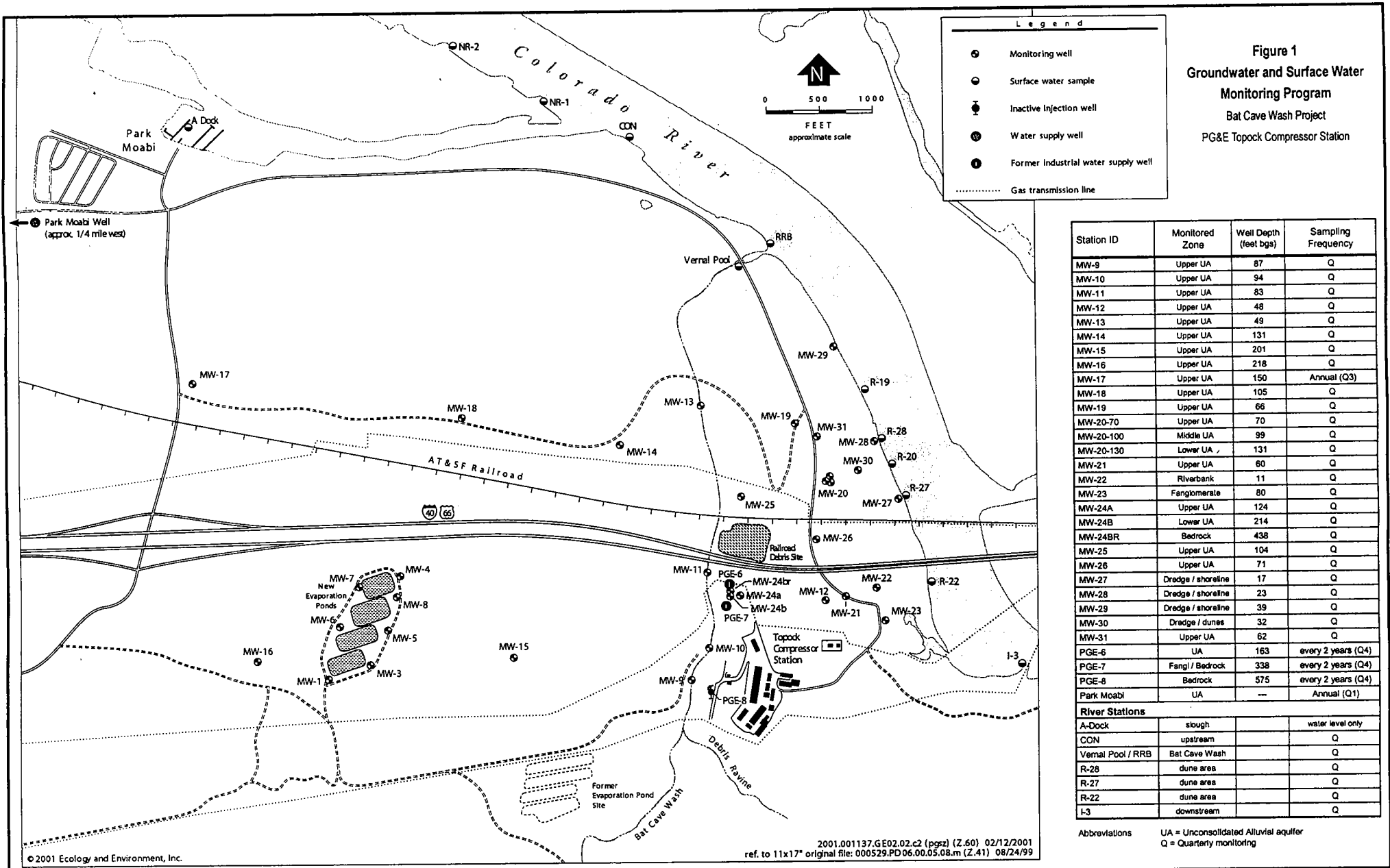


Figure 1
Groundwater and Surface Water
Monitoring Program
 Bat Cave Wash Project
 PG&E Topock Compressor Station

Station ID	Monitored Zone	Well Depth (feet bgs)	Sampling Frequency
MW-9	Upper UA	87	Q
MW-10	Upper UA	94	Q
MW-11	Upper UA	83	Q
MW-12	Upper UA	48	Q
MW-13	Upper UA	49	Q
MW-14	Upper UA	131	Q
MW-15	Upper UA	201	Q
MW-16	Upper UA	218	Q
MW-17	Upper UA	150	Annual (Q3)
MW-18	Upper UA	105	Q
MW-19	Upper UA	66	Q
MW-20-70	Upper UA	70	Q
MW-20-100	Middle UA	99	Q
MW-20-130	Lower UA	131	Q
MW-21	Upper UA	60	Q
MW-22	Rivbank	11	Q
MW-23	Fanglomerate	80	Q
MW-24A	Upper UA	124	Q
MW-24B	Lower UA	214	Q
MW-24BR	Bedrock	438	Q
MW-25	Upper UA	104	Q
MW-26	Upper UA	71	Q
MW-27	Drudge / shoreline	17	Q
MW-28	Drudge / shoreline	23	Q
MW-29	Drudge / shoreline	39	Q
MW-30	Drudge / dunes	32	Q
MW-31	Upper UA	62	Q
PGE-6	UA	163	every 2 years (Q4)
PGE-7	Fangl / Bedrock	338	every 2 years (Q4)
PGE-8	Bedrock	575	every 2 years (Q4)
Park Moabi	UA	--	Annual (Q1)

River Stations		
A-Dock	slough	water level only
CON	upstream	Q
Vernal Pool / RRB	Bat Cave Wash	Q
R-28	dune area	Q
R-27	dune area	Q
R-22	dune area	Q
I-3	downstream	Q

Abbreviations UA = Unconsolidated Alluvial aquifer
 Q = Quarterly monitoring

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