Brunsing Associates, Inc.

February 16, 1999

Project No. 29.7

Ms. Normita Callison
Pacific Coast Building Products
4290 Roseville Road
North Highlands, California 95660

Transmittal: Semi-Annual Groundwater Monitoring Report: January 1999
1735 24th Street, Oakland, California

Dear Ms. Callison:

Attached is a copy of the semi-annual groundwater monitoring report prepared by BACE Environmental, a division of Brunsing Associates, Inc. (BAI) for the facility at 1735 24th Street, Oakland, California. The original report has been sent to Mr. Larry Seto of the Alameda County Health Agency.

If you have any questions, please contact Tom Allan at (415) 391-6840, or Diana Dickerson at (707) 838-3027.

Respectfully Submitted,

Tom Allan

Tom Allan
Staff Environmental Engineer

Attachments: Semi-Annual Monitoring Report (one copy)

760 Market Street, Ste. 344, San Francisco, CA 94102 Phone: (415) 391-6840 Fax: (415) 391-6841

Brunsing Associates, Inc.

February 16, 1999 Project No. 29.7

Ms. Normita Callison
Pacific Coast Building Products
4290 Roseville Road
North Highlands, California 95660

RE: Semi-Annual Groundwater Monitoring Report: January 1999
Pacific Supply Company, 1735 24th Street, Oakland, California
STID 3826

Dear Ms. Callison:

This report has been prepared to document groundwater monitoring performed by BACE Environmental, a division of Brunsing Associates, Inc. (BAI) at the Pacific Supply Company property at 1735 24th Street, Oakland, California. Groundwater monitoring was conducted on January 13, 1999. A brief description of the site history is included in Appendix A.

Scope of Work

The scope of work performed during this reporting period included testing for the existence of free product, calculating groundwater elevations and groundwater flow direction, and collecting a groundwater sample from onsite monitoring wells MW-1 through MW-5, and MW-7 (Plate 1). The current groundwater schedule includes: 1) annual sampling of six wells (MW-1 through MW-5, and MW-7) in the first quarter, 2) semi-annual sampling of well MW-2 (first and third quarters), 3) semi-annual groundwater elevation monitoring (first and third quarters), 4) semi-annual reporting, and 5) deletion of well MW-6 from the monitoring program.

Groundwater Elevations

The depth to groundwater in wells MW-1 through MW-5, and MW-7 were measured on January 13, 1999. The measured groundwater depths and calculated elevations relative to mean sea level (MSL) are listed in Table 1. The potentiometric surface contours and groundwater elevations are presented on Plate 1. The groundwater flow direction near the former underground storage tank (UST) location is to the north, with a gradient of 0.005 foot per foot, based on the calculated groundwater elevations for wells MW-1 through MW-5. Monitoring

well MW-7 continues to indicate an anomalously low groundwater elevation by a magnitude of several feet.

Groundwater Sampling

Wells MW-1 through MW-5, and MW-7 was sampled on January 13, 1999 using the methods described in Appendix B. Free product was not observed in any of the wells. Groundwater samples were transported to BACE Analytical and Field Services (BAFS) for the following analyses:

- Total petroleum hydrocarbons (TPH) as gasoline by EPA Test Method 8015;
- Benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Test Method 8020.

Groundwater Analytical Results

TPH as gasoline and BTEX were not reported in the groundwater samples collected from wells MW-1, MW-3, MW-5, and MW-7. TPH as gasoline was reported in the groundwater samples collected from wells MW-2 and MW-4 at concentrations of 2.1 and 0.12 milligrams per liter (mg/l), respectively. BTEX constituents were reported in the groundwater sample collected from well MW-2 at concentrations of 48, 33, 2.0, and 16 micrograms per liter (μg/l), respectively. Benzene, toluene, and xylenes were reported in groundwater sample collected from well MW-4 at concentrations of 1.1, 0.62, and 0.57 μg/l, respectively. Groundwater samples collected from well MW-2 indicate that the TPH as gasoline concentrations in that well have been stable, ranging from 1.6 to 3.4 mg/l, since July 1993. Low TPH as gasoline concentrations continue to be reported in samples collected from well MW-4 which is located slightly up-gradient and cross-gradient to the former UST.

Analytical laboratory results for the January 13, 1999 groundwater monitoring event are summarized in Table 1, and the TPH as gasoline concentrations for this sampling event are presented on Plate 2. The laboratory report and Chain-of-Custody form for this sampling event are included as Appendix C.

Recommendations

In BAI's groundwater monitoring report dated August 3, 1998, BAI requested that Alameda County review this case for site closure. The request is based on consistently low reported TPH as gasoline concentrations at wells MW-2 and MW-4, and reported non-detectable concentrations at wells MW-1, MW-3, MW-5, and MW-7. Alameda County has not responded to the August 3, 1998 request.

If you have any questions, please contact Tom Allan at (415) 391-6840, or Diana Dickerson at (707) 838-3027.

Respectfully Submitted,

Tom Allan

Tom Allan
Staff Environmental Engineer

Diana M. Dickerson

Diana M. Dickerson R.G., R.E.A
Senior Geologist

cc: Larry Seto, Alameda County Health Agency

List of Attachments

Table 1 - Analytical Data Summary
Plate 1 - Groundwater Elevations, January 13, 1999
Plate 2 - Total Petroleum Hydrocarbons as Gasoline, January 13, 1999
Appendix A - Background and Site History
Appendix B - Monitoring Well Sampling Protocol
Appendix C - Analytical Laboratory Report

TABLE 1. ANALYTICAL DATA SUMMARY
Pacific Supply Company, 1735 24th Street, Oakland, California

Well Name	Sampling Date	Depth to Groundwater (feet)	Groundwater Elevation (feet, MSL)	TPH as gasoline mg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes µg/L	Lead mg/L
MW-1	10/14/88	7.99	0.88	1.1	1.1	ND	–	ND	–
MW-1	12/29/89	7.74	1.13	ND	ND	ND	ND	ND	ND (1)
MW-1	5/28/92	7.81	1.06	ND	ND	ND	ND	ND	0.003(2)
MW-1	9/3/92	7.90	0.97	ND	ND	ND	ND	ND	0.12 (2)
MW-1	11/24/92	7.90	0.97	ND	ND	ND	ND	ND	0.017 (2)
MW-1	3/9/93	7.38	1.49	ND	ND	ND	ND	ND	ND (1)
MW-1	7/21/93	7.68	1.19	ND	ND	ND	ND	ND	ND (1)
MW-1	11/3/93	7.83	1.04	ND	ND	ND	ND	ND	ND (1)
MW-1	2/1/94	7.30	1.57	ND	ND	ND	ND	ND	ND (1)
MW-1	6/2/94	7.43	1.44	ND	ND	ND	ND	ND	ND (1)
MW-1	9/1/94	7.70	1.17	ND	ND	ND	ND	ND	ND (1)
MW-1	12/13/94	6.90	1.97	ND	ND	ND	ND	ND	–
MW-1	3/7/95	7.30	1.57	0.06	3.8	ND	ND	ND	–
MW-1	6/9/95	7.87	1.00	0.09	12	0.8	0.5	1.3	–
MW-1	9/21/95	7.67	1.20	ND	4.1	ND	ND	ND	–
MW-1	12/18/95	7.15	1.72	ND	ND	ND	ND	ND	–
MW-1	2/29/96	6.74	2.13	0.09	1.4	0.5	ND	0.8	–
MW-1	7/15/96	7.76	1.11		–	–	–	–	–
MW-1	1/7/97	6.80	2.07	0.06	0.6	<0.5	<0.5	<0.5	–
MW-1	7/12/97	7.67	1.20	–	–	–	–	–	–
MW-1	1/26/98	6.93	1.94	<0.05	<0.5	<0.5	<0.5	1.1	–
MW-1	7/3/98	7.51	1.36	–	–	–	–	–	–
MW-1	**1/13/99**	**7.63**	**1.24**	**<0.05**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**–**

TABLE 1. ANALYTICAL DATA SUMMARY
Pacific Supply Company, 1735 24th Street, Oakland, California

Well Name	Sampling Date	Depth to Groundwater (feet)	Groundwater Elevation (feet, MSL)	TPH as gasoline mg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes µg/L	Lead mg/L
MW-2	10/14/88	7.29	0.85	11	23	20	–	16	–
MW-2	12/29/89	6.87	1.27	4	200	6.7	ND	ND	0.22 (1)
MW-2	5/28/92	6.92	1.22	8.9	550	48	ND	13	ND (2)
MW-2	9/3/92	7.26	0.88	2.1	760	6.2	1.8	5.1	0.006 (2)
MW-2	11/24/92	7.28	0.86	4.2	370	15	3.4	9.5	ND (2)
MW-2	3/9/93	6.73	1.41	4.3	280	14	3.7	7.1	ND (1)
MW-2	7/21/93	7.02	1.12	3.4	250	9.6	2.5	11	ND(1)
MW-2	11/4/93	7.22	0.92	2.5	230	7.8	2.1	9.9	ND(1)
MW-2	2/1/94	6.93	1.21	3.4	240	17	ND	15	ND(1)
MW-2	6/2/94	6.86	1.28	3.0	150	9.8	3.0	10	ND(1)
MW-2	9/1/94	7.10	1.04	2.1	120	9.8	2.0	9.6	ND(1)
MW-2	12/13/94	6.58	1.56	2.0	200	10	2.7	11	–
MW-2	3/7/95	6.69	1.45	3.0	500	15	5.8	16	–
MW-2	6/9/95	7.00	1.14	2.1	300	14	5.8	13	–
MW-2	9/21/95	6.91	1.23	1.6	120	9.6	ND	15	–
MW-2	12/18/95	6.73	1.41	2.8	120	16	5.2	19	–
MW-2	2/29/96	6.36	1.78	1.7	170	15	2.9	17	–
MW-2	7/15/96	7.11	1.03	2.8	160	22	3.5	17	–
MW-2	1/7/97	6.40	1.74	3.0	350	25	8.1	24	–
MW-2	7/12/97	6.98	1.16	2.1	55	11	<2.5	18	–
MW-2	1/26/98	6.45	1.69	1.8	310	29	5.0	15	–
MW-2	7/3/98	6.91	1.23	1.9	85	9.3	1.8	17	–
MW-2	**1/13/99**	**7.07**	**1.07**	**2.1**	**48**	**33**	**2.0**	**16**	**–**

TABLE 1. ANALYTICAL DATA SUMMARY
Pacific Supply Company, 1735 24th Street, Oakland, California

Well Name	Sampling Date	Depth to Groundwater (feet)	Groundwater Elevation (feet, MSL)	TPH as gasoline mg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes µg/L	Lead mg/L
MW-3	10/14/88	8.25	0.88	3.4	ND	ND	–	2.8	–
MW-3	12/29/89	7.79	1.34	ND	ND	ND	ND	ND	0.205 (1)
MW-3	5/28/92	7.83	1.30	ND	0.8	0.5	ND	ND	0.016 (2)
MW-3	9/3/92	8.22	0.91	ND	ND	ND	ND	ND	0.033 (2)
MW-3	11/24/92	8.29	0.84	ND	ND	ND	ND	ND	0.011 (2)
MW-3	3/9/93	7.30	1.83	0.1	1.8	ND	ND	ND	ND(1)
MW-3	7/21/93	7.87	1.26	ND	ND	ND	ND	ND	ND(1)
MW-3	11/4/93	8.23	0.90	0.07	0.6	0.5	ND	ND	ND(1)
MW-3	2/1/94	7.56	1.57	ND	ND	ND	ND	ND	ND(1)
MW-3	6/2/94	7.46	1.67	0.06	ND	ND	ND	ND	ND(1)
MW-3	9/1/94	7.83	1.30	0.07	1.7	0.9	ND	ND	ND(1)
MW-3	12/13/94	7.07	2.06	0.06	1.4	ND	ND	ND	–
MW-3	3/8/95	7.27	1.86	0.06	1.5	ND	ND	ND	–
MW-3	6/9/95	7.79	1.34	0.10	5.7	ND	ND	ND	–
MW-3	9/21/95	7.87	1.26	ND	1.5	ND	ND	ND	–
MW-3	12/18/95	7.30	1.83	ND	1.3	ND	ND	ND	–
MW-3	2/29/96	6.84	2.29	ND	2.1	0.6	ND	0.7	–
MW-3	7/15/96	7.79	1.34	–	–	–	–	–	–
MW-3	1/7/97	6.62	2.51	0.05	1.0	<0.5	<0.5	<0.5	–
MW-3	7/12/97	7.83	1.30	–	–	–	–	–	–
MW-3	1/26/98	6.60	2.53	<0.05	0.8	<0.5	<0.5	<0.5	–
MW-3	7/3/98	7.48	1.65	–	–	–	–	–	–
MW-3	**1/13/99**	**7.63**	**1.50**	**<0.05**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	–

TABLE 1. ANALYTICAL DATA SUMMARY
Pacific Supply Company, 1735 24th Street, Oakland, California

Well Name	Sampling Date	Depth to Groundwater (feet)	Groundwater Elevation (feet, MSL)	TPH as gasoline mg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes µg/L	Lead mg/L
MW-4	10/14/88	8.33	0.74	4.6	1.2	ND	–	2.2	–
MW-4	12/29/89	8.08	0.99	0.5	0.7	ND	ND	ND	ND (1)
MW-4	5/28/92	8.19	0.88	0.27	8.8	1	ND	3.2	0.030 (2)
MW-4	9/3/92	8.37	0.70	0.20	4.5	4.4	ND	1.9	0.022 (2)
MW-4	11/24/92	8.28	0.79	0.14	3.2	3.2	ND	1.0	0.005 (2)
MW-4	3/9/93	7.98	1.09	0.47	10	ND	ND	2.5	ND (1)
MW-4	7/21/93	8.17	0.90	0.28	4.4	5.9	ND	ND	ND(1)
MW-4	11/4/93	8.14	0.93	0.08	1.3	1.6	ND	ND	ND(1)
MW-4	2/1/94	7.79	1.28	0.08	ND	ND	ND	ND	ND(1)
MW-4	6/2/94	7.53	1.54	0.30	3.1	2.9	ND	0.8	ND(1)
MW-4	9/1/94	7.69	1.38	0.12	1.6	ND	ND	ND	ND(1)
MW-4	12/13/94	6.70	2.37	ND	ND	ND	ND	ND	–
MW-4	3/8/95	6.83	2.24	0.09	ND	ND	ND	ND	–
MW-4	6/9/95	7.66	1.41	0.19	ND	ND	ND	ND	–
MW-4	9/21/95	7.93	1.14	0.09	ND	ND	ND	ND	–
MW-4	12/18/95	6.98	2.09	–	–	–	–	–	–
MW-4	2/29/96	6.54	2.53	0.14	1.6	1.0	ND	0.6	–
MW-4	7/15/96	7.74	1.33	–	–	–	–	–	–
MW-4	1/7/97	6.46	2.61	0.09	1.0	0.5	<0.5	<0.5	–
MW-4	7/12/97	7.82	1.25	–	–	–	–	–	–
MW-4	1/26/98	6.67	2.40	0.09	1.1	0.8	<0.5	<0.5	–
MW-4	7/3/98	7.45	1.62	–	–	–	–	–	–
MW-4	**1/13/99**	**7.51**	**1.56**	**0.12**	**1.1**	**0.62**	**<0.5**	**0.57**	–

TABLE 1. ANALYTICAL DATA SUMMARY
Pacific Supply Company, 1735 24th Street, Oakland, California

Well Name	Sampling Date	Depth to Groundwater (feet)	Groundwater Elevation (feet, MSL)	TPH as gasoline mg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes µg/L	Lead mg/L
MW-5	10/14/88	8.04	0.89	3.2	ND	ND	–	ND	–
MW-5	12/29/89	7.40	1.53	ND	ND	ND	ND	ND	ND (1)
MW-5	5/28/92	7.53	1.40	ND	ND	ND	ND	ND	0.008 (2)
MW-5	9/3/92	8.02	0.91	ND	ND	ND	ND	ND	0.034 (2)
MW-5	11/24/92	7.75	1.18	ND	ND	ND	ND	ND	0.011 (2)
MW-5	3/9/93	6.91	2.02	ND	ND	ND	ND	ND	ND (1)
MW-5	7/21/93	7.57	1.36	ND	ND	ND	ND	ND	ND(1)
MW-5	11/4/93	7.77	1.16	ND	ND	ND	ND	ND	ND(1)
MW-5	2/1/94	7.05	1.88	ND	ND	ND	ND	ND	ND(1)
MW-5	6/2/94	7.18	1.75	ND	ND	ND	ND	ND	ND(1)
MW-5	9/1/94	7.53	1.40	ND	ND	ND	ND	ND	–
MW-5	3/8/95	6.67	2.26	ND	ND	ND	ND	ND	–
MW-5	6/9/95	7.33	1.60	ND	ND	ND	ND	ND	–
MW-5	9/21/95	7.67	1.26	ND	ND	ND	ND	ND	–
MW-5	12/18/95	6.62	2.31	–	–	–	–	–	–
MW-5	2/29/96	6.16	2.77	ND	ND	ND	ND	ND	–
MW-5	7/15/96	7.47	1.46	–	–	–	–	–	–
MW-5	1/7/97	6.11	2.82	<0.05	<0.5	<0.5	<0.5	<0.5	–
MW-5	7/12/97	7.61	1.32	–	–	–	–	–	–
MW-5	1/26/98	6.17	2.76	<0.05	<0.5	<0.5	<0.5	<0.5	–
MW-5	7/3/98	7.23	1.70	–	–	–	–	–	–
MW-5	**1/13/99**	**7.27**	**1.66**	**<0.05**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	–

TABLE 1. ANALYTICAL DATA SUMMARY
Pacific Supply Company, 1735 24th Street, Oakland, California

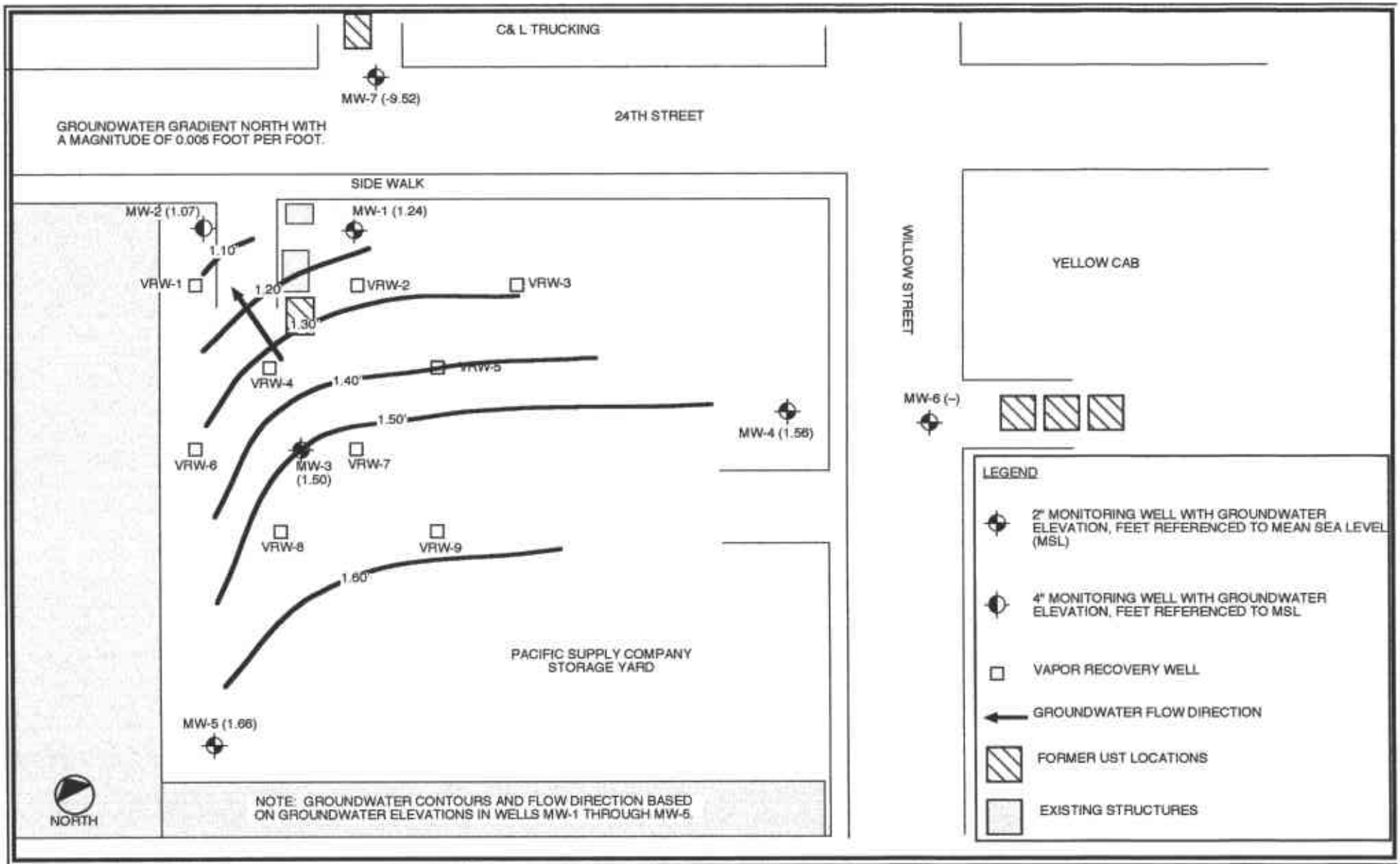
Well Name	Sampling Date	Depth to Groundwater (feet)	Groundwater Elevation (feet, MSL)	TPH as gasoline mg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes µg/L	Lead mg/L
MW-6	12/29/89	5.02	1.11	1.1	5.4	4.5	ND	ND	ND (1)
MW-6	3/9/93	5.10	1.03	2.3	2.3	2.8	ND	3.1	ND (1)
MW-6	7/21/93	5.23	0.90	0.59	ND	7.6	ND	ND	ND(1)
MW-6	11/4/93	5.25	0.88	1.5	ND	1.2	ND	0.7	ND(1)
MW-6	2/1/94	5.05	1.08	1.9	2.5	3.9	1.6	1.1	ND(1)
MW-6	6/2/94	4.49	1.64	1.3	ND	1	ND	ND	ND(1)
MW-6	9/1/94	4.53	1.60	2.2	ND	1.7	ND	ND	ND(1)
MW-6	12/13/94	4.27	1.86	0.66 (3)	ND	ND	ND	ND	–
MW-6	3/8/95	3.37	2.76	1.0 (3)	ND	ND	ND	ND	–
MW-6	6/9/95	4.40	1.73	1.5	ND	3.3	ND	ND	–
MW-6	9/21/95	4.69	1.44	0.28	ND	ND	ND	ND	–
MW-6	12/18/95	4.42	1.71	–	–	–	–	–	–

Note: Based on the February 6, 1996 letter from Jennifer Eberle, monitoring of well MW-6 is no longer required.

TABLE 1. ANALYTICAL DATA SUMMARY
Pacific Supply Company, 1735 24th Street, Oakland, California

Well Name	Sampling Date	Depth to Groundwater (feet)	Groundwater Elevation (feet, MSL)	TPH as gasoline mg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes µg/L	Lead mg/L
MW-7	12/29/89	8.35	-3.32	ND	ND	ND	ND	ND	0.235 (1)
MW-7	3/9/93	13.60	-8.57	ND	ND	ND	ND	ND	ND (1)
MW-7	7/21/93	12.59	-7.56	ND	ND	ND	ND	ND	ND(1)
MW-7	11/4/93	9.84	-4.81	ND	ND	ND	ND	ND	ND(1)
MW-7	2/1/94	10.38	-5.35	ND	ND	ND	ND	ND	ND(1)
MW-7	6/2/94	10.10	-5.07	ND	ND	ND	ND	ND	ND(1)
MW-7	9/1/94	9.63	-4.60	ND	ND	ND	ND	ND	ND(1)
MW-7	12/13/94	11.27	-6.24	ND	ND	ND	ND	ND	–
MW-7	3/7/95	9.68	-4.65	ND	ND	ND	ND	ND	–
MW-7	6/9/95	9.37	-4.34	ND	ND	ND	ND	ND	–
MW-7	9/21/95	9.43	-4.40	ND	ND	ND	ND	ND	–
MW-7	12/18/95	13.28	-8.25	–	–	–	–	–	–
MW-7	2/29/96	11.70	-6.67	ND	ND	ND	ND	ND	–
MW-7	7/15/96	11.12	-6.09	–	–	–	–	–	–
MW-7	1/7/97	14.35	-9.32	<0.05	<0.5	<0.5	<0.5	<0.5	–
MW-7	7/12/97	15.12	-10.09	–	–	–	–	–	–
MW-7	1/26/98	15.28	-10.25	<0.05	<0.5	<0.5	<0.5	<0.5	–
MW-7	7/3/98	14.10	-9.07	–	–	–	–	–	–
MW-7	**1/13/99**	**14.55**	**-9.52**	**<0.05**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	–

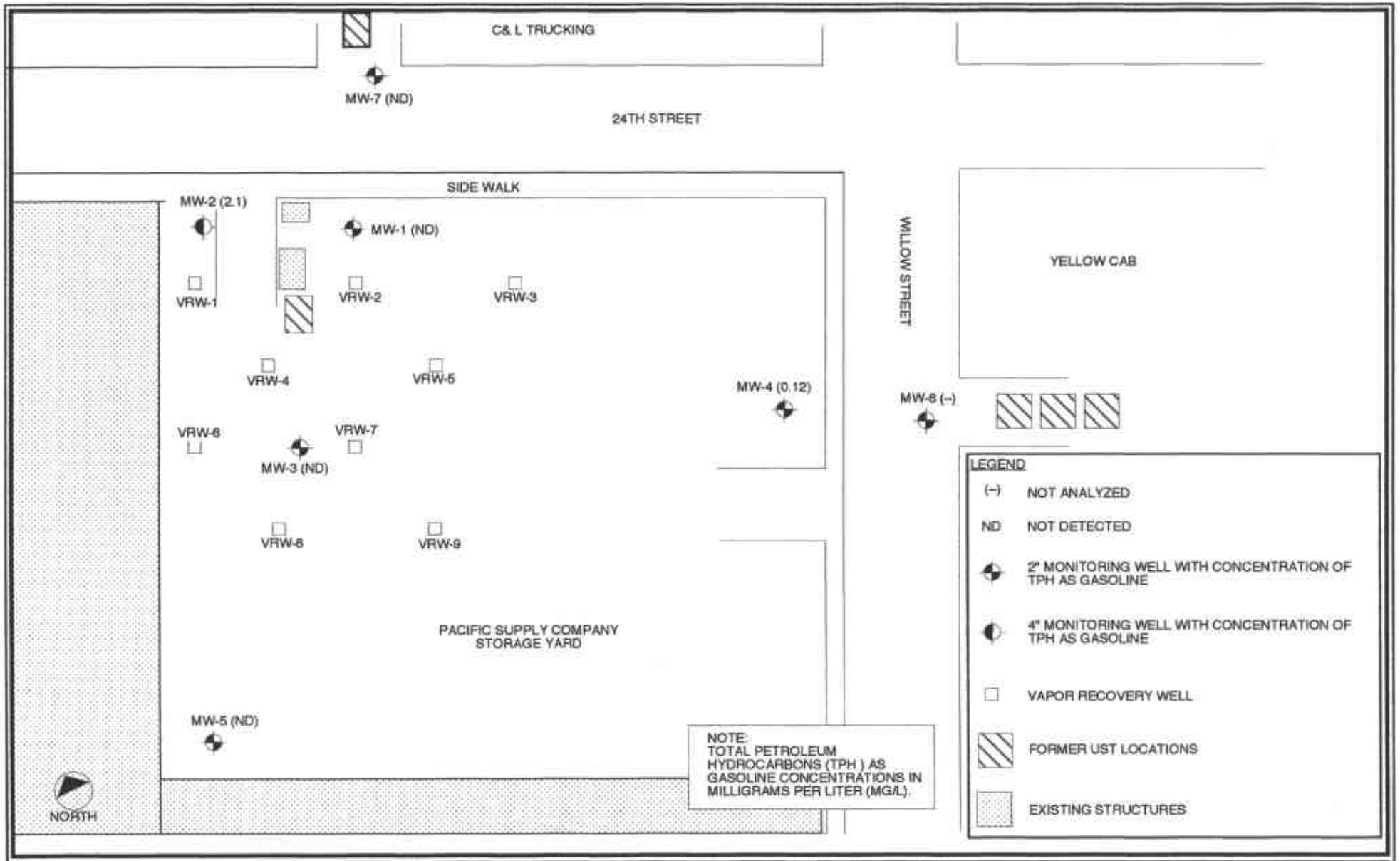
Notes:
(1)=Organic Lead, (2)=Total Lead, and (3)=Chromatographic peak array does not match gasoline standard.
ND = not detected at laboratory reporting limit
µg/L = micrograms per liter
mg/L = milligrams per liter
– = not analyzed
MSL = mean seal level
Groundwater elevations based on the following well casing elevations:
MW-1 (8.87'), MW-2 (8.14'), MW-3 (9.13'), MW-4 (9.07'), MW-5 (8.93'), MW-6 (6.13') and MW-7 (9.68').
TPH = total petroleum hydrocarbons.



PROJECT NUMBER: 29.7 PACIFIC SUPPLY COMPANY OAKLAND, CALIFORNIA		
DRAWING NUMBER: 29.7-01		
DRAWN BY:	TFA	1/25/99
APPROVED BY:	DMD	2/16/99
SCALE: 1 inch = 50 Feet		

BACE Environmental
A Division of
Brunsing Associates, Inc.

PLATE 1
GROUNDWATER ELEVATIONS
JANUARY 13, 1999
PACIFIC SUPPLY COMPANY
1735 24TH STREET
OAKLAND, CALIFORNIA



PROJECT NUMBER: 29.7 PACIFIC SUPPLY COMPANY OAKLAND, CALIFORNIA		
DRAWING NUMBER: 29.7-01		
DRAWN BY:	TFA	7/8/98
APPROVED BY:	DMD	7/14/98
SCALE: 1 Inch = 50 Feet		

BACE Environmental

A Division of

Brunsing Associates, Inc.

PLATE 2

TOTAL PETROLEUM HYDROCARBONS
AS GASOLINE
JANUARY 13, 1999
PACIFIC SUPPLY COMPANY
1735 24TH STREET
OAKLAND, CALIFORNIA

APPENDIX A
Site History and Background

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Monitoring wells MW-1 through MW-5 were constructed in September 1988 as the first phase of a soil and groundwater investigation. Monitoring wells MW-6 and MW-7 were constructed on December 19, 1989 during Phase II of the same investigation. The construction and sampling of these wells are documented in BAI's Report of Findings, dated March 23, 1990.

Vapor recovery wells VRW-1 through VRW-9 were constructed in August 1993 as part of a vapor recovery system. Installation of these wells were documented in a February 7, 1994 report. A vapor extraction system was installed in Fall of 1993 and began operation on December 26, 1993. This system consisted of an internal combustion engine with a spray aeration tank for treatment of groundwater and activated carbon treatment of groundwater prior to discharge. The internal combustion unit and spray aeration unit was manufactured by Remediation Service International (RSI) under the trade name Spray Aeration Vapor Extraction (SAVE) system.

On June 28, 1996, the treatment system was shut down with the concurrence of Pacific Supply Company. Prior to shut down, the system had destroyed an estimated 6,550 pounds of petroleum hydrocarbons since start of operations on December 26, 1993. After shut down, the water in the water tank was treated and discharged to the sanitary sewer under the existing permit and the inside of the tank was cleaned on July 15, 1996.

The permit with the Bay Area Air Quality Management District (BAAQMD) expired on September 1, 1996, and was not renewed. The water discharge permit was discontinued on July 31, 1996. The total volume of water discharged to the sanitary sewer was 151,089 gallons. In December 1996, the shut down and decommissioning of the system was authorized by Jennifer Eberle of the Alameda County Department of Health Services. Decommissioning of the system hardware is complete.

Table 1 is a cumulative summary of the groundwater analytical data and groundwater elevation data available for the site.

APPENDIX B
Monitoring Well Sampling Protocol

Monitoring Well Sampling Protocol

Prior to purging of each monitoring well, the groundwater level is measured and a single bailer full of water is retrieved from the well to check for floating product. The monitoring well is then purged until a minimum of three casing volumes of water are removed, water is relatively clear of sediment, and pH, conductivity, and temperature measurements of the water stabilizes. If wells go dry during purging, the wells are allowed to recover to 80 percent of original water level prior to sampling.

A single groundwater sample is collected from each monitoring well following re-equilibration of each well after purging. Individual log sheets are maintained throughout the sampling operations. The following information is recorded:

- Sample number
- Date and time sampled and purged
- Sampling location
- Types of sampling equipment used
- Name of sampler(s)
- Volume of water purged.

The sample is collected in the following manner:

- A hand-operated, factory-sealed, disposable, polyethylene bailer with sampling port is used for collecting all water samples. A factory provided attachment designed for use with volatile organic compounds (VOCs) is attached to the sampling port when collecting samples to be analyzed for VOCs.

- The sample container(s) are obtained directly from the analytical laboratory. Sample bottles, bottle caps, and septa are protected from solvent contact, dust or other contamination between time of receipt by the field sampler and time of actual usage at the sampling site.

The sample container is labeled with a self-adhesive tag. Field personnel label the tag, using waterproof ink, with the following information:

- Project number
- Sample number
- Date and time sample is obtained
- Initials of sample collector(s).

Following collection, the sample is immediately stored on blue ice in an appropriate container. A Chain-of-Custody Record is completed with the following information:

- Date the sample was taken
- Sample number and the number of containers
- Analyses required
- Remarks including preservatives added and any special conditions.

The original copy of the Chain-of-Custody Record accompanies the sample containers to a California-certified laboratory. The duplicate copy is retained by the BAI representative who sampled the well.

Sampling equipment is cleaned both before and after their use at the sampling location. Thermometers, pH electrodes, and conductivity probes are also cleaned.

The following cleaning procedures are used:

- Scrub with a detergent-potable water solution or other solutions deemed appropriate using a hard bristle brush
- Rinse with potable water
- Double-rinse with organic-free or deionized water
- Package and seal equipment in plastic bags or other appropriate containers to prevent contact with solvents, dust, or other contaminants.

APPENDIX C
Analytical Laboratory Report

BACE Analytical & Field Services
A Division of Brunsing Associates, Inc.

January 28, 1999
Log No: 3099
Laboratory Certificate Number: 1264

BACE Environmental
a division of
Brunsing Associates, Inc.
760 Market Street, Suite 344
San Francisco, CA 94102

ATTN: Tom Allan

RE: Results of the analyses of groundwater samples obtained for project number 29.7 on January 13, 1999.

Dear Mr. Allan,

This letter serves to confirm the analytical results previously communicated to you. Should any questions arise concerning procedure or results, please feel free to contact us.

Sincerely,

William G. Rotz
Director, Mobile Analytical Services

Client: BACE Environmental
Client Contact: Tom Allan

Sample Date: 1/13/99
Analysis Date: 1/15/99

BAFS Log No: 3099

METHOD: EPA 5030/8020

Matrix: Water

Parameter	Reporting Limit µg/L	Lab No: Descriptor:	Results - µg/L 3099-1 (MW-1)	3099-2 (MW-2)
Benzene	0.5		ND	48
Toluene	0.5		ND	33
Ethylbenzene	0.5		ND	2.0
Xylenes (total)	0.5		ND	16
Dilution Factor			1	5

METHOD: EPA 5030 / GC FID

Parameter	Reporting Limit mg/L	Lab No.: Descriptor:	Results - mg/L 3099-1 (MW-1)	3099-2 (MW-2)
TPH - gasoline	0.05		ND	2.1
Dilution Factor			1	5

Note: ND = not detected

Client: BACE Environmental
Client Contact: Tom Allan

Sample Date: 1/13/99
Analysis Date: 1/15/99

BAFS Log No: 3099

METHOD: EPA 5030/8020

Matrix: Water

Parameter	Reporting Limit µg/L	Lab No: Descriptor:	Results - µg/L 3099-3 (MW-3)	3099-4 (MW-4)
Benzene	0.5		ND	1.1
Toluene	0.5		ND	0.62
Ethylbenzene	0.5		ND	ND
Xylenes (total)	0.5		ND	0.57
Dilution Factor			1	1

METHOD: EPA 5030 / GC FID

Parameter	Reporting Limit mg/L	Lab No.: Descriptor:	Results - mg/L 3099-3 (MW-3)	3099-4 (MW-4)
TPH - gasoline	0.05		ND	0.12
Dilution Factor			1	1

Note: ND = not detected

Client: BACE Environmental
Client Contact: Tom Allan

Sample Date: 1/13/99
Analysis Date: 1/15/99

BAFS Log No: 3099

METHOD: EPA 5030/8020

Matrix: Water

Parameter	Reporting Limit µg/L	Lab No: Descriptor:	Results - µg/L 3099-5 (MW-5)	3099-6 (MW-7)
Benzene	0.5		ND	ND
Toluene	0.5		ND	ND
Ethylbenzene	0.5		ND	ND
Xylenes (total)	0.5		ND	ND
Dilution Factor			1	1

METHOD: EPA 5030 / GC FID

Parameter	Reporting Limit mg/L	Lab No.: Descriptor:	Results - mg/L 3099-5 (MW-5)	3099-6 (MW-7)
TPH - gasoline	0.05		ND	ND
Dilution Factor			1	1

Note: ND = not detected

QUALITY CONTROL SUMMARY

Client: BACE Environmental
Client Contact: Tom Allan
Sample Date: 1/13/99
Analysis Date: 1/15/99

BAFS Log No. : 3099

Matrix: Water

	% RECOVERY				
Parameter	**CCV%***	**Blank**	**Spike**	**Spike Dup**	**RPD**
Gasoline	94	ND	98	99	1.0
Benzene	91	ND	92	89	3.3
Toluene	92	ND	97	90	7.5
Ethylbenzene	94	ND	98	92	6.3
Xylenes	95	ND	100	93	7.2

* Continuous Calibration Verification Standard

PROJ. NO.	PROJECT NAME
29.7	PACIFIC SUPPLY
L.P. NO.	SAMPLERS: (Signature) Tom Allan

№ 2896

DATE	SAMPLE I.D.	TYPE	NO. OF CONTAINERS	ANALYSIS: TPH as Gasoline / BTEX	REMARKS
1-13-99	MW-1	WATER	3		3 ea 40ml VOA's 3099-1
	MW-2				-2
	MW-3				-3
	MW-4				-4
	MW-5				-5
	MW-7				-6

LABORATORY: BAFS

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Tom Allan	1-14-99 11:00	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)
	1/14/99 1250	

Remarks: Std. TAT
RESULTS to TA

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