



Brunsing Associates, Inc.

August 3, 1998

STP 3826

Project No. 29.7

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

Transmittal: Semi-Annual Groundwater Monitoring Report: July 1998
1735 24th Street, Oakland, California

Dear Ms. Callison:

Attached is the semi-annual groundwater monitoring report prepared by BACE Environmental, a division of Brunsing Associates, Inc. (BAI) at your request for the facility at 1735 24th Street, Oakland, California. A copy of this report has been sent to Mr. Larry Seto of the Alameda County Health Agency, and Richard Vergeron of Pacific Supply Company. Mr. Larry Seto has replaced Ms. Jennifer Eberle as case manager for this site.

If you have any questions, please contact Tom Allan at (415) 391-6840.

Respectfully Submitted,

Tom Allan

Tom Allan
Staff Environmental Engineer

Attachments: Semi-Annual Monitoring Report (Original and one copy)



Brunsing Associates, Inc.

August 3, 1998

Project No. 29.7

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

RE: Second Semi-Annual Groundwater Monitoring Report: July 1998
Pacific Supply Company
1735 24th Street, Oakland, California

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 July 3, 1998.

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 well MW-2 (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.

Site Background

~~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.~~

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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 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.

Groundwater Elevations

Depth to groundwater measurements were obtained on July 3, 1998 for wells MW-1 through MW-5, and well MW-7. The groundwater depths and elevations relative to mean sea level (MSL) are listed in Table 1, and the potentiometric surface contours and groundwater elevations are shown 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 groundwater elevations in wells MW-1, MW-2, and MW-3. Monitoring well MW-7 continues to indicate an anomalously low groundwater elevation by a magnitude of several feet.



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Groundwater Sampling

Groundwater monitoring well MW-2 was sampled on July 3, 1998 using the methods described in Appendix A. Free product was not found in the well. The groundwater sample was transported to BACE Analytical and Field Services (BAFS) for analyses using the following analytical methods:

- Total Petroleum Hydrocarbons (TPH) as gasoline
-EPA Test Method 5030/GCFID;
- Benzene, Toluene, Ethylbenzene and Xylenes (BTEX), and MTBE
-EPA Test Method 5030/8020.

Groundwater Analytical Results

TPH as gasoline was detected in the groundwater sample collected from well MW-2 at a concentration of 1.9 milligrams per liter (mg/l). Benzene, toluene, ethylbenzene and xylenes were detected at concentrations of 85, 9.3, 1.8, and 17 micrograms per liter ($\mu\text{g}/\text{l}$), respectively. No MTBE was reported in the groundwater sample collected from well MW-2. 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 3.0 mg/l, since June 1994.

Analytical laboratory results for the July 3, 1998 groundwater monitoring event are summarized in Table 1, and the TPH as gasoline concentration at well MW-2 is shown on Plate 2. The laboratory report and Chain-of-Custody form for this sampling event are included in Appendix B.

Recommendations

BACE requests that Alameda County review this case for site closure, 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.



Ms. Normita Callison
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If you have any questions, please contact Tom Allan at (415) 391-6840.

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
Richard Vergeron, Pacific Supply Company

List of Attachments

- Table 1 - Analytical Data Summary
- Plate 1 - Groundwater Elevations, July 3, 1998
- Plate 2 - Total Petroleum Hydrocarbons as Gasoline, July 3, 1998

- Appendix A - Monitoring Well Sampling Protocol
- Appendix B - 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	ND	ND	ND	ND	1.1	-
MW-1	7/3/98	7.51	1.36	-	-	-	-	-	-



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Pacific Supply Company
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Well Name	Sampling Date	Depth to Groundwater (feet)	Groundwater Elevation (feet, MSL)	TPH as gasoline mg/L	Benzene $\mu\text{g/L}$	Toluene $\mu\text{g/L}$	Ethylbenzene $\mu\text{g/L}$	Xylenes $\mu\text{g/L}$	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	ND	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	-



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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	ND	0.8	ND	ND	ND	-
MW-3	7/3/98	7.48	1.65	-	-	-	-	-	-



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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	ND	ND	-
MW-4	7/3/98	7.45	1.62	-	-	-	-	-	-



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Pacific Supply Company
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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	Xýlenes 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	ND	ND	ND	ND	ND	-
MW-5	7/3/98	7.23	1.70	-	-	-	-	-	-



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 $\mu\text{g/L}$	Toluene $\mu\text{g/L}$	Ethylbenzene $\mu\text{g/L}$	Xylenes $\mu\text{g/L}$	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	ND	ND	ND	ND	ND	-
MW-7	7/3/98	14.10	-9.07	-	-	-	-	-	-

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

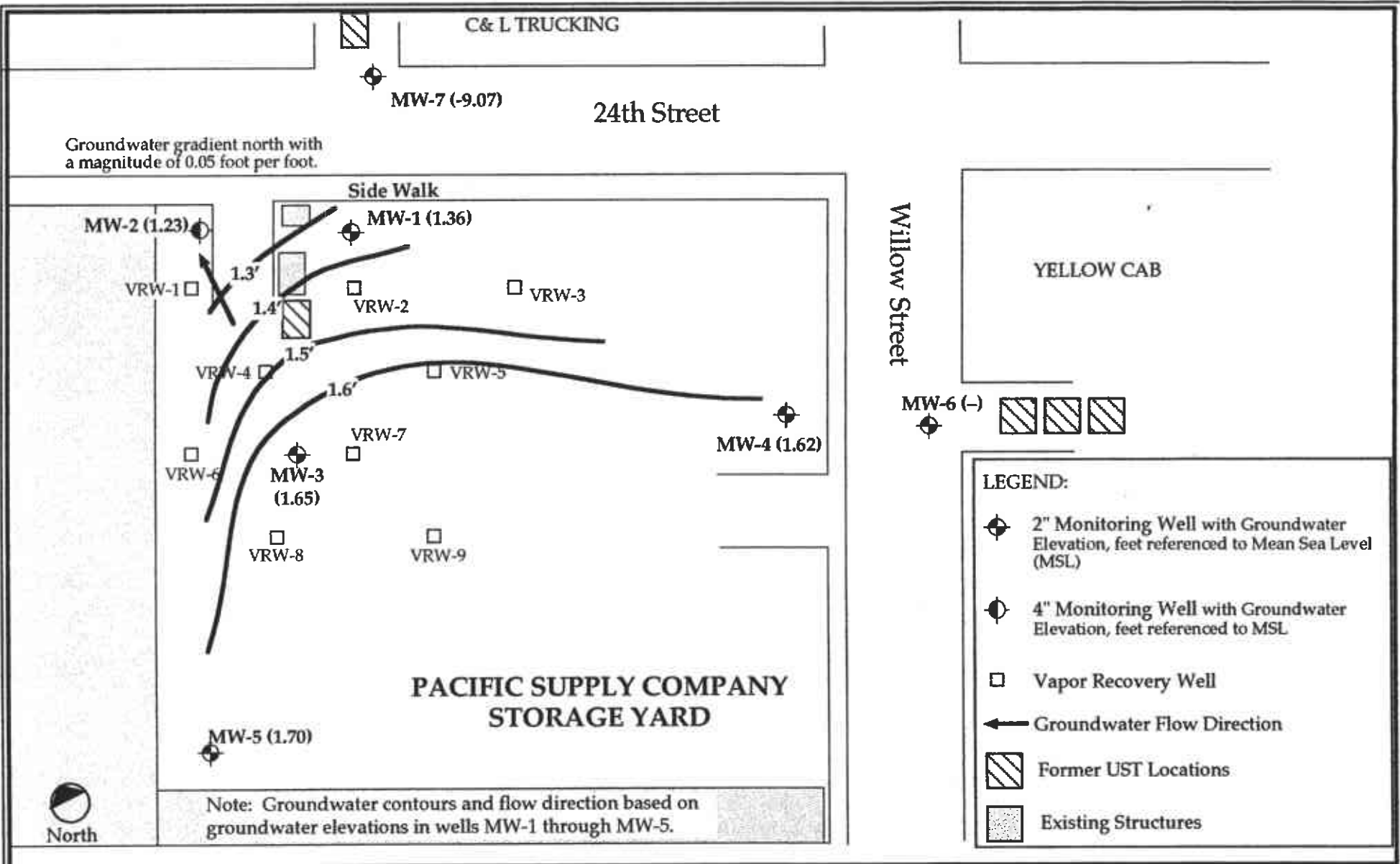
MSL = mean seal level

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.

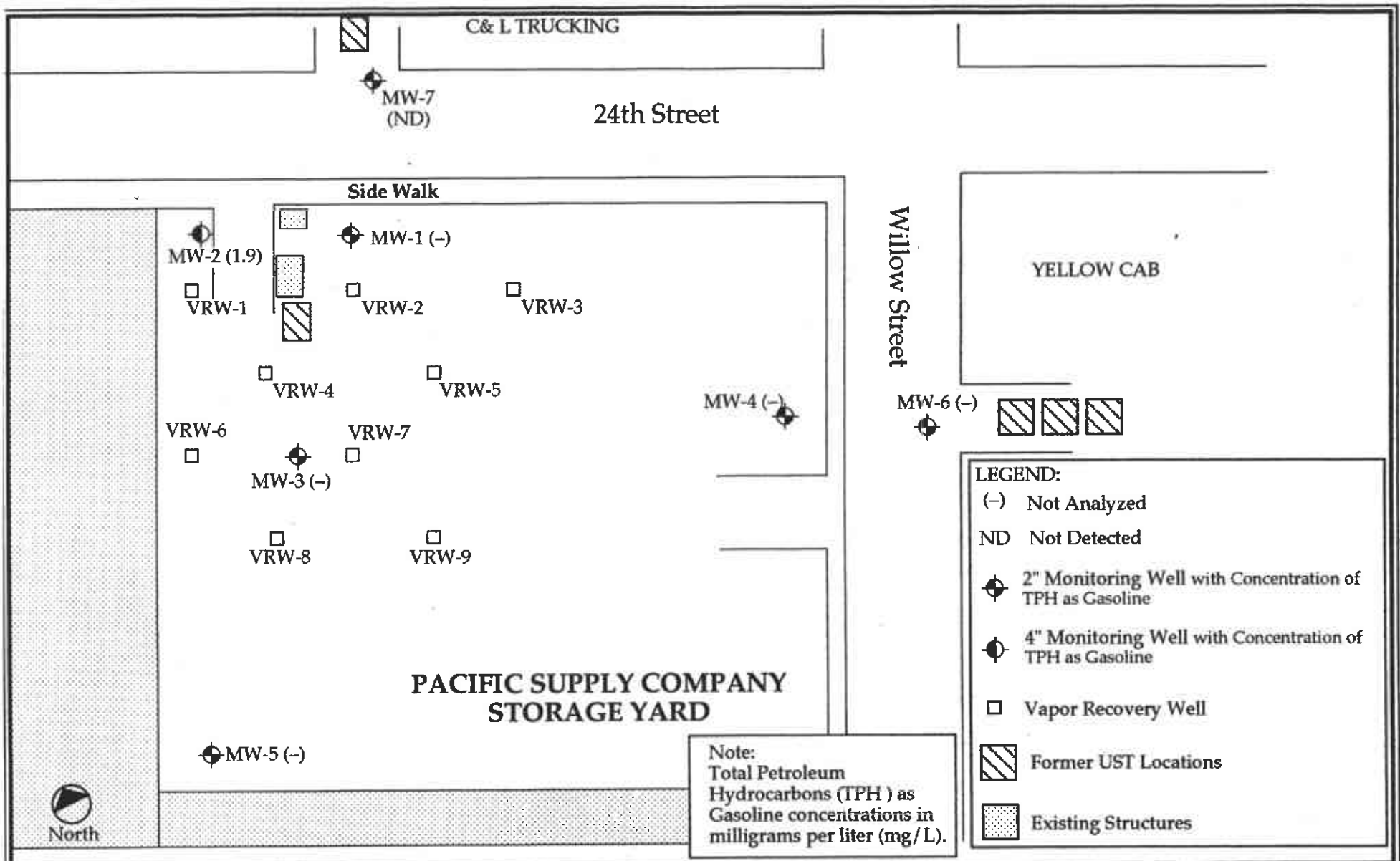




PROJECT NUMBER: 29.7		
PACIFIC SUPPLY COMPANY		
OAKLAND, CALIFORNIA		
DRAWING NUMBER: 29.7-01		
DRAWN BY:	TFA	7/8/98
APPROVED BY:	DMD	8/5/98
SCALE: 1 Inch = 50 Feet		

BACE Environmental
A Division of
Brunsing Associates, Inc.

Plate 1
 Groundwater Elevations
 July 3, 1998
 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	8/5/98
SCALE: 1 Inch = 50 Feet		

BACE Environmental
A Division of
Brunsing Associates, Inc.

Plate 2
 Total Petroleum Hydrocarbons as Gasoline
 July 3, 1998
 Pacific Supply Company
 1735 24th Street
 Oakland, California -

APPENDIX A
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 B
Analytical Laboratory Report





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

July 20 1998
Log No: 2936
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 July 3, 1998.

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

Tami Hucke Norgrove
Laboratory Manager

Client: BACE Environmental
Client Contact: Tom Allan

Sample Date: 7/3/98
Analysis Date: 7/10/98

BAFS Log No: 2936

METHOD: EPA 5030/8020

Matrix: Water

Parameter	Reporting Limit µg/L	Results - µg/L	
		Lab No: Descriptor:	2936-1 (MW-2)
Benzene	0.5		85
Toluene	0.5		9.3
Ethylbenzene	0.5		1.8
Xylenes (total)	0.5		17
MTBE	5.0		ND
Dilution Factor			1

METHOD: EPA 5030 / GC FID

Parameter	Reporting Limit mg/L	Results - mg/L	
		Lab No.: Descriptor:	2936-1 (MW-2)
TPH - gasoline	0.05		1.9
Dilution Factor			1

Note: ND = not detected



QUALITY CONTROL SUMMARY

Client: BACE Environmental

BAFS Log No. : 2936

Client Contact: Tom Allan

Sample Date: 7/3/98

Matrix: Water

Analysis Date: 7/10/98

Parameter	% RECOVERY				
	CCV%*	Blank	Spike	Spike Dup	RPD
Gasoline	94	ND	90	98	8.5
Benzene	93	ND	97	92	5.3
Toluene	103	ND	98	95	3.1
Ethylbenzene	110	ND	105	109	3.7
Xylenes	106	ND	110	112	1.8
MTBE	97	ND	104	110	5.6

* Continuous Calibration Verification Standard



