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February 18, 1998

Project No. 29.7

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

RE: First Quarter Groundwater Monitoring Report: January 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 January 26, 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 groundwater samples from onsite monitoring wells MW-1 through MW-5, and well 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, based on 6 consecutive quarters of non-detectable concentrations of benzene, low total petroleum hydrocarbons (TPH) as gasoline concentrations, and the proximity of onsite monitoring well MW-4.

#### 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 January 26, 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 0.01 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 wells MW-1 through MW-5, and MW-7 were sampled on January 26, 1998 using the methods described in Appendix A. Free product was not found in any of the wells. Groundwater samples were 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)
   -EPA Test Method 5030/8020.

#### Groundwater Analytical Results

The highest concentrations were reported in the sample collected from well MW-2. TPH as gasoline was detected in the groundwater sample collected from well MW-2 at a concentration of 1.8 milligrams per liter (mg/l), and benzene, toluene, ethylbenzene and xylenes were detected at concentrations of 310, 29, 5.0, and 15 micrograms per liter ( $\mu$ g/l), respectively. Xylenes were reported in the sample collected from well MW-1 at 1.1  $\mu$ g/l. Benzene was detected in the groundwater sample collected from well MW-3 at a concentration of 0.8  $\mu$ g/l. TPH as gasoline was detected in the groundwater sample collected from well MW-4 at a concentration of 0.09 mg/l, and benzene and toluene were detected at concentrations of 1.1 and 0.8  $\mu$ g/l, respectively. All other analytes were reported as non-detect at the laboratory reporting limit. Groundwater samples collected from well MW-2 indicate that the petroleum hydrocarbon concentrations in that well have been stable, ranging from 1.6 to 3.0 mg/l, since June 1994.

Analytical laboratory results for the January 26, 1998 groundwater monitoring event are summarized in Table 1, and the TPH as gasoline concentrations at each well are shown on Plate 2. The laboratory report and Chain-of-Custody form for this sampling event are included in Appendix B.



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If you have any questions, please contact Tom Allan at (707) 838-3027.

Respectfully Submitted,

Tom Allan

Staff Environmental Engineer

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

Senior Geologist

cc: Jennifer Eberle, Alameda County Health Agency Richard Vergeron, Pacific Supply Company



#### List of Attachments

Table 1 - Analytical Data Summary

Plate 1 - Groundwater Elevations, January 26, 1998

Plate 2 - Total Petroleum Hydrocarbons as Gasoline, January 26, 1998

Appendix A - Monitoring Well Sampling Protocol

Appendix B - Analytical Laboratory Report



		Depth to	Groundwater	TPH as					
Well	Sampling	Groundwater	Elevation	gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	Lead
Name	Date	(feet)	(feet, MSL)	mg/L	$\mu g/L$	μg/L	μg/L	$\mu g/L$	mg/L
						) III)		NID	
MW-1	10/14/88	7.99	0.88	1.1	1.1	ND	<u></u>	ND	- (1)
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	



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

Well	Sampling	Depth to Groundwater	Groundwater Elevation	TPH as gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	Lead
Name	Date	(feet)	(feet, MSL)	mg/L	μg/L	μg/L	μg/L	μg/L	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	<b>7</b> 60	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	



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Well	Sampling	Depth to Groundwater	Groundwater Elevation	TPH as gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	Lead
Name	Date	(feet)	(feet, MSL)	mg/L	μg/L	μg/L	μg/L	μg/L	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	_		_	<u> </u>		-
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	



Well	Sampling	Depth to Groundwater	Groundwater Elevation	TPH as gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	Lead
Name	Date	(feet)	(feet, MSL)	mg/L	μg/L	μg/L	μg/L	$\mu g/L$	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_	<u> </u>
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	



Well	Sampling		Groundwater Elevation (feet, MSL)	TPH as gasoline	Benzene µg/L	Toluene μg/L	Ethylbenzene μg/L	Xylenes μg/L	Lead mg/L
Name	Date	(feet)	(leet, MSL)	mg/L	μg/ L	μg/ L	μ6/ Ε	mg/ =	1116, 2
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	<i>7.7</i> 5	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	_	<del>-</del>	_	_		-
MW-5	1/26/98	6.17	2.76	ND	ND	ND	ND	ND	_



## Table 1 ANALYTICAL DATA SUMMARY Pacific Supply Company

#### 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.



Well Name	Sampling Date		Groundwater Elevation (feet, MSL)		Benzene µg/L	Toluene μg/L	Ethylbenzene µg/L	μg/L	mg/L
MW-7	12/29/89	8.35	-3.32	ND	ND	ND	ND	ND	0.235 (1)
						3.753	3.753	N.TEN	NTT /41

TATAA_\	12/2/10/	0.00	0.0.						
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. <b>7</b> 0	-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	
Nictory			In the same of the	<u>,                                    </u>					

#### Notes:

(1)=Organic Lead, (2)=Total Lead, and (3)=Chromatographic peak array does not match gasoline standard.

ND = not detected at laboratory reporting limit

 $\mu g/L = micrograms per liter$ 

mg/L = milligrams per liter

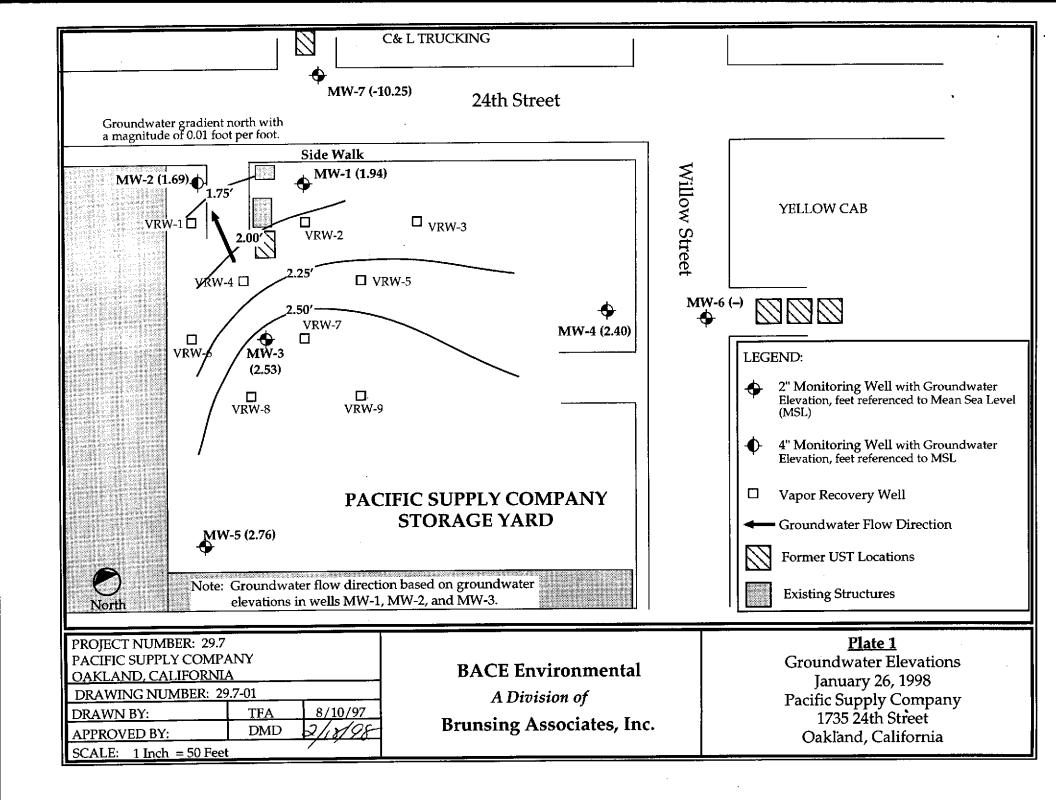
- = not analyzed

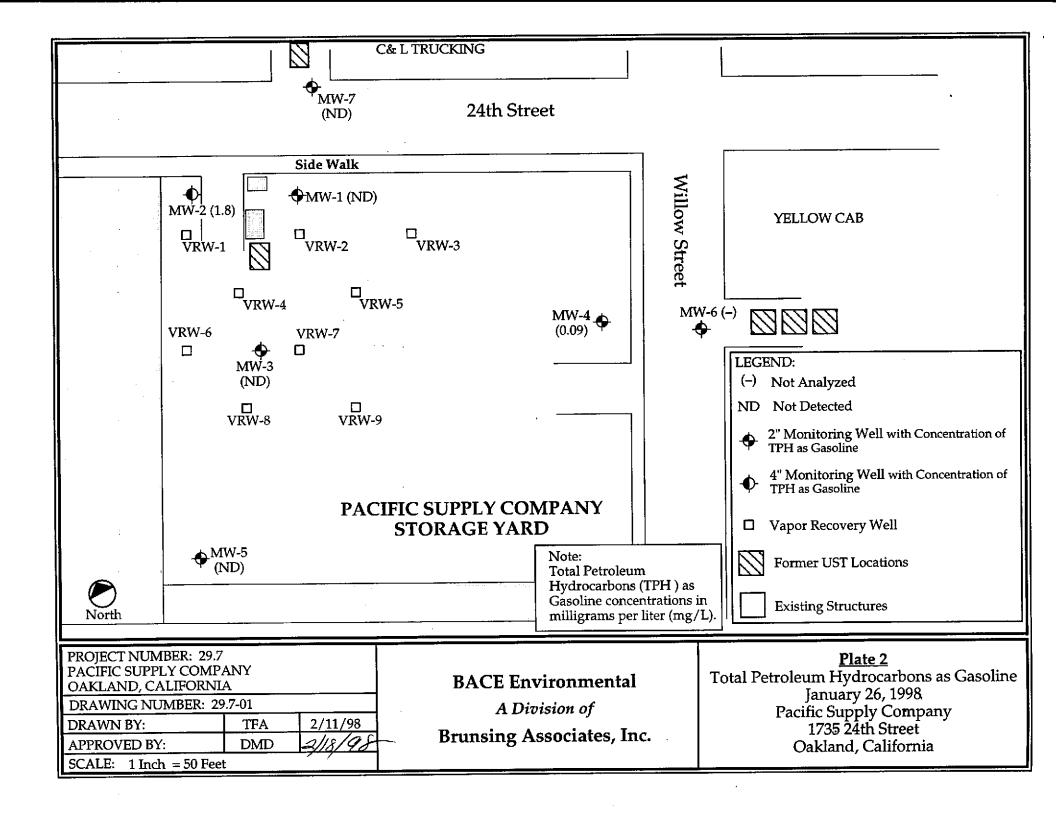
MSL = mean seal level

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').







### APPENDIX A Monitoring Well Sampling Protocol



#### Monitoring Well Sampling Protocol

Prior to purging a monitoring well, groundwater levels are measured with a Solinst electric depth measurement device, or an interface probe, in all wells that are to be measured. At sites where petroleum hydrocarbons are possible contaminants, the well is checked for floating product using a clear bailer, a steel tape with water/oil paste, or an interface probe, during the initial sampling round. If floating product is measured during the initial sampling round or noted during subsequent sampling rounds, floating product measurements are continued.

After the water level and floating product measurements are complete, the monitoring well is 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 the well is purged dry, groundwater samples are collected after the water level in the well recovers to at least 80 percent of the original water column measured in the well prior to sampling, or following a maximum recovery period of two hours. The well is purged using a factory-sealed, disposable, polyethylene bailer, a four-inch diameter submersible Grundfos pump, a two-inch diameter ES-60 purge pump, or a Shureflow diaphragm pump. The purge water is stored onsite in clean, 55-gallon drums.

A groundwater sample is collected from each monitoring well following reequilibration of the well after purging. The groundwater sample is collected using a factory-sealed disposable, polyethylene bailer with a sampling port, or a factorysealed Teflon bailer. A Teflon bailer is used when a sample is collected for analysis of semi-volatile organic compounds or polynuclear aromatic hydrocarbons; a polyethylene bailer is used for collecting a sample that will be analyzed for any other compound. A factory provided attachment designed for use with volatile organic compounds (VOCs) is attached to the polyethylene bailer sampling port when collecting samples to be analyzed for VOCs. The groundwater sample is transferred from the bailer into sample container(s) that are obtained directly from the analytical laboratory.

The sample container(s) is labelled 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 collected
- Initials of sample collector(s).



Individual log sheets are maintained throughout the sampling operations. The following information is recorded:

• Sample number

Date and time well sampled and purged

Sampling location

Types of sampling equipment used

Name of sampler(s)

· Volume of water purged.

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

• Date the sample was collected

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 Form accompanies the sample containers to a California-certified laboratory. The duplicate copy is retained by the BACE representative who sampled the well and placed in company files.

Sampling equipment including thermometers, pH electrodes, and conductivity probes are cleaned both before and after their use at the site. The following cleaning procedures are used:

• Scrub with a potable water and detergent solution or other solutions deemed appropriate using a hard bristle brush

Rinse with potable water

Double-rinse with organic-free or deionized water

Air-dry

 Package and seal equipment in plastic bags or other appropriate containers to prevent contact with solvents, dust, or other contaminants.

In addition, the submersible pump is cleaned by pumping a potable water and detergent solution and potable water through the system. Cleaning solutions are contained onsite in clean 55-gallon drums.



### APPENDIX B Analytical Laboratory Report





February 10, 1998

Log No: 2833

Laboratory Certification Number: 1264

BACE Environmental a division of Brunsing Associates, Inc. P. O. Box 588 Windsor, California 95492

ATTN: Tom Allan

RE: Results of the analyses of groundwater samples obtained for project number

29.7 on January 26, 1998.

Dear Mr. Tom 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: 1/26/98 BAFS Log No: 2833 °

Sample Date: 1/26/98 Analysis Date: 2/8/98

METHOD: EPA 5030/8020 Matrix: Water

			Results -	- μg/l	
Parameter	Reporting Limit μg/l	Lab No: Descriptor:	2833-1 (MW-1)	2833-2 (MW-2)	
		•			
Benzene	0.5		ND	310	
Toluene	0.5		ND	29	
Ethylbenzene	0.5		ND	5.0	
Xylenes (total)	0.5		1.1	15	
Dilution Factor:			1	10	

METHOD: 5030 / GC FID

	•		Results -	· mg/l
Parameter	Reporting Limit mg/l	Lab No: Descriptor:	2833-1 (MW-1)	2833-2 (MW-2)
TPH - gasoline	0.05	-	ND	1.8
Dilution Factor:			. 1	10

NOTE: ND = not detected.



Page: 2 of 4

Client: BACE Environmental

Client Contact: Tom Allan

Sample Date: 1/26/98

Analysis Date: 2/8/98

Page: 3 of 4

BAFS Log No: 2833 -

METHOD: EPA 5030/8020

Matrix: Water

			Results -	- μg/l
Parameter	Reporting Limitug/l	Lab No: <u>Descriptor:</u>	2833-3 (MW-3)	2833-4 (MW-4)
Benzene Toluene Ethylbenzene Xylenes (total)	0.5 0.5 0.5 0.5		0.8 ND ND ND	1.1 0.8 ND ND
Dilution Factor:			1	1

METHOD: 5030 / GC FID

			Results -	· mg/l
Parameter	Reporting Limit mg/l	Lab No: Descriptor:	2833-3 (MW-3)	2833-4 (MW-4)
TPH - gasoline	0.05		ND	0.09
Dilution Factor:			1	1

NOTE: ND = not detected.



Client: BACE Environmental

Client Contact: Tom Allan

Sample Date: 1/26/98

Analysis Date: 2/8/98

Page: 4 of 4

BAFS Log No: 2833 •

METHOD: EPA 5030/8020

Matrix: Water

			Results - μg/l			
Parameter	Reporting Limit  µg/l	Lab No: Descriptor:	2833-5 (MW-5)	2833-6 (MW-7)		
Benzene Toluene	0.5 0.5	•	ND ND	ND ND		
Ethylbenzene Xylenes (total)	0.5 0.5		ND ND	ND ND		
Dilution Factor:	0.3		1	1		

METHOD: 5030 / GC FID

•		-	Results -	- mg/l	
Parameter	Reporting Limit mg/l	Lab No: Descriptor:	2833-5 (MW-5)	2833-6 (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: 1/26/98

Analysis Date: 2/8/98

BAFS Log No.: 2833

Matrix: Water

	% RECOVERY								
Parameter	CCV%*	Blank	Spike	Spike Dup	RPD				
Gasoline	95	ND	100	97	3.0				
Benzene	103	ND	108	107	1.0				
Toluene	95	ND	95	92	3.2				
Ethylbenzene	93	ND	92	88	4.4				
Xylenes	89	ND	90	88	2.2				

<sup>\*</sup> Continuous Calibration Verification Standard



PROJ. NO. 29.7  L.P. NO.	PROJECT NAME  Pacific Supply  SAMPLERS: (Signature)  Tom Allow  SAMPLE I.D.		NO.	<i>\$/</i>	X/						<b>№</b> 2660
	Tom Allan	Т	CON-	Sel Jan H	2 <sup>X</sup> //		//		//	//	REMARKS
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