

April 5, 2007

Project No. 029

Mr. Don Hwang Alameda County Health Care Services Agency Environmental Protection 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577

Alameda County

APR 1 1 2007

Groundwater Monitoring Report-January 2007 Pacific Supply Company 1735 24th Street Oakland, California

**Environmental Health** 

AUT APR 11 PH

Dear Mr. Hwang:

This report has been prepared by Brunsing Associates, Inc. (BAI) to provide a summary of the fieldwork completed at 1735 24th Street, Oakland, California (Plate 1) and the corresponding laboratory analytical results reported for groundwater samples collected during this semi-annual monitoring event. Fieldwork was conducted at the site on January 25 and 26, 2007. The fieldwork was completed in accordance with the Alameda County Health Care Services Agency (ACHCSA) correspondence dated November 6, 2003.

#### Site Background

In May 1987, efforts were initiated to abandon a 1,000-gallon underground gasoline storage tank at Pacific Supply Company's West Oakland site. Soil and associated vapor samples from exploratory boreholes at the site were analyzed by Anatec Laboratories. The results indicated that soil in the vicinity of the tank was contaminated with gasoline and raised the possibility that gasoline may have reached groundwater below the site. During subsequent removal of the tank by Erikson Industrial Services, substantial deterioration of the tank body was documented. Gasoline odors were also detected during tank removal operations.

In order to assess the extent of soil and groundwater quality beneath and immediately adjacent to the Pacific Supply Company site and the potential for migration of contaminants from off-site sources, BAI carried out a two-phase soil and groundwater investigation. Monitoring wells MW-1 through MW-5 (Plate 2) were constructed in September 1988 as the first phase of the 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. The results of the Phase I and II investigations indicated that light petroleum hydrocarbons had migrated beyond the immediate vicinity of the former underground storage tank (UST); however, it was concluded that hydrocarbons in the soil and groundwater had not extended beyond the limits of the property.

The Pacific Supply Company initiated quarterly groundwater monitoring at the request of the ACHCSA in May 1992. Initially, only on-site wells were monitored for total petroleum hydrocarbons (TPH) as gasoline, benzene, toluene, ethylbenzene and xylenes (BTEX), and lead. Later, the five on-site and the two off-site wells were monitored quarterly.

A vapor extraction pilot study was performed in June 1992 to determine the feasibility of using vapor extraction technology as an in-situ corrective action to remove volatile petroleum hydrocarbons from the shallow subsurface soils. A two-inch diameter vapor extraction well (VEW-1) was installed at the location indicated on Plate 2 to an approximate depth of 8 feet below ground surface (bgs). The results of the 4-day pilot study indicated that the lithology at the site permitted the flow of air through the soils at a sufficient rate so as to volatilize hydrocarbon constituents in the soil. The radius of influence was determined in the field by measuring the relative pressure at several probe locations positioned at various radial distances away from the extraction well. The results indicated that the estimated radius of influence from the 2-inch diameter extraction well was approximately 30 feet at a relatively low pressure of less than 50 inches of water, as discussed in BAI's report titled "Vapor Extraction Remedial Design Report and Specification," dated May 24, 1993.

In response to an ACHCSA December 1992 request, BAI also performed an investigation to attempt to delineate the zero line of contamination. Ten soil borings (B-1 through B-10) were drilled as part of this investigation to depths of approximately 7 to 10 feet bgs (Plate 2). From each boring, one soil sample was retained from a depth of approximately 7 to 8 feet bgs for analytical testing of TPH as gasoline and BTEX. Further discussions of this investigation are provided in BAI's report titled "Vapor Extraction Remedial Design Report and Specification," dated May 24, 1993.

Vapor recovery wells VRW-1 through VRW-9 were constructed in August 1993 as part of a vapor recovery system. During installation of the extraction wells, soil samples were collected for chemical analysis in the borings at the depth where groundwater was first encountered, at approximately 7 feet bgs. Installations of these wells were documented in a February 7, 1994 report. A vapor extraction system was installed in the fall of 1993 as an interim remedial action. The system began operation on December 26, 1993. The system consisted of an internal combustion engine with a spray aeration tank for treatment of groundwater, and an activated carbon treatment polishing step prior to groundwater 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.

Groundwater monitoring continued following the shut down of the vapor extraction system. In August 2000, BAI supervised the drilling of three soil borings in 24th Street, on the north side of the Pacific Supply Company building in a downgradient direction from the former UST location. Grab groundwater samples were collected to evaluate whether off-site migration of hydrocarbon contamination in groundwater was occurring. One of the three groundwater samples was reported to contain low levels of TPH as gasoline, BTEX, and petroleum oxygenates. The results of the field investigation are presented in BAI's "Groundwater Investigation and Monitoring Report," dated December 14, 2000.

The drilling activities were performed on July 21, 2004 to determine the effectiveness of the vapor extraction system and to collect soil samples for geotechnical properties to aid in the evaluation of risk based cleanup scenarios. Soil borings CB-1 through CB-14 were drilled to depths ranging from 7 to 8.5 feet bgs. The soil samples selected for laboratory analyses were collected based on the elevation of the historical contamination in the vicinity of the boring, or direction from the ACHCS. The results of this investigation are presented in BAI's report titled "Soil Parameters and Confirmation Soil Sampling Investigation Report", dated January 31, 2005.

Table 1 presents a summary of groundwater analytical data and groundwater elevations for the monitoring wells. Table 2 presents the groundwater concentrations and groundwater elevations for vapor recovery wells. Plate 2 presents a site map that shows the historical boring and sampling locations. Groundwater elevations calculated from this monitoring even are provided on Plate 3.



#### Scope of Work

The scope of work performed for this monitoring event included measuring depths to water in the groundwater and vapor recovery wells and collecting groundwater samples for laboratory analyses. The samples were submitted to a State-certified laboratory under chain of custody protocol.

On January 25, 2007 BAI measured depths to water in groundwater monitoring wells MW-1 through MW-3 and vapor recovery wells VRW-1 through VRW-9. The groundwater monitoring data and calculated elevations relative to mean sea level (MSL) for wells MW-1 through MW-3 (and historical data for wells MW-4 through MW-7) are presented in Table 1, and in Table 2 for vapor recovery wells VRW-1 through VRW-9.

On January 25 and 26, 2007 BAI collected groundwater samples from groundwater monitoring wells MW-1 through MW-3 and vapor recovery wells VRW-1, VRW-2, VRW-3, VRW-4, VRW-6, VRW-8 and VRW-9. Vapor recovery wells VRW-5 and VRW-7 were not sampled because of lack of drum capacity and because there are wells within close proximity that were sampled during this monitoring event.

The groundwater sampling protocol and field logs are included in Appendix A. BACE Analytical & Field Services (BAFS) analyzed the groundwater samples for TPH as gasoline and for volatile organic compounds (VOCs) including BTEX and MTBE by EPA Test Method 8260. The groundwater analytical report for the groundwater samples is presented in Appendix B.

#### **Groundwater Flow Direction**

The groundwater gradient is generally toward the north, with groundwater elevations ranging from 3.81 feet to 4.27 feet above MSL. The groundwater elevations are presented on Plate 3.

#### **Groundwater Analytical Results**

The analytical results of the sample from well MW-1 reported no detectable concentrations of TPH as gasoline, BTEX or MTBE. No detectable concentrations of TPH as gasoline or BTEX have been reported from samples collected from this well since December 2004.

TPH as gasoline was reported in the sample collected from well MW-2 at a concentration of 0.29 milligrams per liter (mg/l), benzene was at 2.65 micrograms per liter ( $\mu$ g/l), and xylenes at 3.00  $\mu$ g/l. In well MW-3, TPH as gasoline was reported at a concentration of 0.15 mg/l.

TPH as gasoline was reported in the samples collected from the vapor extraction wells at concentrations ranging from 0.071 mg/l in VRW-3 to 1.4 mg/l in VRW-4. Benzene, toluene, ethylbenzene and/or xylenes were reported in all samples collected except MW-1 and MW-3, with detectable concentrations of constituents ranging from 0.56 µg/l of ethylbenzene in well



VRW-6 to 260  $\mu$ g/l of benzene in well VRW-1. MTBE was reported below detection limits ranging from <1.0 to <50  $\mu$ g/l in all wells except VRW-1, which reported a concentration of 1.31  $\mu$ g/l.

#### **Monitoring Schedule**

Groundwater monitoring was conducted in January 2006, but was not conducted in June 2006 due to a scheduling error. Groundwater sampling is currently scheduled for June 2007. A report summarizing the results of the June 2007 monitoring event will be provided after BAI receives and reviews the analytical results. BAI recommends discontinuing sampling well MW-1 because all samples analyzed since December 2004 have been reported as containing no detectable concentrations of TPH as gasoline or BTEX.

BAI is also respectfully requesting that ACHSCA respond to previously submitted report titled "Soil Parameters and Confirmation Soil Sampling Investigation Report", dated January 31, 2004. In the report BAI concludes that none of the soil samples collected exceeded the Oakland Tier 2 site-specific target levels (SSTLs) for clayey silts or sandy silts, and that the grab groundwater sample did not exceed the Oakland Guidance Tier 2 SSTLs. In addition, the groundwater analytical data for monitoring wells and vapor recovery wells that are sampled have not exceeded the Oakland Guidance Tier 2 SSTLs. It appears that there are residual concentrations of petroleum hydrocarbons, but that semi-annual sampling is no longer warranted.

If you should have any questions regarding this report, please contact Bill Coset at (707) 838-3027.

Sincerely,

William H. H. Coset

Project Geologist

David E. Conley, P.G. Senior Geologist

cc: Ms. Normita Callison



#### LIST OF ATTACHMENTS

**TABLES** 

Table 1. Summary of Groundwater Analytical Data for Monitoring Wells

Table 2. Summary of Groundwater Analytical Data for Vapor Extraction Wells

**PLATES** 

Plate 1. Vicinity Map

Plate 2. Site Map

Plate 3. Groundwater Elevations, January 25, 2007

<u>APPENDICES</u>

Appendix A. Monitoring Well Sampling Protocol and Field Reports

Appendix B. Analytical Laboratory Report



Well	Depth to Groundwater	Depth to Groundwater	Groundwater Elevation	TPH as gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	Lead	MTBE
Name	Date	(feet)	(feet, MSL)	(mg/L)	(µg/L)	(µg/L)	(µg/L)	(μg/L)	(mg/L)	(μg/L)
MW-I	10/14/1988	7.99	0.88	1.1	1.1	ND	_	ND		
MW-1	12/29/1989	7.74	1.13	ND	ND	ND	ND	ND	ND (1)	
MW-1	5/28/1992	7.81	1.06	ND	ND	ND	ND	ND	0.003(2)	_
MW-1	9/3/1992	7.90	0.97	ND	ND	ND	ND	ND	0.12 (2)	
MW-1	11/24/1992	7.90	0.97	ND	ND	ND	ND	ND	0.017 (2)	
MW-1	3/9/1993	7.38	1.49	ND	ND	ND	ND	ND	ND (1)	_
MW-1	7/21/1993	7.68	1.19	ND	ND	ND	ND	ND	ND (1)	-
MW-1	11/3/1993	7.83	1.04	ND	ND	ND	ND	ND	ND (1)	= =
MW-1	2/1/1994	7.30	1.57	ND	ND	ND	ND	ND	ND (1)	- 54
MW-1	6/2/1994	7.43	1.44	ND	ND	ND	ND	ND	ND (1)	
MW-1	9/1/1994	7.70	1.17	ND	ND	ND	ND	ND	ND (1)	
MW-1	12/13/1994	6.90	1.97	ND	ND	ND	ND	ND	-	_
MW-1	3/7/1995	7.30	1.57	0.06	3.8	ND	ND	ND		_
MW-1	6/9/1995	7.87	1.00	0.09	12	0.8	0.5	1.3	-	
MW-1	9/21/1995	7.67	1.20	ND	4.1	ND	ND	ND	- 1	
MW-1	12/18/1995	7.15	1.72	ND	ND	ND	ND	ND		
MW-1	2/29/1996	6.74	2.13	0.09	1.4	0.5	ND	0.8	_	-
MW-1	7/15/1996	7.76	1,11		-	-			-	_
MW-1	1/7/1997	6.80	2.07	0.06	0.6	<0.5	<0.5	<0.5		_
MW-1	7/12/1997	7.67	1.20	-	-		<u> </u>	=	_	_
MW-1	1/26/1998	6.93	1.94	<0.05	<0.5	<0.5	<0.5	1.1	-	-
MW-1	7/3/1998	7.51	1.36	Le	_	-	<del>-</del>	_	<del>-</del>	_
MW-1	1/13/1999	7.63	1.24	<0.05	<0.5	<0.5	<0.5	<0.5	_	-
MW-1	9/27/1999	7.77	1.10	_		_			- 35	_
MW-1	1/28/2000	6.85	2.02	<0.05	<0.5	<0.5	<0.5	<0.5		<5.0
MW-1	5/16/2002	7.45	1.42	0.35	<0.5	<0.5	<0.5	<0.5	-	<1.0
MW-1	6/10/2003	7.32	4.15	< 0.05	<0.5	<0.5	< 0.5	<0.5		_
MW-1	11/19/2003	7.30	4.17	< 0.050	< 0.30	< 0.30	<0.50	<0.50	_	<u> </u>
MW-1	6/23/2004	7.49	3.98	0.37	<1.0	<1.0	<1.0	<1.0	74_	_
MW-1	12/10/2004	6.27	5.20	<0.050	<0.5	<0.5	<0.5	<0.5	V=	
MW-1	7/21/2005	7.41	4.06	<0.05	<0.50	<0.50	<0.50	< 0.50		_

Well	Depth to Groundwater	Depth to Groundwater	Groundwater Elevation	TPH as gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	Lead	MTBE
Name	Date	(feet)	(feet, MSL)	(mg/L)	(μg/L)	(µg/L)	(µg/L)	(μg/L)	(mg/L)	(µg/L)
MW-1	1/18/2006	6.28	5.19	< 0.05	<0.50	<0.50	<0.50	<0.50	-	_
MW-1	1/26/2007	7.47	4.00	< 0.050	<0.50	<0.50	< 0.50	<0.50		<1.0
MW-2	10/14/1988	7.29	0.85	11	23	20	<u></u>	16	_	_
MW-2	12/29/1989	6.87	1.27	4	200	6.7	ND	ND	0.22 (1)	
MW-2	5/28/1992	6.92	1.22	8.9	550	48	ND	13	ND (2)	
MW-2	9/3/1992	7.26	0.88	2.1	760	6.2	1.8	5.1	0.006 (2)	
MW-2	11/24/1992	7.28	0.86	4.2	370	15	3.4	9.5	ND (2)	
MW-2	3/9/1993	6.73	1.41	4.3	280	14	3.7	7.1	ND (1)	
MW-2	7/21/1993	7.02	1.12	3.4	250	9.6	2.5	11	ND(1)	
MW-2	11/4/1993	7.22	0.92	2.5	230	7.8	2.1	9.9	ND(1)	- 1
MW-2	2/1/1994	6.93	1.21	3.4	240	17	ND	15	ND(1)	
MW-2	6/2/1994	6.86	1.28	3.0	150	9.8	3.0	10	ND(1)	- 5
MW-2	9/1/1994	7.10	1.04	2.1	120	9.8	2.0	9.6	ND(1)	_
MW-2	12/13/1994	6.58	1.56	2.0	200	10	2.7	11		=
MW-2	3/7/1995	6.69	1.45	3.0	500	15	5.8	16	=	_
MW-2	6/9/1995	7.00	1.14	2.1	300	14	5.8	13	-	_
MW-2	9/21/1995	6.91	1.23	1.6	120	9.6	ND	15		
MW-2	12/18/1995	6.73	1.41	2.8	120	16	5.2	19		===
MW-2	2/29/1996	6.36	1.78	1.7	170	15	2.9	17		
MW-2	7/15/1996	7.11	1.03	2.8	160	22	3.5	17		-
MW-2	1/7/1997	6.40	1.74	3.0	350	25	8.1	24		-
MW-2	7/12/1997	6.98	1.16	2.1	55	11	<2.5	18	-	-
MW-2	1/26/1998	6.45	1.69	1.8	310	29	5.0	15	1574	_
MW-2	7/3/1998	6.91	1.23	1.9	85	9.3	1.8	17	_	-
MW-2	1/13/1999	7.07	1.07	2.1	48	33	2.0	16	-	_
MW-2	9/27/1999	7.22	0.92	1.5	20	6.8	2.6	11	<u> </u>	-
MW-2	1/28/2000	6.61	1.53	1.3	22	6.4	1.5	11	W -	<5.0
MW-2	5/17/2002	6.95	1.19	3.3	25.4	<5.0	<5.0	<5.0		<10
MW-2	6/10/2003	6.71	4.09	1.6	52	2.3	32	9.1	_	
MW-2	11/19/2003	6.95	3.85	3.7	9.7	<1.1	<1.1	7.5		_



Well	Depth to Groundwater	Depth to Groundwater	Groundwater Elevation	TPH as gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	Lead	мтве
Name	Date	(feet)	(feet, MSL)	(mg/L)	(µg/L)	(μg/L)	(µg/L)	(µg/L)	(mg/L)	(μg/L)
MW-2	6/23/2004	6.96	3.84	1.1	6.30	2.36	<1.0	7.41	_	= 5/
MW-2	12/9/2004	6.54	4.26	3.0	13.0	13.0	<0.5	24	-	_
MW-2	7/22/2005	6.89	3.91	2.7	5.84	<2.5	<2.5	5.81	===	
MW-2	1/19/2006	6.33	4.47	3.6	15.0	<2.5	<2.5	11.2	155	-
MW-2	1/26/2007	6.99	3.81	0.29	2.65	<2.5	<2.5	3.00	-	<5.0
MW-3	10/14/1988	8.25	0.88	3.4	ND	ND	<del>-</del>	2.8		<u> </u>
MW-3	12/29/1989	7.79	1.34	ND	ND	ND	ND	ND	0.205 (1)	2//
MW-3	5/28/1992	7.83	1.30	ND	0.8	0.5	ND	ND	0.016 (2)	= 2
MW-3	9/3/1992	8.22	0.91	ND	ND	ND	ND	ND	0.033 (2)	
MW-3	11/24/1992	8.29	0.84	ND	ND	ND	ND	ND	0.011 (2)	
MW-3	3/9/1993	7.30	1.83	0.1	1.8	ND	ND	ND	ND(1)	_
MW-3	7/21/1993	7.87	1.26	ND	ND	ND	ND	ND	ND(1)	_
MW-3	11/4/1993	8.23	0.90	0.07	0.6	0.5	ND	ND	ND(1)	
MW-3	2/1/1994	7.56	1.57	ND	ND	ND	ND	ND	ND(1)	-
MW-3	6/2/1994	7.46	1.67	0.06	ND	ND	ND	ND	ND(1)	2
MW-3	9/1/1994	7.83	1.30	0.07	1.7	0.9	ND	ND	ND(1)	-
MW-3	12/13/1994	7.07	2.06	0.06	1.4	ND	ND	ND	-	
MW-3	3/8/1995	7.27	1.86	0.06	1.5	ND	ND	ND		-
MW-3	6/9/1995	7.79	1.34	0.10	5.7	ND	ND	ND	_	-
MW-3	9/21/1995	7.87	1.26	ND	1.5	ND	ND	ND		-
MW-3	12/18/1995	7.30	1.83	ND	1.3	ND	ND	ND		
MW-3	2/29/1996	6.84	2.29	ND	2.1	0.6	ND	0.7		-
MW-3	7/15/1996	7.79	1.34		_	==	<u> </u>			
MW-3	1/7/1997	6.62	2.51	0.05	1.0	<0.5	<0.5	<0.5	_	-
MW-3	7/12/1997	7.83	1.30	=======================================	_	-			_	-
MW-3	1/26/1998	6.60	2.53	< 0.05	0.8	<0.5	<0.5	<0.5		141
MW-3	7/3/1998	7.48	1.65	_	i.e.	_		= =		-
MW-3	1/13/1999	7.63	1.50	< 0.05	<0.5	<0.5	<0.5	<0.5	_	_
MW-3	9/27/1999	7.94	1.19	-	_	_	-			_
MW-3	1/28/2000	7.12	2.01	< 0.05	<0.5	< 0.5	< 0.5	<0.5	15	<5.0



Well	Depth to Groundwater	Depth to Groundwater	Groundwater Elevation	TPH as gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	Lead	мтве
Name	Date	(feet)	(feet, MSL)	(mg/L)	(µg/L)	(μg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)
MW-3	6/5/2003	7.53	4.23	<0.05	<0.5	<0.5	<0.5	<0.5		
MW-3	11/19/2003	7.83	3.93	0.16	<0.54	< 0.54	< 0.55	<1.6	( <del></del>	-
MW-3	6/23/2004	7.65	4.11	< 0.05	<1.0	<1.0	<1.0	<1.0	16	
MW-3	12/8/2004	7.53	4.23	< 0.050	<0.5	<0.5	<0.5	<0.5	12	
MW-3	7/20/2005	7.62	4.14	< 0.10	<1.0	<1.0	<1.0	<1.0	_	_
MW-3	1/19/2006	6.76	5.00	< 0.05	< 0.50	< 0.50	< 0.50	0.71	_	
MW-3	1/25/2007	7.54	4.22	0.15	<0.50	<0.50	<0.50	< 0.50	_	<1.0
MW-4	10/14/1988	8.33	0.74	4.6	1.2	ND		2.2		_
MW-4	12/29/1989	8.08	0.99	0.5	0.7	ND	ND	ND	ND (1)	_
MW-4	5/28/1992	8.19	0.88	0.27	8.8	1	ND	3.2	0.030(2)	-
MW-4	9/3/1992	8.37	0.70	0.20	4.5	4.4	ND	1.9	0.022 (2)	-
MW-4	11/24/1992	8.28	0.79	0.14	3.2	3.2	ND	1.0	0.005 (2)	-
MW-4	3/9/1993	7.98	1.09	0.47	10	ND	ND	2.5	ND (1)	870
MW-4	7/21/1993	8.17	0.90	0.28	4.4	5.9	ND	ND	ND(1)	-
MW-4	11/4/1993	8.14	0.93	0.08	1.3	1.6	ND	ND	ND(1)	_
MW-4	2/1/1994	7.79	1.28	0.08	ND	ND	ND	ND	ND(1)	_
MW-4	6/2/1994	7.53	1.54	0.30	3.1	2.9	ND	0.8	ND(1)	_
MW-4	9/1/1994	7.69	1.38	0.12	1.6	ND	ND	ND	ND(1)	_
MW-4	12/13/1994	6.70	2.37	ND	ND	ND	ND	ND	-	
MW-4	3/8/1995	6.83	2.24	0.09	ND	ND	ND	ND	_	
MW-4	6/9/1995	7.66	1.41	0.19	ND	ND	ND	ND	_	
MW-4	9/21/1995	7.93	1.14	0.09	ND	ND	ND	ND		
MW-4	12/18/1995	6.98	2.09		<u> </u>	_			_	
MW-4	2/29/1996	6.54	2.53	0.14	1.6	1.0	ND	0.6		-
MW-4	7/15/1996	7.74	1.33	_	-		<u> </u>			_
MW-4	1/7/1997	6.46	2.61	0.09	1.0	0.5	<0.5	<0.5		= = =
MW-4	7/12/1997	7.82	1.25		-	-	-			
MW-4	1/26/1998	6.67	2.40	0.09	1.1	0.8	<0.5	<0.5		-
MW-4	7/3/1998	7.45	1.62	12	-	-	_	l		-



Well	Depth to Groundwater	Depth to Groundwater	Groundwater Elevation	TPH as gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	Lead	MTBE (μg/L)
Name	Date	(feet)	(feet, MSL)	(mg/L)	(µg/L)	(μg/L)	(μg/L)	(μg/L)	(mg/L)	
MW-4	1/13/1999	7.51	1.56	0.12	1.1	0.62	<0.5	0.57		
MW-4	9/27/1999	7.88	1.19	_					_	- CE O
MW-4	1/28/2000	6.73	2.34	0.072	<0.5	<0.5	<0.5	<0.5	_	<5.0
MW-5	10/14/1988	8.04	0.89	3.2	ND	ND		ND	_2	
MW-5	12/29/1989	7.40	1.53	ND	ND	ND	ND	ND	ND (1)	UE.
MW-5	5/28/1992	7.53	1.40	ND	ND	ND	ND	ND	0.008 (2)	( (4
MW-5	9/3/1992	8.02	0.91	ND	ND	ND	ND	ND	0.034 (2)	7/2
MW-5	11/24/1992	7.75	1.18	ND	ND	ND	ND	ND	0.011 (2)	<del>-</del>
MW-5	3/9/1993	6.91	2.02	ND	ND	ND	ND	ND	ND (1)	-
MW-5	7/21/1993	7.57	1.36	ND	ND	ND	ND	ND	ND(1)	_
MW-5	11/4/1993	7.77	1.16	ND	ND	ND	ND	ND	ND(1)	-
MW-5	2/1/1994	7.05	1.88	ND	ND	ND	ND	ND	ND(1)	
MW-5	6/2/1994	7.18	1.75	ND	ND	ND	ND	ND	ND(1)	_
MW-5	9/1/1994	7.53	1.40	ND	ND	ND	ND	ND	_	
MW-5	3/8/1995	6.67	2.26	ND	ND	ND	ND	ND		
MW-5	6/9/1995	7.33	1.60	ND	ND	ND	ND	ND		
MW-5	9/21/1995	7.67	1.26	ND	ND	ND	ND	ND		-
MW-5	12/18/1995	6.62	2.31		-	_	_	_	_	2/
MW-5	2/29/1996	6.16	2.77	ND	ND	ND	ND	ND	_	_
MW-5	7/15/1996	7.47	1.46	_	+	=2	<u> </u>			_
MW-5	1/7/1997	6.11	2.82	<0.05	<0.5	<0.5	< 0.5	<0.5		_
MW-5	7/12/1997	7.61	1.32	-			_	(=	-	
MW-5	1/26/1998	6.17	2.76	<0.05	<0.5	<0.5	<0.5	<0.5		
MW-5	7/3/1998	7.23	1.70	_			_	-	1=	
MW-5	1/13/1999	7.27	1.66	<0.05	<0.5	<0.5	<0.5	<0.5		
MW-5	9/27/1999	7.76	1.17	-	-	-	_			
MW-5	1/28/2000	6.43	2.50	<0.05	<0.5	<0.5	<0.5	<0.5		<5.0



Well	Depth to Groundwater	Depth to Groundwater	Groundwater Elevation	TPH as gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	Lead	МТВЕ
Name	Date	(feet)	(feet, MSL)	(mg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(μg/L)
MW-6	12/29/1989	5.02	1.11	1.1	5.4	4.5	ND	ND	ND (1)	===
MW-6	3/9/1993	5.10	1.03	2.3	2.3	2.8	ND	3.1	ND (1)	-
MW-6	7/21/1993	5.23	0.90	0.59	ND	7.6	ND	ND	ND(1)	,
MW-6	11/4/1993	5.25	0.88	1.5	ND	1.2	ND	0.7	ND(1)	_
MW-6	2/1/1994	5.05	1.08	1.9	2.5	3.9	1.6	1.1	ND(1)	_
MW-6	6/2/1994	4.49	1.64	1.3	ND	1	ND	ND	ND(1)	
MW-6	9/1/1994	4.53	1.60	2.2	ND	1.7	ND	ND	ND(1)	_
MW-6	12/13/1994	4.27	1.86	0.66(3)	ND	ND	ND	ND		
MW-6	3/8/1995	3.37	2.76	1.0 (3)	ND	ND	ND	ND	-	
MW-6	6/9/1995	4.40	1.73	1.5	ND	3,3	ND	ND	<u> </u>	-
MW-6	9/21/1995	4.69	1.44	0.28	ND	ND	ND	ND	<del>-</del>	
MW-6	12/18/1995	4.42	1.71		_		_	-	-	
MW-7	12/29/1989	8.35	-3.32	ND	ND	ND	ND	ND	0.235 (1)	-
MW-7	3/9/1993	13.60	-8.57	ND	ND	ND	ND	ND	ND (1)	-
MW-7	7/21/1993	12.59	-7.56	ND	ND	ND	ND	ND	ND(1)	
MW-7	11/4/1993	9.84	-4.81	ND	ND	ND	ND	ND	ND(1)	-
MW-7	2/1/1994	10.38	-5.35	ND	ND	ND	ND	ND	ND(1)	-
MW-7	6/2/1994	10.10	-5.07	ND	ND	ND	ND	ND	ND(1)	_
MW-7	9/1/1994	9.63	-4.60	ND	ND	ND	ND	ND	ND(1)	-
MW-7	12/13/1994	11.27	-6.24	ND	ND	ND	ND	ND		_
MW-7	3/7/1995	9.68	-4.65	ND	ND	ND	ND	ND		_
MW-7	6/9/1995	9.37	-4.34	ND	ND	ND	ND	ND	_	- 3-
MW-7	9/21/1995	9.43	-4.40	ND	ND	ND	ND	ND	=	_
MW-7	12/18/1995	13.28	-8.25	-		_	-	-		_
MW-7	2/29/1996	11.70	-6.67	ND	ND	ND	ND	ND	<del>-</del>	_
MW-7	7/15/1996	11.12	-6.09	_	-		_	-		
MW-7	1/7/1997	14.35	-9.32	< 0.05	<0.5	<0.5	<0.5	<0.5		_ =
MW-7	7/12/1997	15.12	-10.09	_		/ / / / / / / / / / / / / / / / / / /				- 1



Pacific Supply Company, 1735 24th Street, Oakland, California

Well	Depth to Groundwater	Depth to Groundwater	Groundwater Elevation	TPH as gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	Lead	мтве
Name	Date	(feet)	(feet, MSL)	(mg/L)	(µg/L)	(μg/L)	(μg/L)	(μg/L)	(mg/L)	(µg/L)
MW-7	1/26/1998	15.28	-10.25	<0.05	<0.5	<0.5	<0.5	<0.5		-
MW-7	7/3/1998	14.10	-9.07		-	-		_		
MW-7	1/13/1999	14.55	-9.52	<0.05	<0.5	<0.5	<0.5	<0.5		
MW-7	9/27/1999	14.03	-9.00	_	_	_		_		
MW-7	1/28/2000	10.91	-5.88	<0.05	<0.5	<0.5	<0.5	<0.5	_	<5.0

MTBE = methyl tertiary butyl ether. TPH = total petroleum hydrocarbons.

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

ND = not detected at laboratory reporting limit. <= less than given laboratory reporting limit.

 $\mu g/L = micrograms$  per liter. mg/L = milligrams per liter. - = not requested.

MSL = mean seal level.

Groundwater elevations prior to 2003 based on the following well casing elevations in feet above MSL:

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 (5.03').

New survey data was obtained on June 23, 2003 by Phelps and Associates Land Surveyors.

June 2003 water levels were measured on June 5, 2003.

June 2004 water levels were measured on June 22, 2004.

December 2004 water levels were measured on December 8, 2004.



### TABLE 2. SUMMARY OF GROUNDWATER ANALYTICAL DATA FOR VAPOR EXTRACTION WELLS

Sample ID	Depth to Groundwater Date	Depth to Groundwater (feet)	Top of Casing Elevation (feet, MSL)	Groundwater Elevation (feet, MSL)	TPH as gasoline (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes (ug/L)	MTBE (µg/L)	Other Oxygenates & Lead Scavengers (µg/L)
VRW-1	11/3/1993	(1001)	-		3	1600	19	1.1	16	-	
VRW-1	6/10/2003	7.31	11.18	3.87	0.44	5.9	<0.5	<0.5	1.9	-	
VRW-1	11/19/2003	7.33	11.18	3.85	1.2	19	< 0.54	< 0.55	6.3	-	
VRW-1	6/22/2004	7.32	11.18	3.86	0.32	3.23	<1.0	<1.0	3.36		
VRW-1	12/9/2004	6.93	11.18	4.25	0.32	8.0	<3	<3	3.7		
VRW-1	7/22/2005	7.25	11.18	3.93	0.69	5.35	1.27	< 0.50	3.66		(*)
VRW-1	1/19/2006	6.63	11.18	4.55	0.53	6.98	1.41	< 0.50	3.18	-	
VRW-1	1/25/2007	7.34	11,18	3.84	0.32	260	0.97	< 0.50	2.43	1.31	
VRW-2	11/4/1993	<u> </u>	<u>_</u>	_	7.2	3,300	600	2.4	870	-	•
VRW-2	5/17/2002	-	:	_	2.8	471	<10	<10	<10	<20	<10 to <20
VRW-2	6/9/2003	6.87	11.08	4,21	0.47	38	2.8	<1.0	<1.0	- 2	•
VRW-2	11/19/2003	7.00	11.08	4.08	1.3	51	< 0.54	< 0.55	4.0	\$	(#)
VRW-2	6/25/2004	7.00	11.08	4.08	0.24	274	4.10	4,11	8.22		3.53
VRW-2	12/9/2004	6.45	11.08	4.63	< 0.050	9.6	4.2	2.5	4.3	-	-
VRW-2	7/21/2005	6.93	11.08	4.15	2.1	102	1.43	0.84	3.81	2	-
VRW-2	1/18/2006	5.83	11.08	5.25	3.8	280	<2.5	3.81	7.54	2	220
VRW-2	1/25/2007	6.94	11.08	4.14	1.0	62.3	<2.5	<2.5	3.56	<5.0	
VRW-3	11/4/1993		_	_	5.7	120	41	1.1	380	- 1	
	5/17/2002				0.42	10.9	<0.5	<0.5	1.07	<1.0	<0.50 to <1.0
VRW-3		7.41	11.62	4.21	0.061	4.8	<0.5	< 0.5	<0.5	-	
VRW-3	6/9/2003	7.48	11.62	4.14	0.16	1.7	< 0.54	< 0.55	2.7	-	8.00
VRW-3	11/19/2003		11.62	4.04	0.12	2.00	<0.50	<0.50	1.00	-	
VRW-3	6/25/2004	7.58		5.28	0.12	27	3.7	1.0	3.1		(#)
VRW-3	12/10/2004	6,34	11.62	4.12	0.11	<1.0	<1.0	<1.0	2.02		
VRW-3	7/22/2005	7.50	11.62	5.25	0.11	230	<0.50	<0.50	1.46		
VRW-3	1/18/2006	6.37	11.62 11.62	4.12	0.16	1.68	<0.50	<0.50	<0.50	<1.0	-
VRW-3	1/26/2007	7.50	11.02				900	5.4	990		
VRW-4	11/4/1993	=	-		9.0 11	4,400 4,270	741	512	1,130	<50	<25 to <50
VRW-4	5/15/2002		-			_		12	89	- 50	
VRW-4	6/5/2003	7,01	11.33	4.32	2.2	1,200	100	<2.2	36		
VRW-4	11/19/2003	7.44	11.33	3.89	1.7	210	2.4				N N
VRW-4	6/22/2004	7.20	11.33	4.13	14	4,540	611	739	1,170		
VRW-4	12/8/2004	6.99	11.33	4.34	2.7	780	68	90	160	-	
VRW-4	7/20/2005	7.12	11.33	4.21	19	3,740	381	480	643		
VRW-4	1/19/2006	6.29	11.33	5.04	7.8	1,670	196	270	324		
VRW-4	1/26/2007	7.06	11.33	4.27	1.4	163	<25	<25	25.2	<50	•



### TABLE 2. SUMMARY OF GROUNDWATER ANALYTICAL DATA FOR VAPOR EXTRACTION WELLS

Sample ID	Depth to Groundwater Date	Depth to Groundwater (feet)	Top of Casing Elevation (feet, MSL)	Groundwater Elevation (feet, MSL)	TPH as gasoline (mg/L)	Benzene (µg/L)	Toluene (μg/L)	Ethyl- benzene (ug/L)	Xylenes (μg/L)	MTBE (µg/L)	Other Oxygenates & Lead Scavengers (µg/L)
VRW-5	11/4/1993	-		_	0.90	68	33	2.5	32	•	
VRW-5	5/16/2002				0.87	44.3	<5.0	<5.0	<5.0	<10	<5.0 to <10
VRW-5	6/9/2003	7.33	11.56	4.23	0.93	90	<1.0	14	0.16	-	94.5
VRW-5	11/19/2003	7.53	11.56	4.03	2.9	250	<1.1	24	41		
VRW-5	6/23/2004	7.47	11.56	4.09	0.72	40.5	<1.0	1.17	8.04		
VRW-5	12/10/2004	7.11	11.56	4.45	0.72	60	10	<3	33	-	<b>:</b> €:
VRW-5	7/21/2005	7.38	11.56	4.18	1.6	102	3.83	4.62	12.4		T+:
VRW-5	1/19/2006	6.29	11.56	5.27	1.8	65.4	<2.5	31.4	33.4		9€3
VRW-5	1/25/2007	7.40	11.56	4.16	NA	NA	NA	NA	NA	NA	NA
	11/4/1993			<u>+</u>	0.41	6.6	1.0	ND	31		
VRW-6	5/15/2002	-	_	-	0.73	178	4.58	1.41	6.10	<1.0	<0.50 to <1.0
VRW-6	6/6/2003	7.21	11.43	4.22	<0.05	<0.5	<0.5	< 0.5	<0.5		
VRW-6	11/19/2003	7.39	11.43	4.04	0.21	13	<0.54	1.0	2.5		
VRW-6	6/23/2004	7.36	11.43	4.07	0.42	43.4	3.60	1.69	13.0		
VRW-6		6.71	11.43	4.72	0.14	8.0	21	<0.5	3.6		Se.
VRW-6	12/9/2004	7.32	11.43	4.11	0.33	18.3	1.13	0.95	5.05		
VRW-6	7/21/2005	5.85	11.43	5.58	0.13	3.96	<0.50	< 0.50	1.25		(*)
VRW-6	1/19/2006 1/25/2007	7.28	11.43	4.15	0.20	13.5	0.72	0.56	2.67	<1.0	(*)
VRW-6				*		ND	ND	ND	ND	. 1	
VRW-7	11/4/1993		-		0.10 1.6	28.9	0.980	<0.50	<0.50	<1.0	<0.50 to <1.0
VRW-7	5/16/2002	-	44.70	4.22		19	1.3	<0.5	2.2	1.0	-0,50 to 110
VRW-7	6/6/2003	7.47	11.70	4.23	0.36		< 0.54	1.7	5.6		
VRW-7	11/19/2003	7.78	11.70	3.92	1.1	14	8.06	9.81	15.9		
VRW-7	6/22/2004	7.61	11.70	4.09	1.3		<3	<3	5.0	-	2
VRW-7	12/9/2004	7.54	11.70	4.16	0.34	28	2.76	2.56	6.94		
VRW-7	7/21/2005	7.54	11.70	4.16	1.7	48.1 86.8	3.63	6.89	9.04		
VRW-7	1/19/2006	6.70	11.70	5.00	1.6		NA	NA	NA NA	NA	NA
VRW-7	1/25/2007	7.46	11.70	4.24	NA	NA					IVA
VRW-8	11/4/1993				5.9	460	54	ND	53		-104 -00
VRW-8	5/16/2002			-	3.3	248	16.0	<10	<10	<20	<10 to <20
VRW-8	6/6/2003	7.42	11.62	4.20	1.8	70	10	11	6.1	300	-
VRW-8	11/19/2003	7.85	11.62	3.77	3.6	36	<2.7	<2.7	4.3	(-):	*
VRW-8	6/23/2004	7.56	11.62	4.06	2.1	115	11.8	<5.0	18.2	(-):	
VRW-8	12/9/2004	7.41	11.62	4.21	1.3	30	9.0	<3	7.6	(4)	*
VRW-8	7/21/2005	7.49	11.62	4.13	4.1	24.8	3.44	<2.5	7.34	(4)	*
VRW-8	1/19/2006	6.73	11.62	4.89	4.8	18.1	4.26	<2.5	8_30	392	
VRW-8	1/25/2007	7.41	11.62	4.21	1.3	10.7	<2.5	<2.5	6.70	<5.0	

#### TABLE 2. SUMMARY OF GROUNDWATER ANALYTICAL DATA FOR VAPOR EXTRACTION WELLS

Pacific Supply Company, 1735 24th Street, Oakland, California

Sample ID	Depth to Groundwater Date	Depth to Groundwater (feet)	Top of Casing Elevation (feet, MSL)	Groundwater Elevation (feet, MSL)	TPH as gasoline (mg/L)	Benzene (ug/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes (μg/L)	MTBE (µg/L)	Other Oxygenates & Lead Scavengers (µg/L)
VRW-9	11/4/1993		12		0.47	36	18	ND	1.0		
VRW-9	5/16/2002	5		_	0.080	0.990	2.00	< 0.50	5.93	<1.0	<0.50 to <1.0
VRW-9	6/6/2003	7.67	11.87	4.20	0.58	10	4.4	4.9	< 0.50		
VRW-9	11/19/2003	8.01	11.87	3.86	0.86	<1.1	<1.1	<1.1	5.5	8.	150
VRW-9	6/22/2004	7.76	11,87	4.11	0.61	<1.0	1.35	<1.0	5.55	*	3.5
VRW-9	12/9/2004	7.51	11.87	4.36	0.57	8.8	10	< 0.5	5.5	*	
VRW-9	7/21/2005	7,71	11.87	4,16	0.66	<1.0	<1.0	<1.0	2.83	*	7*
VRW-9	1/19/2006	6.94	11.87	4.93	1.0	2.04	<1.0	<1.0	4.91		
VRW-9	1/26/2007	7.65	11.87	4.22	0.52	<1.0	1.01	<1.0	3.53	<2.0	(+:

mg/L = milligrams per liter

μg/L = micrograms per liter

na = not analyzed.

ND = not detected above laboratory reporting limits.

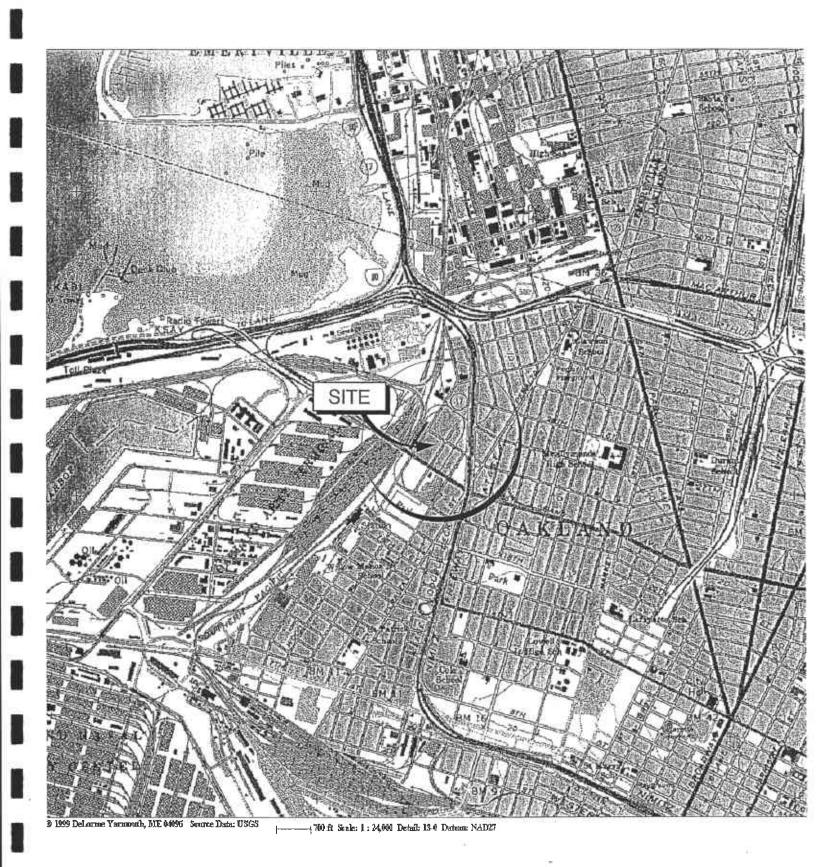
MSL = Mean Sea Level

< = less than the specified laboratory reporting limit

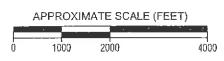
June 2004 groundwater elevations were collected on June 22, 2004.

December 2004 groundwater elevations were collected on December 8, 2004.







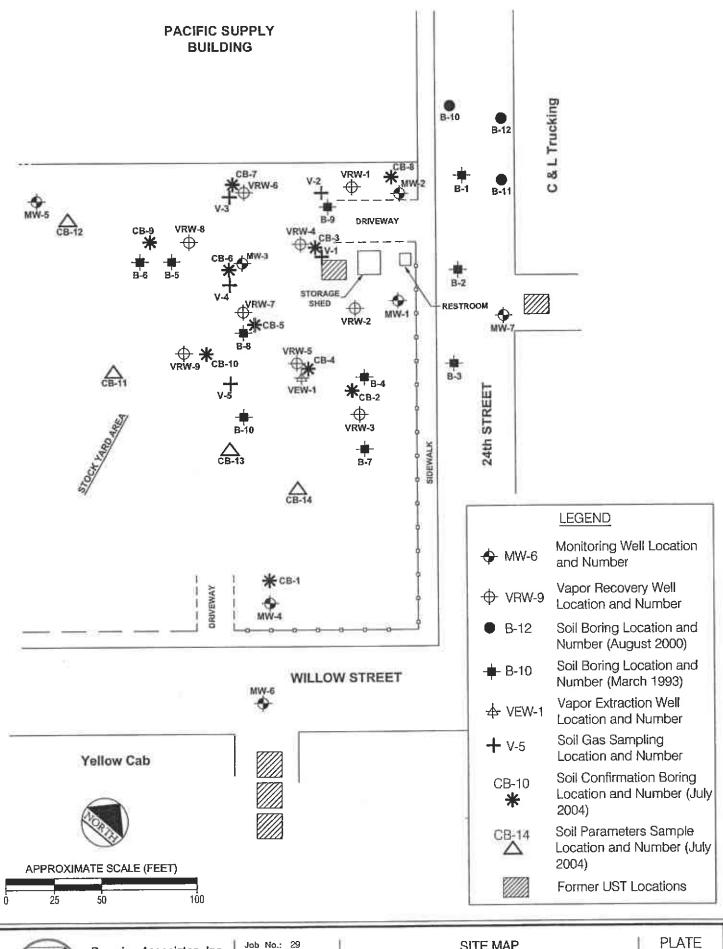






VICINITY MAP
PACIFIC SUPPLY COMPANY
Oakland, California

PLATE





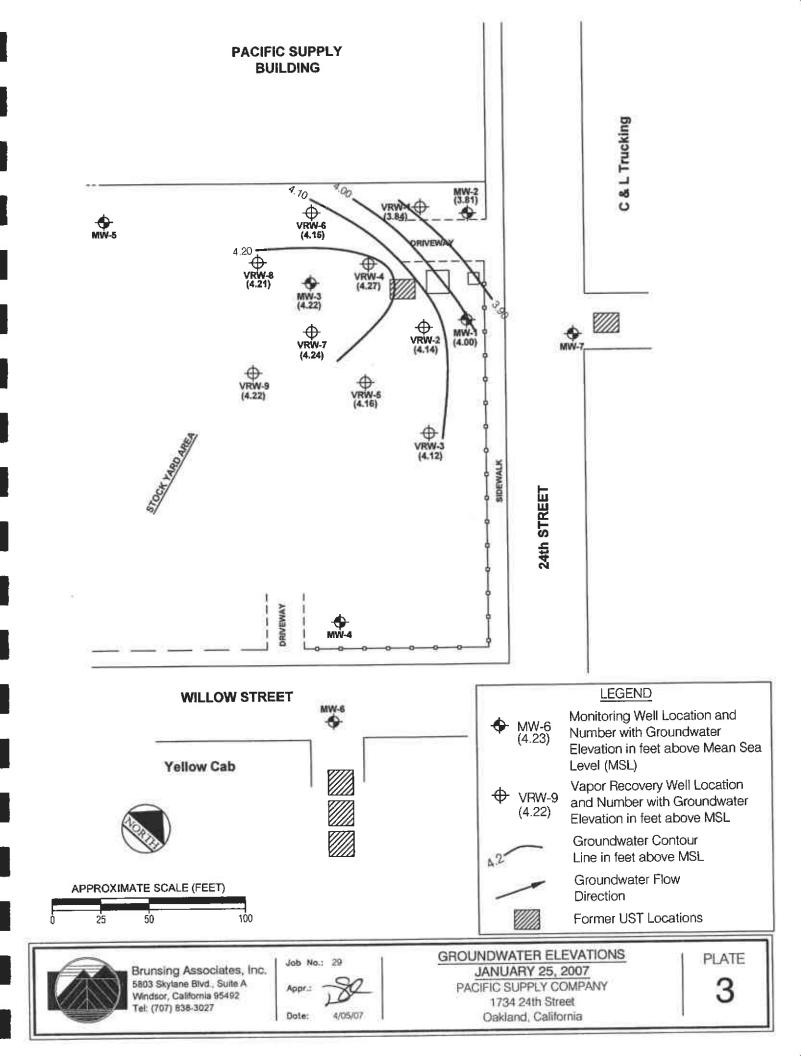
Brunsing Associates, Inc. 5803 Skylane Blvd., Suite A Windsor, California 95492 Tel: (707) 838-3027

Appr.: 12/7/04 Date:

SITE MAP PACIFIC SUPPLY COMPANY 1734 24th Street Oakland, California

**PLATE** 

2



# APPENDIX A Monitoring Well Sampling Protocol and Field Reports



#### **Groundwater Sampling Protocol**

#### **Monitoring Wells**

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 become relatively stabile. 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-40 purge pump, or a peristaltic pump. The purge water is stored on-site in clean, 55-gallon drums.

A groundwater sample is collected from each monitoring well following re-equilibration of the well after purging. The groundwater sample is collected using a factory-sealed disposable, polyethylene bailer with a sampling port, or a factory-sealed Teflon bailer. 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 labeled with a self-adhesive tag. The following information is included on the tag:

- 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. A copy is retained by BAI 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
- Package and seal equipment in plastic bags or other appropriate containers to prevent contact with solvents, dust, or other contaminants.

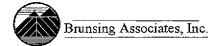
In addition, the pumps are cleaned by pumping a potable water and detergent solution and deionized water through the system. Cleaning solutions are contained on-site in clean 55-gallon drums.

#### **Domestic and Irrigation Wells**

Groundwater samples collected from domestic or irrigation wells are collected from the spigot that is the closest to the well. Prior to collecting the sample, the spigot is allowed to flow for at least 5 minutes to purge the well. The sample is then collected directly into laboratory-supplied containers, sealed, labeled, and stored on blue ice in an appropriate container, as described above. A chain-of-custody form is completed and submitted with the samples to the analytical laboratory.



UST Fund Site:	Yes No	FII	ELD	REP	ORŢ			
JOB NO:	29	PROJECT: Pacific	Supply	FILE	COPA		PAGE	_OF
•	EXD			1 1 -			Total Time:	10.0
DATE:	1/25/07	PROJECT PHASE	=					186616
	/ * '	VEHICLE USED:	1999 F-	150				186538.2
						TOTAL N	/IILEAGE:	78.1
	4	N OF WORK AND C	ONVERSATI	ION RECORE				
0645	_ arrive	( a) shop	aut an	d runne				
0746	llarre	te site		d supple				
0930	arrive	@ site	<u>.</u>					
	• Loca	to Identify,	and mach	all mon	taring 2.v.			
	- Bail o	out water from	n monus	mento.				
				<del></del>	, r	0		
	Suy	our two re	undo o	7 granini	ewaler 2 2W-1, VR	level m	<u>lasuren</u> 2ω-3.	vento veni-4
		VRW-5, VI	RW-61	VRW-7	, VRW-S	7 vew-	৭.	
	<u>- all</u>	e well agui	librated					
	• Set	up for	длошпа	luater	sampl	ing	·	
	• Beg	in grounder	vater s -3, VRU	amplin V+6, VK	w-8, ver	U-1, and	l veu	1-2.
	• 11	ore purgewa	Ton	. dan	1414 A L	a cated	منده م	initu
	whi	en old 1	emediat	ion s	ystem	once	existe	l.
	· Decor				<i>0</i>			
	· Food	n sampling up equip	muent					
1615	740	· ita						
1645	ariu	ed Sinish	nich	work				
	<del></del>	<del></del>					*· <del>** ***</del>	
		**************************************						
						DRUM COUNT		
						]		
						Water = //	Devipmt W	
		<del></del>				_Soil =	Decon Wat	er =



### WATER LEVELS SHEET\_\_\_OF\_

PROJECT: Pacific Supply

PROJECT NUMBER: 29

INSTRUMENT TYPE: 1471 22

INITIALS: EXD DATE: 1/25/07

	<b></b>				DATE: \/25/07
WELL	DEPTH TO	DISTANCE	TIME	EQUILIBRATED	
NUMBER	PRODUCT	TO WATER	(24 HOUR)	(CHECK FOR YES)	NOTES
MW-1	Ø	7.48	1055	<del>                                     </del>	
MW-2	P	6.99	1038		
MW-3	9	7.55	1104	<del> </del>	
VRW-1	P	7.33	१०३१		
VRW-2	P	6.93	1043		
VRW-3	0	7.49	1056		
VRW-4	P	7.07	1041		
VRW-5	Ø	7.39	1058		
VRW-6	P	7.28	1103		
VRW-7	P	7.46	1100		
VRW-8	4	7.40	llot		
VRW-9	Ø	7.65	1059		
MW-1	Ø	7.47	1112	<u></u>	
MW-2	Ø	6.99	1105	· .	
MW-3	P	1.54	1120	<u></u>	
VRW-1	0	7.34	११०९		
VRW-2	Ø	6.94	1111		
VRW-3	Ø	7.50	1114		
VRW-4	P	7.06	1110		
VRW-5	Ø	7.40	1115		
VRW-6	Ø	7.28	1121	V	
VRW-7	Ø	7.46	1116		
VRW-8	Ø	7.41	1:118		
VRW-9	0	7.45	1117	~	
· · ·					
_					

SHEET

	D:E- 0						PROJECT NUMBER: 29				
PROJECT:				e .							
WELL#	MW-3	PRECIP. IN L	AST 5 DAYS:		WIND		DATE: 1/25/07				
STARTING	TIME:	1315	FINISHING T	TIME: 134	40		INITIALS: EXD				
CALCULATI	ON OF PU	RGE VOLUM	E			-	G A				
2" WELL	DEPTH:	16.00	- D.T.W.	7.54	= H20	COLUM	N: 2.46 X 0.5 = 4.23 L				
4" WELL	DEPTH:		- D.T.W. [		= H20	COLUM	N: X 2.0 = O				
THEREFOR	THEREFORE TOTAL PURGE GALLONS EQUALS 4.25 s										
	<u>FIELD MEASUREMENTS</u>										
TIME	GALLONS REMOVED	<u>p H</u>	CONDUCTIVITY	TEMP.			OBSERVATIONS				
132.5	15	7.60	* 3999 US	19.00		.110·~	/drk brown, odor, sediment				
			,		/-						
1326	3.5	7.62	*3999 u.S	19.1 6	yel	low /	Drk brown, odor, sediment				
1331	4.0	7.62	* 3999,5	19.1°C	yell	ow / 1	Ork brown, odor sediment				
	i i				-						
,											
SAMPLIN	NG:			TPH-Gas, 8			GO DRY?				
		T									
WATER	LEVELS:	NOTES:									
TIME	D.T.W.				···						
1336	7.83	* 39	199 > 00	t of F	zang	e. ·					
						<del></del>					
	<u> </u>	1			<u> </u>		<u> </u>				
			*		<del></del>	· · · · · · · · · · · · · · · · · · ·					
		1	*								
					-						

SHEET

PROJECT:	Pacific Sup	pply		<del></del>		PROJECT NUMBER: 2	29				
WELL#	VRW-2	PRECIP. IN L	AST 5 DAYS:		WIND V	DATE: 1/25/07					
			FINISHING T			INITIALS: EXD					
CALCULAT	ON OF PUR	RGE VOLUM	<u> </u>	<u></u>			G				
			_ <del></del>		= H20 COLUMN:	X 0.5 =	A L				
4" WELL	DEPTH:	20.00	- D.T.W. [	6.94	= H20 COLUMN:	13.06 X 2.0 = ZG	. 12 O				
THEREFO	RE TOTAL	PURGE GA	ALLONS EQUAI	_\$	26		S				
<u>FIELD MEASUREMENTS</u>											
TIME	GALLONS REMOVED	<u>p H</u>	CONDUCTIVITY	TEMP.		OBSERVATIONS					
1524	8.5	7.68	3162 45	18.5	DrK green /	blek, odor					
1530	17	7.51	3023 µS	18.5 %	Dr.K. green / bi	ick, odor					
		,									
1539	26	7.62	2499 ps	18.50	DIK green	IbleK, odor					
					- "	<u> </u>					
	· · · · · · · · · · · · · · · · · · ·	<u></u>									
SAMPLIN	NG:	SAMPLE	: ANALYSIS:	TPH-Gas, 8	260B (BTEX, petro	oxy & Pb scav)					
		SAN	MPLE TIME:	1540	DID WELL G	O DRY?					
WATER	LEVELS:	NOTES:									
TIME	D.T.W.										
1543	7.45		s 97			ANT TO THE RESIDENCE OF THE PERSON OF THE PE					
		<u></u>									
			,,								

SHEET

PROJECT:	Pacific Sup	ply					PROJECT NUMBER: 29			
WELL#	VRW-3	PRECIP. IN L	AST 5 DAYS:	V	WIND ~		DATE: 1/26/07			
STARTING	TIME: 4	3810	FINISHING	TIME: 08.	35		INITIALS: EXD			
CALCULAT	ION OF PUR	RGE VOLUM	E					G		
	DEPTH:	,	 ] - D.T.W.		] = H20 C	OLUMN: [	X 0.5 =	A L		
4" WELL	DEPTH:	20.00	] - D.T.W.	7.50	] = H20 C	OLUMN: [	12.5 X 2.0 = 25	0 L		
THEREFORE TOTAL PURGE GALLONS EQUALS 25 S										
<u>FIELD MEASUREMENTS</u>										
TIME	GALLONS REMOVED	рН	CONDUCTIVITY	Y TEMP.			OBSERVATIONS			
0812	8	7.94	1241 A	5 16.7 %	vel	CR, DI	K / black /green, sh	een, sed		
						· · · · · · · · · · · · · · · · · · ·				
0919	16	7.56	3720 MS	17.4 °c	edoz,	DrK/b	lack/green, sheen, sed	iment		
0824	24	7.64	1774 µS	17.2 %	o do R	P, DEKI	black I brown, sedimen	t, shee,		
SAMPLI	NG:	SAMPLE	E ANALYSIS:	TPH-Gas,	8260B (BTI	EX, petro d	oxy & Pb scav)			
		SAI	MPLE TIME:	0825	] DiD	WELL GO	DRY?			
WATER	LEVELS:	NOTES:								
TIME	D.T.W.						•			
0830	14 36		,	8,						
			**************************************			<u> </u>				
				-				·		
						÷				

SHEET

PROJECT:	Pacific Sup	ply				PRO	JECT NUMBER:	29	
WELL#	VRW-6	PRECIP. IN L	.AST 5 DAYS: ➤		WIND /	DA	ATE: 1/25/07		
STARTING	TIME: /	200	FINISHING T	ГІМЕ: /23	O	INITI	ALS: <b>EXD</b>		
CALCULAT	ION OF PUR	GE VOLUM	<u>E</u>			i			G
2" WELL	DEPTH:		] - D.T.W. [		= H20 CO	LUMN:	,X 0.5 =		A L
4" WELL	DEPTH:	20.00	] - D.T.W. [	7.28	= H20 CO	LUMN: 12	7z X 2.0 = 2	5.44	0 N
THEREFO	RE TOTAL	PURGE G/	ALLONS EQUA	LS	2	5.5			S
	<u>-</u>		FIE	LD MEA	SUREM	<u>ENTS</u>			
	GALLONS								
TIME	REMOVED	рН	CONDUCTIVITY	<u>TEMP.</u>			RVATIONS		
1206	8	7.22	1 V	20.20		, turbic	( brown ; oa	dor	<u> </u>
1217	12	7.68	* 3999 ps		•		brown green	, dolos,	Sheen
	ص ا		اکبر	·c	DRY	well		÷	
	24				» ·	ا المد			
·	29		µS	<u> </u>	DRY	well			
	,		· · · · · · · · · · · · · · · · · · ·				<del> </del>		
SAMPLII	NG.	SAMPLE	: ANALYSIS:	TPH-Gas 8	260B (BTE)	C, petro oxy &	Ph scav)		
- 0, 1111 211								<u></u> 1	
		SAN	MPLE TIME:	1220		/ELL GO DRY	? yes		
WATER	LEVELS:	NOTES:	•		٠.				
TIME	D.T.W.								
1225	18.26	* O.	at of Range		99				
							î .		
							,	•	
				<u>-</u>	•				· 
		-							
.1									

### WELL SAMPLING SHEET OF

PROJECT:	Pacific Sup	ply			•		PROJECT NUMBER: 29				
l			AST 5 DAYS: 6		WIND		DATE: 1/28/07				
STARTING	TIME: /	235	FINISHING T	IME: <i>131</i>	10		INITIALS: EXD				
CALCULATI	ON OF PUR	GE VOLUM	<u></u> <u></u>					G			
2" WELL	DEPTH:		- D.T.W. [		= H20	COLUMN:	X 0.5 =	] L			
4" WELL	DEPTH:	20.00		/			12.59 X2.0 = 25.18	] O			
THEREFOR	RE TOTAL	PURGE GA	ALLONS EQUAI	_S		25		N S			
	FIELD MEASUREMENTS										
TIME	GALLONS REMOVED	рН	CONDUCTIVITY	TEMP			OBSERVATIONS				
1243	8	7.38			turt	id gree	en/brown, odor,				
1251	16	7.34	* 3999 <sub>u</sub> 5	17.35	tur	oid gre	en/brown, odor				
1257	24	8.23	* 3999 µS	17.6 °c	turb	id gre	en/brown, codor				
	<u></u>					. <u></u>					
SAMPLIN	NG:	SAMPLE	ANALYSIS:	TPH-Gas, 8	3260B (B	TEX, petro	o oxy & Pb scav)				
		SAM	MPLE TIME:	1300	וס [	D WELL G	GO DRY?				
WATER	LEVELS:	NOTES:									
TIME	D.T.W.										
1303	7.46	* 0	out of Rang	je > 39	199						
				<del></del> <del>_</del>	-						

UST \_\_\_\_Yes
Fund Site: \_\_\_\_No

# FIELD REPORT

		PAGE OF
JOB NO:	29 PROJECT: Pacific Supply	
INITIAL:	EXD SUBJECT: GW Monitoring	Total Time: 8 · O
DATE:	1/26/07 PROJECT PHASE NUMBER:	End. Mileage: <u>/86686.</u> 9
	VEHICLE USED: 2006	Beg. Mileage: /6/6/6.3
		TOTAL MILEAGE: 70.6
	DESCRIPTION OF WORK AND CONVERSATION RECORD	
0745	leave to site	
0800	arrive @ site	
	· perform groundwester sampling @ VRS	W-3, mw-1, VRW-4,
	* Unable to sample vew-7 and vew- drum storage capacity.	-5 due to insuffient
	· Stored purgewater in drums loc of old Remediation unit	ated in area
	· Close all well caps and monum  Decen sampling equipment  Load up equipment	ients.
	• Fill out Chain of Custody • Complete field forms.	
1330	Leave Site	
1445	travel	
/7 <del>7</del> 3	arrive @ office	
	· Unload equipment and supplies · Submit samples and reports	
1545	off nork	
		DRIM COURT. 2
		DRUM COUNT: 2 punctured drums
<b>y</b> .,		Water = t \ Devlpmt Water =
	# 7 \	Soil = Decon Water =
•	* Z Drims	



### WELL SAMPLING SHEET

	,										
PROJECT:	Pacific Sup	ply						PROJECT	NUMBER:	29	,
WELL#	MW-1	PRECIP. IN L	AST 5 DAYS:	-	V	/IND ✓		DATE:	1/20/07		
STARTING	TIME:	0840	FINISHING	TIME:	090	5		INITIALS:	EXD		
CALCULATI	ON OF PUR	GE VOLUM	<u>E</u>								G
2" WELL	DEPTH:	19.00	- D.T.W.	7.4	7	= H20 C	OLUMN:	11.53	ک X 0.5 =	5.765	A L
4" WELL	DEPTH:		- D.T.W.		<u>-</u>	= H20 C	OLUMN:		X 2.0 =		0 N
THEREFO	RE TOTAL	PURGE GA	ALLONS EQU	ALS			5.75	]			S
FIELD MEASUREMENTS											
<u> </u>	GALLONS		<u> </u>				·				
TIME	REMOVED	рΗ	CONDUCTIVITY	<del></del>				OBSERVATI			,
0844	2	7.46	1591 ps	15.	7 c	DrK	brown	sheen,	cdor		
									<u>.</u>		
0848	4	7.36	2020 p5	16.5	Č	DIK	brown,	sheen,	odoR		
0351	55	7.42	1800	16.7	c	DrK	brown	Sheen	odor		
								<u> </u>			
						_			·		
SAMPLII	NG:	SAMPLE	E ANALYSIS:	TPH-C	es. 82	60B (BT	EX, petro	oxy & Pb s	cav)		
<u> </u> 		SAI	MPLE TIME:	085.	3	DIE	WELL G	O DRY?	NO		
WATER	LEVELS:	NOTES:	· · · · ·								
TIME	D.T.W.									·	
0858	7.89										
									,		
								6			
			-5.								

SHEET

r					<del></del>					
PROJECT:	Pacifi	c sup	P <sup>1</sup> y			PROJECT NUMBER: 29				
WELL# ^	1W-Z	PRECIP. IN L	AST 5 DAYS:	vone	WIND /	DATE: 1/26/07				
STARTING	TIME: /	1020	FINISHING T	TIME: 105	5	INITIALS: EXD				
CALCULATI	ON OF PUR	GE VOLUM	E FOR 3 WELL	CASINGS		G				
2" WELL	DEPTH:		- D.T.W. [		= H20 COLUM	MN: X 0.5 = A L				
4" WELL	DEPTH:	20.00	- D.T.W.	6.99	= H20 COLUM	MN: 13.01 X 2.0 = 26.0Z 0				
THEREFOR	RE TOTAL	PURGE GA	LLONS EQUA	LS	70	N S				
FIELD MEASUREMENTS										
	GALLONS				·	······································				
TIME	REMOVED	<u>рН</u>	CONDUCTIVITY			OBSERVATIONS				
1029	8	7.51	2805 µ5	16.8c	DrK yello	w/brown, odor sheen				
1.2.4	1/	7 4:	200	11 0	A	17 1 46				
1034	16	7.41	2472 MS	16.20	Drk yellan	/brown, odor sheen				
==-	24	<del></del>								
SAMPLIN	nc.	SAMDLE	ANALYSIS:	TDH_Coc T	DH Diesel 826	0B (BTEX, petro oxy & Pb scav)				
OAWII EII	<u>10.</u>									
		SAN	IPLE TIME:	1038	DID WEL	L GO DRY? No				
WATER	LEVELS:	NOTES:				· ·				
TIME	D.T.W.									
1043	7.02	• //	nable L	200 mm - 1	ale tostal	Things Dallane dua Is				
, , , ,		inc	Aliano +	down	Stoma	eapacity.				
		1.1.2	altrerent	WININI	Junge.	Capacity.				
						<u> </u>				
				<del>.</del>						
		<u> </u>		<del> </del>						

### WELL SAMPLING SHEET

PROJECT: Pacific Supply PROJECT NUMBER: 29										
WELL# VRW-1 PRECIP. IN LAST 5 DAYS: WIND DATE: 1/25/07										
STARTING TIME: 1415 FINISHING TIME: 1455 INITIALS: EXD										
CALCULATION OF PURGE VOLUME										
2" WELL DEPTH: D.T.W = H20 COLUMN: X 0.5 = A L										
4" WELL DEPTH: 20.00 - D.T.W. 7.34 = H20 COLUMN: 12.66 X 2.0 = 25.32 O										
THEREFORE TOTAL PURGE GALLONS EQUALS 25 S										
FIELD MEASUREMENTS										
GALLONS										
TIME REMOVED DH CONDUCTIVITY TEMP. OBSERVATIONS  1924 6 7.45 #3999 WS 19.1 C Clear Vellow, Odor										
1924 6 7.45 *3999,15 19.1 c clear yellow, odor										
1432 18 7.44 *3999 19.8 & DRK brown / yellow, odor										
1444 25 7.70 #39995 19.0° Drk brown/green, ador										
1.10 K 11.00 DIE 010017 3.00 7										
SAMPLING: SAMPLE ANALYSIS: TPH-Gas, 8260B (BTEX, petro oxy & Pb scav)										
SAMPLE TIME: 1445 DID WELL GO DRY?										
WATER LEVELS: NOTES:										
TIME D.T.W.										
1450 13.12 * out of Range > 3999										

### WELL SAMPLING SHEET OF

PROJECT:	Pacific Sup	ply				PROJECT NUMBER: 29					
WELL#	VRW-4	PRECIP. IN L	AST 5 DAYS: 💆	,	WIND -	DATE: 1/26/07					
STARTING	TIME:	0910	FINISHING T	IME: 095	ل	INITIALS: EXD					
CALCULATI	ON OF PUR	GE VOLUM	<u> </u>			G					
	•				= H20 COLU	JMN: X 0.5 = A					
4" WELL	DEPTH:	20.00	- D.T.W. [	7.06	= H20 COLU	JMN: 12.94 X 2.0 = Z5.88 0					
THEREFOR	THEREFORE TOTAL PURGE GALLONS EQUALS 25.75 S										
	FIELD MEASUREMENTS										
<u>TIME</u>	GALLONS REMOVED	рΗ	CONDUCTIVITY	TEMP.		<u>OBSERVATIONS</u>					
0918	8	7.17	2652 MS	18.2 %	Eurbid	brown, odor, sheen					
0926	16	7,17	3300,5	19.47	turbiol 1	brown, oder, sheen					
	<i>\top</i>		′								
0934	24	7.33	¥ 3999 µ5	19.2 0	turbid	brown, oder, sheen					
	<del> </del>		7-								
SAMPLI	√G:	SAMPLE	ANALYSIS:	TPH-Gas, 8	3260B (BTEX.	petro oxy & Pb scav)					
		SAI	MPLE TIME:	0935	DID WE	LL GO DRY? NO					
<b><i>@</i>WATER</b>	LEVELS:	NOTES:									
TIME	D. <u>T.</u> W.										
0945	13.20	*	cout of run	uje >39	99						
ļ	\$ ***.										
<u> </u>			n 2								
				3							
	<u> </u>		<del></del>		<u> </u>						

# WELL SAMPLING SHEET

PROJECT:	Pacific Sup	ply					PROJECT	NUMBER:	29	
WELL#	VRW-9	PRECIP. IN L	AST 5 DAYS: 🚜	ine	WIND		DATE:	1/26/07		
STARTING	TIME: 2	134	FINISHING T	TME: 124	00		INITIALS:	EXO		
CALCULATI	ON OF PUR	GE VOLUM	<u>E</u>				<u> </u>	••••		G
2" WELL	DEPTH:		- D.T.W. [		= H20	COLUMN:		X 0.5 = [		A L L
4" WELL	DEPTH: [	20.00	- D.T.W. [	7.65	= H20	COLUMN:	12.35	X 2.0 = [	24.7	0 N
THEREFORE TOTAL PURGE GALLONS EQUALS 24.5										
<u>FIELD MEASUREMENTS</u>										
TIME	GALLONS REMOVED	рН	CONDUCTIVITY	TEMP.	·		OBSERVATI	<u> </u>		
1139	8	7.63	* 3999 mS		d	rk gre	en/brow	in, odor	-, Sheen	,
1145	16	7.65	*3959ms	19.30	dr	K gree	en/brown	n, adar	sheen	
	_				<u>.</u>			<del></del>		
	24		<u> کیر</u>	_ e						
-							<del></del>	<del>.</del>		
										<u></u>
			1							
SAMPLI	NG:		EANALYSIS:							
		SAM	MPLE TIME:	1150	Dil	D WELL G	O DRY?	NO		
WATER	LEVELS:	NOTES:								
TIME	D.T.W.									
1153	7.75	<b>*</b> ₹>3	1999 out	of Rong	د				····	<del></del>
				·		<del></del>				
		M)	rable to insu	comp	lete	tota	1 purge	gailons	r 	
		di	ce to insu	Hicien	t di	um s	torage.		<del> </del>	
			<del></del>	-	<del> </del>	· #		<u></u>		
					<del></del>				<del></del>	
I .	!	i								

### APPENDIX B

Analytical Laboratory Report



# Laboratory Report Project Overview

Laboratory:

Bace Analytical, Windsor, CA

Lab Report Number:

4927

Project Name:

1735 24TH ST.

Work Order Number:

029.16

Control Sheet Number:

NA

### Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Lablotctl	Run Sub
4927	MVV-1	4927-1	W	CS	8260FAB	SW5030B	01/26/200 7	02/06/200 7	02/06/200 7	20070206	15
4927	MVV-1	4927-1	W	CS	CATPH-G	SW5030B	01/26/200 7	02/06/200 7	02/06/200 7	02062007	13
4927	MW-2	4927-2	W	cs	8260FAB	SW5030B	01/26/200 7	<b>02/06/200</b> 7	02/06/200 7	20070206	16
4927	MW-2	4927-2	W	cs	CATPH-G	SW5030B	01/26/200	02/06/200	02/06/200	02062007	14
4927	MW-3	4927-3	W	cs	8260FAB	SW5030B	01/25/200 7	02/06/200 7		20070206	17
4927	MW-3	4927-3	W	cs	CATPH-G	SW5030B	, 01/25/200 7	02/06/200	, 02/06/200 7	02062007	15
4927	VRW-1	4927-4	W	cs	8260FAB	SW5030B	01/25/200 7	02/06/200 7		20070206	18
4927	VRW-1	4927-4	W	cs	CATPH-G	SW5030B	01/25/200 7	02/06/200 7	· ·	02062007	16
4927	VRW-2	4927-5	W	cs	8260FAB	SW5030B	01/25/200 7	, 02/06/200 7		20070206	19
4927	VRW-2	4927-5	W	cs	CATPH-G	SW5030B	01/25/200 7	, 02/06/200 7	02/06/200 7	02062007	17
4927	VRW-3	4927-6	W	cs	8260FAB	SW5030B	01/26/200 7	02/06/200 7	-	20070206	20
4927	VRW-3	4927-6	W	ÇS	CATPH-G	SW5030B	01/26/200 7	02/06/200 7		02062007	18
4927	VRW-4	4927-7	W	cs	8260FAB	SW5030B	01/26/200 7	02/06/200 7		20070206	21
4927	VRW-4	4927-7	W	cs	CATPH-G	SW5030B	01/26/200 7	02/06/200 7	-	02062007	19
4927	VRW-6	4927-8	W	cs	8260FAB	SW5030B	01/25/200 7	, 02/06/200 7	02/06/200 7	20070206	22
4927	VRW-6	4927-8	W	cs	CATPH-G	SW5030B	01/25/200 7	02/06/200 7	02/06/200 7	02062007	20
4927	VRW-8	4927-9	W	cs	8260FAB	SW5030B	7 01/25/200 7	02/06/200 7	02/06/200 7	20070206	23
4927	VRW-8	4927-9	W	cs	CATPH-G	SW5030B	01/25/200 7	02/06/200 7	•	02062007	21
4927	VRW-9	4927-10	W	cs	8260FAB	SW5030B	01/26/200	02/06/200	•	20070206	24
4927	VRW-9	4927-10	W	cs	CATPH-G	SW5030B	7 01/26/200	7 02/06/200	•	02062007	22

### Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Labiotcti	Run Sub
							7	7	7		
		4930-1	W	NC	8260FAB	SW5030B	1.1	02/06/200	02/06/200	20070206	8
								7	7		
		4930-4	W	NC	CATPH-G	SW5030B	1.1	02/06/200	02/06/200	02062007	6
								7	7		_
		4927MB	W	LB1	8260FAB	SW5030B	1.1	02/06/200	02/06/200	20070206	2
					0.4.7.7.1.0	OMEGGG		02/06/200	02/06/200	02062007	2
		4927MB	W	LB1	CATPH-G	SW5030B	11	7	7	02002007	2
		4927MS	w	MS1	8260FAB	SW5030B	11	02/06/200	02/06/200	20070206	9
		402) 1910	.,		02007772	0.1100000	. ,	7	7		
		4927MS	w	MS1	CATPH-G	SW5030B	11	02/06/200	02/06/200	02062007	7
								7	7		
		4927SD	W	SD1	8260FAB	SW5030B	11	02/06/200	02/06/200	20070206	10
								7	7		
		4927SD	W	SD1	CATPH-G	SW5030B	11	02/06/200	02/06/200	02062007	8
								7	7		

Page: 1

Project Name: Project No: 1735 24TH ST.

029.16

Analysis:

VOCs by GC/MS Fuel Additives Plus BTEX

Method: 8260FAB

Prep Meth: SW5030B

Field ID:

MW-1

Descr/Location: MW-1 Sample Date: 01/26/2007 Sample Time: 0853

Sample Time: Matrix:

Water Not Filtered Lab Samp ID: 4927-1
Rec'd Date: 01/29/2

Rec'd Date: Prep Date:

01/29/2007 02/06/2007

Analysis Date: 02/06/2007 QC Batch: 20070206

Notes:

A - a luda	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil
Analyte		<u>'</u>					1 10 5
Methyl-tert-butyl ether (MTBE)	0.38	1.0	PQL		ND	UG/L	1
Ethyl tert-butyl ether (ETBE)	0.30	1.0	PQL		ND	UG/L	1
tert-Amyl methyl ether (TAME)	0.26	1.0	PQL	•	ND	UG/L	1
Di-isopropyl ether (DIPE)	0.37	1.0	PQL		ND	UG/L	1
tert-Butyl alcohol (TBA)	2.4	10.	PQL		ND	UG/L	1
1,2-Dichloroethane	0.30	0.50	PQL		ND	UG/L	1
1,2-Dibromoethane	0.30	0.50	PQL		ND	UG/L	1
Benzene	0.27	0.50	PQL		ND	UG/L	1
Toluene	0.25	0.50	PQL		ND	UG/L	1
Ethylbenzene	0.25	0.50	PQL		ND	UG/L	1
Xylenes	0.25	0.50	PQL		ND	UG/L	1
SURROGATE AND INTERNAL STA	NDARD RECOV	ERIES:					
4-Bromofluorobenzene		86-118	SLSA		101%		
Toluene-d8		88-110	SLSA		99%		
Dibromofluoromethane		86-115	SLSA		100%		

Approved by: William & Got

Project Name: 1735 24TH ST. Analysis: VOCs by GC/MS Fuel Additives Plus BTEX

Project No: 029.16 Method: 8260FAB
Prep Meth: SW5030B

Field ID: MW-2 Lab Samp ID: 4927-2
Descr/Location: MW-2 Rec'd Date: 01/29/2007

 Sample Date:
 01/26/2007
 Prep Date:
 02/06/2007

 Sample Time:
 1038
 Analysis Date:
 02/06/2007

 Matrix:
 Water
 QC Batch:
 20070206

Basis: Not Filtered Notes:

DX: Value < lowest standard (MQL), but > than MDL

	T						D D''	-
Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil	
Methyl-tert-butyl ether (MTBE)	1.9	5.0	PQL		ND	UG/L	5	
Ethyl tert-butyl ether (ETBE)	1.5	5.0	PQL		ND	UG/L	5	
tert-Amyl methyl ether (TAME)	1.3	5.0	PQL		ND	UG/L	5	,
Di-isopropyl ether (DIPE)	1.9	5.0	PQL		ND	UG/L	5	
tert-Butyl alcohol (TBA)	12.	50.	PQL		ND	UG/L	5	
1,2-Dichloroethane	1.5	2.5	PQL		ND	UG/L	5	
1,2-Dibromoethane	1.5	2.5	PQL		ND	UG/L	5	
Benzene	1.4	2.5	PQL		265	UG/L	5	
Toluene	1.3	2.5	PQL	DX	ND	UG/L	5	
Ethylbenzene	1.3	2.5	PQL		ND	UG/L	5	
Xylenes	1.3	2.5	PQL		3.00	UG/L	5	
SURROGATE AND INTERNAL STAND	ARD RECOV	ERIES:	-					
4-Bromofluorobenzene		86-118	SLSA		102%			1
Toluene-d8		88-110	SLSA		99%			1
Dibromofluoromethane		86-115	SLSA		100%			1

Approved by: William & Goty

Date: 2/,3/07

Page: 2

VOCs by GC/MS Fuel Additives Plus BTEX Project Name: 1735 24TH ST. Analysis:

Project No: 029.16 Method: 8260FAB

Prep Meth: SW5030B

Page: 3

Field ID: MW-3 Lab Samp ID: 4927-3

Rec'd Date: 01/29/2007 Descr/Location: MW-3 02/06/2007 Sample Date: 01/25/2007 Prep Date: Analysis Date: 02/06/2007 Sample Time: 1333

Matrix: Water QC Batch: 20070206

Not Filtered Notes: Basis:

Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil	
Methyl-tert-butyl ether (MTBE)	0.38	1.0	PQL		ND	UG/L	1	
Ethyl tert-butyl ether (ETBE)	0.30	1.0	PQL		ND	UG/L	1	
tert-Amyl methyl ether (TAME)	0.26	1.0	PQL		ND	UG/L	1	
Di-isopropyl ether (DIPE)	0.37	1.0	PQL		ND	UG/L	1	
tert-Butyl alcohol (TBA)	2.4	10.	PQL		138.	UG/L	1	
1,2-Dichloroethane	0.30	0.50	PQL		ND	UG/L	1	
1,2-Dibromoethane	0.30	0.50	PQL		ND	UG/L	1	
Benzene	0.27	0.50	PQL		ND	UG/L	1	
Toluene	0.25	0.50	PQL		ND	UG/L	1	
Ethylbenzene	0.25	0.50	PQL		ND	UG/L	1	
Xylenes	0.25	0.50	PQL		ND	UG/L	1	
SURROGATE AND INTERNAL STAN	DARD RECOV	ERIES:						
4-Bromofluorobenzene		86-118	SLSA		101%			•
Toluene-d8		88-110	SLSA		98%			
Dibromofluoromethane		86-115	SLSA		99%			

Welling & G

Date: \_\_

Page: 4

Project Name: Project No:

1735 24TH ST.

029.16

Analysis:

VOCs by GC/MS Fuel Additives Plus BTEX

8260FAB Method: Prep Meth: SW5030B

Field ID:

VRW-1 VRW-1 Lab Samp ID: 4927-4 Rec'd Date:

01/29/2007

Descr/Location: Sample Date:

01/25/2007 1445

Prep Date:

02/06/2007

Sample Time: Matrix:

Water

Analysis Date: 02/06/2007 QC Batch:

20070206

Basis:

Not Filtered

Notes:

basis. Not Filtered		Notes.						
Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil	
Methyl-tert-butyl ether (MTBE)	0.38	1.0	PQL		1.31	UG/L	1	
Ethyl tert-butyl ether (ETBE)	0.30	1.0	PQL		ND	UG/L	1	
tert-Amyl methyl ether (TAME)	0.26	1.0	PQL		ND	UG/L	1	
Di-isopropyl ether (DIPE)	0.37	1.0	PQL		ND	UG/L	1	
tert-Butyl alcohol (TBA)	2.4	10.	PQL		ND	UG/L	1	
1,2-Dichloroethane	0.30	0.50	PQL		ND	UG/L	1	
1,2-Dibromoethane	0.30	0.50	PQL		ND	UG/L	1	
Benzene	0.27	0.50	PQL		260	UG/L	1	
Toluene	0.25	0.50	PQL		0.97	UG/L	1	
Ethylbenzene	0.25	0.50	PQL		ND	UG/L	1	
Xylenes	0.25	0.50	PQL		243	UG/L	1	
SURROGATE AND INTERNAL STAN	DARD RECOV	'ERIES:						
4-Bromofluorobenzene		86-118	SLSA		100%			
Toluene-d8		88-110	SLSA		98%			
Dibromofluoromethane		86-115	SLSA		100%			

William H

Page: 5

Project Name: Project No:

1735 24TH ST.

029.16

Analysis:

VOCs by GC/MS Fuel Additives Plus BTEX

Method: 8260FAB Prep Meth: SW5030B

Field ID:

VRW-2 VRW-2

Descr/Location: Sample Date: Sample Time:

01/25/2007 1540

Matrix:

Water

Lab Samp ID: 4927-5

Rec'd Date:

01/29/2007

Prep Date:

02/06/2007 Analysis Date: 02/06/2007

QC Batch:

20070206

Basis: Not Filtered		Notes:						
Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil	
Methyl-tert-butyl ether (MTBE)	1.9	5.0	PQL		ND	UG/L	5	
Ethyl tert-butyl ether (ETBE)	1.5	5.0	PQL		ND	UG/L	5	
tert-Amyl methyl ether (TAME)	1.3	5.0	PQL		ND	UG/L	5	
Di-isopropyl ether (DIPE)	1.9	5.0	PQL		ND	UG/L	5	
tert-Butyl alcohol (TBA)	12.	50.	PQL		ND	UG/L	5	
1,2-Dichloroethane	1.5	2.5	PQL		ND	UG/L	5	
1,2-Dibromoethane	1.5	2.5	PQL		ND	UG/L	5	
Benzene	1.4	2.5	PQL		623	UG/L	5	
Toluene	1.3	2.5	PQL		ND	UG/L	5	
Ethylbenzene	1.3	2.5	PQL		ND	UG/L	5	
Xylenes	1.3	2.5	PQL		3.56	UG/L	5	
SURROGATE AND INTERNAL S	STANDARD RECOV	/ERIES:						
4-Bromofluorobenzene		86-118	SLSA		101%			1
Toluene-d8		88-110	SLSA		99%			1
Dibromofluoromethane		86-115	SLSA		100%			•

William & 4 Approved by:

Page: 6

Project Name:

1735 24TH ST.

Project No:

029.16

Analysis:

VOCs by GC/MS Fuel Additives Plus BTEX

Method:

8260FAB

Prep Meth: SW5030B

Field ID:

VRW-3 VRW-3

Descr/Location: Sample Date:

01/26/2007

Sample Time: Matrix:

0825

Water

Lab Samp ID: 4927-6

Rec'd Date:

01/29/2007 02/06/2007

Prep Date:

Analysis Date: 02/06/2007

QC Batch:

20070206

Basis: Not Filtered		Notes:						
Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil	
Methyl-tert-butyl ether (MTBE)	0.38	1.0	PQL		ND	UG/L	1	
Ethyl tert-butyl ether (ETBE)	0.30	1.0	PQL		ND	UG/L	1	
tert-Amyl methyl ether (TAME)	0.26	1.0	PQL		ND	UG/L	1	
Di-isopropyl ether (DIPE)	0.37	1.0	PQL		ND	UG/L	1	
tert-Butyl alcohol (TBA)	2.4	10.	PQL		ND	UG/L	1	
1,2-Dichloroethane	0.30	0.50	PQL		ND	UG/L	1	
1,2-Dibromoethane	0.30	0.50	PQL	]	ND	UG/L	1	
Benzene	0.27	0.50	PQL		1.68	UG/L	1	
Toluene	0.25	0.50	PQL		ND	UG/L	1	
Ethylbenzene	0.25	0.50	PQL	ĺ	ND	UG/L	1	
Xylenes	0.25	0.50	PQL		ND	UG/L	1	
SURROGATE AND INTERNAL STAN	DARD RECOV	ERIES:						
4-Bromofluorobenzene		86-118	SLSA		100%			•
Toluene-d8		88-110	SLSA	L	98%			
Dibromofluoromethane		86-115	SLSA	<u> </u>	99%			

Wallson &

Page: 7

Project Name: Project No:

1735 24TH ST.

029.16

Analysis:

VOCs by GC/MS Fuel Additives Plus BTEX

8260FAB Method:

Prep Meth: SW5030B

Field 1D:

VRW-4 VRW-4

Descr/Location: Sample Date:

01/26/2007 0935

Sample Time: Matrix:

Water Mot Filtered Lab Samp ID: 4927-7 Rec'd Date:

01/29/2007

Prep Date:

02/06/2007 Analysis Date: 02/06/2007

QC Batch:

20070206

Notes:

Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil	
Methyl-tert-butyl ether (MTBE)	19.	50.	PQL		ND	UG/L	50	
Ethyl tert-butyl ether (ETBE)	15.	50.	PQL		ND	UG/L	50	
tert-Amyl methyl ether (TAME)	13.	50.	PQL		ND	UG/L	50	
Di-isopropyl ether (DIPE)	19.	50.	PQL		ND	UG/L	50	
tert-Butyl alcohol (TBA)	120.	500.	PQL		ND	UG/L	50	
1,2-Dichloroethane	15.	25.	PQL		ND	UG/L	50	
1,2-Dibromoethane	15.	25.	PQL		ND	UG/L	50	
Benzene	14.	25.	PQL	ļ	163.	UG/L	50	
Toluene	13.	25.	PQL		ND	UG/L	50	
Ethylbenzene	13.	25.	PQL	DX	NĐ	UG/L	50	
Xylenes	13.	25.	PQL		25.2	UG/L	50	
SURROGATE AND INTERNAL STAN	DARD RECOV	ERIES:						
4-Bromofluorobenzene		86-118	SLSA		101%			1
Toluene-d8		88-110	SLSA		100%			1
Dibromofluoromethane		86-115	SLSA		100%			1

William & Approved by:

Page: 8

Project Name: Project No:

1735 24TH ST.

029.16

Analysis:

VOCs by GC/MS Fuel Additives Plus BTEX

Method:

8260FAB

Prep Meth: SW5030B

Field ID:

VRW-6

VRW-6 Descr/Location:

Sample Date: Sample Time: 01/25/2007 1220

Matrix:

Water

Basis:

Not Filtered

Lab Samp ID: 4927-8

Rec'd Date:

01/29/2007

Prep Date:

02/06/2007

QC Batch:

Analysis Date: 02/06/2007 20070206

Notes:

Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil
<u> </u>	0.38	1.0	PQL	11010	ND	UG/L	1
Methyl-tert-butyl ether (MTBE)							4
Ethyl tert-butyl ether (ETBE)	0.30	1.0	PQL		ND	UG/L	
tert-Amyl methyl ether (TAME)	0.26	1.0	PQL		ND	UG/L	1
Di-isopropyl ether (DIPE)	0.37	1.0	PQL		ND	UG/L	1
tert-Butyl alcohol (TBA)	2.4	10.	PQL		ND	UG/L	1
1,2-Dichloroethane	0.30	0.50	PQL		ND	UG/L	1
1,2-Dibromoethane	0.30	0.50	PQL		ND	UG/L	1
Benzene	0.27	0.50	PQL		13.5	UG/L	1
Toluene	0.25	0.50	PQL		0.72	UG/L	1
Ethylbenzene	0.25	0.50	PQL		0.56	UG/L	1
Xylenes	0.25	0.50	PQL		267	UG/L	1
SURROGATE AND INTERNAL STAND	ARD RECOV	ERIES:					
4-Bromofluorobenzene		86-118	SLSA		100%		
Toluene-d8		88-110	SLSA		98%		
Dibromofluoromethane		86-115	SLSA		99%		

Walliam of Approved by:

Page: 9

Project Name:

Project No:

1735 24TH ST.

029.16

Analysis:

VOCs by GC/MS Fuel Additives Plus BTEX

Method:

8260FAB

Prep Meth: SW5030B

Field ID:

VRW-8 VRW-8

Rec'd Date:

Lab Samp ID: 4927-9 01/29/2007

Descr/Location: Sample Date: Sample Time:

01/25/2007 1300

Prep Date:

02/06/2007 Analysis Date: 02/06/2007

Matrix:

Water

QC Batch:

20070206

Basis:

Not Filtered

Notes:

Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil	
Methyl-tert-butyl ether (MTBE)	1.9	5.0	PQL		ND	UG/L	5	
Ethyl tert-butyl ether (ETBE)	1.5	5.0	PQL		ND	UG/L	5	
tert-Amyl methyl ether (TAME)	, 1.3	5.0	PQL		ND	UG/L	5	
Di-isopropyl ether (DIPE)	1.9	5.0	PQL		ND	UG/L	5	
tert-Butyl alcohol (TBA)	12.	50.	PQL		ND	UG/L	5	
1,2-Dichloroethane	1.5	2.5	PQL		ND	UG/L	5	
1,2-Dibromoethane	1.5	2.5	PQL		ND	UG/L	5	
Benzene	1.4	2.5	PQL		10.7	UG/L	5	
Toluene	1.3	2.5	PQL	DX	ND	UG/L	5	ļ
Ethylbenzene	1.3	2.5	PQL		ND	UG/L	5	ļ
Xylenes	1.3	2.5	PQL_		6.70	UG/L	5	
SURROGATE AND INTERNAL STAND	ARD RECOV	ERIES:						
4-Bromofluorobenzene		86-118	SLSA		101%			1
Toluene-d8		88-110	SLSA		99%			1
Dibromofluoromethane		86-115	SLSA		98%			1
DX: Value < lowest standard (MQL), bu	t > than MDL							

Walling 18 Approved by:

Page: 10

Project Name:

1735 24TH ST.

Analysis:

VOCs by GC/MS Fuel Additives Plus BTEX

Project No:

029.16

Method: 8260FAB

Prep Meth: SW5030B

Field ID:

VRW-9 VRW-9

Rec'd Date:

Lab Samp ID: 4927-10 01/29/2007

Descr/Location: Sample Date:

01/26/2007

Prep Date:

02/06/2007

Sample Time: Matrix:

1150 Water Analysis Date: 02/06/2007 QC Batch:

20070206

Basis:

Not Filtered

Notes:

Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil	
Methyl-tert-butyl ether (MTBE)	0.76	2.0	PQL		ND	UG/L	2	
Ethyl tert-butyl ether (ETBE)	0.60	2.0	PQL		ND	UG/L	2	
tert-Amyl methyl ether (TAME)	0.52	2.0	PQL		ND	UG/L	2	
Di-isopropyl ether (DIPE)	0.74	2.0	PQL		ND	UG/L	2	
tert-Butyl alcohol (TBA)	4.8	20.	PQL		ND	UG/L	2	
1,2-Dichloroethane	0.60	1.0	PQL		ND	UG/L	2	
1,2-Dibromoethane	0.60	1.0	PQL		ND	UG/L	2	
Benzene	0.54	1.0	PQL	DX	ND	UG/L	2	
Toluene	0.50	1.0	PQL		1.01	UG/L	2	
Ethylbenzene	0.50	1.0	PQL		ND	UG/L	2	
Xylenes	0.50	1.0	PQL		3.53	UG/L	2	
SURROGATE AND INTERNAL STANI	OARD RECOV	ERIES:	-					
4-Bromofluorobenzene		86-118	SLSA		104%			
Toluene-d8		88-110	SLSA		98%			
Dibromofluoromethane		86-115	SLSA		100%			
DX: Value < lowest standard (MQL), bu	ut > than MDL							

William & Approved by: \_

Page: 11

Project Name:

1735 24TH ST.

Project No:

029.16

Analysis:

CA LUFT Method for Gasoline Range Organics

Method:

CATPH-G

Prep Meth: SW5030B

Field ID:

MW-1 MW-1

Descr/Location: Sample Date:

01/26/2007 0853

Sample Time: Matrix:

Basis:

Water

Not Filtered

Lab Samp ID: 4927-1

Rec'd Date:

01/29/2007

Prep Date:

02/06/2007 Analysis Date: 02/06/2007

QC Batch:

02062007

Notes:

Analyte	Det Limit	Rep Limit	<del></del>	Note	Result	Units	Pvc Dil	
Gasoline Range Organics (C5-C12)	0.020	0.050	PQL		ND	MG/L	11	
SURROGATE AND INTERNAL STAND	ARD RECOV		CLCA	•	98%			1
4-Bromofluorobenzene		75-125	SLSA		90 /0			

Walliam of

Lab Report No.: 4927

Date: 02/13/2007

Page: 12

Project Name:

1735 24TH ST.

Project No:

029.16

Analysis:

CA LUFT Method for Gasoline Range Organics

Method:

CATPH-G

Prep Meth: SW5030B

Field ID:

MW-2

Descr/Location: MW-2 Sample Date: 01/26/

Sample Time:

01/26/2007 1038

Matrix: Basis: Water

Not Filtered

Lab Samp ID: 4927-2

Rec'd Date:

01/29/2007 02/06/2007

Prep Date:

Analysis Date: 02/06/2007

QC Batch:

02062007

Notes:

Analyte	Det Limit	Rep Limit	-	Note	Result	Units	Pvc Dil	
Gasoline Range Organics (C5-C12)	0.100	0.250	PQL		0.29	MG/L	5	
SURROGATE AND INTERNAL STAND 4-Bromofluorobenzene	ARD RECOV		SLSA		105%			1

Approved by: Walliam & Goty

Page: 13

Project Name:

1735 24TH ST.

Project No:

029.16

Analysis:

CA LUFT Method for Gasoline Range Organics

Method:

CATPH-G

Prep Meth: SW5030B

Field ID: Descr/Location: MW-3 MW-3

01/25/2007 Sample Date:

Sample Time: Matrix:

1333 Water Not Filtered Lab Samp ID: 4927-3

Rec'd Date:

01/29/2007 02/06/2007

Prep Date: Analysis Date: 02/06/2007

02062007

Notes:

QC Batch:

Analyte

Basis:

Det Limit

Rep Limit 0.050

Note

Pvc Dil Result Units MG/L 1 0.15

0.020 Gasoline Range Organics (C5-C12) SURROGATE AND INTERNAL STANDARD RECOVERIES:

4-Bromofluorobenzene

75-125 SLSA

**PQL** 

103%

Wallow H 4

Page: 14

Project Name: Project No:

1735 24TH ST.

029.16

Analysis:

CA LUFT Method for Gasoline Range Organics

CATPH-G Method:

Prep Meth: SW5030B

Field ID:

VRW-1 VRW-1

Descr/Location: Sample Date:

01/25/2007

Sample Time:

1445

Matrix: Basis:

Water

Not Filtered

Lab Samp ID: 4927-4

Rec'd Date:

01/29/2007

Prep Date:

02/06/2007 Analysis Date: 02/06/2007

QC Batch:

02062007

N	of	_	_	•
1.4	Ųι	C	3	•

							·——
Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil
Gasoline Range Organics (C5-C12)	0.020	0.050	PQL		0.32	MG/L	1
SURROGATE AND INTERNAL STAND 4-Bromofluorobenzene	OARD RECOV		SLSA		112%		

Wallowy 18

Page: 15

Project Name: Project No:

1735 24TH ST.

Analysis:

CA LUFT Method for Gasoline Range Organics

029.16

CATPH-G Method: Prep Meth: SW5030B

Field ID:

VRW-2

Descr/Location: Sample Date:

VRW-2 01/25/2007

Sample Time: Matrix:

Basis:

1540

Water

Not Filtered

Lab Samp ID: 4927-5

Rec'd Date:

01/29/2007

Prep Date:

02/06/2007 Analysis Date: 02/06/2007

QC Batch:

02062007

Notes:

Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil	
Gasoline Range Organics (C5-C12)	0.100	0.250	PQL		1.0	MG/L	5	
SURROGATE AND INTERNAL STAND 4-Bromofluorobenzene	ARD RECOV	ERIES: 75-125	SLSA		93%			1

William 18 4

Page: 16

Project Name:

1735 24TH ST.

Project No:

029.16

Analysis:

CA LUFT Method for Gasoline Range Organics

Method: CATPH-G

Prep Meth: SW5030B

Field ID: Descr/Location:

Sample Date:

VRW-3 VRW-3

01/26/2007 0825

Sample Time: Matrix: Basis:

Water Not Filtered Lab Samp ID: 4927-6

Rec'd Date: Prep Date:

01/29/2007 02/06/2007 Analysis Date: 02/06/2007

QC Batch:

02062007

Notes:

Pvc Dil Units Det Limit Rep Limit Note Result Analyte MG/L 0.071 1 0.020 0.050 **PQL** Gasoline Range Organics (C5-C12)

SURROGATE AND INTERNAL STANDARD RECOVERIES:

4-Bromofluorobenzene

75-125 SLSA 87%

Wallson A

Page: 17

Project Name:

1735 24TH ST.

029.16

Analysis:

CA LUFT Method for Gasoline Range Organics

Method:

CATPH-G

Prep Meth: SW5030B

Field ID: Descr/Location:

Project No:

VRW-4 VRW-4

Sample Date: Sample Time: 01/26/2007

Matrix: Basis:

0935 Water

Not Filtered

Lab Samp ID: 4927-7

Rec'd Date:

01/29/2007

Prep Date:

02/06/2007 Analysis Date: 02/06/2007

QC Batch:

02062007

Notes:

Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil	
Gasoline Range Organics (C5-C12)	0.400	1.00	PQL		1.4	MG/L	20	
SURROGATE AND INTERNAL STAND 4-Bromofluorobenzene	ARD RECOV	ERIES: 75-125	SLSA		95%			

Approved by: William H

Page: 18

Project Name: Project No:

1735 24TH ST.

029.16

Analysis:

CA LUFT Method for Gasoline Range Organics

CATPH-G Method:

Prep Meth: SW5030B

Field ID:

VRW-6 VRW-6

Sample Date: Sample Time:

Descr/Location:

01/25/2007

Matrix: Basis:

1220 Water

Not Filtered

Lab Samp ID: 4927-8

Rec'd Date: Prep Date:

01/29/2007 02/06/2007 Analysis Date: 02/06/2007

QC Batch:

02062007

Notes:

Units Pvc Dil Result Note Det Limit Rep Limit Analyte 0.20 MG/L 1 0.050 PQL 0.020 Gasoline Range Organics (C5-C12)

SURROGATE AND INTERNAL STANDARD RECOVERIES:

75-125 SLSA 4-Bromofluorobenzene

113%

Approved by: Walliam &

Page: 19

Project Name:

1735 24TH ST.

Project No:

029.16

Analysis:

CA LUFT Method for Gasoline Range Organics

Method:

CATPH-G

Prep Meth: SW5030B

Field ID:

VRW-8 Descr/Location: VRW-8

Sample Date: Sample Time: 01/25/2007

Matrix: Basis:

1300 Water

Not Filtered

Lab Samp ID: 4927-9

Rec'd Date:

01/29/2007

Prep Date:

02/06/2007 Analysis Date: 02/06/2007

QC Batch:

02062007

Notes:

Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil	
Gasoline Range Organics (C5-C12)	0.100	0.250	PQL		1.3	MG/L	5	
SURROGATE AND INTERNAL STAND 4-Bromofluorobenzene	ARD RECOV	ERIES: 75-125	SLSA	·	114%			

William of

Page: 20

Project Name:

Project No:

1735 24TH ST.

029.16

Analysis:

CA LUFT Method for Gasoline Range Organics

Method:

CATPH-G

Prep Meth: SW5030B

Field ID:

VRW-9

Descr/Location: Sample Date:

VRW-9 01/26/2007

Sample Time:

1150

Matrix: Basis:

Water

Not Filtered

Lab Samp ID: 4927-10

Rec'd Date:

01/29/2007 02/06/2007

Prep Date:

Analysis Date: 02/06/2007

QC Batch:

02062007

Notes:

Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil	
Gasoline Range Organics (C5-C12)	0.040	0.100	PQL		0.52	MG/L	2	
SURROGATE AND INTERNAL STAND	ARD RECOV		SLSA	-	93%			1

Approved by: Wallowy of

#### QA/QC Report Method Blank Summary

Bace Analytical, Windsor, CA

Lab Report No.: 4927 Date: 02/13/2007

Page: 21

QC Batch:

02062007

Water

Lab Samp ID: 4927MB Analysis Date: 02/06/2007

Basis:

Matrix:

Not Filtered

Analysis:

CA LUFT Method for Gasoline Range

CATPH-G Method: Prep Meth: SW5030B

Prep Date: 02/06/2007

Notes:

Pvc Dil Result Units Note Det Limit Rep Limit Analyte MG/L 1 0.050 ND PQL 0.020 Gasoline Range Organics (C5-C12) SURROGATE AND INTERNAL STANDARD RECOVERIES: 101% 75-125 **SLSA** 4-Bromofluorobenzene

# QA/QC Report Matrix Spike/Duplicate Matrix Spike Summary

Bace Analytical, Windsor, CA

Lab Report No.: 4927 Date: 02/13/2007 Page: 22

QC Batch:

02062007

Matrix:

Water Lab Samp ID: 4927MS

Basis:

Not Filtered

Project Name: Lab Generated or Non COE Sample

Project No.:

Lab Generated or Non COE Sample

Field ID:

Lab Generated or Non COE Sample

Lab Ref ID:

4930-4

	Analysis Spike Level Sample		Spike Level		Spike Level				Sample Spike Result		Level Sample Spike Result			% Recoveries			Acceptance Criteria		
Analyte	Method	MS	DMS	Result	MS <sup>'</sup>	DMS	Units	MS	DMS	RPD	% R	ec	RPD						
Gasoline Range Organics (C5-C12)	CATPH-G	0.450	0.450	ND	0.481	0.449	MG/L	107	99.8	7.0	135-65	MSA	25 MSP						
4-Bromofluorobenzene	CATPH-G	100.	100.	104.	97.	93.	PERCENT	97.0	93.0	4.2	125-75	SLSA	20SLSP						

## QA/QC Report Method Blank Summary

#### Bace Analytical, Windsor, CA

Lab Report No.: 4927 Date: 02/13/2007

Page: 23

QC Batch:

20070206

Matrix:

Water

Lab Samp ID: 4927MB

Analysis Date: 02/06/2007

Basis:

Not Filtered

Analysis:

VOCs by GC/MS Fuel Additives Plus BTEX

Method:

8260FAB

Prep Meth: SW5030B

Prep Date: 02/06/2007

Notes:

Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil
Methyl-tert-butyl ether (MTBE)	0.38	1.0	PQL		ND	UG/L	1
Ethyl tert-butyl ether (ETBE)	0.30	1.0	PQL		ND	UG/L	1
tert-Amyl methyl ether (TAME)	0.26	1.0	PQL		ND	UG/L	1
Di-isopropyl ether (DIPE)	0.37	1.0	PQL		ND	UG/L	1
tert-Butyl alcohol (TBA)	2.4	10.	PQL		ND	UG/L	1
1,2-Dichloroethane	0.30	0.50	PQL		ND	UG/L	1
1,2-Dibromoethane	0.30	0.50	PQL		ND	UG/L	1
Benzene	0.27	0.50	PQL		ND	UG/L	1
Toluene	0.25	0.50	PQL		ND	UG/L	1
Ethylbenzene	0.25	0.50	PQL		ND	UG/L	1
Xylenes	0.25	0.50	PQL		ND	UG/L	1
SURROGATE AND INTERNAL STAND	ARD RECOV	ERIES:					
4-Bromofluorobenzene		86-118	SLSA		105%		
Toluene-d8		88-110	SLSA		103%		
Dibromofluoromethane		86-115	SLSA	·	103%		

### QA/QC Report Matrix Spike/Duplicate Matrix Spike Summary

Bace Analytical, Windsor, CA

Lab Report No.: 4927 Date: 02/13/2007

Page: 24

QC Batch:

20070206

Matrix:

Water

Lab Samp ID: 4927MS

Basis:

Not Filtered

Project Name: Lab Generated or Non COE Sample

Project No.:

Lab Generated or Non COE Sample

Field ID:

Lab Generated or Non COE Sample

Lab Ref ID:

4930-1

Augusta	Analysis Method	Spike MS	e Level DMS	Sample Result	Spike MS	Result DMS	Units	I	ecove DMS		% R	Accepta Criter ec	
Analyte				ND	10.0	10.0	UG/L	100	100	0.00	130-70	MSA	20MSP
1,2-Dibromoethane	8260FAB	10.0	10.0	ND	9.78	10.0	UG/L	97.8	100	2.2	130-70	MSA	20MSP
1,2-Dichloroethane	8260FAB	10.0	10.0		10.5	10.7	UG/L	105	107	1.9	127-76	MSA	20MSP
Benzene	8260FAB	10.0	10.0	ND	8.93	8.28	UG/L	89.3	82.8	7.6	130-70	MSA	20MSP
Di-isopropyl ether (DIPE)	8260FAB	10.0	10.0	ND	_	8.62	UG/L	91.1	86.2	5.5	130-70	MSA	20MSP
Ethyl tert-butyl ether (ETBE)	8260FAB	10.0	10.0	ND	9.11		UG/L	104	105	0.96	130-70	MSA	20MSP
Ethylbenzene	8260FAB	10.0	10.0	ND	10.4	10.5		89.5		5.9	130-70	MSA	20MSP
Methyl-tert-butyl ether (MTBE)	8260FAB	10.0	10.0	ND	8.95	8.44	UG/L	i	-	0.00	125-76	MSA	20MSP
Toluene	8260FAB	10.0	10.0	ND	10.3	10.3	UG/L	103			1	MSA	20MSP
Xylenes	8260FAB	30.0	30.0	ND	30.4	31.3	UG/L	101	104	2.9	130-70		
tert-Amyl methyl ether (TAME)	8260FAB	10.0	10.0	ND	8.96	8.55	UG/L	89.6		4.7	130-70	MSA	20MSP
tert-Butyl alcohol (TBA)	8260FAB	50.0	50.0	ND	37.5	37.9	UG/L	75.0		1.1	140-60	MSA	25MSP
4-Bromofluorobenzene	8260FAB	100.	100.	100.	99.	100.	PERCENT	99.0		1.0	118-86	SLSA	20 SLSP
Dibromofluoromethane	8260FAB	100.	100.	100.	100.	102.	PERCENT	100	102	2.0	115-86	SLSA	20 SLSP
Toluene-d8	8260FAB	100.	100.	99.	99.	99.	PERCENT	99.0	99.0	0.00	110-88	SLSA	20SLSP

### **Chain-of Custody Form**

Project # Project Name Land 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		l			Ana	ılysis					
Project # Project Name Pacific Supply 029.016 1735 24+h st, Oakland	al cal	\ \ \ \ \	\ \ \	100							c.o.c. No. 11346
L.P. No. ISampler's Signature	INO.			9 0							Remarks:
Deschamp	of Con-	سلت ا	707	BTEX, Petro							
	Sample tainers Type	s d	00	<b>∞</b> ∂}							
	H20 4	×	人					49	27	2-/	
1/26/07 MW-Z / 1038	i i	メ								-2	
1/25/07 MW-3 / 1333		×	×							3	
1/25/07 VRW-1 1445			×							4	
1/25/07 VRW-2 1540		×	\ <del>/</del>						_[	5	
1/26/07 VRW-3 0825		<u> </u> ×			<u> </u>						
1/26/67 VRW-4 0935		<u> </u>		_		1 +		_		<del>7</del>  _	
— \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1_1_				<u> </u>	-				_	NO SAMPLE COLLECTED
1/25/07 VRW-6 / 1220		<b>-</b>  ×	_ <b> </b> ×		<u> </u>	<b>↓</b> ↓	_			8	111115 1115
- VRW 7	1 1 1				<u> </u>					_	NO SAMPLE COLLECTED
1/25/07 VRW-8 1300		<u> </u>	_			1				<u> </u>	
1/26/07 VRW-9 1150	+ 4	У.	_ 🗡		-	-		_ <u> ·</u>	-11	<del>/</del>  -	
					<del>                                     </del>	<del>                                     </del>		$\perp$			
		_			<del>                                     </del>	_		<u> </u>			
			<del>                                     </del>		<del>                                     </del>	<del>  </del>	-		_	-	
					<del>                                     </del>	-		$\dashv$			
		<u> </u>	ļ			1 1		-	$\dashv$		
		_				<del>                                     </del>			_		
				1774	L B LUSCO	1	1aO4-	D. 40	NO3	FC-ICE	F - (specify)
Laboratory: BATS		Pre	servation	on: A - HCE	- H250			יות - ט	NO3.	100.	3. (opoon),
Relinquished by: Date/Ti	ime Receive	ediby:	29/0	<u> </u>	20_	Rema	irks: anda	ned	T	4 T	Brunsing Associates, Inc.
(signed) Pale Date/Ti			Pollo	1 11	<del>/</del>		DF	T		. <del>1</del>	P.O. Box 588
(signed)	(signed)	Value	11.	ry H	( <del>916)</del> -	+-	rali	(5) (5) 5	> +	~ \ &	5803 Skylane Blvd., Suite A Windsor, CA 95492
Relinquished by: Date/T (signed)	ime Receive (signed)		boratory l	by:	· 8	B	raly 111	Cas	iet	-	(707) 838-3027 (707) 838-4420 fax