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Shell Oil Products US

July 26, 2004

RO

Amir K. Gholami
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Alameda County
JUL 28 2004
Environmental Health

Subject: Shell-branded Service Station
540 Hegenberger Road
Oakland, California

Dear Mr. Gholami:

Attached for your review and comment is a copy of the *Second Quarter 2004 Monitoring Report* for the above referenced site. Upon information and belief, I declare, under penalty of perjury, that the information contained in the attached document is true and correct.

As always, please feel free to contact me directly at (559) 645-9306 with any questions or concerns.

Sincerely,

Shell Oil Products US

Karen Petryna

Karen Petryna
Sr. Environmental Engineer

July 26, 2004

Amir K. Gholami, REHS
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: **Second Quarter 2004 Monitoring Report**
Shell-branded Service Station
540 Hegenberger Road
Oakland, California
Incident #98995752
Cambria Project #246-0414-002



Dear Mr. Gholami:

On behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell), Cambria Environmental Technology, Inc. (Cambria) is submitting this groundwater monitoring report in accordance with the reporting requirements of 23 CCR 2652d.

SECOND QUARTER 2004 ACTIVITIES

Groundwater Monitoring: Blaine Tech Services, Inc. (Blaine) of San Jose, California gauged water levels, sampled the monitoring wells, calculated groundwater elevations, and compiled the analytical data. The adjacent Arco station located at 566 Hegenberger Road was sampled concurrently. Cambria prepared a vicinity map which includes previously submitted well survey information (Figure 1) and a groundwater elevation contour map (Figure 2). Blaine's report, presenting the laboratory reports and supporting field documents is included as Attachment A. Data from the Arco site is presented on Figure 2 and included as Attachment B.

Historical Interim Remediation Summary: From July 1999 through June 2000, groundwater extraction (GWE) was performed at the site to remove dissolved-phase hydrocarbons and methyl tert-butyl ether (MTBE) from beneath the site. From June through December 2000, dual-phase vacuum extraction (DVE) was conducted to enhance GWE and to extract vapor-phase hydrocarbon and MTBE from the soil as well. DVE was discontinued after the December 2000 event, and monthly DVE events were resumed in May 2001. Due to low vapor mass-removal rates, DVE was discontinued in October 2001, and monthly GWE was re-initiated. Wells MW-1 and MW-3 and tank backfill well BW-D were used for extraction until April 2002, when

**Cambria
Environmental
Technology, Inc.**

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extraction from the tank backfill was switched from well BW-D to BW-B due to higher historic MTBE concentrations observed in this well. A total of 13.7 lbs. of MTBE was removed from the subsurface during DVE and GWE events. Monthly GWE events were discontinued in March 2003 when construction of a fixed GWE system was initiated.

GWE System: During the second quarter, Cambria continued to operate the GWE system. Monitoring wells MW-1, MW-3, and MW-5 were used as extraction wells. Table 1 summarizes system analytical data. Groundwater level measurements and flow meter readings have been recorded at various times of operation to assess system production. Table 2 summarizes the field data and system operation and calculates mass removal. Based on the field data, the GWE system operated at average flow rates ranging from approximately 0.16 to 1.52 gallons per minute.

Through July 8, 2004, a total of 315,799 gallons of groundwater has been extracted. A total of 18.4 pounds of MTBE has been recovered. Table 2 presents mass removal data.

Influent samples collected from the GWE system continue to show a decreasing trend in MTBE concentrations since system operation was initiated. Data from the most recent influent sampling event on July 8, 2004 shows an MTBE concentration which has decreased to 190 parts per billion (ppb), a decrease of two orders of magnitude from its historical maximum of 29,000 ppb shortly after system startup. Groundwater monitoring well sampling data also continues to demonstrate decreasing trends in MTBE concentrations.

ANTICIPATED THIRD QUARTER 2004 ACTIVITIES

Groundwater Monitoring: Blaine will gauge water levels, sample the monitoring wells using the non-purging method, and tabulate the data. In addition, Blaine will sample tank backfill well BW-D. The sampling event will take place concurrently with sampling at the Arco station located at 566 Hegenberger Road. Arco and Shell will exchange water level and analytical data on these events. Cambria will prepare a report documenting those activities.

GWE System: We will operate the system under the conditions of the East Bay Municipal Utility District discharge permit. The GWE system will be temporarily shut down approximately one month prior to the next groundwater sampling event scheduled for September 2004. We will evaluate the need to continue operating the GWE system based on results of groundwater sampling.

CLOSING

We appreciate the opportunity to work with you on this project. Please call Diane Lundquist at (510) 420-3334 if you have any questions or comments.

Sincerely,
Cambria Environmental Technology, Inc



Diane Lundquist, P.E.
Principal Engineer



Figures: 1 - Vicinity/Area Well Survey Map
2 - Groundwater Elevation Contour Map

Tables: 1 - Groundwater Extraction – System Analytical Data
2 - Groundwater Extraction – Operation and Mass Removal Data

Attachments: A - Blaine Groundwater Monitoring Report and Field Notes
B - Arco Groundwater Data

cc: Karen Petryna, Shell Oil Products US, 20945 S. Wilmington Ave., Carson, CA 90810

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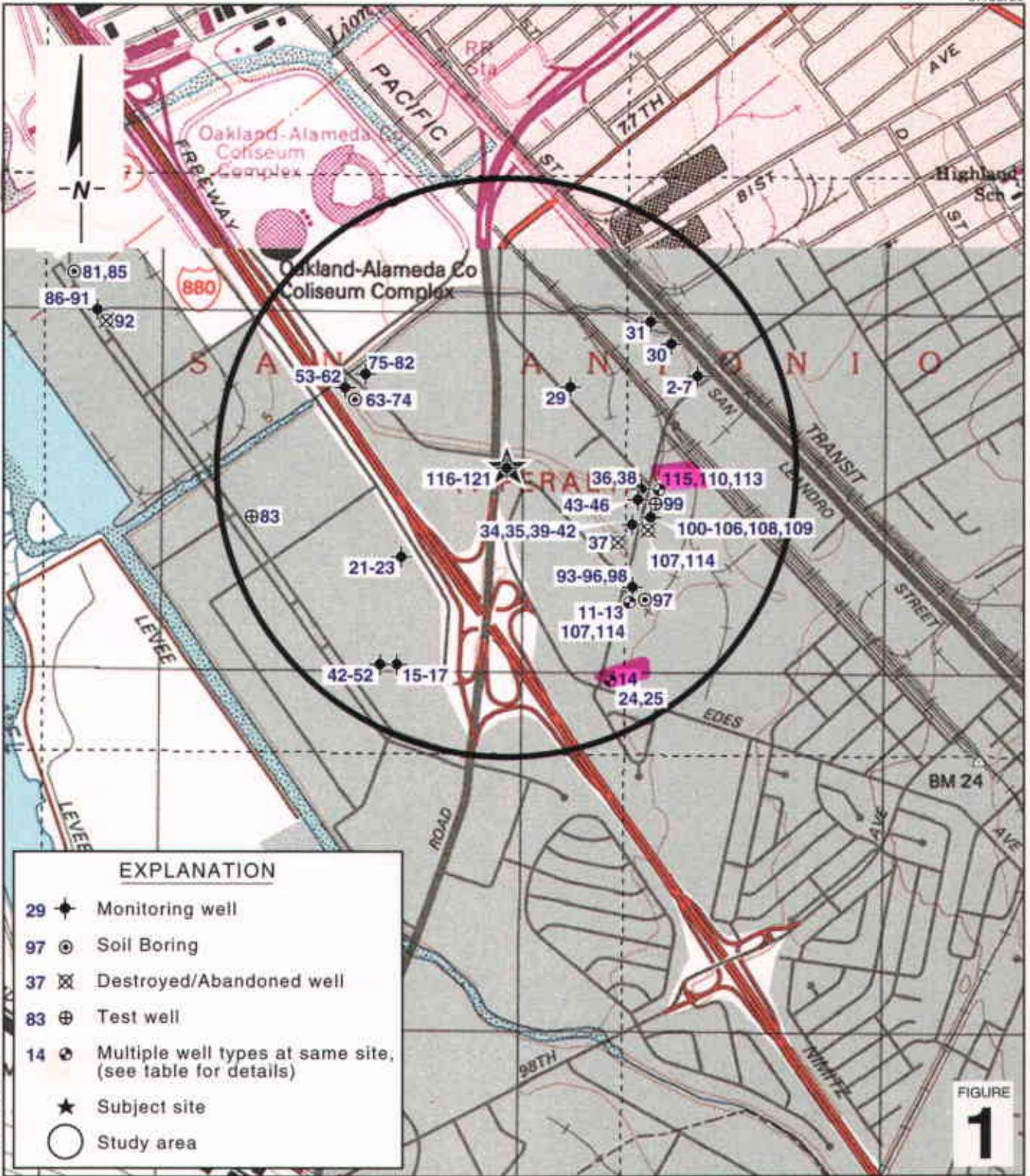


FIGURE 1

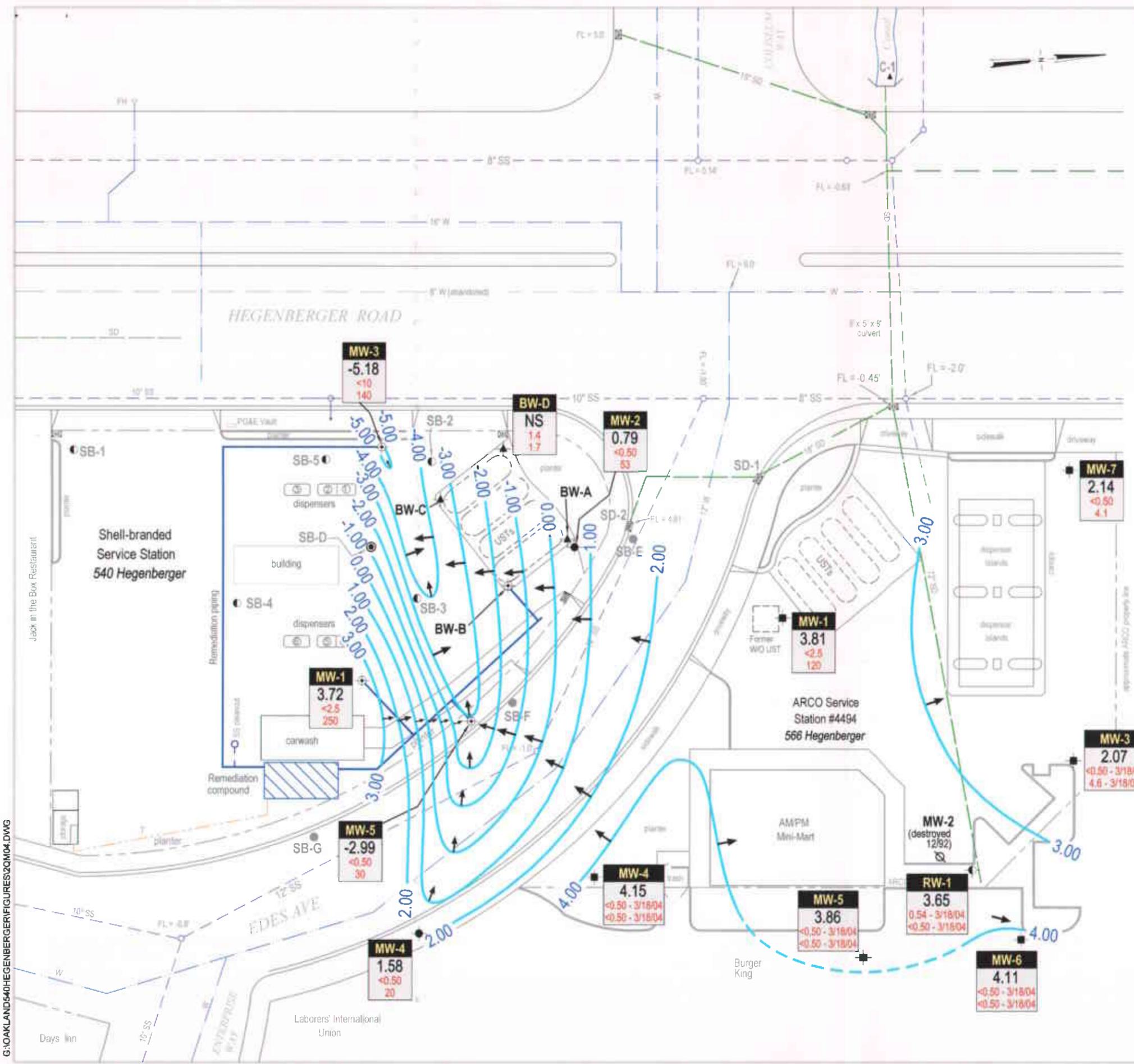
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SCALE 1:1/4 MILES

Shell-branded Service Station
540 Hegenberger Road
Oakland, California
Incident #98995752



C A M B R I A

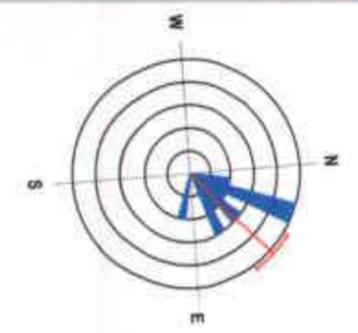
Area Well Survey
(1/2-Mile Radius)



EXPLANATION

- MW-2 ● Shell monitoring well
- BW-A ▲ Tank backfill well
- MW-1 ⊕ Well used for groundwater extraction
- MW-1 ⊕ ARCO monitoring well
- RW-1 ⊕ ARCO recovery well
- SB-1 ● Soil boring location (March 1998)
- SB-D ● Soil boring location (July 1998)
- SB-E ● Soil boring location (August 2000)
- C-1 ▲ Canal sampling location
- FH ◊ Fire hydrant
- FL = 5.0' Flowline elevation (msl)
- - - Sanitary sewer main (SS)
- Water line (W)
- Storm drain (SD)
- - - Telephone line (T)
- ▶ Flow direction
- NS Not surveyed
- Groundwater flow direction
- XX.XX Groundwater elevation contour, in feet above msl, approximately located, dashed where inferred

Well	ELEV	Benzene	MTBE
MW-3	-5.18	<10	140
BW-D	NS	1.4	1.7
MW-2	0.79	<0.50	53
MW-7	2.14	<0.50	4.1
MW-1	3.81	<2.5	120
MW-1	3.72	<2.5	250
MW-5	-2.99	<0.50	30
MW-4	1.58	<0.50	20
MW-4	4.15	<0.50 - 3/18/04	<0.50 - 3/18/04
MW-5	3.86	<0.50 - 3/18/04	<0.50 - 3/18/04
MW-6	4.11	<0.50 - 3/18/04	<0.50 - 3/18/04
MW-3	2.07	<0.50 - 3/18/04	4.6 - 3/18/04
MW-2 (destroyed 12/92)	3.65	0.54 - 3/18/04	<0.50 - 3/18/04



Shell Groundwater Gradient Direction
August 1998 through March 2003
(20 events prior to groundwater extraction)

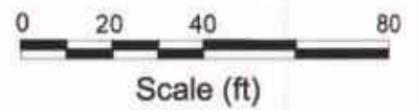


FIGURE
2

**Groundwater Elevation
Contour Map**

May 25, 2004



C A M B R I A

Shell-branded Service Station

540 Hegenberger Road
Oakland, California
Incident #98995752

Table 1: Groundwater Extraction - System Analytical Data - Shell-branded Service Station, Incident #98995752, 540 Hegenberger, Oakland, CA

Sample Date (mm/dd/yyyy)	Influent			Midfluent 1			Midfluent 2			Effluent		
	TPHg Conc. (ppb)	Benzene Conc. (ppb)	MTBE Conc (ppb)	TPHg Conc. (ppb)	Benzene Conc (ppb)	MTBE Conc. (ppb)	TPHg Conc. (ppb)	Benzene Conc (ppb)	MTBE Conc. (ppb)	TPHg Conc. (ppb)	Benzene Conc. (ppb)	MTBE Conc (ppb)
04/28/2003	<1,000	<10	2,700	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
05/12/2003	<10,000	<100	21,000	51 ^a	<0.50	<0.50	140 ^a	<0.50	<0.50	99 ^a	<0.50	<0.50
05/27/2003	<10,000	<100	29,000	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
06/09/2003	<25,000	<250	20,000	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
06/23/2003	<500	<5.0	1,300	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
07/08/2003	<1,000	<10	2,000	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
07/25/2003	<500	<50	16,000	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
08/05/2003	<5,000	<50	11,000	<50	<0.50	<5.0	<50	<0.50	<5.0	<50	<0.50	<5.0
08/19/2003	<10,000	<100	13,000	<50	<0.50	<5.0	<50	<0.50	<5.0	<50	<0.50	<5.0
09/05/2003	<5,000	<50	8,900	<50	<0.50	<5.0	<50	<0.50	<5.0	<50	<0.50	<5.0
09/19/2003	<2,000	<20	6,900	58	<0.50	<5.0	<50	<0.50	<5.0	<50	<0.50	<5.0
10/01/2003	<2,500	<25	5,300	<100	<1.0	<10	<50	<0.50	<5.0	<50	<0.50	<5.0
11/14/2003	<1,300	20	1,300	<50	<0.50	<5.0	<50	<0.50	<5.0	<50	<0.50	<5.0
12/02/2003	<1,300	45	1,200	<50	<0.50	<5.0	<50	<0.50	<5.0	<50	<0.50	<5.0
12/18/2003	<1,000	11	1,200	<500	<5.0	<50	<50	<0.50	<5.0	<50	<0.50	<5.0
01/06/2004	<250	<2.5	240	<500	<5.0	<50	<50	<0.50	<5.0	<50	<0.50	<5.0
02/04/2004	<500	<5.0	620	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
03/09/2004	<100	<1.0	100	<50	<0.50	<0.50	NS	NS	NS	NS	NS	NS
04/02/2004	<100	<1.0	110	<50	<0.50	<0.50	NS	NS	NS	NS	NS	NS
05/14/2004	<100	<1.0	270	<50	<0.50	<5.0	NS	NS	NS	NS	NS	NS
06/10/2004	<100	1.4	180	<50	<0.50	<5.0	NS	NS	NS	NS	NS	NS
07/08/2004	<100	<1.0	190	<50	<0.50	<5.0	<50	<0.50	<5.0	NS	NS	NS

Abbreviations & Notes:

Table 1: Groundwater Extraction - System Analytical Data - Shell-branded Service Station, Incident #98995752, 540 Hegenberger, Oakland, CA

Sample Date (mm/dd/yyyy)	Influent			Midfluent 1			Midfluent 2			Effluent		
	TPHg Conc. (ppb)	Benzene Conc. (ppb)	MTBE Conc. (ppb)									

TPHg = Total purgeable hydrocarbons as gasoline

MTBE = Methyl tert-butyl ether

Conc. = Concentration

ppb = parts per billion, equivalent to $\mu\text{g/l}$

TPHg, benzene, and MTBE analyzed by EPA Method 8260B

a = Hydrocarbons reported in the gasoline range do not match the laboratory gasoline standard.

Table 2: Groundwater Extraction - Operation and Mass Removal Data - Shell-branded Service Station, Incident #98995752, 540 Hegenberger Road , Oakland, CA

Site Visit (mm/dd/yy)	Hour Meter (hours)	Flow Meter Reading (gal)	Period			TPHg			Benzene			MTBE		
			Period Volume (gal)	Operational Flow Rate (gpm)	Cumulative Volume (gal)	TPHg Conc. (ppb)	Period Removal (pounds)	Cumulative Removal (pounds)	Benzene Conc. (ppb)	Period Removal (pounds)	Cumulative Removal (pounds)	MTBE Conc. (ppb)	Period Removal (pounds)	Cumulative Removal (pounds)
04/28/03	3.3	840	0	0.00	0	<1,000	0.000	0.000	<10	0.000	0.000	2,700	0.000	0.000
05/02/03	101.3	6,680	5,840	0.99	5,840			0.024		0.000	0.000		0.132	0.132
05/12/03	341.2	23,885	17,205	1.20	23,045	<10,000	0.718	0.742	<100	0.007	0.007	21,000	3.015	3.146
05/27/03	699.9	45,085	21,200	0.99	44,245	<10,000	0.885	1.627	<100	0.009	0.016	29,000	5.130	8.277
06/09/03	1011.8	58,453	13,368	0.71	57,613	<25,000	1.394	3.021	<250	0.014	0.030	20,000	2.231	10.507
06/23/03	1347.2	67,082	8,629	0.43	66,242	<500	0.018	3.039	<5.0	0.000	0.030	1,300	0.094	10.601
07/08/03	1706.9	80,092	13,010	0.60	79,252	<1,000	0.054	3.093	<10	0.001	0.031	2,000	0.217	10.818
07/25/03	2113.6	97,580	17,488	0.72	96,740	<500	0.036	3.130	<50	0.004	0.035	16,000	2.335	13.153
08/05/03	2136.0	98,536	956	0.71	97,696	<5,000	0.020	3.150	<50	0.000	0.035	11,000	0.088	13.241
08/19/03	2473.8	114,245	15,709	0.78	113,405	<10,000	0.655	3.805	<100	0.007	0.041	13,000	1.704	14.945
09/05/03	2881.3	125,020	10,775	0.44	124,180	<5,000	0.225	4.030	<50	0.002	0.044	8,900	0.800	15.745
09/19/03	3218.8	136,594	11,574	0.57	135,754	<2,000	0.097	4.126	<20	0.001	0.045	6,900	0.666	16.411
10/01/03	3503.6	145,329	8,735	0.51	144,489	<2,500	0.091	4.218	<25	0.001	0.045	5,300	0.386	16.798
10/17/03	3821.0	154,978	9,649	0.51	154,138		0.101	4.318		0.001	0.046		0.427	17.224
10/31/03	4155.5	165,292	10,314	0.51	164,452		0.108	4.426		0.001	0.048		0.456	17.681
11/14/03	4299.6	171,405	6,113	0.71	170,565	<1,300	0.033	4.459	20	0.001	0.049	1,300	0.066	17.747
11/19/03	4300.4	171,405	0	0.00	170,565		0.000	4.459		0.000	0.049		0.000	17.747
11/26/03	4468.3	179,248	7,843	0.78	178,408		0.043	4.502		0.001	0.050		0.085	17.832
12/02/03	4614.1	186,020	6,772	0.77	185,180	<1,300	0.037	4.538	45	0.003	0.052	1,200	0.068	17.900
12/18/03	5000.8	205,130	19,110	0.82	204,290		0.104	4.642		0.007	0.060		0.191	18.091
01/02/04	5361.9	209,447	4,317	0.20	208,607		0.023	4.665		0.002	0.061		0.043	18.134
01/06/04	5451.1	210,081	634	0.12	209,241	<250	0.001	4.666	<2.5	0.000	0.061	240	0.001	18.136
01/20/04	5788.5	214,091	4,010	0.20	213,251		0.004	4.670		0.000	0.061		0.008	18.144
01/28/04	5842.8	215,451	1,360	0.42	214,611		0.001	4.672		0.000	0.061		0.003	18.146
02/04/04	5987.0	220,414	4,963	0.57	219,574	<500	0.010	4.682	<5.0	0.000	0.061	620	0.026	18.172
02/18/04	6343.4	222,732	2,318	0.11	221,892		0.005	4.687		0.000	0.061		0.012	18.184
02/20/04	6392.8	223,811	1,079	0.36	222,971		0.002	4.689		0.000	0.061		0.006	18.190
03/09/04	6688.4	229,070	5,259	0.30	228,230	<100	0.002	4.691	<1.0	0.000	0.061	100	0.004	18.194
03/25/04	7074.7	234,471	5,401	0.23	233,631		0.002	4.693		0.000	0.061		0.005	18.199
04/02/04	7262.7	237,008	2,537	0.22	236,168	<100	0.001	4.695	<1.0	0.000	0.062	110	0.002	18.201
04/14/04	7554.7	238,665	1,657	0.09	237,825		0.001	4.695		0.000	0.062		0.002	18.202
04/27/04	7864.7	266,992	28,327	1.52	266,152		0.012	4.707		0.000	0.062		0.026	18.228

Table 2: Groundwater Extraction - Operation and Mass Removal Data - Shell-branded Service Station, Incident #98995752, 540 Hegenberger Road , Oakland, CA

Site Visit (mm/dd/yy)	Hour Meter (hours)	Flow Meter Reading (gal)	Period		TPHg			Benzene			MTBE			
			Period Volume (gal)	Operational Flow Rate (gpm)	Cumulative Volume (gal)	TPHg Conc. (ppb)	Period Removal (pounds)	Cumulative Removal (pounds)	Benzene Conc. (ppb)	Period Removal (pounds)	Cumulative Removal (pounds)	MTBE Conc. (ppb)	Period Removal (pounds)	Cumulative Removal (pounds)
05/14/04	8271.1	281,246	14,254	0.58	280,406	<100	0.006	4.713	<1.0	0.000	0.062	270	0.032	18.261
05/26/04	8556.7	300,888	19,642	1.15	300,048		0.008	4.721		0.000	0.062		0.044	18.305
06/10/04	8922.2	304,323	3,435	0.16	303,483	<100	0.001	4.723	1.4	0.000	0.062	180	0.005	18.310
06/15/04	9017.3	310,562	9,674	0.35	309,722		0.004	4.727		0.000	0.062		0.015	18.324
06/23/04	9209.9	315,074	10,751	0.62	314,234		0.004	4.731		0.000	0.062		0.016	18.341
07/08/04	9574.6	316,639	6,077	0.18	315,799	<100	0.003	4.734	<1.0	0.000	0.062	190	0.010	18.350
Total Extracted Volume= 315798.500					Total Pounds Removed: 4.734			Total Pounds Removed: 0.062			Total Pounds Removed: 18.350			
Average Period Operational Flow Rate= 0.55					Total Gallons Removed: 0.767			Total Gallons Removed: 0.010			Total Gallons Removed: 2.972			

Abbreviations & Notes:

TPHg = Total purgeable hydrocarbons as gasoline
 MTBE = Methyl tert-butyl ether
 Conc. = Concentration
 ppb = Parts per billion, equivalent to µg/L
 µg/L = Micrograms per liter
 L = Liter gal = Gallon g = Gram
 Mass removed based on the formula: volume extracted (gal) x Concentration (µg/L) x (g/10⁶µg) x (pound/453.6g) x (3.785 L/gal)
 When constituents are not detected, the concentration is assumed to be equal to half the detection limit in subsequent calculations.
 Volume removal data based on the formula: mass (pounds) x (density)⁻¹ (cc/g) x 453.6 (g/pound) x (L/1000 cc) * (gal/3.785 L)
 Density inputs: TPHg = 0.73 g/cc, TPHd = 0.87 g/cc, MTBE = 0.74 g/cc
 TPHg, BTEX, and MTBE analyzed by EPA Method 8260B
 System started on 4/28/03 with 3.3hours and 880 gallons on flow meter.

ATTACHMENT A
Blaine Groundwater Monitoring Report
and Field Notes

BLAINE
TECH SERVICES, INC.



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SAN JOSE, CA 95112-1105
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June 24, 2004

Karen Petryna
Shell Oil Products US
P.O. Box 7869
Burbank, CA 91510-7869

Second Quarter 2004 Groundwater Monitoring at
Shell-branded Service Station
540 Hegenberger Road
Oakland, CA

Monitoring performed on May 25, 2004

Groundwater Monitoring Report **040525-JP-1**

This report covers the routine monitoring of groundwater wells at this Shell-branded facility. In accordance with standard procedures that conform to Regional Water Quality Control Board requirements, routine field data collection includes depth to water, total well depth, thickness of any separate immiscible layer, water column volume, calculated purge volume (if applicable), elapsed evacuation time (if applicable), total volume of water removed (if applicable), and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater (if applicable) is, likewise, collected and transported to the Martinez Refining Company.

Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL CONCENTRATIONS**. The full analytical report for the most recent samples and the field data sheets are attached to this report.

At a minimum, Blaine Tech Services, Inc. field personnel are certified on completion of a forty-hour Hazardous Materials and Emergency Response training course per 29 CFR 1910.120. Field personnel are also enrolled in annual eight-hour refresher courses.

Blaine Tech Services, Inc. conducts sampling and documentation assignments of this type as an independent third party. Our activities at this site consisted of objective data and sample collection only. No interpretation of analytical results, defining of hydrological conditions or formulation of recommendations was performed.

Please call if you have any questions.

Yours truly,

Leon Gearhart
Project Coordinator

LG/ks

attachments: Cumulative Table of WELL CONCENTRATIONS
Certified Analytical Report
Field Data Sheets

cc: Anni Kreml
Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Oakland, CA 94608

WELL CONCENTRATIONS
Shell-branded Service Station
540 Hegenberger Road
Oakland, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC (MSL)	Depth to Water (ft)	GW Elevation (MSL)	DO Reading (ppm)
MW-1 (a)	08/26/1998	2,700	28	55	59	39	33,000	NA	10.54	7.91	2.63	1.8
MW-1 (b)	08/26/1998	<1,000	22	<10	<10	<10	17,000	NA	10.54	7.91	2.63	2.2
MW-1	12/28/1998	<5,000	<50.0	<50.0	<50.0	<50.0	153,000	33,000	10.54	8.75	1.79	1.9
MW-1	03/29/1999	<2,000	<20.0	<20.0	<20.0	<20.0	693,000	NA	10.54	8.32	2.22	2.0
MW-1	06/22/1999	20,000	<200	<200	<200	<200	150,000	NA	10.54	9.05	1.49	1.7
MW-1	09/30/1999	<2,500	<25.0	<25.0	<25.0	<25.0	30,900	NA	10.54	8.35	2.19	2.6
MW-1	11/19/1999	NA	NA	NA	NA	NA	NA	NA	10.54	9.58	0.96	NA
MW-1	11/24/1999	NA	NA	NA	NA	NA	NA	NA	10.54	9.65	0.89	NA
MW-1	12/02/1999	NA	NA	NA	NA	NA	NA	NA	10.54	9.55	0.99	NA
MW-1	12/10/1999	<50.0	29.7	<20.0	<20.0	<20.0	76,300	NA	10.54	8.86	1.68	1.2
MW-1	03/02/2000	<2,500	<25.0	<25.0	<25.0	<25.0	27,600	NA	10.54	8.83	1.71	3.2
MW-1	06/08/2000	<2,000	<20.0	<20.0	<20.0	<20.0	59,000	67,600	10.54	7.78	2.76	1.9
MW-1	09/05/2000	<10,000	411	<100	<100	<100	71,100	115,000e	10.54	7.84	2.70	NA
MW-1	12/15/2000	35,600	1,310	<50.0	<50.0	<50.0	136,000	f	10.54	7.65	2.89	NA
MW-1	03/09/2001	<10,000	1,390	<100	<100	<100	89,600	164,000	10.54	6.44	4.10	NA
MW-1	06/27/2001	<5,000	<50	<50	<50	<50	NA	19,000	10.54	8.46	2.08	NA
MW-1	09/19/2001	<5,000	<50	<50	<50	<50	NA	52,000	10.54	8.10	2.44	NA
MW-1	12/31/2001	<5,000	<25	<25	<25	<25	NA	17,000	10.54	7.31	3.23	NA
MW-1	03/14/2002	<20,000	<200	<200	<200	<200	NA	60,000	10.54	7.68	2.86	NA
MW-1	06/25/2002	<5,000	<50	<50	<50	<50	NA	34,000	10.54	8.40	2.14	NA
MW-1	09/19/2002	<2,500	<25	<25	<25	<25	NA	18,000	10.52	8.58	1.94	NA
MW-1	12/12/2002	<5,000	<50	<50	<50	<50	NA	30,000	10.52	8.41	2.11	NA
MW-1	01/02/2003	NA	<0.50	<0.50	<0.50	<1.0	NA	NA	10.52	7.45	3.07	NA
MW-1	03/20/2003 g	3,800	<25	<25	<25	<25	5,500	NA	10.52	8.21	2.31	NA
MW-1	06/23/2003	<10,000	<100	<100	<100	<200	NA	35,000	10.52	9.02	1.50	NA
MW-1	09/22/2003	<5,000	<50	<50	<50	<100	NA	15,000	10.52	15.74	-5.22	NA
MW-1	12/03/2003	<1,300	<13	<13	<13	<25	NA	3,600	10.52	18.35 h	NA	NA
MW-1	03/18/2004	<250	<2.5	<2.5	<2.5	<5.0	NA	570	10.52	7.32	3.20	NA
MW-1	05/25/2004	<250	<2.5	<2.5	<2.5	<5.0	NA	250	10.52	6.80	3.72	NA

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MW-2 (a)	08/26/1998	<250	3.2	<2.5	<2.5	<2.5	4,000	NA	9.21	7.18	2.03	2.4
MW-2 (b)	08/26/1998	<250	3.1	<2.5	<2.5	<2.5	4,800	NA	9.21	7.18	2.03	2.7
MW-2 (D)(b)	08/26/1998	<250	4.8	<2.5	<2.5	6.0	3,300	NA	9.21	7.18	2.03	2.7
MW-2	12/28/1998	<50.0	<0.500	<0.500	<0.500	<0.500	28.8	NA	9.21	7.34	1.87	2.1
MW-2	03/29/1999	235	<0.500	<0.500	<0.500	3.4	101	NA	9.21	6.85	2.36	2.0
MW-2	06/22/1999	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	9.21	7.10	2.11	1.9
MW-2	09/30/1999	<50.0	<0.500	<0.500	<0.500	<0.500	1,700	NA	9.21	8.06	1.15	1.0
MW-2	12/10/1999	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	9.21	8.61	0.60	1.4
MW-2	03/02/2000	<500	11.5	<5.00	<5.00	<5.00	5,280	NA	9.21	6.33	2.88	0.4
MW-2	06/08/2000	<50.0	0.670	<0.500	<0.500	<0.500	3,160	NA	9.21	6.87	2.34	1.6
MW-2	09/05/2000	<1,000	<10.0	<10.0	<10.0	<10.0	9,600	NA	9.21	6.79	2.42	NA
MW-2	12/15/2000	<200	<2.00	<2.00	<2.00	<2.00	6,320	NA	9.21	6.76	2.45	NA
MW-2	03/09/2001	<500	<5.00	<5.00	<5.00	<5.00	17,200	NA	9.21	6.28	2.93	NA
MW-2	06/27/2001	<100	1.4	<1.0	<1.0	<2.0	NA	470	9.21	7.12	2.09	NA
MW-2	09/19/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	330	9.21	7.17	2.04	NA
MW-2	12/31/2001	<100	<1.0	<1.0	<1.0	<1.0	NA	420	9.21	6.24	2.97	NA
MW-2	03/14/2002	<250	4.5	3.3	<2.5	<2.5	NA	1,600	9.21	6.72	2.49	NA
MW-2	06/25/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	110	9.21	7.23	1.98	NA
MW-2	09/19/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	90	9.19	7.48	1.71	NA
MW-2	12/12/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	170	9.19	7.33	1.86	NA
MW-2	03/20/2003 g	56	<0.50	<0.50	<0.50	<0.50	58	NA	9.19	7.65	1.54	NA
MW-2	06/23/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	44	9.19	8.72	0.47	NA
MW-2	09/22/2003	<250	<2.5	<2.5	<2.5	<5.0	NA	37	9.19	8.84	0.35	NA
MW-2	12/03/2003	<250	<2.5	<2.5	<2.5	<5.0	NA	99	9.19	8.95	0.24	NA
MW-2	03/18/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	24	9.19	7.19	2.00	NA
MW-2	05/25/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	53	9.19	8.40	0.79	NA
MW-3 (a)	08/26/1998	2,300	180	330	<0.50	420	44,000	NA	9.45	6.52	2.93	1.8
MW-3 (b)	08/26/1998	<50	<0.50	<0.50	<0.50	<0.50	52,000	75,000	9.45	6.52	2.93	2.3
MW-3	12/28/1998	<5.00	139	<50.0	<50.0	<50.0	15,100	NA	9.45	6.73	2.72	1.7

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MW-3	03/29/1999	52,500	5,500	6,900	1,360	6,250	508,000	630,000 (c)	9.45	6.21	3.24	2.1
MW-3	06/22/1999	58,000	6,600	9,850	1,640	6,950	677,000	653,000	9.45	7.00	2.45	1.3
MW-3	09/30/1999	4,360	121	122	36.1	647	33,700	35,600	9.45	6.84	2.61	0.6
MW-3	11/19/1999	NA	NA	NA	NA	NA	NA	NA	9.45	7.93	1.52	NA
MW-3	11/24/1999	NA	NA	NA	NA	NA	NA	NA	9.45	8.25	1.20	NA
MW-3	12/02/1999	NA	NA	NA	NA	NA	NA	NA	9.45	7.55	1.90	NA
MW-3	12/10/1999	4,220	973	26.3	273	584	88,200	NA	9.45	7.28	2.17	2.5
MW-3	03/02/2000	65,300	5,210	10,300	2,650	15,100	56,800	59,800e	9.45	5.87	3.58	d
MW-3	06/08/2000	72,700	3,570	10,200	2,100	13,400	44,400	NA	9.45	5.32	4.13	1.1
MW-3	09/05/2000	26,100	959	2,910	1,090	5,640	24,000	NA	9.45	5.60	3.85	NA
MW-3	12/15/2000	5,190	438	8.39	483	530	19,100	11,800f	9.45	6.27	3.18	NA
MW-3	03/09/2001	5,880	472	42.2	392	1,290	41,800	NA	9.45	5.71	3.74	NA
MW-3	06/27/2001	9,100	330	79	140	1,600	NA	31,000	9.45	6.88	2.57	NA
MW-3	09/19/2001	790	14	18	17	67	NA	8,100	9.45	6.70	2.75	NA
MW-3	12/31/2001	<5,000	220	<50	86	<50	NA	22,000	9.45	5.92	3.53	NA
MW-3	03/14/2002	<2,500	<25	<25	<25	<25	NA	12,000	9.45	6.25	3.20	NA
MW-3	06/25/2002	<10,000	160	<100	<100	<100	NA	42,000	9.45	6.65	2.80	NA
MW-3	09/19/2002	<10,000	650	<100	280	360	NA	84,000	9.45	6.51	2.94	NA
MW-3	12/12/2002	<10,000	170	<100	<100	<100	NA	45,000	9.45	6.97	2.48	NA
MW-3	01/02/2003	NA	59	<5.0	5.3	<10	NA	NA	9.45	5.90	3.55	NA
MW-3	03/20/2003 g	5,100	<50	<50	<50	<50	4,400	NA	9.45	6.87	2.58	NA
MW-3	06/23/2003	<5,000	<50	<50	<50	<100	NA	8,100	9.45	13.80	-4.35	NA
MW-3	09/22/2003	<250	<2.5	4.6	<2.5	<5.0	NA	470	9.45	6.31	3.14	NA
MW-3	12/03/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	180	9.45	14.77 h	NA	NA
MW-3	03/18/2004	<1,000	14	<10	<10	<20	NA	2,500	9.45	6.07	3.38	NA
MW-3	05/25/2004	3,900	<10	66	23	470	NA	140	9.45	14.63	-5.18	NA
MW-4	09/25/2000	NA	NA	NA	NA	NA	NA	NA	9.88	7.64	2.24	NA
MW-4	12/15/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	9.88	7.55	2.33	NA
MW-4	03/09/2001	<50.0	<0.500	0.730	<0.500	0.529	3.16	NA	9.88	7.04	2.84	NA

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MW-4	06/27/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	9.88	7.76	2.12	NA
MW-4	09/19/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	9.88	7.69	2.19	NA
MW-4	12/31/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	9.88	7.08	2.80	NA
MW-4	03/14/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	9.88	7.57	2.31	NA
MW-4	06/25/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	9.88	8.50	1.38	NA
MW-4	09/19/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	9.88	8.22	1.66	NA
MW-4	12/12/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	9.88	8.08	1.80	NA
MW-4	03/20/2003 g	<50	<0.50	<0.50	<0.50	<0.50	<5.0	NA	9.88	7.92	1.96	NA
MW-4	06/23/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	<5.0	9.88	8.18	1.70	NA
MW-4	09/22/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	16	9.88	8.28	1.60	NA
MW-4	12/03/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	15	9.88	8.44	1.44	NA
MW-4	03/18/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	15	9.88	7.52	2.36	NA
MW-4	05/25/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	20	9.88	8.30	1.58	NA
MW-5	06/18/2002	NA	NA	NA	NA	NA	NA	NA	NA	8.36	NA	NA
MW-5	06/25/2002	<10,000	<100	<100	<100	<100	NA	60,000	NA	8.30	NA	NA
MW-5	09/19/2002	<2,000	<20	<20	<20	<20	NA	7,200	10.03	8.44	1.59	NA
MW-5	12/12/2002	<5,000	<50	<50	<50	<50	NA	33,000	10.03	8.49	1.54	NA
MW-5	03/20/2003 g	12,000	<50	<50	<50	<50	15,000	NA	10.03	8.23	1.80	NA
MW-5	06/23/2003	<1,000	<10	<10	<10	<20	NA	1,700	10.03	16.70	-6.67	NA
MW-5	09/22/2003	<2,500	<25	<25	<25	<50	NA	4,400	10.03	16.70	-6.67	NA
MW-5	12/03/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	70	10.03	16.79	-6.76	NA
MW-5	03/18/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	43	10.03	16.78	-6.75	NA
MW-5	05/25/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	30	10.03	13.02	-2.99	NA
C-1	09/19/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	1.44	NA	NA
C-1	03/29/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	2.59	NA	NA
C-1	06/25/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	3.72	NA	NA
C-1	09/19/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	3.08	NA	NA
C-1	12/12/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	0.64	NA	NA

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C-1	03/20/2003 g	<50	<0.50	<0.50	<0.50	<0.50	<5.0	NA	NA	4.61	NA	NA
SD-1	09/19/2001	Unable to sample		NA	NA	NA	NA	NA	NA	NA	NA	NA
SD-1	03/29/2002	Dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SD-1	06/25/2002	Dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SD-1	09/19/2002	Dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SD-1	12/12/2002	Dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SD-1	03/20/2003	Dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SD-2	09/19/2001	Unable to sample		NA	NA	NA	NA	NA	NA	NA	NA	NA
SD-2	03/29/2002	Dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SD-2	06/25/2002	Dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SD-2	09/19/2002	Dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SD-2	12/12/2002	Dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SD-2	03/20/2003	Dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BW-A	06/22/1999	318	<0.50	<0.50	0.590	1.48	4,470	NA	NA	4.71	NA	1.1
BW-A	06/25/2002	<500	<5.0	<5.0	<5.0	18	NA	3,100	NA	5.14	NA	NA
BW-A	09/19/2002	<200	<2.0	<2.0	<2.0	<2.0	NA	<20	NA	7.19	NA	NA
BW-A	12/12/2002	<500	<5.0	<5.0	<5.0	<5.0	NA	2,900	NA	6.40	NA	NA
BW-A	03/20/2003 g	<2,500	<25	<25	<25	<25	<250	NA	NA	5.36	NA	NA
BW-A	06/23/2003	<1,000	<10	<10	<10	<20	NA	<100	NA	10.27	NA	NA
BW-B	06/22/1999	<250	<2.5	<2.5	<2.5	<2.5	8,600	NA	NA	5.90	NA	1.2
BW-B	06/27/2001	<5,000	<50	<50	<50	<50	NA	40,000	NA	5.83	NA	NA
BW-B	12/31/2001	<2,000	<20	<20	<20	<20	NA	9,200	NA	4.19	NA	NA
BW-B	03/14/2002	<2,000	<20	<20	<20	<20	NA	9,400	NA	5.24	NA	NA
BW-B	06/25/2002	<2,000	<20	<20	<20	<20	NA	6,600	NA	6.19	NA	NA
BW-B	09/19/2002	<500	<5.0	<5.0	<5.0	<5.0	NA	<50	NA	8.46	NA	NA
BW-B	12/12/2002	<500	<5.0	<5.0	<5.0	<5.0	NA	1,700	NA	7.46	NA	NA

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BW-B	03/20/2003 g	170	<1.0	<1.0	<1.0	<1.0	190	NA	NA	6.23	NA	NA
BW-B	06/23/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	43	NA	9.95	NA	NA
BW-C	06/22/1999	<50	<0.50	<0.50	<0.50	0.98	11,000	NA	NA	5.91	NA	1.6
BW-C	06/25/2002	<5,000	<50	<50	<50	<50	NA	20,000	NA	6.49	NA	NA
BW-C	09/19/2002	<1,000	<10	<10	<10	<10	NA	400	NA	8.52	NA	NA
BW-C	12/12/2002	<2,000	<20	<20	<20	<20	NA	8,000	NA	7.57	NA	NA
BW-C	03/20/2003 g	270	<1.0	<1.0	<1.0	<1.0	250	NA	NA	6.48	NA	NA
BW-C	06/23/2003	<1,000	<10	<10	<10	<20	NA	170	NA	11.48	NA	NA
BW-D	06/22/1999	<50.0	<0.500	<0.500	<0.500	<0.500	2,190	NA	NA	4.78	NA	1.4
BW-D	06/25/2002	Well inaccessible		NA	NA	NA	NA	NA	NA	NA	NA	NA
BW-D	07/02/2002	<1,000	23	<10	<10	<10	NA	<100	NA	6.36	NA	NA
BW-D	09/19/2002	<250	<2.5	<2.5	<2.5	<2.5	NA	<25	NA	7.25	NA	NA
BW-D	12/12/2002	<5,000	<50	<50	<50	<50	NA	16,000	NA	6.21	NA	NA
BW-D	03/20/2003 g	71	<0.50	<0.50	<0.50	<0.50	55	NA	NA	5.23	NA	NA
BW-D	06/23/2003	<1,000	<10	<10	<10	<20	NA	<100	NA	10.25	NA	NA
BW-D	09/22/2003	<100	<1.0	<1.0	<1.0	<2.0	NA	120	NA	10.18	NA	NA
BW-D	12/03/2003	<1,300	110	<13	<13	29	NA	560	NA	10.20	NA	NA
BW-D	03/18/2004	<50	0.67	<0.50	<0.50	<1.0	NA	12	NA	3.42	NA	NA
BW-D	05/25/2004	<50	1.4	0.96	<0.50	<1.0	NA	1.7	NA	8.83	NA	NA

WELL CONCENTRATIONS
Shell-branded Service Station
540 Hegenberger Road
Oakland, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC (MSL)	Depth to Water (ft)	GW Elevation (MSL)	DO Reading (ppm)
---------	------	----------------	-------------	-------------	-------------	-------------	------------------------	------------------------	--------------	---------------------------	--------------------------	------------------------

Abbreviations:

TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B; prior to June 27, 2001, analyzed by EPA Method 8015.

BTEX = Benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B; prior to June 27, 2001, analyzed by EPA Method 8020.

MTBE = Methyl tertiary butyl ether

TOC = Top of Casing Elevation

GW = Groundwater

DO = Dissolved Oxygen

ppm = Parts per million

ug/L = Parts per billion

MSL = Mean sea level

ft = Feet

<n = Below detection limit

D = Duplicate sample

NA = Not applicable

Notes:

a = Pre-purge

b = Post purge

c = Lab confirmed MTBE by mistake. MTBE value at MW-1 should have been confirmed instead.

d = DO reading not taken.

e = Sample was analyzed outside of the EPA recommended holding time.

f = The second highest MTBE hit was mistakenly confirmed. MTBE for MW-1 should have been confirmed.

g = On March 20, 2003, all analyses run by EPA Method 8015/8020.

h = Depth to top of pump; pump prevented depth to water measurement

Site surveyed September 21, 2000 by Virgil Chavez Land Surveying of Vallejo, CA.

C-1 is a canal sample location.

SD-1 and SD-2 are storm drains.

Wells MW-1 through MW-5 surveyed January 24 and June 19, 2002 by Virgil Chavez Land Surveying of Vallejo, CA.

Blaine Tech Services, Inc.

June 09, 2004

1680 Rogers Avenue
San Jose, CA 95112-1105
Attn.: Leon Gearhart
Project#: 040525-JP1
Project: 98995752
Site: 540 Hegenberger Road, Oakland

Dear Mr. Gearhart,

Attached is our report for your samples received on 05/25/2004 16:27
This report has been reviewed and approved for release. Reproduction of this report
is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after
07/09/2004 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions,
please call me at (925) 484-1919.

You can also contact me via email. My email address is: vvancil@stl-inc.com

Sincerely,



Vincent Vancil
Project Manager

Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 040525-JP1
98995752

Received: 05/25/2004 16:27

Site: 540 Hegenberger Road, Oakland

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-1	05/25/2004 09:05	Water	1
MW-2	05/25/2004 11:20	Water	2
MW-3	05/25/2004 09:10	Water	3
MW-4	05/25/2004 10:25	Water	4
MW-5	05/25/2004 09:25	Water	5
BW-D	05/25/2004 11:00	Water	6

Severn Trent Laboratories, Inc.

STL San Francisco * 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 * www.stl-inc.com * CA DHS ELAP# 2496

06/09/2004 17:14

Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 040525-JP1

98995752

Received: 05/25/2004 16:27

Site: 540 Hegenberger Road, Oakland

Prep(s): 5030B	Test(s): 8260B
Sample ID: MW-1	Lab ID: 2004-05-0886 - 1
Sampled: 05/25/2004 09:05	Extracted: 6/3/2004 19:42
Matrix: Water	QC Batch#: 2004/06/03-2A.68
Analysis Flag: o (See Legend and Note Section)	

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	250	ug/L	5.00	06/03/2004 19:42	
Benzene	ND	2.5	ug/L	5.00	06/03/2004 19:42	
Toluene	ND	2.5	ug/L	5.00	06/03/2004 19:42	
Ethylbenzene	ND	2.5	ug/L	5.00	06/03/2004 19:42	
Total xylenes	ND	5.0	ug/L	5.00	06/03/2004 19:42	
Methyl tert-butyl ether (MTBE)	250	2.5	ug/L	5.00	06/03/2004 19:42	
Surrogate(s)						
1,2-Dichloroethane-d4	119.0	76-130	%	5.00	06/03/2004 19:42	
Toluene-d8	103.2	78-115	%	5.00	06/03/2004 19:42	

Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 040525-JP1

98995752

Received: 05/25/2004 16:27

Site: 540 Hegenberger Road, Oakland

Prep(s):	5030B	Test(s):	8260B
Sample ID:	MW-2	Lab ID:	2004-05-0886 - 2
Sampled:	05/25/2004 11:20	Extracted:	6/3/2004 20:01
Matrix:	Water	QC Batch#:	2004/06/03-2A.68

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	06/03/2004 20:01	
Benzene	ND	0.50	ug/L	1.00	06/03/2004 20:01	
Toluene	ND	0.50	ug/L	1.00	06/03/2004 20:01	
Ethylbenzene	ND	0.50	ug/L	1.00	06/03/2004 20:01	
Total xylenes	ND	1.0	ug/L	1.00	06/03/2004 20:01	
Methyl tert-butyl ether (MTBE)	53	0.50	ug/L	1.00	06/03/2004 20:01	
Surrogate(s)						
1,2-Dichloroethane-d4	106.4	76-130	%	1.00	06/03/2004 20:01	
Toluene-d8	99.4	78-115	%	1.00	06/03/2004 20:01	

Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 040525-JP1
98995752

Received: 05/25/2004 16:27

Site: 540 Hegenberger Road, Oakland

Prep(s): 5030B	Test(s): 8260B
Sample ID: MW-3	Lab ID: 2004-05-0886 - 3
Sampled: 05/25/2004 09:10	Extracted: 6/3/2004 20:20
Matrix: Water	QC Batch#: 2004/06/03-2A.68
Analysis Flag: o (See Legend and Note Section)	

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	3900	1000	ug/L	20.00	06/03/2004 20:20	
Benzene	ND	10	ug/L	20.00	06/03/2004 20:20	
Toluene	66	10	ug/L	20.00	06/03/2004 20:20	
Ethylbenzene	23	10	ug/L	20.00	06/03/2004 20:20	
Total xylenes	470	20	ug/L	20.00	06/03/2004 20:20	
Methyl tert-butyl ether (MTBE)	140	10	ug/L	20.00	06/03/2004 20:20	
Surrogate(s)						
1,2-Dichloroethane-d4	107.0	76-130	%	20.00	06/03/2004 20:20	
Toluene-d8	105.9	78-115	%	20.00	06/03/2004 20:20	

Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 040525-JP1

98995752

Received: 05/25/2004 16:27

Site: 540 Hegenberger Road, Oakland

Prep(s):	5030B	Test(s):	8260B
Sample ID:	MW-4	Lab ID:	2004-05-0886 - 4
Sampled:	05/25/2004 10:25	Extracted:	6/3/2004 20:39
Matrix:	Water	QC Batch#:	2004/06/03-2A.68

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	06/03/2004 20:39	
Benzene	ND	0.50	ug/L	1.00	06/03/2004 20:39	
Toluene	ND	0.50	ug/L	1.00	06/03/2004 20:39	
Ethylbenzene	ND	0.50	ug/L	1.00	06/03/2004 20:39	
Total xylenes	ND	1.0	ug/L	1.00	06/03/2004 20:39	
Methyl tert-butyl ether (MTBE)	20	0.50	ug/L	1.00	06/03/2004 20:39	
Surrogate(s)						
1,2-Dichloroethane-d4	110.9	76-130	%	1.00	06/03/2004 20:39	
Toluene-d8	106.5	78-115	%	1.00	06/03/2004 20:39	

Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 040525-JP1
98995752

Received: 05/25/2004 16:27

Site: 540 Hegenberger Road, Oakland

Prep(s): 5030B	Test(s): 8260B
Sample ID: MW-5	Lab ID: 2004-05-0886 - 5
Sampled: 05/25/2004 09:25	Extracted: 6/3/2004 15:04
Matrix: Water	QC Batch#: 2004/06/03-1B.65

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	06/03/2004 15:04	
Benzene	ND	0.50	ug/L	1.00	06/03/2004 15:04	
Toluene	ND	0.50	ug/L	1.00	06/03/2004 15:04	
Ethylbenzene	ND	0.50	ug/L	1.00	06/03/2004 15:04	
Total xylenes	ND	1.0	ug/L	1.00	06/03/2004 15:04	
Methyl tert-butyl ether (MTBE)	30	0.50	ug/L	1.00	06/03/2004 15:04	
Surrogate(s)						
1,2-Dichloroethane-d4	98.7	76-130	%	1.00	06/03/2004 15:04	
Toluene-d8	103.4	78-115	%	1.00	06/03/2004 15:04	

Severn Trent Laboratories, Inc.

STL San Francisco * 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 * www.stl-inc.com * CA DHS ELAP# 2496

06/09/2004 17:14

Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 040525-JP1

98995752

Received: 05/25/2004 16:27

Site: 540 Hegenberger Road, Oakland

Prep(s):	5030B	Test(s):	8260B
Sample ID:	BW-D	Lab ID:	2004-05-0886 - 6
Sampled:	05/25/2004 11:00	Extracted:	6/3/2004 20:58
Matrix:	Water	QC Batch#:	2004/06/03-2A.68

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	06/03/2004 20:58	
Benzene	1.4	0.50	ug/L	1.00	06/03/2004 20:58	
Toluene	0.96	0.50	ug/L	1.00	06/03/2004 20:58	
Ethylbenzene	ND	0.50	ug/L	1.00	06/03/2004 20:58	
Total xylenes	ND	1.0	ug/L	1.00	06/03/2004 20:58	
Methyl tert-butyl ether (MTBE)	1.7	0.50	ug/L	1.00	06/03/2004 20:58	
Surrogate(s)						
1,2-Dichloroethane-d4	112.0	76-130	%	1.00	06/03/2004 20:58	
Toluene-d8	98.8	78-115	%	1.00	06/03/2004 20:58	

Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 040525-JP1

98995752

Received: 05/25/2004 16:27

Site: 540 Hegenberger Road, Oakland

Batch QC Report		
Prep(s): 5030B		Test(s): 8260B
Method: Blank	Water	QC Batch # 2004/06/03-1B.65
MB: 2004/06/03-1B.65-048		Date Extracted: 06/03/2004 11:48

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	06/03/2004 11:48	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	06/03/2004 11:48	
Benzene	ND	0.5	ug/L	06/03/2004 11:48	
Toluene	ND	0.5	ug/L	06/03/2004 11:48	
Ethylbenzene	ND	0.5	ug/L	06/03/2004 11:48	
Total xylenes	ND	1.0	ug/L	06/03/2004 11:48	
Surrogates(s)					
1,2-Dichloroethane-d4	93.8	76-130	%	06/03/2004 11:48	
Toluene-d8	104.4	78-115	%	06/03/2004 11:48	

Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 040525-JP1

98995752

Received: 05/25/2004 16:27

Site: 540 Hegenberger Road, Oakland

Batch QC Report					
Prep(s): 5030B				Test(s): 8260B	
Method Blank		Water		QC Batch # 2004/06/03-2A.68	
MB: 2004/06/03-2A.68-014				Date Extracted: 06/03/2004 17:14	

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	06/03/2004 17:14	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	06/03/2004 17:14	
Benzene	ND	0.5	ug/L	06/03/2004 17:14	
Toluene	ND	0.5	ug/L	06/03/2004 17:14	
Ethylbenzene	ND	0.5	ug/L	06/03/2004 17:14	
Total xylenes	ND	1.0	ug/L	06/03/2004 17:14	
Surrogates(s)					
1,2-Dichloroethane-d4	106.8	76-130	%	06/03/2004 17:14	
Toluene-d8	103.4	78-115	%	06/03/2004 17:14	

Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 040525-JP1
98995752

Received: 05/25/2004 16:27

Site: 540 Hegenberger Road, Oakland

Batch QC Report									
Prep(s): 5030B						Test(s): 8260B			
Laboratory Control Spike				Water		QC Batch # 2004/06/03-1B.65			
LCS		2004/06/03-1B.65-059		Extracted: 06/03/2004		Analyzed: 06/03/2004 10:59			
LCSD									

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	21.8		25	87.2			65-165	20		
Benzene	27.9		25	111.6			69-129	20		
Toluene	25.5		25	102.0			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	406		500	81.2			76-130			
Toluene-d8	517		500	103.4			78-115			

Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 040525-JP1

98995752

Received: 05/25/2004 16:27

Site: 540 Hegenberger Road, Oakland

Legend and Notes

Analysis Flag

o

Reporting limits were raised due to high level of analyte present in the sample.

Shell Chain of Custody Record

86252

Lab. Identification (if necessary):

Address:

City, State, Zip:

Shell Project Manager t

invoiced:

SCIENCE & ENGINEERING
 TECHNICAL SERVICES
 CRMT HOUSTON

Karen Potryna

2004-05-0886

INCIDENT NUMBER (S&E ONLY)

9 8 9 9 5 7 5 2

SAP or CRMT NUMBER (TS/CRMT)

DATE: 5-25-04

PAGE: 1 of 1

SAMPLING COMPANY: **Blaine Tech Services** LOG CODE: **BTSS** SITE ADDRESS (Street and City): **540 Hegenberger Road, Oakland** DIGITAL ID NO.: **T0600102123**

ADDRESS: **1680 Rogers Avenue, San Jose, CA 95112** CONTRACT PROJECT NO.: **040525-1P**

PROJECT CONTACT (Hierarchy of POC preferred): **Leon Gearhart** CONTRACTOR PROJECT NO.: **BTS#**

TELEPHONE: **408-573-6555** FAX: **408-573-7771** EMAIL: **lgearhart@blainetech.com** ANALYST: **Anni Kream** PHONE NO.: **(510)420-3335** SHELL OAKLAND EDF@cambrja-env.com

TURNAROUND TIME (BUSINESS DAYS): 10 DAYS 5 DAYS 72 HOURS 48 HOURS 24 HOURS LESS THAN 24 HOURS

LAB USE ONLY: LA - RWQCB REPORT FORMAT UST AGENCY:

GOING MTBE CONFIRMATION: HIGHEST _____ HIGHEST per BORING _____ ALL _____

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EOD IS NOT NEEDED

WATER NUMBER: **Matthew Pyroh**

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING		MATRIX	NO. COF	TPH - Gas, Purgeable	BTEX	MTBE (P2601B - 800b RL)	MTBE (S260B - 0.5ppb RL)	Oxygenates (S) by (S260B)	Ethanol (S260E)	Methanol	1,2-DCA (S260B)	EDB (S260B)	TPH - Diesel, Extractable (up15m)
		DATE	TIME												
	MW-1	5-25-04	0905	W	3	X	X	X							
	MW-2		1120			X	X	X							
	MW-3		0910			X	X	X							
	MW-4		1025			X	X	X							
	MW-5		0925			X	X	X							
	BW-D		1100			X	X	X							

FIELD NOTES:
 Container/Preservative
 or PID Readings
 or Laboratory Notes

TEMPERATURE ON RECEIPT: **60c**

Requested by (Signature): *Matthew Pyroh* Received by (Signature): *[Signature]* Date: **5/25/04** Time: **1627**

Requested by (Signature): *[Signature]* Received by (Signature): *[Signature]* Date: **5/25/04** Time: **1753**

Requested by (Signature): *[Signature]* Received by (Signature): *Deuce Harrington / STL-SF* Date: **5/25/04** Time: **1753**

SHELL WELL MONITORING DATA SHEET

BTS #: 040525-JP1	Site: 98995752
Sampler: JP	Date: 5-25-04
Well I.D.: MW-2	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 19.90	Depth to Water (DTW): 8.40
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.70	

Purge Method: Bailer Water: Peristaltic Sampling Method: Bailer
 Disposable Bailer Extraction Pump Disposable Bailer
 Positive Air Displacement Other _____ Extraction Port
 Electric Submersible Other _____ Dedicated Tubing

1.8 (Gals.) X 3 = 5.4 Gals.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² + 0.163</td> </tr> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² + 0.163	
Well Diameter	Multiplier	Well Diameter	Multiplier															
1"	0.04	4"	0.65															
2"	0.16	6"	1.47															
3"	0.37	Other	radius ² + 0.163															
I Case Volume	Specified Volumes	Calculated Volume																

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u>)	Turbidity (NTUs)	Gals. Removed	Observations
1111	66.4	7.4	1109	7200	1.8	cloudy
1114	67.0	7.3	1123	7200	3.6	"
1117	68.1	7.3	1189	7200	5.4	"

Did well dewater? Yes No Gallons actually evacuated: 5.4
 Sampling Date: 5-25-04 Sampling Time: 1120 Depth to Water: 12.38 (site departure)

Sample I.D.: MW-2 Laboratory: STL Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: _____

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable): _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: _____

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

SHELL WELL MONITORING DATA SHEET

BTS #: 040525-JP1	Site: 98995752
Sampler: JP	Date: 5-25-04
Well I.D.: BW-0	Well Diameter: 2 3 4 6 8 <u>12</u>
Total Well Depth (TD): 12.30	Depth to Water (DTW): 8.83
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.52	

Purge Method: Bailer Waterra Sampling Method: Bailer
 Disposable Bailer Peristaltic Disposable Bailer
 Positive Air Displacement Extraction Pump Extraction Port
 Electric Submersible Other _____ Dedicated Tubing

$20.3 \text{ (Gals.)} \times 3 = 60.9 \text{ Gals.}$ 1 Case Volume Specified Volumes Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1044	68.4	7.6	828	13	20.3	clear
1052	67.9	7.0	732	4	40.6	"
1057	67.8	7.0	771	2	60.9	"

Did well dewater? Yes No Gallons actually evacuated: 60.9

Sampling Date: 5-25-04 Sampling Time: 1100 Depth to Water: 9.47

Sample I.D.: BW-D Laboratory: STL Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: _____

EB I.D. (if applicable): _____ @ _____ Time Duplicate I.D. (if applicable): _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: _____

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

ATTACHMENT B
Arco Groundwater Data

Table 1
Groundwater Elevation and Analytical Data

Atlantic Richfield Company Service Station #4494
566 Hegenberger Road
Oakland, California

Well Number	Date Sampled	Top of Riser Elevation (ft)	Depth to Top of Screen (ft, bgs)	Total Well Depth (ft, bgs)	Depth to Groundwater (ft, TOC)	Groundwater Elevation (ft)	GRO/TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Dissolved Oxygen (mg/L) ⁽¹⁾	pH ⁽²⁾			
MW-1	06/20/00	106.10	13.0	22.7	7.02	99.08	ND<1,000	ND<10	ND<10	ND<10	ND<20	14,000/15,000 ^a	NA	NA			
	09/28/00				7.07	99.03	ND<500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	13000/18,800 ^a	NA	NA		
	12/17/00				6.95	99.15	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	10,600	NA	NA		
	03/28/01				6.88	99.22	ND<500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	16,900	NA	NA		
	06/21/01				7.18	98.92	ND<1,000	ND<10	98.92	ND<10	ND<10	ND<10	ND<10	3,400	NA	NA	
	09/23/01				7.11	98.99	ND<1,000	ND<10	98.99	ND<10	ND<10	ND<10	ND<10	2200/1800 ^a	NA	NA	
	12/31/01				6.91	99.19	ND<5,000	ND<50	99.19	ND<50	ND<50	ND<50	ND<50	14,000	NA	NA	
	03/14/02				6.85	99.25	ND<5,000	ND<50	99.25	ND<50	ND<50	ND<50	ND<50	6,200	NA	NA	
	04/17/02				5.89	100.21	ND<5,000	ND<50	100.21	ND<50	ND<50	ND<50	ND<50	4,500	NA	NA	
	08/08/02				7.19	98.91		230 ^b	98.91	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	660/440 ^a	4.5	7.8
	12/12/02				7.28	98.82		630 ^d	98.82	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	1300/830 ^a	1.9	7.6
	03/20/03 ^e				6.91	99.19		1,100	99.19	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	780	2.2	8.5
	06/23/03				7.61	98.49		530	98.49	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	260	1.2	7.6
	09/22/03 ^f				11.36	7.78	3.58	ND<50	3.58	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	17	3.5	7.7
	12/03/03				7.90	3.46	4.10	ND<2.5	3.46	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	11	2.60	6.9
	03/18/04				6.68	4.68	ND<250	ND<2.5	4.68	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	130	2.4	7.0
	05/25/04				7.55	3.81	ND<250	ND<2.5	3.81	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	120	1.3	7.0
MW-3	06/20/00	106.29	7.0	17.7	9.18	97.11	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	27/27 ^a	NA	NA			
	09/28/00				9.33	96.96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	4.3/ND<2.0 ^a	NA	NA		
	12/17/00				9.31	96.98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA		
	03/28/01				9.23	97.06	ND<50	ND<0.5	97.06	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7.42	NA	NA	
	06/21/01				9.58	96.71	ND<50	ND<0.5	96.71	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA	
	09/23/01				9.76	96.53	ND<50	ND<0.5	96.53	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA	
	12/31/01				8.78	97.51	ND<50	ND<0.5	97.51	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA	
	03/14/02				9.25	97.04	ND<50	ND<0.5	97.04	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4	NA	NA	
	04/17/02				8.44	97.85	ND<50	ND<0.5	97.85	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA	
	08/08/02				9.63	96.66	ND<50	ND<0.5	96.66	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	2.6	7.9	
	12/12/02				9.51	96.78	ND<50 ^d	ND<0.5	96.78	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	3.0	6.8	
	03/20/03 ^e				9.40	96.89	ND<50	ND<0.50	96.89	ND<0.50	ND<0.50	ND<0.50	ND<0.50	6.1	1.2	7.0	
	06/23/03				9.36	96.93	ND<50	ND<0.50	96.93	ND<0.50	ND<0.50	ND<0.50	ND<0.50	5.2	0.9	8.2	
	09/22/03 ^f				11.62	9.48	2.14	ND<50	2.14	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.9	1.4	7.9
	12/03/03				9.44	2.18			2.18		Sampled semi-annually 1st and 3rd quarter.						
03/18/04	8.76	2.86	ND<50	ND<0.50	2.86	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4.6	0.8	7.3				
05/25/04	9.55	2.07			2.07		Sampled semi-annually 1st and 3rd quarter.										

Table 1
Groundwater Elevation and Analytical Data

Atlantic Richfield Company Service Station #4494
566 Heegenberger Road
Oakland, California

Well Number	Date Sampled	Top of Riser Elevation (ft)	Depth to Top of Screen (ft, bgs)	Total Well Depth (ft., bgs)	Depth to Groundwater (ft, TOC)	Groundwater Elevation (ft)	GRO/TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Dissolved Oxygen (mg/L) ^(a)	pH ^(a)	
MW-4	06/20/00	107.40	7.0	16.3	8.49	98.91	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<10	NA	NA	
	09/28/00				8.70	98.70	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<2.5	NA	NA	
	12/17/00				8.53	98.87	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA	
	03/23/01				8.59	98.81	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA	
	06/21/01				8.79	98.61	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA	
	09/23/01				8.67	98.73	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA	
	12/31/01				8.03	99.37	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA	
	03/14/02				8.48	98.92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA	
	04/17/02				7.79	99.61	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.6	NA	NA	
	08/08/02				8.90	98.50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	4.5	8.0	
	12/12/02				9.07	98.33	ND<50 ^d	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	5.6	6.2	
	03/20/03 ^e				8.85	98.55	ND<50	ND<0.50	ND<0.50	ND<0.50	0.50	ND<0.50	4.8	7.8	
	06/23/03				9.26	98.14	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	6.3	7.5	
	09/22/03 ^f				13.18	9.22	3.96	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	7.4	8.0
	12/03/03				9.48	3.70				Sampled semi-annually 1st and 3rd quarter.					
	03/18/04	8.32	4.86		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4.5	8.4			
	05/25/04	9.03	4.15				Sampled semi-annually 1st and 3rd quarter.								
MW-5	06/20/00	105.19	8.0	16.6	7.65	97.54	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<10	NA	NA	
	09/28/00				6.82	98.37	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<2.5	NA	NA	
	12/17/00				6.50	98.69	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA	
	03/28/01				6.34	98.85	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA	
	06/21/01				7.88	97.31	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA	
	09/23/01				6.98	98.21	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA	
	12/31/01				5.01	100.18	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA	
	03/14/02				5.93	99.26	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA	
	04/17/02				5.37	99.82	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	8.5	NA	NA	
	08/08/02				6.85	98.34	ND<50 ^b	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	0.7	7.3	
	12/12/02				6.53	98.66	ND<50 ^d	2.2	4.7	1.3	6.8	ND<2.5	1.3	7.0	
	03/20/03 ^e				6.40	98.79	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.7	7.1	
	06/23/03				6.72	98.47	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.3	7.2	
	09/22/03 ^f				10.63	6.76	3.87	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.7	7.2
	12/03/03				6.56	4.07				Sampled semi-annually 1st and 3rd quarter.					
	03/18/04	5.98	4.65		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.7	7.3			
	05/25/04	6.77	3.86				Sampled semi-annually 1st and 3rd quarter.								

Table 1
Groundwater Elevation and Analytical Data

Atlantic Richfield Company Service Station #4494
566 Hegenberger Road
Oakland, California

Well Number	Date Sampled	Top of Riser Elevation (ft)	Depth to Top of Screen (ft, bgs)	Total Well Depth (ft, bgs)	Depth to Groundwater (ft, TOC)	Groundwater Elevation (ft)	GRO/TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Dissolved Oxygen (mg/L) (6)	pH (9)
MW-6	06/20/00	105.07	8.0	17.8	6.24	98.83	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<10	NA	NA
	09/28/00				6.45	98.62	ND<50	ND<0.5	ND<0.5	ND<1.0	ND<2.5	NA	NA	
	12/17/00				6.26	98.81	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA	
	03/28/01				6.10	98.97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA	
	06/21/01				7.68	97.39	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA	
	09/23/01				6.72	98.35	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA	
	12/23/01				4.68	100.39	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA	
	03/14/02				5.55	99.52	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA	
	04/17/02				4.96	100.11	ND<50	ND<0.5	ND<0.5	ND<0.5	7	NA	NA	
	08/08/02				6.46	98.61	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<2.5	0.7	7.3	
	12/12/02	6.18	98.89	65 ^d	3.3	8.4	2.7	14	ND<2.5	1.1	6.9			
	03/20/03 ^e	6.18	98.89	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.2	7.0			
	06/23/03	6.15	98.92	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.0	7.1			
	09/22/03 ^f	10.41	6.43	3.98	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.5	7.0			
	12/03/03	6.12	4.29	Sampled semi-annually 1st and 3rd quarter.			ND<0.50	ND<0.50	ND<0.50	0.9	7.2			
	03/18/04	5.40	5.01	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.9	7.2				
	05/25/04	6.30	4.11	Sampled semi-annually 1st and 3rd quarter.			ND<0.50	ND<0.50	ND<0.50	0.9	7.2			
MW-7	06/20/00	105.52	9.0	13.7	8.65	96.87	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	13/13 ^a	NA	NA
	09/28/00				8.75	96.77	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	136/261 ^a	NA	NA
	12/17/00				8.62	96.90	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	27.1	NA	NA
	03/28/01				8.66	96.86	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	51.5	NA	NA
	06/21/01				8.84	96.68	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	53	NA	NA
	09/23/01				8.75	96.77	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	35/21 ^a	NA	NA
	12/23/01				7.79	97.73	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	440	NA	NA
	03/14/02				8.30	97.22	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	18	NA	NA
	04/17/02				7.43	98.09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	67	NA	NA
	08/08/02				8.61	96.91	55 ^b	ND<0.5	ND<0.5	ND<0.5	ND<0.5	130/100 ^a	1.1	7.1
	12/12/02	**	8.55	NC	75 ^d	ND<0.5	ND<0.5	ND<0.5	160/130 ^a	1.2	7.0			
	03/20/03 ^e	8.38	NC	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	32	2.2	7.2			
	06/23/03	8.37	NC	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	14	0.8	7.1			
	09/22/03 ^f	10.51	8.95	1.56	ND<50	ND<0.50	ND<0.50	ND<0.50	5.3	2.2	7.2			
	12/03/03	8.86	1.65	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4.2	0.1	7.2			
	03/18/04	8.03	2.48	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.0	1.0	7.2			
	05/25/04	8.37	2.14	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4.1	0.7	7.1			

**Table 1
Groundwater Elevation and Analytical Data**

Atlantic Richfield Company Service Station #4494
566 Hegenberger Road
Oakland, California

Well Number	Date Sampled	Top of Riser Elevation (ft)	Depth to Top of Screen (ft., bgs)	Total Well Depth (ft., bgs)	Depth to Groundwater (ft., TOC)	Groundwater Elevation (ft)	GRO/TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Dissolved Oxygen (mg/L) ^(d)	pH ^(e)	
RW-1	06/20/00	NE	NA	11.0	8.21	NC	ND<50	ND<0.5	1.1	ND<0.5	ND<1.0	ND<1.0	NA	NA	
	09/28/00				8.28	NC	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<2.5	NA	NA	
	12/17/00				8.29	NC	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA	
	03/28/01				8.16	NC	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA	
	06/21/01				9.37	NC	160	5.1	ND<0.5	1.1	3.2	ND<2.5	NA	NA	
	09/23/01				8.75	NC	57	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA	
	12/31/01				6.80	NC	520	3.1	ND<0.5	6.4	4.7	ND<2.5	NA	NA	
	03/14/02				7.86	NC	240	3.7	ND<0.5	0.7	2.8	ND<2.5	NA	NA	
	04/17/02				7.13	NC	ND<50	ND<0.5	1.6	ND<0.5	0.72	ND<2.5	NA	NA	
	08/08/02				8.48	NC	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.7/ND<0.5 ^(c)	1.1	7.0	
	12/12/02				8.63	NC	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	1.9	6.9	
	03/20/03 ^(f)				8.08	NC	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.9	7.3	
	06/23/03				8.28	NC	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.1	7.3	
	09/22/03 ^(f)	11.97			8.42	3.55	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.8	7.1	
	12/03/03				8.05	3.92			Sampled semi-annually 1st and 3rd quarter.						
	03/18/04				7.18	4.79		50	0.54	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.9	7.1
	05/25/04				8.32	3.65									

ft., bgs = feet below ground surface

GRO = Gasoline Range Organics

MTBE = Methyl tertiary butyl ether analyzed by EPA Method 8021B unless otherwise noted. (prior to 3/20/03)

mg/L = Milligrams per liter

NA = Not available, not applicable, or not analyzed

NC = Not calculated

ND< = Not detected at or above specified laboratory reporting limit.

NE = Not surveyed/No elevation

NS = Not sampled

TOC = Top of casing

TPH = Total Petroleum Hydrocarbons analyzed by EPA Method 8015M. (prior to 3/20/03)

µg/L = Micrograms per liter

a = Analyzed by EPA Method 8260

b = Hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.

c = This sample was analyzed beyond the EPA recommended holding time. The results may still be useful for their intended purpose.

d = Analyzed by EPA Method 8215B/8021B for Gasoline Range Organics

e = TPH-g, BTEX, and MTBE analyzed by EPA method 8260B beginning on 2003 sampling event (03/20/03)

f = Top of casing elevations were re-surveyed on July 18, 2003 by URS Corporation of Pleasant Hill, CA

g = pH and DO are field measurements

** = Top of casing was found shattered on December 12, 2002. Top of Casing (TOC) unknown.

Please note that beginning in the Fourth Quarter 2003, the laboratory modified the reported analyte list. Total Petroleum Hydrocarbons as Gasoline (TPH_g) has been changed to Gasoline Range Organics (GRO). The resulting data may be impacted by the potential inclusion of non-TPH_g analytes within the requested fuel range resulting in a higher concentration being reported. Beginning in the Second Quarter 2004, the carbon range for GRO was changed from C6-C10 to C4-C12. The data within this table collected prior to August 2002 was provided to URS by Atlantic Richfield Company and their previous consultants. URS has not verified the accuracy of this information.

Source:

Table 2
Groundwater Flow Direction and Gradient

Atlantic Richfield Company Service Station #4494
566 Hegenberger Road
Oakland, California

Date Measured	Average Flow Direction	Average Hydraulic Gradient
06/20/00	North-Northeast	0.015
09/28/00	North	0.018
12/17/00	North-Northwest	0.013
03/28/01	Northwest	0.011
06/21/01	North	0.017
09/23/01	North	0.020
12/31/01	North-Northwest	0.023
03/14/02	North-Northwest	0.017
04/14/02	Northwest	0.007
08/08/02	North-Northwest	0.022
12/12/02	North-Northwest	0.017
03/20/03	North-Northwest	0.016
06/23/03	Northwest	0.014
09/22/03	Northwest	0.017
12/03/03	Northwest	0.013
03/18/04	North-Northwest	0.011
05/25/04	North-Northwest	0.011

Note:

The data within this table collected prior to August 2002 was provided to URS by Atlantic Richfield Company and their previous consultants. URS has not verified the accuracy of this information.

**Table 3
Fuel Additive Analytical Data**

Atlantic Richfield Company Service Station # 4494
566 Hegenberger Road
Oakland, California

Well Number	Date Sampled	Ethanol (µg/L)	TBA (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-1	03/20/03	ND<1,000	640	780	ND<5.0	ND<5.0	ND<5.0	NA	NA
	06/23/03	ND<1,000	ND<200	260	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	09/22/03	ND<100	250	17	ND<0.50	ND<0.50	ND<0.50	NA	NA
	12/03/03	ND<500	ND<100	260	ND<2.5	ND<2.5	ND<2.5	NA	NA
	03/18/04	ND<500	ND<100	130	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5
	05/25/04	ND<500	ND<100	120	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5
MW-3	03/20/03	ND<100	ND<20	601	ND<0.50	ND<0.50	1.1	NA	NA
	06/23/03	ND<100	ND<20	5.2	ND<0.50	ND<0.50	0.75	ND<0.50	ND<0.50
	09/22/03	ND<100	ND<20	3.9	ND<0.50	ND<0.50	ND<0.50	NA	NA
	03/18/04	ND<100	ND<20	4.6	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-4	03/20/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	NA
	06/23/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	09/22/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	NA
	03/18/04	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-5	03/20/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	NA
	06/23/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	09/22/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	NA
	03/18/04	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-6	03/20/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	NA
	06/23/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	09/22/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	NA
	03/18/04	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-7	03/20/03	ND<100	ND<20	32	ND<0.50	ND<0.50	0.62	NA	NA
	06/23/03	ND<100	170	14	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	09/22/03	ND<100	170	5.3	ND<0.50	ND<0.50	ND<0.50	NA	NA
	12/03/03	ND<100	85	4.2	ND<0.50	ND<0.50	ND<0.50	NA	NA
	03/18/04	ND<100 ^(a)	ND<20	3.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	05/25/04	ND<100	43	4.1	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
RW-1	03/20/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	NA
	06/23/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	09/22/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	NA
	03/18/04	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50

Table 3
Fuel Additive Analytical Data

Atlantic Richfield Company Service Station # 4494
566 Hegenberger Road
Oakland, California

Note = All fuel oxygenate compounds analyzed using EPA Method 8260B
1,2-DCA = 1,2-Dichloroethane
DIPE = Di-isopropyl ether
EDB = 1,2-Dibromoethane
ETBE = Ethyl tert butyl ether
MTBE = Methyl tert-butyl ether
NA = Not analyzed
ND< = Not detected at or above laboratory reporting limit
TAME = tert-Amyl methyl ether
TBA = tert-Butyl alcohol
µg/L = micrograms per liter

Notes:

- a = The continuing calibration verification was outside of client contractual acceptance limits. However, it was within method acceptance limits and should be useful for its intended purpose.



9 June, 2004

Scott Robinson
URS Corporation [Arco]
1333 Broadway, Suite 800
Oakland, CA 94612

RE: ARCO #4494, Oakland, CA
Work Order: MNE0656

Enclosed are the results of analyses for samples received by the laboratory on 05/25/04 16:51. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lisa Race
Senior Project Manager

CA ELAP Certificate #1210

URS Corporation [Arco]
1333 Broadway, Suite 800
Oakland CA, 94612

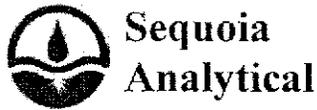
Project: ARCO #4494, Oakland, CA
Project Number: INTRIM-50443
Project Manager: Scott Robinson

MNE0656
Reported:
06/09/04 18:22

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	MNE0656-01	Water	05/25/04 13:55	05/25/04 16:51
MW-7	MNE0656-02	Water	05/25/04 13:35	05/25/04 16:51
TB-4494-05252004	MNE0656-03	Water	05/25/04 14:00	05/25/04 16:51

The carbon range for the TPH-GRO has been changed from C6-C10 to C4-C12. The carbon range for TPH-DRO has been changed from C10-C28 to C10-C36. EPA 8015B has been modified to better meet the requirements of California regulatory agencies. These samples were received with no custody seals.



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 Morgan Hill, CA 95037
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URS Corporation [Arco]
 1333 Broadway, Suite 800
 Oakland CA, 94612

Project: ARCO #4494, Oakland, CA
 Project Number: INTRIM-50443
 Project Manager: Scott Robinson

MNE0656
 Reported:
 06/09/04 18:22

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
MW-1 (MNE0656-01) Water Sampled: 05/25/04 13:55 Received: 05/25/04 16:51										
Ethanol	ND	500		ug/l	5	4F07003	06/07/04	06/07/04	EPA 8260B	
tert-Butyl alcohol	ND	100		"	"	"	"	"	"	
Methyl tert-butyl ether	120	2.5		"	"	"	"	"	"	
Di-isopropyl ether	ND	2.5		"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.5		"	"	"	"	"	"	
tert-Amyl methyl ether	ND	2.5		"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.5		"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	2.5		"	"	"	"	"	"	
Benzene	ND	2.5		"	"	"	"	"	"	
Toluene	ND	2.5		"	"	"	"	"	"	
Ethylbenzene	ND	2.5		"	"	"	"	"	"	
Xylenes (total)	ND	2.5		"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	250		"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		120 %		78-129		"	"	"	"	
MW-7 (MNE0656-02) Water Sampled: 05/25/04 13:35 Received: 05/25/04 16:51										
Ethanol	ND	100		ug/l	1	4F07003	06/07/04	06/07/04	EPA 8260B	
tert-Butyl alcohol	43	20		"	"	"	"	"	"	
Methyl tert-butyl ether	4.1	0.50		"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50		"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50		"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50		"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50		"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50		"	"	"	"	"	"	
Benzene	ND	0.50		"	"	"	"	"	"	
Toluene	ND	0.50		"	"	"	"	"	"	
Ethylbenzene	ND	0.50		"	"	"	"	"	"	
Xylenes (total)	ND	0.50		"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	50		"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		123 %		78-129		"	"	"	"	

URS Corporation [Arco]
 1333 Broadway, Suite 800
 Oakland CA, 94612

 Project: ARCO #4494, Oakland, CA
 Project Number: INTRIM-50443
 Project Manager: Scott Robinson

 MNE0656
 Reported:
 06/09/04 18:22

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4F07003 - EPA 5030B P/T
Blank (4F07003-BLK1)

Prepared & Analyzed: 06/07/04

Ethanol	ND	100	ug/l							
tert-Butyl alcohol	ND	5.0	"							
Methyl tert-butyl ether	ND	0.50	"							
Di-isopropyl ether	ND	0.50	"							
Ethyl tert-butyl ether	ND	0.50	"							
tert-Amyl methyl ether	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Gasoline Range Organics (C4-C12)	ND	50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>5.84</i>		<i>"</i>	<i>5.00</i>		<i>117</i>	<i>78-129</i>			

Laboratory Control Sample (4F07003-BS1)

Prepared & Analyzed: 06/07/04

Ethanol	249	100	ug/l	200		124	31-186			
tert-Butyl alcohol	47.1	5.0	"	50.0		94.2	0-206			
Methyl tert-butyl ether	10.1	0.50	"	10.0		101	63-137			
Di-isopropyl ether	10.0	0.50	"	10.0		100	76-130			
Ethyl tert-butyl ether	10.5	0.50	"	10.0		105	61-141			
tert-Amyl methyl ether	9.06	0.50	"	10.0		90.6	56-140			
1,2-Dichloroethane	10.2	0.50	"	10.0		102	77-136			
1,2-Dibromoethane (EDB)	9.37	0.50	"	10.0		93.7	77-132			
Benzene	9.48	0.50	"	10.0		94.8	78-124			
Toluene	8.53	0.50	"	10.0		85.3	78-129			
Ethylbenzene	9.33	0.50	"	10.0		93.3	84-117			
Xylenes (total)	27.5	0.50	"	30.0		91.7	83-125			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>5.57</i>		<i>"</i>	<i>5.00</i>		<i>111</i>	<i>78-129</i>			

URS Corporation [Arco]
 1333 Broadway, Suite 800
 Oakland CA, 94612

 Project: ARCO #4494, Oakland, CA
 Project Number: INTRIM-50443
 Project Manager: Scott Robinson

 MNE0656
 Reported:
 06/09/04 18:22

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4F07003 - EPA 5030B P/T
Laboratory Control Sample (4F07003-BS2)

Prepared & Analyzed: 06/07/04

Methyl tert-butyl ether	9.06	0.50	ug/l	9.92		91.3	63-137			
Benzene	5.04	0.50	"	6.40		78.8	78-124			
Toluene	30.4	0.50	"	29.7		102	78-129			
Ethylbenzene	7.84	0.50	"	6.96		113	84-117			
Xylenes (total)	36.5	0.50	"	33.7		108	83-125			
Gasoline Range Organics (C4-C12)	426	50	"	440		96.8	70-124			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>5.38</i>		<i>"</i>	<i>5.00</i>		<i>108</i>	<i>78-129</i>			

Laboratory Control Sample Dup (4F07003-BSD1)

Prepared & Analyzed: 06/07/04

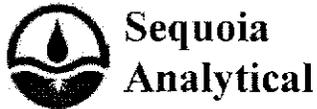
Ethanol	226	100	ug/l	200		113	31-186	9.68	37	
tert-Butyl alcohol	48.8	5.0	"	50.0		97.6	0-206	3.55	22	
Methyl tert-butyl ether	10.6	0.50	"	10.0		106	63-137	4.83	13	
Di-isopropyl ether	10.5	0.50	"	10.0		105	76-130	4.88	9	
Ethyl tert-butyl ether	11.4	0.50	"	10.0		114	61-141	8.22	9	
tert-Amyl methyl ether	9.44	0.50	"	10.0		94.4	56-140	4.11	12	
1,2-Dichloroethane	10.8	0.50	"	10.0		108	77-136	5.71	13	
1,2-Dibromoethane (EDB)	9.77	0.50	"	10.0		97.7	77-132	4.18	9	
Benzene	9.86	0.50	"	10.0		98.6	78-124	3.93	12	
Toluene	9.32	0.50	"	10.0		93.2	78-129	8.85	10	
Ethylbenzene	9.54	0.50	"	10.0		95.4	84-117	2.23	10	
Xylenes (total)	28.5	0.50	"	30.0		95.0	83-125	3.57	11	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>5.67</i>		<i>"</i>	<i>5.00</i>		<i>113</i>	<i>78-129</i>			

Matrix Spike (4F07003-MS1)

Source: MNE0696-01

Prepared: 06/07/04 Analyzed: 06/08/04

Methyl tert-butyl ether	3820	50	ug/l	992	2700	113	63-137			
Benzene	563	50	"	640	8.0	86.7	78-124			
Toluene	3170	50	"	2970	13	106	78-129			
Ethylbenzene	759	50	"	696	ND	109	84-117			
Xylenes (total)	3740	50	"	3370	ND	111	83-125			
Gasoline Range Organics (C4-C12)	46400	5000	"	44000	ND	105	70-124			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>5.84</i>		<i>"</i>	<i>5.00</i>		<i>117</i>	<i>78-129</i>			



**Sequoia
Analytical**

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Morgan Hill, CA 95037
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URS Corporation [Arco]
1333 Broadway, Suite 800
Oakland CA, 94612

Project: ARCO #4494, Oakland, CA
Project Number: INTRIM-50443
Project Manager: Scott Robinson

MNE0656
Reported:
06/09/04 18:22

**Volatile Organic Compounds by EPA Method 8260B - Quality Control
Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4F07003 - EPA 5030B P/T

Matrix Spike Dup (4F07003-MSD1)	Source: MNE0696-01			Prepared: 06/07/04		Analyzed: 06/08/04				
Methyl tert-butyl ether	3970	50	ug/l	992	2700	128	63-137	3.85	13	
Benzene	586	50	"	640	8.0	90.3	78-124	4.00	12	
Toluene	3350	50	"	2970	13	112	78-129	5.52	10	
Ethylbenzene	765	50	"	696	ND	110	84-117	0.787	10	
Xylenes (total)	3670	50	"	3370	ND	109	83-125	1.89	11	
Gasoline Range Organics (C4-C12)	50200	5000	"	44000	ND	114	70-124	7.87	20	
Surrogate: 1,2-Dichloroethane-d4	5.94		"	5.00		119	78-129			

Sequoia Analytical - Morgan Hill

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.

URS Corporation [Arco]
1333 Broadway, Suite 800
Oakland CA, 94612Project: ARCO #4494, Oakland, CA
Project Number: INTRIM-50443
Project Manager: Scott RobinsonMNE0656
Reported:
06/09/04 18:22**Notes and Definitions**

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference



Chain of Custody Record

MINE 0656

Project Name 4494 GWM
 BP BU/GEM CO Portfolio Retail
 BP Laboratory Contract Number: Atlantic Richfield Company

On-site Time: <u>11:50</u>	Temp: <u>68°</u>
Off-site Time:	Temp: <u>70°</u>
Sky Conditions: <u>Partly Cloudy</u>	
Meteorological Events: <u>None</u>	
Wind Speed: <u>NA</u>	Direction: <u>NA</u>

Date: 5-25-04 Requested Due Date (mm/dd/yy) 14 day TAT

Send To: Lab Name: <u>SEQUOIA</u> Lab Address: <u>885 Jarvis Dr.</u> <u>Morgan Hill, CA 95037</u>	BP/GEM Facility No.: <u>ARCO 4494</u> BP/GEM Facility Address: <u>566 HEGENBERGER, OAKLAND, CA</u> Site ID No. <u>ARCO 4494</u> Site Lat/Long: California Global ID #: <u>T0600100104</u>	Consultant/Contractor: <u>URS</u> Address: <u>1333 Broadway, Suite 800</u> <u>Oakland, CA 94612</u> e-mail EDD: <u>donna.casper@URSCorp.com</u> Consultant/Contractor Project No.: <u>J5-00004494.01 00427</u> Consultant Tele/Fax: <u>510-893-3600/510-874-3268</u> Consultant/Contractor PM: <u>Scott Robinson</u> Invoice to: <u>Consultant/Contractor of BP/GEM</u> (Circle one) BP/GEM Work Release No: <u>INTRIM -50443</u>
Lab PM <u>Lisa Race</u> Tele/Fax: <u>408-776-9600 / 408-782-6300</u> Report Type & QC Level: <u>1 Send EDF Reports</u> BP/GEM Account No.:	BP/GEM PM Contact: <u>PAUL SUPPLE</u> Address: <u>P.O. Box 6549</u> <u>Moraga, CA 94570</u> Tele/Fax: <u>925-299-8891/925-299-8872</u>	

Item No.	Sample Description	Time	Matrix				Laboratory No.	No. of containers	Preservatives				Requested Analysis							Sample Point Lat/Long and Comments
			Soil/Solid	Water/Liquid	Sediments	Air			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	GRO / BTEX E-8015/8221/8260	DRO w/SGC (8015)	MIBE (8021)	MIBE (8260)	MTBE, TAME, ETBE DIPE, TBA (8260)	1,2-DCA & EDB (8260)	Ethanol (8260)	
+ 1	MW-1	1355	X				01	3					X			X	X	X		
+ 2	MW-7	1335	X				02	3					X			X	X	X		
+ 3	TB-4494.05252014	1400	X				03	2												on hold
4																				
5																				
6																				
7																				
8																				
9																				
10																				

Sampler's Name: <u>Matthew Dyck</u>	Relinquished By / Affiliation: <u>Matthew Dyck / Blaine Tech</u>	Date: <u>5/25/04</u>	Time: <u>1535</u>	Accepted By / Affiliation: <u>Marlene Jule / SEQUOIA</u>	Date: <u>5/25/04</u>	Time: <u>1535</u>
Sampler's Company: <u>Blaine Tech</u>		Date: <u>5/25/04</u>	Time: <u>16:51</u>		Date: <u>5/25/04</u>	Time: <u>16:51</u>
Method:						
Tracking No.:						

Instructions: Address Invoice to BP/GEM but send to URS for approval

Temperature Blank Yes No Cooler Temperature on Receipt °F/C Trip Blank Yes No

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: URS
 REC. BY (PRINT): Andrew Truffe
 WORKORDER: MNE 0656

DATE REC'D AT LAB: 5/25/04
 TIME REC'D AT LAB: 16:51
 DATE LOGGED IN: 5-26-04

DRINKING WATER for
 regulatory purposes: YES / NO
 WASTE WATER for
 regulatory purposes: YES / NO

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s) Present / <input checked="" type="checkbox"/> Absent Intact / Broken*	01		MW-1	3 VOA	HCL	Liquid	5/25/04	4092090 = Lot #
	02		MW-7	↓	↓	↓	↓	4092090 = Lot #
2. Chain-of-Custody <input checked="" type="checkbox"/> Present / Absent*	03		TB-444-0525/2004	2 VOA	↓	↓	↓	4128070 = Lot #
3. Traffic Reports or Packing List: Present / <input checked="" type="checkbox"/> Absent								
4. Airbill: Airbill / Sticker Present / <input checked="" type="checkbox"/> Absent								
5. Airbill #:								
6. Sample Labels: <input checked="" type="checkbox"/> Present / Absent								
7. Sample IDs: <input checked="" type="checkbox"/> Listed / Not Listed on Chain-of-Custody								
8. Sample Condition: <input checked="" type="checkbox"/> Intact / Broken* / Leaking*								
9. Does information on chain-of-custody, traffic reports and sample labels agree? <input checked="" type="checkbox"/> Yes / No*								
10. Sample received within hold time: <input checked="" type="checkbox"/> Yes / No*								
11. Adequate sample volume received? <input checked="" type="checkbox"/> Yes / No*								
12. Proper Preservatives used: <input checked="" type="checkbox"/> Yes / No*								
13. Temp Rec. at Lab: <u>4°C</u> Is temp 4 +/- 2°C? <input checked="" type="checkbox"/> Yes / No**								

ACT

5/25/04

5/25/04

(Acceptance range for samples requiring thermal pres.)
 Exception (if any): METALS / DFF ON ICE
 Problem COC

*IF CIRCLED, CONTACT PROJECT MANAGER AND ATTACH RECORD OF RESOLUTION.