RO 223

Denis L. Brown

Shell Oil Products US
HSE – Environmental Services
20945 S. Wilmington Ave.
Carson, CA 90810-1039
Tel (707) 865 0251
Fax (707) 865 2542
Email denis.l.brown@shell.com

August 11, 2005
Jerry Wickham
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Second Quarter 2005 Monitoring Report
Shell-branded Service Station
540 Hegenberger Road
Oakland, California
SAP Code 135694
Incident No. 98995752

Dear Mr. Wickham:

Attached for your review and comment is a copy of the *Second Quarter 2005 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.

If you have any questions or concerns, please call me at (707) 865-0251.

Sincerely,

Denis L. Brown
Sr. Environmental Engineer

CAMBRIA

August 11, 2005

Jerry Wickham
Hazardous Materials Specialist
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: **Second Quarter 2005 Monitoring Report**
Shell-branded Service Station
540 Hegenberger Road
Oakland, California
Incident #98995752
Cambria Project #247-0414-002
ACHCSA Case # RO-0223

Dear Mr. Wickham:

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 2005 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, mobile groundwater extraction (GWE) using a vacuum truck was performed to remove dissolved-phase hydrocarbons and methyl tertiary butyl ether (MTBE) from beneath the site. From June through December 2000, mobile dual-phase vacuum extraction (DVE) using a vacuum truck and carbon vapor abatement was conducted to enhance GWE and to extract vapor-phase hydrocarbons and MTBE from the soil as well. DVE was discontinued after the December 2000 event, but was reinstated on a monthly basis in May 2001. Due to low vapor mass-removal rates, DVE was

Cambria Environmental Technology, Inc.

5900 Hollis Street
Suite A
Emeryville, CA 94608
Tel (510) 420-0700
Fax (510) 420-9170

discontinued in October 2001, and monthly GWE was reinstated. Wells MW-1 and MW-3 and tank backfill well BW-D were used for extraction until April 2002, when extraction from the tank backfill was switched from well BW-D to BW-B due to higher historical MTBE concentrations observed in this well. A total of 13.7 lbs. of MTBE was removed from the subsurface during mobile DVE and GWE events. Monthly GWE events were discontinued in March 2003 when construction of a fixed GWE system began.

GWE System: Based on the groundwater monitoring and GWE system data, which demonstrated decreased MTBE concentrations in groundwater, Cambria shut down GWE system operation on August 4, 2004. After reviewing the third quarter 2004 groundwater monitoring data, which showed rebound of MTBE concentrations in well MW-3 (28,000 parts per billion [ppb] on September 22, 2004), Cambria restarted the system on November 2, 2004, pumping only from well MW-3.

After the system was restarted, the fourth quarter groundwater monitoring data showed a significant decrease in MW-3 concentrations (84 ppb on December 22, 2004). Based on this and GWE system influent data from the first quarter 2005 (see Table 1), Cambria shut the system down again on March 2, 2005. MTBE concentrations across the site remained low during the first quarter 2005 sampling event (85 ppb MTBE in MW-3 on February 23, 2005), and the system remained off throughout the second quarter of 2005. After reviewing the second quarter 2005 groundwater monitoring data, which showed rebound of MTBE concentrations in well MW-3 (6,100 ppb on June 27, 2005), Cambria restarted the system on July 29, 2005, pumping only from well MW-3.

Table 1 summarizes GWE system analytical data. Table 2 summarizes the field data and system operation and calculates mass removal. Through March 2, 2005 (when the system was shut down), a total of 354,862 gallons of groundwater has been extracted. A total of 18.4 pounds of MTBE has been recovered.

ANTICIPATED THIRD QUARTER 2005 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 for these events. Cambria will prepare a report documenting those activities.

GWE System: The GWE system will remain on, pumping from well MW-3 only. Cambria will continue to evaluate subsequent groundwater monitoring and sampling data to determine the appropriate course of action for the GWE system.

CLOSING

We appreciate the opportunity to work with you on this project. Please call Cynthia Vasko at (510) 420-3344 if you have any questions or comments.

Sincerely,
Cambria Environmental Technology, Inc.

Cynthia Vasko
Project Engineer

for:
Matthew W. Derby, P.E.
Senior Project Engineer

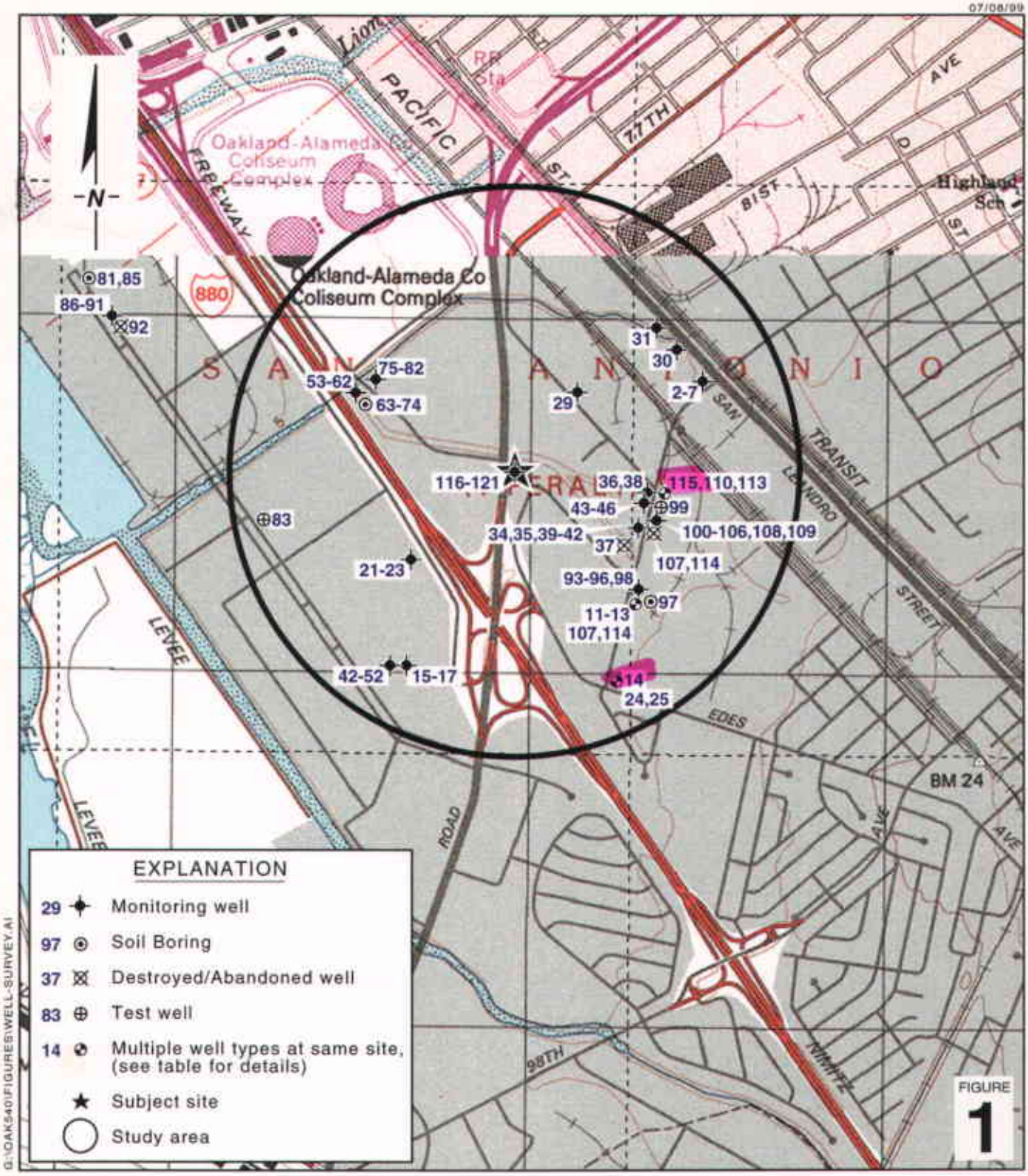
Figures: 1 - Vicinity/Area Well Survey Map
2 - Groundwater Elevation Contour Map

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: Denis Brown, Shell Oil Products US, 20945 S. Wilmington Ave., Carson, CA 90810

G:\Oakland 540 Hegenberger\Qm\2q05\2q05qm.doc



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

CAMBRIA

Area Well Survey

(1/2-Mile Radius)

08/02/05

Groundwater Elevation Contour Map

June 27, 2005

HEGENBERGER ROAD

EDES AVE

Shell-branded Service Station
540 Hegenberger

ARCO Service Station #4494
566 Hegenberger

Remediation compound

Remediation piping

dispensers

canwash

building

USTs

Former WIO UST

AM/PM Mini-Mart

Burger King Restaurant

Jack in the Box Restaurant

Days Inn

Laborers' International Union

Coliseum Way

Canal

ENTERPRISE WAY

MW-3
4.65
96
6,100

MW-1
4.09
<2.5
16

MW-5
4.05
<0.50
46

MW-4
2.40
<0.50
14

BW-D
NS
<0.50
1.8

MW-2
2.02
<0.50
28

BW-A

BW-B

BW-C

MW-1
4.70
<2.5
150

MW-4
4.80
<0.50 - 2/23/05
<0.50 - 2/23/05

MW-2
(destroyed 12/97)

RW-1
4.11
<0.50 - 2/23/05
<0.50 - 2/23/05

MW-5
4.37
<0.50 - 2/23/05
<0.50 - 2/23/05

MW-6
4.63
<0.50 - 2/23/05
5.0 - 2/23/05

MW-7
2.27
<0.50
4.2

MW-3
2.27
<0.50 - 2/23/05
<0.50 - 2/23/05

SB-1, SB-2, SB-3, SB-4, SB-5, SB-D, SB-E, SB-F, SB-G

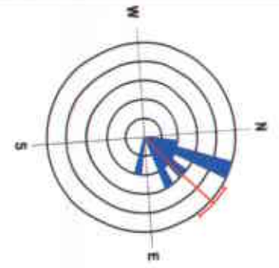
4.50, 4.00, 3.50, 3.00, 2.50

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

- Well designation
- Groundwater elevation, in feet above msl
- Benzene and MTBE concentrations are in parts per billion and are analyzed by EPA Method 8260.



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

0 20 40 80
Scale (ft)

FIGURE
2

Shell-branded Service Station
540 Hegenberger Road
Oakland, California
Incident No.98995752

CAMBRIA

G:\OAKLAND 540 HEGENBERGER\FIGURES\2QM05.DWG

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

	Influent			Midfluent 1			Midfluent 2			Effluent		
Sample Date (mm/dd/yyyy)	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
08/04/2004	<100	<1.0	160	<50	<0.50	<0.50	NS	NS	NS	<50	<0.50	<0.50
11/02/2004	<100	6.6	240	130	<0.50	<5.0	<50	<0.50	<5.0	NS	NS	NS

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

	Influent			Midfluent 1			Midfluent 2			Effluent		
Sample Date (mm/dd/yyyy)	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)
11/23/2004	<100	<1.0	170	<50	<0.50	<5.0	<50	<0.50	<5.0	<50	<0.50	<5.0
12/06/2004	<100	<1.0	91	<50	<0.50	<5.0	NS	NS	NS	<50	<0.50	<5.0
01/04/2005	51[b]	<0.50	12	<50	<0.50	<5.0	NS	NS	NS	NS	NS	NS
02/02/2005	87	<0.50	79	210	<0.50	<5.0	NS	NS	NS	NS	NS	NS
03/02/2005	<50	<0.50	58	<50	<0.50	<5.0	NS	NS	NS	<50	<0.50	<5.0

Abbreviations & Notes:

TPHg = Total purgeable hydrocarbons as gasoline
MTBE = Methyl tertiary butyl ether
Conc. = Concentration
ppb = parts per billion, equivalent to µg/l
TPHg, benzene, and MTBE analyzed by EPA Method 8260B
a = Hydrocarbons reported in the gasoline range do not match the laboratory gasoline standard.
b = The concentration reported reflects individual or discrete unidentified peaks not matching a typical fuel pattern.

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

			Period			TPHg			Benzene			MTBE		
Site Visit (mm/dd/yy)	Hour Meter (hours)	Flow Meter Reading (gal)	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	0.024		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
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	6,239	1.09	309,722		0.003	4.725		0.000	0.062		0.009	18.319
06/23/04	9209.9	315,074	4,512	0.39	314,234		0.002	4.727		0.000	0.062		0.007	18.326
07/08/04	9574.6	316,639	1,565	0.07	315,799	<100	0.001	4.728	<1.0	0.000	0.062	190	0.002	18.329

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

		Period				TPHg			Benzene			MTBE		
Site Visit (mm/dd/yy)	Hour Meter (hours)	Flow Meter Reading (gal)	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)
07/23/04	9933.6	325,405	8,767	0.41	324,565		0.004	4.731		0.000	0.062		0.014	18.342
08/04/04	10219.5	331,453	6,048	0.35	330,613	<100	0.003	4.734	<1.0	0.000	0.062	160	0.008	18.351
11/02/04	10221.8	331,745	292	2.12	330,905	<100	0.000	4.734	6.6	0.000	0.062	240	0.001	18.351
11/23/04	10578.6	338,624	6,879	0.32	337,784	<100	0.003	4.737	<1.0	0.000	0.062	170	0.010	18.361
12/06/04	10893.4	338,754	130	0.01	337,914	<100	0.000	4.737	<1.0	0.000	0.062	91	0.000	18.361
12/17/04	11154.0	344,387	5,633	0.36	343,547		0.002	4.739		0.000	0.062		0.004	18.365
01/04/05	11543.0	348,748	4,361	0.19	347,908	51	0.002	4.741	<0.50	0.000	0.062	12	0.000	18.366
01/21/05	11955.3	350,749	2,001	0.08	349,909		0.001	4.742		0.000	0.062		0.000	18.366
02/02/05	12153.7	353,595	2,846	0.24	352,755	87	0.002	4.744	<0.50	0.000	0.062	79	0.002	18.368
02/17/05	12509.4	354,130	535	0.03	353,290		0.000	4.744		0.000	0.062		0.000	18.368
03/02/05	12820.7	355,702	1,572	0.08	354,862	<50	0.000	4.745	<0.50	0.000	0.062	58	0.001	18.369
		Total Extracted Volume=		**354,862**			**Total Pounds Removed:**	**4.745**	**Total Pounds Removed:**		**0.062**	**Total Pounds Removed:**		**18.369**
		Average Period Operational Flow Rate=		**0.15**			**Total Gallons Removed:**	**0.779**	**Total Gallons Removed:**		**0.008**	**Total Gallons Removed:**		**2.975**

Abbreviations & Notes:

TPHg = Total purgeable hydrocarbons as gasoline
MTBE = Methyl tertiary 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 ($g/10^6 \mu g$) 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, benzene = 0.88 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.

GROUNDWATER SAMPLING SPECIALISTS
SINCE 1985

July 15, 2005

Denis Brown
Shell Oil Products US
20945 South Wilmington Avenue
Carson, CA 90810

Second Quarter 2005 Groundwater Monitoring at
Shell-branded Service Station
540 Hegenberger Road
Oakland, CA

Monitoring performed on June 27, 2005

Groundwater Monitoring Report **050627-DA-2**

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/cl

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

cc: Anni Kreml
Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, 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)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
MW-1 (a)	8/26/1998	2,700	28	55	59	39	33,000	NA	NA	NA	NA	NA	NA	10.54	7.91	2.63	1.8
MW-1 (b)	8/26/1998	<1,000	22	<10	<10	<10	17,000	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	10.54	8.75	1.79	1.9
MW-1	3/29/1999	<2,000	<20.0	<20.0	<20.0	<20.0	693,000	NA	NA	NA	NA	NA	NA	10.54	8.32	2.22	2.0
MW-1	6/22/1999	20,000	<200	<200	<200	<200	150,000	NA	NA	NA	NA	NA	NA	10.54	9.05	1.49	1.7
MW-1	9/30/1999	<2,500	<25.0	<25.0	<25.0	<25.0	30,900	NA	NA	NA	NA	NA	NA	10.54	8.35	2.19	2.6
MW-1	11/19/1999	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	10.54	9.65	0.89	NA
MW-1	12/2/1999	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	10.54	8.86	1.68	1.2
MW-1	3/2/2000	<2,500	<25.0	<25.0	<25.0	<25.0	27,600	NA	NA	NA	NA	NA	NA	10.54	8.83	1.71	3.2
MW-1	6/8/2000	<2,000	<20.0	<20.0	<20.0	<20.0	59,000	67,600	NA	NA	NA	NA	NA	10.54	7.78	2.76	1.9
MW-1	9/5/2000	<10,000	411	<100	<100	<100	71,100	115,000e	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	10.54	7.65	2.89	NA
MW-1	3/9/2001	<10,000	1,390	<100	<100	<100	89,600	164,000	NA	NA	NA	NA	NA	10.54	6.44	4.10	NA
MW-1	6/27/2001	<5,000	<50	<50	<50	<50	NA	19,000	NA	NA	NA	NA	NA	10.54	8.46	2.08	NA
MW-1	9/19/2001	<5,000	<50	<50	<50	<50	NA	52,000	NA	NA	NA	NA	NA	10.54	8.10	2.44	NA
MW-1	12/31/2001	<5,000	<25	<25	<25	<25	NA	17,000	NA	NA	NA	NA	NA	10.54	7.31	3.23	NA
MW-1	3/14/2002	<20,000	<200	<200	<200	<200	NA	60,000	NA	NA	NA	NA	NA	10.54	7.68	2.86	NA
MW-1	6/25/2002	<5,000	<50	<50	<50	<50	NA	34,000	NA	NA	NA	NA	NA	10.54	8.40	2.14	NA
MW-1	9/19/2002	<2,500	<25	<25	<25	<25	NA	18,000	NA	NA	NA	NA	NA	10.52	8.58	1.94	NA
MW-1	12/12/2002	<5,000	<50	<50	<50	<50	NA	30,000	NA	NA	NA	NA	NA	10.52	8.41	2.11	NA
MW-1	1/2/2003	NA	<0.50	<0.50	<0.50	<1.0	NA	NA	NA	NA	NA	NA	NA	10.52	7.45	3.07	NA
MW-1	03/20/2003 g	3,800	<25	<25	<25	<25	5,500	NA	NA	NA	NA	NA	NA	10.52	8.21	2.31	NA
MW-1	6/23/2003	<10,000	<100	<100	<100	<200	NA	35,000	NA	NA	NA	NA	NA	10.52	9.02	1.50	NA
MW-1	9/22/2003	<5,000	<50	<50	<50	<100	NA	15,000	NA	NA	NA	NA	NA	10.52	15.74	-5.22	NA
MW-1	12/3/2003	<1,300	<13	<13	<13	<25	NA	3,600	NA	NA	NA	NA	NA	10.52	18.35 h	NA	NA
MW-1	3/18/2004	<250	<2.5	<2.5	<2.5	<5.0	NA	570	NA	NA	NA	NA	NA	10.52	7.32	3.20	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)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
MW-1	5/25/2004	<250	<2.5	<2.5	<2.5	<5.0	NA	250	NA	NA	NA	NA	NA	10.52	6.80	3.72	NA
MW-1	9/22/2004	<2,000	<20	<20	<20	<40	NA	170	<80	<80	<80	20,000	<2,000	10.52	6.55	3.97	NA
MW-1	12/22/2004	<500	<5.0	<5.0	<5.0	<10	NA	57	NA	NA	NA	NA	NA	10.52	6.44	4.08	NA
MW-1	2/23/2005	<2,000	<20	<20	<20	<40	NA	110	NA	NA	NA	NA	NA	10.52	5.79	4.73	NA
MW-1	**6/27/2005**	**<250**	**<2.5**	**<2.5**	**<2.5**	**<5.0**	**NA**	**16**	**NA**	**NA**	**NA**	**NA**	**NA**	**10.52**	**6.43**	**4.09**	**NA**
MW-2 (a)	8/26/1998	<250	3.2	<2.5	<2.5	<2.5	4,000	NA	NA	NA	NA	NA	NA	9.21	7.18	2.03	2.4
MW-2 (b)	8/26/1998	<250	3.1	<2.5	<2.5	<2.5	4,800	NA	NA	NA	NA	NA	NA	9.21	7.18	2.03	2.7
MW-2 (D)(b)	8/26/1998	<250	4.8	<2.5	<2.5	6.0	3,300	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	9.21	7.34	1.87	2.1
MW-2	3/29/1999	235	<0.500	<0.500	<0.500	3.4	101	NA	NA	NA	NA	NA	NA	9.21	6.85	2.36	2.0
MW-2	6/22/1999	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	NA	NA	9.21	7.10	2.11	1.9
MW-2	9/30/1999	<50.0	<0.500	<0.500	<0.500	<0.500	1,700	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	9.21	8.61	0.60	1.4
MW-2	3/2/2000	<500	11.5	<5.00	<5.00	<5.00	5,280	NA	NA	NA	NA	NA	NA	9.21	6.33	2.88	0.4
MW-2	6/8/2000	<50.0	0.670	<0.500	<0.500	<0.500	3,160	NA	NA	NA	NA	NA	NA	9.21	6.87	2.34	1.6
MW-2	9/5/2000	<1,000	<10.0	<10.0	<10.0	<10.0	9,600	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	9.21	6.76	2.45	NA
MW-2	3/9/2001	<500	<5.00	<5.00	<5.00	<5.00	17,200	NA	NA	NA	NA	NA	NA	9.21	6.28	2.93	NA
MW-2	6/27/2001	<100	1.4	<1.0	<1.0	<2.0	NA	470	NA	NA	NA	NA	NA	9.21	7.12	2.09	NA
MW-2	9/19/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	330	NA	NA	NA	NA	NA	9.21	7.17	2.04	NA
MW-2	12/31/2001	<100	<1.0	<1.0	<1.0	<1.0	NA	420	NA	NA	NA	NA	NA	9.21	6.24	2.97	NA
MW-2	3/14/2002	<250	4.5	3.3	<2.5	<2.5	NA	1,600	NA	NA	NA	NA	NA	9.21	6.72	2.49	NA
MW-2	6/25/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	110	NA	NA	NA	NA	NA	9.21	7.23	1.98	NA
MW-2	9/19/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	90	NA	NA	NA	NA	NA	9.19	7.48	1.71	NA
MW-2	12/12/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	170	NA	NA	NA	NA	NA	9.19	7.33	1.86	NA
MW-2	03/20/2003 g	56	<0.50	<0.50	<0.50	<0.50	58	NA	NA	NA	NA	NA	NA	9.19	7.65	1.54	NA
MW-2	6/23/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	44	NA	NA	NA	NA	NA	9.19	8.72	0.47	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)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
MW-2	9/22/2003	<250	<2.5	<2.5	<2.5	<5.0	NA	37	NA	NA	NA	NA	NA	9.19	8.84	0.35	NA
MW-2	12/3/2003	<250	<2.5	<2.5	<2.5	<5.0	NA	99	NA	NA	NA	NA	NA	9.19	8.95	0.24	NA
MW-2	3/18/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	24	NA	NA	NA	NA	NA	9.19	7.19	2.00	NA
MW-2	5/25/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	53	NA	NA	NA	NA	NA	9.19	8.40	0.79	NA
MW-2	9/22/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	24	<2.0	<2.0	<2.0	100	<50	9.19	7.08	2.11	NA
MW-2	12/22/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	39	NA	NA	NA	NA	NA	9.19	7.09	2.10	NA
MW-2	2/23/2005	<50	<0.50	<0.50	<0.50	<1.0	NA	38	NA	NA	NA	NA	NA	9.19	6.50	2.69	NA
MW-2	**6/27/2005**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**NA**	**28**	**NA**	**NA**	**NA**	**NA**	**NA**	**9.19**	**7.17**	**2.02**	**NA**
MW-3 (a)	8/26/1998	2,300	180	330	<0.50	420	44,000	NA	NA	NA	NA	NA	NA	9.45	6.52	2.93	1.8
MW-3 (b)	8/26/1998	<50	<0.50	<0.50	<0.50	<0.50	52,000	75,000	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	9.45	6.73	2.72	1.7
MW-3	3/29/1999	52,500	5,500	6,900	1,360	6,250	508,000	630,000 (c)	NA	NA	NA	NA	NA	9.45	6.21	3.24	2.1
MW-3	6/22/1999	58,000	6,600	9,850	1,640	6,950	677,000	653,000	NA	NA	NA	NA	NA	9.45	7.00	2.45	1.3
MW-3	9/30/1999	4,360	121	122	36.1	647	33,700	35,600	NA	NA	NA	NA	NA	9.45	6.84	2.61	0.6
MW-3	11/19/1999	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	9.45	8.25	1.20	NA
MW-3	12/2/1999	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	9.45	7.28	2.17	2.5
MW-3	3/2/2000	65,300	5,210	10,300	2,650	15,100	56,800	59,800e	NA	NA	NA	NA	NA	9.45	5.87	3.58	d
MW-3	6/8/2000	72,700	3,570	10,200	2,100	13,400	44,400	NA	NA	NA	NA	NA	NA	9.45	5.32	4.13	1.1
MW-3	9/5/2000	26,100	959	2,910	1,090	5,640	24,000	NA	NA	NA	NA	NA	NA	9.45	5.60	3.85	NA
MW-3	12/15/2000	5,190	438	8.39	483	530	19,100	11,800f	NA	NA	NA	NA	NA	9.45	6.27	3.18	NA
MW-3	3/9/2001	5,880	472	42.2	392	1,290	41,800	NA	NA	NA	NA	NA	NA	9.45	5.71	3.74	NA
MW-3	6/27/2001	9,100	330	79	140	1,600	NA	31,000	NA	NA	NA	NA	NA	9.45	6.88	2.57	NA
MW-3	9/19/2001	790	14	18	17	67	NA	8,100	NA	NA	NA	NA	NA	9.45	6.70	2.75	NA
MW-3	12/31/2001	<5,000	220	<50	86	<50	NA	22,000	NA	NA	NA	NA	NA	9.45	5.92	3.53	NA
MW-3	3/14/2002	<2,500	<25	<25	<25	<25	NA	12,000	NA	NA	NA	NA	NA	9.45	6.25	3.20	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)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
MW-3	6/25/2002	<10,000	160	<100	<100	<100	NA	42,000	NA	NA	NA	NA	NA	9.45	6.65	2.80	NA
MW-3	9/19/2002	<10,000	650	<100	280	360	NA	84,000	NA	NA	NA	NA	NA	9.45	6.51	2.94	NA
MW-3	12/12/2002	<10,000	170	<100	<100	<100	NA	45,000	NA	NA	NA	NA	NA	9.45	6.97	2.48	NA
MW-3	1/2/2003	NA	59	<5.0	5.3	<10	NA	NA	NA	NA	NA	NA	NA	9.45	5.90	3.55	NA
MW-3	03/20/2003 g	5,100	<50	<50	<50	<50	4,400	NA	NA	NA	NA	NA	NA	9.45	6.87	2.58	NA
MW-3	6/23/2003	<5,000	<50	<50	<50	<100	NA	8,100	NA	NA	NA	NA	NA	9.45	13.80	-4.35	NA
MW-3	9/22/2003	<250	<2.5	4.6	<2.5	<5.0	NA	470	NA	NA	NA	NA	NA	9.45	6.31	3.14	NA
MW-3	12/3/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	180	NA	NA	NA	NA	NA	9.45	14.77 h	NA	NA
MW-3	3/18/2004	<1,000	14	<10	<10	<20	NA	2,500	NA	NA	NA	NA	NA	9.45	6.07	3.38	NA
MW-3	5/25/2004	3,900	<10	66	23	470	NA	140	NA	NA	NA	NA	NA	9.45	14.63	-5.18	NA
MW-3	9/22/2004	<10,000	830	<100	290	450	NA	28,000	<400	<400	<400	13,000	<10,000	9.45	4.86	4.59	NA
MW-3	12/22/2004	94	<0.50	<0.50	<0.50	<1.0	NA	84	NA	NA	NA	NA	NA	9.45	6.93	2.52	NA
MW-3	2/23/2005	<50 i	<0.50	<0.50	<0.50	<1.0	NA	85	NA	NA	NA	NA	NA	9.45	5.68	3.77	NA
MW-3	**6/27/2005**	**<2,500**	**96**	**<25**	**29**	**<50**	**NA**	**6,100**	**NA**	**NA**	**NA**	**NA**	**NA**	**9.45**	**4.80**	**4.65**	**NA**
MW-4	9/25/2000	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	9.88	7.55	2.33	NA
MW-4	3/9/2001	<50.0	<0.500	0.730	<0.500	0.529	3.16	NA	NA	NA	NA	NA	NA	9.88	7.04	2.84	NA
MW-4	6/27/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	9.88	7.76	2.12	NA
MW-4	9/19/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	9.88	7.69	2.19	NA
MW-4	12/31/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	9.88	7.08	2.80	NA
MW-4	3/14/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	9.88	7.57	2.31	NA
MW-4	6/25/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	9.88	8.50	1.38	NA
MW-4	9/19/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	9.88	8.22	1.66	NA
MW-4	12/12/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	9.88	7.92	1.96	NA
MW-4	6/23/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	<5.0	NA	NA	NA	NA	NA	9.88	8.18	1.70	NA
MW-4	9/22/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	16	NA	NA	NA	NA	NA	9.88	8.28	1.60	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)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
MW-4	12/3/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	15	NA	NA	NA	NA	NA	9.88	8.44	1.44	NA
MW-4	3/18/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	15	NA	NA	NA	NA	NA	9.88	7.52	2.36	NA
MW-4	5/25/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	20	NA	NA	NA	NA	NA	9.88	8.30	1.58	NA
MW-4	9/22/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	20	<2.0	<2.0	<2.0	<5.0	<50	9.88	7.72	2.16	NA
MW-4	12/22/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	20	NA	NA	NA	NA	NA	9.88	7.32	2.56	NA
MW-4	2/23/2005	<50	<0.50	<0.50	<0.50	<1.0	NA	18	NA	NA	NA	NA	NA	9.88	6.95	2.93	NA
MW-4	**6/27/2005**	**55**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**NA**	**14**	**NA**	**NA**	**NA**	**NA**	**NA**	**9.88**	**7.48**	**2.40**	**NA**
MW-5	6/18/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.36	NA	NA
MW-5	6/25/2002	<10,000	<100	<100	<100	<100	NA	60,000	NA	NA	NA	NA	NA	NA	8.30	NA	NA
MW-5	9/19/2002	<2,000	<20	<20	<20	<20	NA	7,200	NA	NA	NA	NA	NA	10.03	8.44	1.59	NA
MW-5	12/12/2002	<5,000	<50	<50	<50	<50	NA	33,000	NA	NA	NA	NA	NA	10.03	8.49	1.54	NA
MW-5	03/20/2003 g	12,000	<50	<50	<50	<50	15,000	NA	NA	NA	NA	NA	NA	10.03	8.23	1.80	NA
MW-5	6/23/2003	<1,000	<10	<10	<10	<20	NA	1,700	NA	NA	NA	NA	NA	10.03	16.70	-6.67	NA
MW-5	9/22/2003	<2,500	<25	<25	<25	<50	NA	4,400	NA	NA	NA	NA	NA	10.03	16.70	-6.67	NA
MW-5	12/3/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	70	NA	NA	NA	NA	NA	10.03	16.79	-6.76	NA
MW-5	3/18/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	43	NA	NA	NA	NA	NA	10.03	16.78	-6.75	NA
MW-5	5/25/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	30	NA	NA	NA	NA	NA	10.03	13.02	-2.99	NA
MW-5	9/22/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	20	<2.0	<2.0	<2.0	83	<50	10.03	5.91	4.12	NA
MW-5	12/22/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	67	NA	NA	NA	NA	NA	10.03	5.72	4.31	NA
MW-5	2/23/2005	<50	<0.50	<0.50	<0.50	<1.0	NA	120	NA	NA	NA	NA	NA	10.03	4.41	5.62	NA
MW-5	**6/27/2005**	**56**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**NA**	**46**	**NA**	**NA**	**NA**	**NA**	**NA**	**10.03**	**5.98**	**4.05**	**NA**
C-1	9/19/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	NA	1.44	NA	NA
C-1	3/29/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	NA	2.59	NA	NA
C-1	6/25/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	NA	3.72	NA	NA
C-1	9/19/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	NA	3.08	NA	NA
C-1	12/12/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	NA	0.64	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)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
C-1	03/20/2003 g	<50	<0.50	<0.50	<0.50	<0.50	<5.0	NA	NA	NA	NA	NA	NA	NA	4.61	NA	NA
SD-1	9/19/2001	Unable to sample		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SD-1	3/29/2002	Dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SD-1	6/25/2002	Dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SD-1	9/19/2002	Dry	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
SD-1	3/20/2003	Dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SD-2	9/19/2001	Unable to sample		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SD-2	3/29/2002	Dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SD-2	6/25/2002	Dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SD-2	9/19/2002	Dry	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA
SD-2	3/20/2003	Dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BW-A	6/22/1999	318	<0.50	<0.50	0.590	1.48	4,470	NA	NA	NA	NA	NA	NA	NA	4.71	NA	1.1
BW-A	6/25/2002	<500	<5.0	<5.0	<5.0	18	NA	3,100	NA	NA	NA	NA	NA	NA	5.14	NA	NA
BW-A	9/19/2002	<200	<2.0	<2.0	<2.0	<2.0	NA	<20	NA	NA	NA	NA	NA	NA	7.19	NA	NA
BW-A	12/12/2002	<500	<5.0	<5.0	<5.0	<5.0	NA	2,900	NA	NA	NA	NA	NA	NA	6.40	NA	NA
BW-A	03/20/2003 g	<2,500	<25	<25	<25	<25	<250	NA	NA	NA	NA	NA	NA	NA	5.36	NA	NA
BW-A	6/23/2003	<1,000	<10	<10	<10	<20	NA	<100	NA	NA	NA	NA	NA	NA	10.27	NA	NA
BW-B	6/22/1999	<250	<2.5	<2.5	<2.5	<2.5	8,600	NA	NA	NA	NA	NA	NA	NA	5.90	NA	1.2
BW-B	6/27/2001	<5,000	<50	<50	<50	<50	NA	40,000	NA	NA	NA	NA	NA	NA	5.83	NA	NA
BW-B	12/31/2001	<2,000	<20	<20	<20	<20	NA	9,200	NA	NA	NA	NA	NA	NA	4.19	NA	NA
BW-B	3/14/2002	<2,000	<20	<20	<20	<20	NA	9,400	NA	NA	NA	NA	NA	NA	5.24	NA	NA
BW-B	6/25/2002	<2,000	<20	<20	<20	<20	NA	6,600	NA	NA	NA	NA	NA	NA	6.19	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)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
BW-B	9/19/2002	<500	<5.0	<5.0	<5.0	<5.0	NA	<50	NA	NA	NA	NA	NA	NA	8.46	NA	NA
BW-B	12/12/2002	<500	<5.0	<5.0	<5.0	<5.0	NA	1,700	NA	NA	NA	NA	NA	NA	7.46	NA	NA
BW-B	03/20/2003 g	170	<1.0	<1.0	<1.0	<1.0	190	NA	NA	NA	NA	NA	NA	NA	6.23	NA	NA
BW-B	6/23/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	43	NA	NA	NA	NA	NA	NA	9.95	NA	NA
BW-C	6/22/1999	<50	<0.50	<0.50	<0.50	0.98	11,000	NA	NA	NA	NA	NA	NA	NA	5.91	NA	1.6
BW-C	6/25/2002	<5,000	<50	<50	<50	<50	NA	20,000	NA	NA	NA	NA	NA	NA	6.49	NA	NA
BW-C	9/19/2002	<1,000	<10	<10	<10	<10	NA	400	NA	NA	NA	NA	NA	NA	8.52	NA	NA
BW-C	12/12/2002	<2,000	<20	<20	<20	<20	NA	8,000	NA	NA	NA	NA	NA	NA	7.57	NA	NA
BW-C	03/20/2003 g	270	<1.0	<1.0	<1.0	<1.0	250	NA	NA	NA	NA	NA	NA	NA	6.48	NA	NA
BW-C	6/23/2003	<1,000	<10	<10	<10	<20	NA	170	NA	NA	NA	NA	NA	NA	11.48	NA	NA
BW-D	6/22/1999	<50.0	<0.500	<0.500	<0.500	<0.500	2,190	NA	NA	NA	NA	NA	NA	NA	4.78	NA	1.4
BW-D	6/25/2002	Well inaccessible		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BW-D	7/2/2002	<1,000	23	<10	<10	<10	NA	<100	NA	NA	NA	NA	NA	NA	6.36	NA	NA
BW-D	9/19/2002	<250	<2.5	<2.5	<2.5	<2.5	NA	<25	NA	NA	NA	NA	NA	NA	7.25	NA	NA
BW-D	12/12/2002	<5,000	<50	<50	<50	<50	NA	16,000	NA	NA	NA	NA	NA	NA	6.21	NA	NA
BW-D	03/20/2003 g	71	<0.50	<0.50	<0.50	<0.50	55	NA	NA	NA	NA	NA	NA	NA	5.23	NA	NA
BW-D	6/23/2003	<1,000	<10	<10	<10	<20	NA	<100	NA	NA	NA	NA	NA	NA	10.25	NA	NA
BW-D	9/22/2003	<100	<1.0	<1.0	<1.0	<2.0	NA	120	NA	NA	NA	NA	NA	NA	10.18	NA	NA
BW-D	12/3/2003	<1,300	110	<13	<13	29	NA	560	NA	NA	NA	NA	NA	NA	10.20	NA	NA
BW-D	3/18/2004	<50	0.67	<0.50	<0.50	<1.0	NA	12	NA	NA	NA	NA	NA	NA	3.42	NA	NA
BW-D	5/25/2004	<50	1.4	0.96	<0.50	<1.0	NA	1.7	NA	NA	NA	NA	NA	NA	8.83	NA	NA
BW-D	9/22/2004	<100	6.9	<1.0	2.1	4.2	NA	210	NA	NA	NA	NA	NA	NA	2.75	NA	NA
BW-D	12/22/2004	61	2.1	2.9	<0.50	3.6	NA	5.4	NA	NA	NA	NA	NA	NA	3.67	NA	NA
BW-D	2/23/2005	<50	<0.50	<0.50	<0.50	<1.0	NA	1.2	NA	NA	NA	NA	NA	NA	2.88	NA	NA
BW-D	**6/27/2005**	**53**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**NA**	**1.8**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**3.70**	**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)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (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

DIPE = Di-isopropyl ether, analyzed by EPA Method 8260B

ETBE = Ethyl tertiary butyl ether, analyzed by EPA Method 8260B

TAME = Tertiary amyl methyl ether, analyzed by EPA Method 8260B

TBA = Tertiary butyl alcohol, analyzed by EPA Method 8260B

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

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)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)

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.

i = The concentration reported reflects individual or discrete unidentified peaks not matching a typical fuel pattern.

Ethanol analyzed by EPA Method 8260B.

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.

SEVERN TRENT STL

Submission#: 2005-06-0738

Blaine Tech Services, Inc.

July 13, 2005

1680 Rogers Avenue
San Jose, CA 95112-1105

Attn.: Leon Gearhart

Project#: 050627-DA2
Project: 98995752
Site: 540 Hegenberger Road, Oakland

Dear Mr.Gearhart,

Attached is our report for your samples received on 06/28/2005 13:55
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 08/12/2005 unless you have requested otherwise.
We appreciate the opportunity to be of service to you. If you have any questions,

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

Sincerely,

Melissa Brewer

Melissa Brewer
Project Manager

SEVERN TRENT STL

Submission: 2005-06-0738

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: 050627-DA2
98995752

Received: 06/28/2005 13:55

Site: 540 Hegenberger Road, Oakland

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-1	06/27/2005 12:41	Water	1
MW-2	06/27/2005 11:20	Water	2
MW-3	06/27/2005 11:57	Water	3
MW-4	06/27/2005 10:27	Water	4
MW-5	06/27/2005 12:20	Water	5
BW-D	06/27/2005 11:12	Water	6

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: 050627-DA2
98995752

Received: 06/28/2005 13:55

Site: 540 Hegenberger Road, Oakland

Prep(s): 5030B
Test(s): 8260B

Sample ID: **MW-1**
Lab ID: 2005-06-0738 - 1

Sampled: 06/27/2005 12:41
Extracted: 7/7/2005 23:04

Matrix: Water
QC Batch#: 2005/07/07-2A.64

Analysis Flag: L2, pH: <2 (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	250	ug/L	5.00	07/07/2005 23:04	
Benzene	ND	2.5	ug/L	5.00	07/07/2005 23:04	
Toluene	ND	2.5	ug/L	5.00	07/07/2005 23:04	
Ethylbenzene	ND	2.5	ug/L	5.00	07/07/2005 23:04	
Total xylenes	ND	5.0	ug/L	5.00	07/07/2005 23:04	
Methyl tert-butyl ether (MTBE)	16	2.5	ug/L	5.00	07/07/2005 23:04	
Surrogate(s)						
1,2-Dichloroethane-d4	84.1	73-130	%	5.00	07/07/2005 23:04	
Toluene-d8	93.4	81-114	%	5.00	07/07/2005 23:04	

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: 050627-DA2
98995752

Received: 06/28/2005 13:55

Site: 540 Hegenberger Road, Oakland

Prep(s): 5030B
Sample ID: **MW-2**
Sampled: 06/27/2005 11:20
Matrix: Water
pH: <2

Test(s): 8260B
Lab ID: 2005-06-0738 - 2
Extracted: 7/8/2005 14:33
QC Batch#: 2005/07/08-1B.68

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	1.00	07/08/2005 14:33	
Benzene	ND	0.50	ug/L	1.00	07/08/2005 14:33	
Toluene	ND	0.50	ug/L	1.00	07/08/2005 14:33	
Ethylbenzene	ND	0.50	ug/L	1.00	07/08/2005 14:33	
Total xylenes	ND	1.0	ug/L	1.00	07/08/2005 14:33	
Methyl tert-butyl ether (MTBE)	28	0.50	ug/L	1.00	07/08/2005 14:33	
Surrogate(s)						
1,2-Dichloroethane-d4	98.9	73-130	%	1.00	07/08/2005 14:33	
Toluene-d8	98.1	81-114	%	1.00	07/08/2005 14:33	

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: 050627-DA2
98995752

Received: 06/28/2005 13:55

Site: 540 Hegenberger Road, Oakland

Prep(s): 5030B
Test(s): 8260B

Sample ID: **MW-3**
Lab ID: 2005-06-0738 - 3

Sampled: 06/27/2005 11:57
Extracted: 7/9/2005 00:12

Matrix: Water
QC Batch#: 2005/07/08-2A.66

Analysis Flag: L2, pH: <2 (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	2500	ug/L	50.00	07/09/2005 00:12	
Benzene	96	25	ug/L	50.00	07/09/2005 00:12	
Toluene	ND	25	ug/L	50.00	07/09/2005 00:12	
Ethylbenzene	29	25	ug/L	50.00	07/09/2005 00:12	
Total xylenes	ND	50	ug/L	50.00	07/09/2005 00:12	
Methyl tert-butyl ether (MTBE)	6100	25	ug/L	50.00	07/09/2005 00:12	
Surrogate(s)						
1,2-Dichloroethane-d4	117.8	73-130	%	50.00	07/09/2005 00:12	
Toluene-d8	90.2	81-114	%	50.00	07/09/2005 00:12	

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: 050627-DA2
98995752

Received: 06/28/2005 13:55

Site: 540 Hegenberger Road, Oakland

Prep(s): 5030B
Sample ID: **MW-4**
Sampled: 06/27/2005 10:27
Matrix: Water
pH: <2

Test(s): 8260B
Lab ID: 2005-06-0738 - 4
Extracted: 7/8/2005 00:16
QC Batch#: 2005/07/07-2A.64

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	55	50	ug/L	1.00	07/08/2005 00:16	
Benzene	ND	0.50	ug/L	1.00	07/08/2005 00:16	
Toluene	ND	0.50	ug/L	1.00	07/08/2005 00:16	
Ethylbenzene	ND	0.50	ug/L	1.00	07/08/2005 00:16	
Total xylenes	ND	1.0	ug/L	1.00	07/08/2005 00:16	
Methyl tert-butyl ether (MTBE)	14	0.50	ug/L	1.00	07/08/2005 00:16	
Surrogate(s)						
1,2-Dichloroethane-d4	88.7	73-130	%	1.00	07/08/2005 00:16	
Toluene-d8	84.4	81-114	%	1.00	07/08/2005 00:16	

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: 050627-DA2
98995752

Received: 06/28/2005 13:55

Site: 540 Hegenberger Road, Oakland

Prep(s): 5030B
Sample ID: **MW-5**
Sampled: 06/27/2005 12:20
Matrix: Water
pH: <2

Test(s): 8260B
Lab ID: 2005-06-0738 - 5
Extracted: 7/8/2005 00:40
QC Batch#: 2005/07/07-2A.64

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	56	50	ug/L	1.00	07/08/2005 00:40	
Benzene	ND	0.50	ug/L	1.00	07/08/2005 00:40	
Toluene	ND	0.50	ug/L	1.00	07/08/2005 00:40	
Ethylbenzene	ND	0.50	ug/L	1.00	07/08/2005 00:40	
Total xylenes	ND	1.0	ug/L	1.00	07/08/2005 00:40	
Methyl tert-butyl ether (MTBE)	46	0.50	ug/L	1.00	07/08/2005 00:40	
Surrogate(s)						
1,2-Dichloroethane-d4	82.1	73-130	%	1.00	07/08/2005 00:40	
Toluene-d8	83.9	81-114	%	1.00	07/08/2005 00:40	

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: 050627-DA2
98995752

Received: 06/28/2005 13:55

Site: 540 Hegenberger Road, Oakland

Prep(s): 5030B
Sample ID: **BW-D**
Sampled: 06/27/2005 11:12
Matrix: Water
pH: <2

Test(s): 8260B
Lab ID: 2005-06-0738 - 6
Extracted: 7/8/2005 01:04
QC Batch#: 2005/07/07-2A.64

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	53	50	ug/L	1.00	07/08/2005 01:04	
Benzene	ND	0.50	ug/L	1.00	07/08/2005 01:04	
Toluene	ND	0.50	ug/L	1.00	07/08/2005 01:04	
Ethylbenzene	ND	0.50	ug/L	1.00	07/08/2005 01:04	
Total xylenes	ND	1.0	ug/L	1.00	07/08/2005 01:04	
Methyl tert-butyl ether (MTBE)	1.8	0.50	ug/L	1.00	07/08/2005 01:04	
Surrogate(s)						
1,2-Dichloroethane-d4	85.7	73-130	%	1.00	07/08/2005 01:04	
Toluene-d8	81.5	81-114	%	1.00	07/08/2005 01:04	

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: 050627-DA2
98995752

Received: 06/28/2005 13:55

Site: 540 Hegenberger Road, Oakland

Batch QC Report

Prep(s): 5030B — Test(s): 8260B

Method Blank — **Water** — **QC Batch # 2005/07/07-2A.64**

MB: 2005/07/07-2A.64-035 — Date Extracted: 07/07/2005 18:35

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	07/07/2005 18:35	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	07/07/2005 18:35	
Benzene	ND	0.5	ug/L	07/07/2005 18:35	
Toluene	ND	0.5	ug/L	07/07/2005 18:35	
Ethylbenzene	ND	0.5	ug/L	07/07/2005 18:35	
Total xylenes	ND	1.0	ug/L	07/07/2005 18:35	
Surrogates(s)					
1,2-Dichloroethane-d4	80.6	73-130	%	07/07/2005 18:35	
Toluene-d8	88.8	81-114	%	07/07/2005 18:35	

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: 050627-DA2
98995752

Received: 06/28/2005 13:55

Site: 540 Hegenberger Road, Oakland

Batch QC Report

Prep(s): 5030B
Method Blank
MB: 2005/07/08-1B.68-049

Water

Test(s): 8260B
QC Batch # 2005/07/08-1B.68
Date Extracted: 07/08/2005 08:49

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	07/08/2005 08:49	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	07/08/2005 08:49	
Benzene	ND	0.5	ug/L	07/08/2005 08:49	
Toluene	ND	0.5	ug/L	07/08/2005 08:49	
Ethylbenzene	ND	0.5	ug/L	07/08/2005 08:49	
Total xylenes	ND	1.0	ug/L	07/08/2005 08:49	
Surrogates(s)					
1,2-Dichloroethane-d4	96.7	73-130	%	07/08/2005 08:49	
Toluene-d8	99.6	81-114	%	07/08/2005 08:49	

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: 050627-DA2
98995752

Received: 06/28/2005 13:55

Site: 540 Hegenberger Road, Oakland

Batch QC Report

Prep(s): 5030B — Test(s): 8260B

Method Blank — **Water** — **QC Batch # 2005/07/08-2A.66**

MB: 2005/07/08-2A.66-032 — Date Extracted: 07/08/2005 19:32

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	07/08/2005 19:32	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	07/08/2005 19:32	
Benzene	ND	0.5	ug/L	07/08/2005 19:32	
Toluene	ND	0.5	ug/L	07/08/2005 19:32	
Ethylbenzene	ND	0.5	ug/L	07/08/2005 19:32	
Total xylenes	ND	1.0	ug/L	07/08/2005 19:32	
Surrogates(s)					
1,2-Dichloroethane-d4	110.6	73-130	%	07/08/2005 19:32	
Toluene-d8	96.8	81-114	%	07/08/2005 19:32	

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: 050627-DA2
98995752

Received: 06/28/2005 13:55

Site: 540 Hegenberger Road, Oakland

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike **Water** **QC Batch # 2005/07/07-2A.64**

LCS 2005/07/07-2A.64-001 Extracted: 07/07/2005 Analyzed: 07/07/2005 19:01
LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	22.6		25	90.4			65-165	20		
Benzene	29.5		25	118.0			69-129	20		
Toluene	30.0		25	120.0			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	376		500	75.2			73-130			
Toluene-d8	453		500	90.6			81-114			

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: 050627-DA2
98995752

Received: 06/28/2005 13:55

Site: 540 Hegenberger Road, Oakland

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike **Water** **QC Batch # 2005/07/08-1B.68**

LCS 2005/07/08-1B.68-048 Extracted: 07/08/2005 Analyzed: 07/08/2005 07:48
LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	23.1		25	92.4			65-165	20		
Benzene	26.1		25	104.4			69-129	20		
Toluene	27.0		25	108.0			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	397		500	79.4			73-130			
Toluene-d8	511		500	102.2			81-114			

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: 050627-DA2
98995752

Received: 06/28/2005 13:55

Site: 540 Hegenberger Road, Oakland

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike **Water** **QC Batch # 2005/07/08-2A.66**

LCS 2005/07/08-2A.66-007 Extracted: 07/08/2005 Analyzed: 07/08/2005 19:07

LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	23.4		25	93.6			65-165	20		
Benzene	24.3		25	97.2			69-129	20		
Toluene	29.4		25	117.6			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	508		500	101.6			73-130			
Toluene-d8	506		500	101.2			81-114			

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: 050627-DA2
98995752

Received: 06/28/2005 13:55

Site: 540 Hegenberger Road, Oakland

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Matrix Spike (MS / MSD) **Water** **QC Batch # 2005/07/07-2A.64**

MS/MSD

Lab ID: 2005-06-0737 - 001

MS: 2005/07/07-2A.64-054 Extracted: 07/07/2005

Analyzed: 07/07/2005 19:54

Dilution: 1.00

MSD: 2005/07/07-2A.64-017 Extracted: 07/07/2005

Analyzed: 07/07/2005 20:17

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample	ug/L	MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	25.7	24.6	ND	25	102.8	98.4	4.4	65-165	20		
Benzene	27.9	28.0	ND	25	111.6	112.0	0.4	69-129	20		
Toluene	30.2	27.4	ND	25	120.8	109.6	9.7	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	453	408		500	90.6	81.6		73-130			
Toluene-d8	475	425		500	95.0	85.0		81-114			

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: 050627-DA2
98995752

Received: 06/28/2005 13:55

Site: 540 Hegenberger Road, Oakland

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Matrix Spike (MS / MSD) **Water** **QC Batch # 2005/07/08-1B.68**

MS/MSD

Lab ID: 2005-06-0793 - 011

MS: 2005/07/08-1B.68-039 Extracted: 07/08/2005 Analyzed: 07/08/2005 10:39

Dilution: 10.00

MSD: 2005/07/08-1B.68-005 Extracted: 07/08/2005 Analyzed: 07/08/2005 11:05

Dilution: 10.00

Compound	Conc. ug/L			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample	ug/L	MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	1040	1050	776	250	105.6	109.6	3.7	65-165	20		
Benzene	249	234	ND	250	99.6	93.6	6.2	69-129	20		
Toluene	266	240	0.733	250	106.1	95.7	10.3	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	419	398		500	83.8	79.6		73-130			
Toluene-d8	526	503		500	105.1	100.6		81-114			

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: 050627-DA2
98995752

Received: 06/28/2005 13:55

Site: 540 Hegenberger Road, Oakland

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Matrix Spike (MS / MSD) **Water** **QC Batch # 2005/07/08-2A.66**

MS/MSD

Lab ID: 2005-06-0784 - 003

MS: 2005/07/08-2A.66-027 Extracted: 07/08/2005 Analyzed: 07/08/2005 20:27

Dilution: 1.00

MSD: 2005/07/08-2A.66-052 Extracted: 07/08/2005 Analyzed: 07/08/2005 20:52

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample	ug/L	MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	19.9	21.8	ND	25	79.6	87.2	9.1	65-165	20		
Benzene	21.4	21.2	ND	25	85.6	84.8	0.9	69-129	20		
Toluene	23.7	24.3	ND	25	94.8	97.2	2.5	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	512	536		500	102.5	107.2		73-130			
Toluene-d8	474	479		500	94.8	95.8		81-114			

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: 050627-DA2
98995752

Received: 06/28/2005 13:55

Site: 540 Hegenberger Road, Oakland

Legend and Notes

Analysis Flag

L2

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

LAB: STL

Lab Identification (if necessary):

Address:

City, State, Zip:

SHELL Chain Of Custody Record

116944

Shell Project Manager to be invoiced:

☑ SCIENCE & ENGINEERING
☐ TECHNICAL SERVICES
☐ CRMT HOUSTON

Denis Brown

2005-06-0738

INCIDENT NUMBER (S&E ONLY): 9 8 9 9 5 7 5 2

SAP or CRMT NUMBER (TS/CRMT): [redacted]

DATE: 6/27/05

PAGE: 1 of 1

SAMPLING COMPANY: Blaine Tech Services	LOG CODE: BTSS	SITE ADDRESS (Street and City): 540 Hegenberger Road, Oakland	GLOBAL ID NO.: T0600102123
ADDRESS: 1680 Rogers Avenue, San Jose, CA 95112		EDF DELIVERABLE TO (Responsible Party or Designee): Anni Kremi	PHONE NO.: (510)420-3335
PROJECT CONTACT (Hardcopy or PDF Report to): Leon Gearhart		E-MAIL: ShellOaklandEDF@cambria-env.com	CONSULTANT PROJECT NO.: 052627-042
TELEPHONE: 408-573-0555	FAX: 408-573-7771	E-MAIL: lgearhart@blainetech.com	SAMPLER NAME(S) (Print): David Allbut

BTS #

LAB USE ONLY

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

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

GC/MS MTBE CONFIRMATION: HIGHEST ____ HIGHEST per BORING ____ ALL ____

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDD IS NOT NEEDED ☐

REQUESTED ANALYSIS

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

3

TEMPERATURE ON RECEIPT C°

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH - Gas, Purgeable	BTEX	MTBE (8021B - 5ppb RL)	MTBE (8260B - 0.5ppb RL)	Oxygenates (5) by (8260B)	Ethanol (8260B)	Methanol	1,2-DCA (8260B)	EDB (8260B)		TPH - Diesel, Extractable (8015m)									FIELD NOTES
✓	MW-1	6/27/05	1241	W	3	X	X		X																
✓	MW-2	↓	1120	↓	↓	X	X		X																
✓	MW-3	↓	1157	↓	↓	X	X		X																
✓	MW-4	↓	1027	↓	↓	X	X		X																
✓	MW-5	↓	1220	↓	↓	X	X		X																
✓	BW-D	↓	1112	↓	↓	X	X		X																

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
David Allbut	[illegible] Sample Custodian	6/27/05	1357
[illegible] Sample Custodian	[illegible]	6/28/05	1355
[illegible] 6/28/05 1746	[illegible]	06/28/05	1746

Original: Green to File

C&O Graphic (714) 898-9702

WELL GAUGING DATA

Project # 050627-DA1 Date 6/27/05 Client Shell

Site 540 Hegenberger Rd. Oakland, CA

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
MW-1	2					6.43	22.43	TOC	
MW-2	2					7.17	19.86		
MW-3	2	Gauged w/pump in well Ext pump not running				4.80	18.38		
MW-4	4					7.48	18.40		
MW-5	4	Gauged w/pump in well Ext. Pump not running				5.98	18.75		
* BW-D	12					3.70	12.35		
* Gauged w/ stinger in well									

SHELL WELL MONITORING DATA SHEET

BTS #: 050627-DA1	Site: 540 Hegenberger Rd. Oakland, CA
Sampler: DA	Date: 6/27/05
Well I.D.: MW-1	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 22.43	Depth to Water (DTW): 6.43
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]: 9.63	

Purge Method: X Bailer; Disposable Bailer; Positive Air Displacement; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other____

Sampling Method: X Bailer; Disposable Bailer; Extraction Port; Dedicated Tubing; Other: ____

2.6 (Gals.) X 3 = 7.8 Gals.
1 Case Volume; Specified Volumes; Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (uS))	Turbidity (NTUs)	Gals. Removed	Observations
1234	61.7	7.5	2211	71000	3	grey, cloudy
1236	66.9	7.5	3301	721	6	"
1238	66.7	7.5	3342	598	8	"

Did well dewater? Yes (No) Gallons actually evacuated: 8

Sampling Date: 6/27/05 Sampling Time: 1241 Depth to Water: 11.20 @site departure

Sample I.D.: MW-1 Laboratory: (STL) Other____

Analyzed for: (TPH-G BTEX MTBE) TPH-D Other: see COC

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 #: 050627-DA2	Site: 540 Hegenberger Rd Oakland, CA
Sampler: DA	Date: 6/27/05
Well I.D.: MW-2	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 19.86	Depth to Water (DTW): 7.17
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]: 9.71	

Purge Method: ✕ Bailer; Disposable Bailer; Positive Air Displacement; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: ✕ Bailer; Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

2.0 (Gals.) X	3	= 6.0 Gals.
1 Case Volume	Specified Volumes	Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1104	67.6	7.1	526	>1000	2	cloudy, tan
1106	67.6	7.1	586	>1000	4	"
1108	67.2	7.2	602	>1000	6	"

Did well dewater? Yes (No) Gallons actually evacuated: 6

Sampling Date: 6/27/05 Sampling Time: 1120 Depth to Water: 9.71

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 #: 050627-DA2	Site: 540 Hegenberger Rd. Oakland, CA
Sampler: DA	Date: 6/27/05
Well I.D.: MW-3	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 18.38	Depth to Water (DTW): 4.80
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]: 7.52	

Purge Method: X Bailer; Disposable Bailer; Positive Air Displacement; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: X Bailer; Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

2.2 (Gals.) X 3 = 6.6 Gals.
1 Case Volume; Specified Volumes; Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1150	68.5	7.0	3900	276	2.5	Cloudy
1152	68.3	7.1	7497	341	5	"
1154	67.8	7.3	7577	418	6.75	"

Did well dewater? Yes (No) Gallons actually evacuated: 6.75

Sampling Date: 6/27/05 Sampling Time: 1157 Depth to Water: 7.43

Sample I.D.: MW-3 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 #: 050627-DA2	Site: 540 Hegenberger Rd. Oakland, CA
Sampler: DA	Date: 6/27/05
Well I.D.: MW-4	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth (TD): 18.40	Depth to Water (DTW): 7.48
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]: —	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; X Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: X Bailer; Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

1 Case Volume		Specified Volumes		Calculated Volume
7.1	(Gals.) X	3	=	21.3 Gals.

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (uS))	Turbidity (NTUs)	Gals. Removed	Observations
1021	64.4	7.3	6449	156	7.5	cloudy
1023	65.4	7.4	5242	161	15	"
1024	65.5	7.3	5165	165	21.5	"

Did well dewater? Yes (No) Gallons actually evacuated: 21.5

Sampling Date: 6/27/05 Sampling Time: 1027 Depth to Water: — traffic well

Sample I.D.: MW-4 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 #: 050627-DA2	Site: 540 Hegenberger Rd. Oakland, CA
Sampler: DA	Date: 6/27/05
Well I.D.: MW-5	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): ~~18.40~~ 18.75 DA	Depth to Water (DTW): 5.98
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]: 8.53	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; X Electric Submersible; Waterra Peristaltic; Extraction Pump; Other_____

Sampling Method: X Bailer; Disposable Bailer; Extraction Port; Dedicated Tubing; Other:_____

8.3 (Gals.) X 3 = 24.9 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1213	69.6	7.7	2020	164	8.5	cloudy
1215	68.9	7.6	1195	115	17	
1216	well dewatered @ 17g.					DTW=16.00
1217	68.8	7.6	898	256	—	

Did well dewater? (Yes) No Gallons actually evacuated: 17

Sampling Date: 6/27/05 Sampling Time: 1220 Depth to Water: 16.00

Sample I.D.: MW-5 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 #: 050627-DA1	Site: 540 Hegenberger Rd. Oakland, CA
Sampler: DA	Date: 6/27/05
Well I.D.: BW-D	Well Diameter: 2 3 4 6 8 12
Total Well Depth (TD): 12.35	Depth to Water (DTW): 3.70
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]: 5.43	

Purge Method: Bailer, Disposable Bailer, Positive Air Displacement, (Electric Submersible), Waterra, Peristaltic, Extraction Pump, Other_____

Sampling Method: (Bailer), Disposable Bailer, Extraction Port, Dedicated Tubing, Other:_____

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

12" = 5.87

50.8 (Gals.) X 3 = 152.4 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1050	68.2	7.3	1510	51	51	clear
1059	69.1	7.0	960	21	102	"
1109	68.0	6.9	921	32	152.5	"

Did well dewater? Yes (No) Gallons actually evacuated: 152.5

Sampling Date: 6/27/05 Sampling Time: 1112 Depth to Water: 3.70

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

ARCO Service Station #4494

566 Hegenberger Rd., Oakland, CA

Well No.	Date	P/ NP	Footnotes/ Comments	TOC (ft MSL)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (ft bgs)	GWE (ft MSL)	GRO/ TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO (mg/L)	pH
MW-1	6/20/2000	--	a	106.1	13.00	--	7.02	99.08	<1,000	<10	<10	<10	<20	14000/ 15000	---	---
	9/28/2000	--	a	106.1	13.00	--	7.07	99.03	<500	<5.0	<5.0	<5.0	<5.0	13000/ 18800	---	---
	12/17/2000	--		106.1	13.00	--	6.95	99.15	<50	<0.5	<0.5	<0.5	<0.5	10,600	---	---
	3/28/2001	--		106.1	13.00	--	6.88	99.22	<500	<5.0	<5.0	<5.0	<5.0	16,900	---	---
	6/21/2001	--		106.1	13.00	--	7.18	98.92	<1,000	<10	<10	<10	<10	3,400	---	---
	9/23/2001	--	a	106.1	13.00	--	7.11	98.99	<1,000	<10	<10	<10	<10	2200/1800	---	---
	12/31/2001	--		106.1	13.00	--	6.91	99.19	<5,000	<50	<50	<50	<50	14,000	---	---
	3/14/2002	--		106.1	13.00	--	6.85	99.25	<5,000	<50	<50	<50	<50	6,200	---	---
	4/17/2002	--		106.1	13.00	--	5.89	100.21	<5,000	<50	<50	<50	<50	4,500	---	---
	8/8/2002	--	a, b	106.1	13.00	--	7.19	98.91	230	<2.0	<2.0	<2.0	<2.0	660/440	4.5	7.8
	12/12/2002	--	a, d	106.1	13.00	--	7.28	98.82	630	<5.0	<5.0	<5.0	<5.0	1300/830	1.9	7.6
	3/20/2003	--	e	106.1	13.00	--	6.91	99.19	1,100	<5.0	<5.0	<5.0	<5.0	780	2.2	8.5
	6/23/2003	--		106.1	13.00	--	7.61	98.49	530	<5.0	<5.0	<5.0	<5.0	260	1.2	7.6
	9/22/2003	--		11.36	13.00	--	7.78	3.58	<50	<0.50	<0.50	<0.50	<0.50	17	3.5	7.7
	12/03/2003	P		11.36	13.00	--	7.90	3.46	410	2.6	9.8	<2.5	11	260	2.10	6.9
	03/18/2004	P		11.36	13.00	--	6.68	4.68	<250	<2.5	<2.5	<2.5	<2.5	130	2.40	7.0
	05/25/2004	P		11.36	13.00	--	7.55	3.81	<250	<2.5	<2.5	<2.5	<2.5	120	1.30	7.0
	09/22/2004	P		11.36	13.00	--	6.78	4.58	150	1.5	<1.0	<1.0	<1.0	140	3.80	7.12
	12/22/2004	P		11.36	13.00	--	6.44	4.92	<500	<5.0	<5.0	<5.0	<5.0	74	1.70	6.8
	02/23/2005	P		11.36	13.00	--	7.03	4.33	<50	<0.50	<0.50	<0.50	<0.50	6.0	2.10	7.2
	06/27/2005	**P**		**11.36**	**13.00**	**--**	**6.66**	**4.70**	**<250**	**<2.5**	**<2.5**	**<2.5**	**<2.5**	**150**	**3.60**	**7.4**
MW-3	6/20/2000	--	a	106.29	7.00	--	9.18	97.11	<50	<0.5	<0.5	<0.5	<1.0	27/27	---	---
	9/28/2000	--	a	106.29	7.00	--	9.33	96.96	<50	<0.5	<0.5	<0.5	<1.0	4.3/<2.0	---	---
	12/17/2000	--		106.29	7.00	--	9.31	96.98	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	3/28/2001	--		106.29	7.00	--	9.23	97.06	<50	<0.5	<0.5	<0.5	<0.5	7.42	---	---
	6/21/2001	--		106.29	7.00	--	9.58	96.71	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	9/23/2001	--		106.29	7.00	--	9.76	96.53	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	12/31/2001	--		106.29	7.00	--	8.78	97.51	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	3/14/2002	--		106.29	7.00	--	9.25	97.04	<50	<0.5	<0.5	<0.5	<0.5	4.0	---	---
	4/17/2002	--		106.29	7.00	--	8.44	97.85	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	8/8/2002	--		106.29	7.00	--	9.63	96.66	<50	<0.5	<0.5	<0.5	<0.5	<2.5	2.6	7.9
	12/12/2002	--	d	106.29	7.00	--	9.51	96.78	<50	<0.5	<0.5	<0.5	<0.5	<2.5	3.0	6.8

Table 1

Groundwater Elevation and Analytical Data

ARCO Service Station #4494

566 Hegenberger Rd., Oakland, CA

Well No.	Date	P/ NP	Footnotes/ Comments	TOC (ft MSL)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (ft bgs)	GWE (ft MSL)	GRO/ TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO (mg/L)	pH
MW-3	3/20/2003	--	e	106.29	7.00	--	9.40	96.89	<50	<0.50	<0.50	<0.50	<0.50	6.1	1.2	7.0
	6/23/2003	--		106.29	7.00	--	9.36	96.93	<50	<0.50	<0.50	<0.50	<0.50	5.2	0.9	8.2
	9/22/2003	--		11.62	7.00	--	9.48	2.14	<50	<0.50	<0.50	<0.50	<0.50	3.9	1.4	7.9
	12/03/2003	--	g	11.62	7.00	--	9.44	2.18	--	--	--	--	--	--	--	--
	03/18/2004	NP		11.62	7.00	--	8.76	2.86	<50	<0.50	<0.50	<0.50	<0.50	4.6	0.80	7.3
	05/25/2004	--	g	11.62	7.00	--	9.55	2.07	--	--	--	--	--	--	--	--
	09/22/2004	NP		11.62	7.00	--	9.44	2.18	<50	<0.50	<0.50	<0.50	<0.50	4.7	--	--
	12/22/2004	--		11.62	7.00	--	9.06	2.56	--	--	--	--	--	--	--	--
	02/23/2005	NP		11.62	7.00	--	8.75	2.87	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.60	8.2
	06/27/2005	--		**11.62**	**7.00**	--	**9.35**	**2.27**	--	--	--	--	--	--	--	--
MW-4	6/20/2000	--		107.4	7.00	--	8.49	98.91	<50	<0.5	<0.5	<0.5	<1.0	<10	---	---
	9/28/2000	--		107.4	7.00	--	8.70	98.70	<50	<0.5	<0.5	<0.5	<1.0	<2.5	---	---
	12/17/2000	--		107.4	7.00	--	8.53	98.87	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	3/28/2001	--		107.4	7.00	--	8.59	98.81	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	6/21/2001	--		107.4	7.00	--	8.79	98.61	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	9/23/2001	--		107.4	7.00	--	8.67	98.73	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	12/31/2001	--		107.4	7.00	--	8.03	99.37	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	3/14/2002	--		107.4	7.00	--	8.48	98.92	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	4/17/2002	--		107.4	7.00	--	7.79	99.61	<50	<0.5	<0.5	<0.5	<0.5	5.6	---	---
	8/8/2002	--		107.4	7.00	--	8.90	98.50	<50	<0.5	<0.5	<0.5	<0.5	<2.5	4.5	8.0
	12/12/2002	--	d	107.4	7.00	--	9.07	98.33	<50	<0.5	<0.5	<0.5	<0.5	<2.5	5.6	6.2
	3/20/2003	--	e	107.4	7.00	--	8.85	98.55	<50	<0.50	<0.50	<0.50	0.50	<0.50	4.8	7.8
	6/23/2003	--		107.4	7.00	--	9.26	98.14	<50	<0.50	<0.50	<0.50	<0.50	<0.50	6.3	7.5
	9/22/2003	--		13.18	7.00	--	9.22	3.96	<50	<0.50	<0.50	<0.50	<0.50	<0.50	7.4	8.0
	12/03/2003	--	g	13.18	7.00	--	9.48	3.70	--	--	--	--	--	--	--	--
	03/18/2004	NP		13.18	7.00	--	8.32	4.86	<50	<0.50	<0.50	<0.50	<0.50	<0.50	4.50	8.4
	05/25/2004	--	g	13.18	7.00	--	9.03	4.15	--	--	--	--	--	--	--	--
	09/22/2004	NP		13.18	7.00	--	8.62	4.56	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.70	--
	12/22/2004	--		13.18	7.00	--	7.80	5.38	--	--	--	--	--	--	--	--
	02/23/2005	NP		13.18	7.00	--	7.74	5.44	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.10	7.3
	06/27/2005	--		**13.18**	**7.00**	--	**8.38**	**4.80**	--	--	--	--	--	--	--	--
MW-5	6/20/2000	--		105.19	8.00	--	7.65	97.54	<50	<0.5	<0.5	<0.5	<1.0	<10	---	---
	9/28/2000	--		105.19	8.00	--	6.82	98.37	<50	<0.5	<0.5	<0.5	<1.0	<2.5	---	---

Table 1

Groundwater Elevation and Analytical Data

ARCO Service Station #4494

566 Hegenberger Rd., Oakland, CA

Well No.	Date	P/ NP	Footnotes/ Comments	TOC (ft MSL)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (ft bgs)	GWE (ft MSL)	GRO/ TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO (mg/L)	pH
MW-5	12/17/2000	--		105.19	8.00	--	6.50	98.69	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
	3/28/2001	--		105.19	8.00	--	6.34	98.85	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
	6/21/2001	--		105.19	8.00	--	7.88	97.31	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
	9/23/2001	--		105.19	8.00	--	6.98	98.21	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
	12/31/2001	--		105.19	8.00	--	5.01	100.18	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
	3/14/2002	--		105.19	8.00	--	5.93	99.26	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
	4/17/2002	--		105.19	8.00	--	5.37	99.82	<50	<0.5	<0.5	<0.5	<0.5	8.5	--	--
	8/8/2002	--	b	105.19	8.00	--	6.85	98.34	<50	<0.5	<0.5	<0.5	<0.5	<2.5	0.7	7.3
	12/12/2002	--	d	105.19	8.00	--	6.53	98.66	<50	2.2	4.7	1.3	6.8	<2.5	1.3	7.0
	3/20/2003	--	e	105.19	8.00	--	6.40	98.79	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.7	7.1
	6/23/2003	--		105.19	8.00	--	6.72	98.47	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.3	7.2
	9/22/2003	--	f	10.63	8.00	--	6.76	3.87	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.7	7.2
	12/03/2003	--	g	10.63	8.00	--	6.56	4.07	--	--	--	--	--	--	--	--
	03/18/2004	P		10.63	8.00	--	5.98	4.65	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.70	7.3
	05/25/2004	--	g	10.63	8.00	--	6.77	3.86	--	--	--	--	--	--	--	--
	09/22/2004	P		10.63	8.00	--	6.90	3.73	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.0	7.17
	12/22/2004	--		10.63	8.00	--	6.18	4.45	--	--	--	--	--	--	--	--
	02/23/2005	P		10.63	8.00	--	5.36	5.27	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.0	7.2
	06/27/2005	--		**10.63**	**8.00**	--	**6.26**	**4.37**	--	--	--	--	--	--	--	--
MW-6	6/20/2000	--		105.07	8.00	--	6.24	98.83	<50	<0.5	<0.5	<0.5	<1.0	<10	--	--
	9/28/2000	--		105.07	8.00	--	6.45	98.62	<50	<0.5	<0.5	<0.5	<1.0	<2.5	--	--
	12/17/2000	--		105.07	8.00	--	6.26	98.81	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
	3/28/2001	--		105.07	8.00	--	6.10	98.97	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
	6/21/2001	--		105.07	8.00	--	7.68	97.39	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
	9/23/2001	--		105.07	8.00	--	6.72	98.35	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
	12/23/2001	--		105.07	8.00	--	4.68	100.39	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
	3/14/2002	--		105.07	8.00	--	5.55	99.52	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
	4/17/2002	--		105.07	8.00	--	4.96	100.11	<50	<0.5	<0.5	<0.5	<0.5	7.0	--	--
	8/8/2002	--		105.07	8.00	--	6.46	98.61	<50	<0.5	<0.5	<0.5	<0.5	<2.5	0.7	7.3
	12/12/2002	--	d	105.07	8.00	--	6.18	98.89	65	3.3	8.4	2.7	14	<2.5	1.1	6.9
	3/20/2003	--	e	105.07	8.00	--	6.18	98.89	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.2	7.0
	6/23/2003	--		105.07	8.00	--	6.15	98.92	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.0	7.1
	9/22/2003	--	f	10.41	8.00	--	6.43	3.98	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.5	7.0

Table 1

Groundwater Elevation and Analytical Data

ARCO Service Station #4494

566 Hegenberger Rd., Oakland, CA

Well No.	Date	P/ NP	Footnotes/ Comments	TOC (ft MSL)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (ft bgs)	GWE (ft MSL)	GRO/ TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO (mg/L)	pH
MW-6	12/03/2003	--	g	10.41	8.00	--	6.12	4.29	--	--	--	--	--	--	--	--
	03/18/2004	P		10.41	8.00	--	5.40	5.01	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.90	7.2
	05/25/2004	--	g	10.41	8.00	--	6.30	4.11	--	--	--	--	--	--	--	--
	09/22/2004	P		10.41	8.00	--	6.43	3.98	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.30	7.01
	12/22/2004	--		10.41	8.00	--	5.73	4.68	--	--	--	--	--	--	--	--
	02/23/2005	P		10.41	8.00	--	4.61	5.80	<50	<0.50	<0.50	<0.50	<0.50	5.0	2.60	7.1
	06/27/2005	--		**10.41**	**8.00**	--	**5.78**	**4.63**	--	--	--	--	--	--	--	--
MW-7	6/20/2000	--	a	105.52	9.00	--	8.65	96.87	<50	<0.5	<0.5	<0.5	<1.0	13/13	---	---
	9/28/2000	--	a	105.52	9.00	--	8.75	96.77	<50	<0.5	<0.5	<0.5	<1.0	136/261	---	---
	12/17/2000	--		105.52	9.00	--	8.62	96.90	<50	<0.5	<0.5	<0.5	<0.5	27.1	---	---
	3/28/2001	--		105.52	9.00	--	8.66	96.86	<50	<0.5	<0.5	<0.5	<0.5	51.5	---	---
	6/21/2001	--		105.52	9.00	--	8.84	96.68	<50	<0.5	<0.5	<0.5	<0.5	53	---	---
	9/23/2001	--	a	105.52	9.00	--	8.75	96.77	<50	<0.5	<0.5	<0.5	<0.5	35/21	---	---
	12/23/2001	--		105.52	9.00	--	7.79	97.73	<50	<0.5	<0.5	<0.5	<0.5	440	---	---
	3/14/2002	--		105.52	9.00	--	8.30	97.22	<50	<0.5	<0.5	<0.5	<0.5	18	---	---
	4/17/2002	--		105.52	9.00	--	7.43	98.09	<50	<0.5	<0.5	<0.5	<0.5	67	---	---
	8/8/2002	--	a, b	105.52	9.00	--	8.61	96.91	55	<0.5	<0.5	<0.5	<0.5	130/100	1.1	7.1
	12/12/2002	--	a, d, h	105.52	9.00	--	8.55	---	75	< 0.5	< 0.5	< 0.5	< 0.5	160/130	1.2	7.0
	3/20/2003	--	e	105.52	9.00	--	8.38	---	<50	<0.50	<0.50	<0.50	<0.50	32	2.2	7.2
	6/23/2003	--		105.52	9.00	--	8.37	---	<50	<0.50	<0.50	<0.50	<0.50	14	0.8	7.1
	9/22/2003	--	f	10.51	9.00	--	8.95	1.56	<50	<0.50	<0.50	<0.50	<0.50	5.3	2.2	7.2
	12/03/2003	P		10.51	9.00	--	8.86	1.65	<50	<0.50	<0.50	<0.50	<0.50	4.2	0.10	7.2
	03/18/2004	P		10.51	9.00	--	8.03	2.48	<50	<0.50	<0.50	<0.50	<0.50	3.0	1.0	7.2
	05/25/2004	P		10.51	9.00	--	8.37	2.14	<50	<0.50	<0.50	<0.50	<0.50	4.1	0.70	7.1
	09/22/2004	P		10.51	9.00	--	8.90	1.61	<50	<0.50	<0.50	<0.50	<0.50	2.3	0.90	7.27
	12/22/2004	P		10.51	9.00	--	7.90	2.61	<50	<0.50	<0.50	<0.50	<0.50	2.7	2.80	7.2
	02/23/2005	P		10.51	9.00	--	8.23	2.28	180	<0.50	<0.50	<0.50	<0.50	<0.50	1.30	7.1
	06/27/2005	P		**10.51**	**9.00**	--	**8.24**	**2.27**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**4.2**	**0.10**	**6.7**
RW-1	6/20/2000	--		---	--	--	8.21	---	<50	<0.5	1.1	<0.5	<1.0	<10	---	---
	9/28/2000	--		---	--	--	8.28	---	<50	<0.5	<0.5	<0.5	<1.0	<2.5	---	---
	12/17/2000	--		---	--	--	8.29	---	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	3/28/2001	--		---	--	--	8.16	---	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	6/21/2001	--		---	--	--	9.37	---	160	5.1	<0.5	1.1	3.2	<2.5	---	---

Table 1

Groundwater Elevation and Analytical Data

ARCO Service Station #4494

566 Hegenberger Rd., Oakland, CA

Well No.	Date	P/ NP	Footnotes/ Comments	TOC (ft MSL)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (ft bgs)	GWE (ft MSL)	GRO/ TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO (mg/L)	pH
RW-1	9/23/2001	--		---	--	--	8.75	---	57	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	12/31/2001	--		---	--	--	6.80	---	520	3.1	<0.5	6.4	4.7	<2.5	---	---
	3/14/2002	--		---	--	--	7.86	---	240	3.7	<0.5	0.7	2.8	<2.5	---	---
	4/17/2002	--		---	--	--	7.13	---	<50	<0.5	1.6	<0.5	0.72	<2.5	---	---
	8/8/2002	--	a, c	---	--	--	8.48	---	<50	<0.5	<0.5	<0.5	<0.5	3.7/<0.5	1.1	7.0
	12/12/2002	--		---	--	--	8.63	---	<50	<0.5	<0.5	<0.5	<0.5	<2.5	1.9	6.9
	3/20/2003	--	e	---	--	--	8.08	---	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.9	7.3
	6/23/2003	--		---	--	--	8.28	---	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.1	7.3
	9/22/2003	--	f	11.97	--	--	8.42	3.55	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.8	7.1
	12/03/2003	--	g	11.97	--	--	8.05	3.92	--	--	--	--	--	--	--	--
	03/18/2004	P		11.97	--	--	7.18	4.79	50	0.54	<0.50	<0.50	<0.50	<0.50	0.90	7.1
	05/26/2004	--	g	11.97	--	--	8.32	3.65	--	--	--	--	--	--	--	--
	09/22/2004	P		11.97	--	--	8.42	3.55	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.0	6.7
	12/22/2004	--		11.97	--	--	7.23	4.74	--	--	--	--	--	--	--	--
	02/23/2005	P		11.97	--	--	6.89	5.08	190	<0.50	<0.50	<0.50	<0.50	<0.50	0.71	7.2
	08/27/2005	--		11.97	--	--	7.86	4.11	--	--	--	--	--	--	--	--

Table 1

Groundwater Elevation and Analytical Data

ARCO Service Station #4494
566 Hegenberger Rd., Oakland, CA

SYMBOLS AND ABBREVIATIONS:
--- = Not calculated, surveyed, available, applicable, analyzed.
< = Not detected at or above specifed laboratory reporting limit.
DO = Dissolved oxygen
DTW = Depth to water
ft bgs = Feet below ground surface
GRO = Gasoline range organics
GWE = Groundwater elevation
mg/L = Milligrams per liter
MSL = Mean sea level
MTBE = Methyl tertiary butyl ether analyzed by EPA Method 8021B prior to 3/20/03 unless otherwise noted.
TPH-g = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8015M prior to 3/20/03 and by 8260b henceforth.
TOC = Top of casing
ug/L = Micrograms per liter

FOOTNOTES:
a = MTBE confirmation analyzed by EPA Method 8260
b = Hydrocarbon pattern is present in the requested fuel quantitation range for TPHg/GRO 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 TPHg/GRO.
e = TPH-g, BTEX, and MTBE analyzed by EPA method 8260B beginning on 2003 samlping event (03/20/03)
f = Top of casing elvations were re-surveyed on July 18, 2003 by URS Corporation of Pleasant Hill, CA
g = Wells MW-3, MW-4, MW-5, MW-6 and RW-1 are sampled semi-annually in the 1st and 3rd quarters.
h = Top of casing was found shattered on December 12, 2002. Top of Casing (TOC) unknown.

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

Beginning in the fourth quarter 2003, the laboratory modified the reported analyte list. TPHg was changed to GRO. The resulting data may be impacted by the potential of non-TPHg analytes within the requested fuel range resulting in a higher concentration being reported.

Beginning in the second quarter 2004, the carbon range for GRO has been changed from C6-C10 to C4-C12.

The values for pH and DO were obtained through field measurements.

Table 2

Fuel Additives Analytical Data

ARCO Service Station #4494

566 Hegenberger Rd., Oakland, CA

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)	Footnotes/ Comments
MW-1	3/20/2003	<1,000	640	780	<5.0	<5.0	<5.0	---	---	
	6/23/2003	<1,000	<200	260	<5.0	<5.0	<5.0	<5.0	<5.0	
	9/22/2003	<100	250	17	<0.50	<0.50	<0.50	---	---	
	12/03/2003	<500	<100	260	<2.5	<2.5	<2.5	--	--	
	03/18/2004	<500	<100	130	<2.5	<2.5	<2.5	<2.5	<2.5	
	05/25/2004	<500	<100	120	<2.5	<2.5	<2.5	<2.5	<2.5	
	09/22/2004	<200	<40	140	<1.0	<1.0	<1.0	<1.0	<1.0	
	12/22/2004	<1,000	<200	74	<5.0	<5.0	<5.0	<5.0	<5.0	
	02/23/2005	<100	<20	6.0	<0.50	<0.50	2.4	<0.50	<0.50	
	06/27/2005	**<500**	**<100**	**150**	**<2.5**	**<2.5**	**<2.5**	**<2.5**	**<2.5**	
MW-3	3/20/2003	<100	<20	601	<0.50	<0.50	1.1	---	---	
	6/23/2003	<100	<20	5.2	<0.50	<0.50	0.75	<0.50	<0.50	
	9/22/2003	<100	<20	3.9	<0.50	<0.50	<0.50	---	---	
	03/18/2004	<100	<20	4.6	<0.50	<0.50	<0.50	<0.50	<0.50	
	09/22/2004	<100	<20	4.7	<0.50	<0.50	<0.50	<0.50	<0.50	
	02/23/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-4	3/20/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	---	---	
	6/23/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	9/22/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	---	---	
	03/18/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	09/22/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	02/23/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-5	3/20/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	---	---	
	6/23/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	9/22/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	---	---	
	03/18/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	09/22/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	02/23/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-6	3/20/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	---	---	
	6/23/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	9/22/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	---	---	
	03/18/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	09/22/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	

Table 2

Fuel Additives Analytical Data

ARCO Service Station #4494

566 Hegenberger Rd., Oakland, CA

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)	Footnotes/ Comments
MW-6	02/23/2005	<100	140	5.0	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-7	3/20/2003	<100	<20	21	<0.50	<0.50	0.62	---	---	
	6/23/2003	<100	170	14	<0.50	<0.50	<0.50	<0.50	<0.50	
	9/22/2003	<100	170	5.3	<0.50	<0.50	<0.50	---	---	
	12/03/2003	<100	85	4.2	<0.50	<0.50	<0.50	--	--	
	03/18/2004	<100	<20	3.0	<0.50	<0.50	<0.50	<0.50	<0.50	a
	05/25/2004	<100	43	4.1	<0.50	<0.50	<0.50	<0.50	<0.50	
	09/22/2004	<100	<20	2.3	<0.50	<0.50	<0.50	<0.50	<0.50	
	12/22/2004	<100	34	2.7	<0.50	<0.50	<0.50	<0.50	<0.50	
	02/23/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	06/27/2005	**<100**	**86**	**4.2**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
RW-1	3/20/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	---	---	
	6/23/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	9/22/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	---	---	
	03/18/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	09/22/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	02/23/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	

Table 2

Fuel Additives Analytical Data

ARCO Service Station #4494
566 Hegenberger Rd., Oakland, CA

SYMBOLS AND ABBREVIATIONS:
< = Not detected at or above the laboratory reporting limit
--- = Not analyzed, sampled, available
1,2-DCA = 1,2-Dichloroethane
DIPE = Di-isopropyl ether
EDB = 1,2-Dibromoethane
ETBE = Ethyl tert butyl ether
MTBE = Methyl tert-butyl ether
TAME = tert-Amyl methyl ether
TBA = tert-Butyl alcohol
µg/L = micrograms per liter

FOOTNOTES:
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.

NOTES:
All fuel oxygenate compounds were analyzed using EPA Method 8260B.